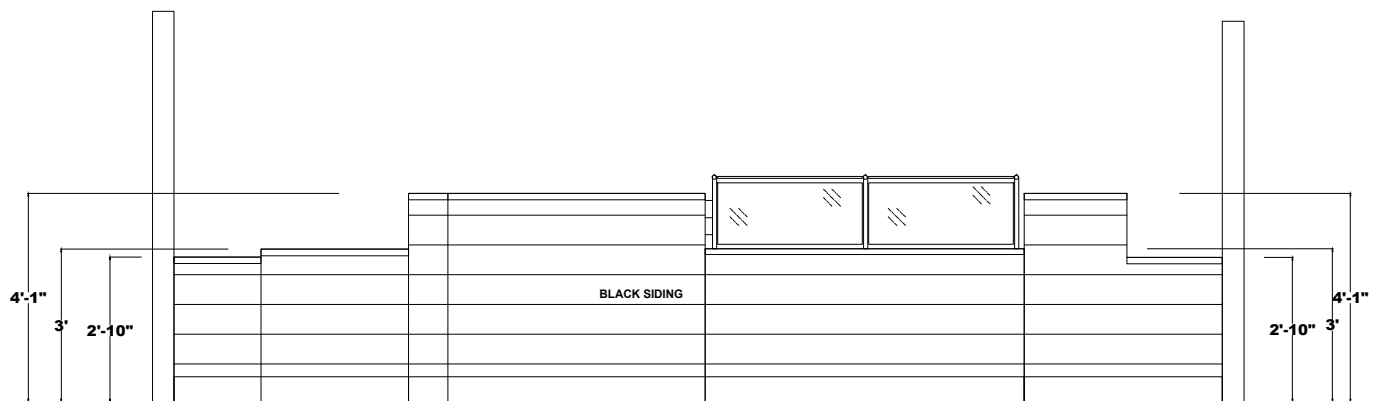


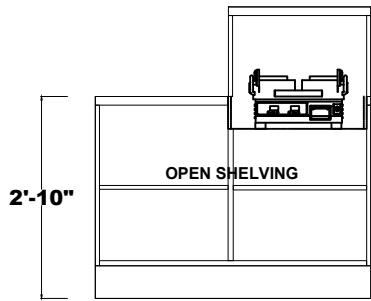
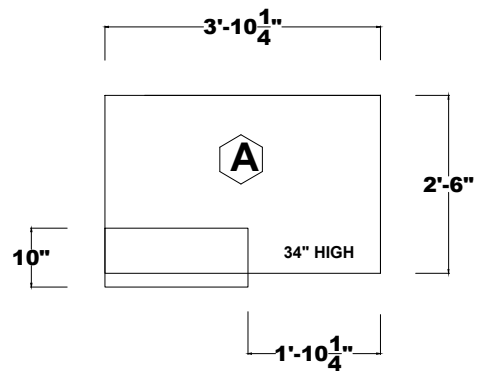
THIS DRAWING IS ONLY A DRAFT DESIGN. ON SITE MEASUREMENTS NEED TO BE DONE FOR VERIFICATION.



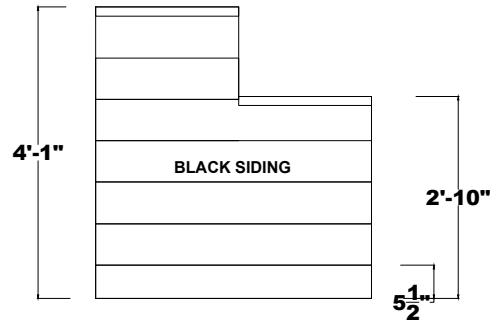
SLC-BROWNS-03-25-2019 - 205-SF



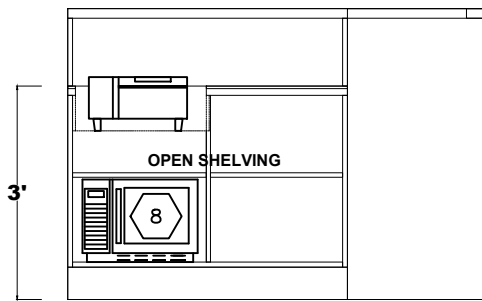
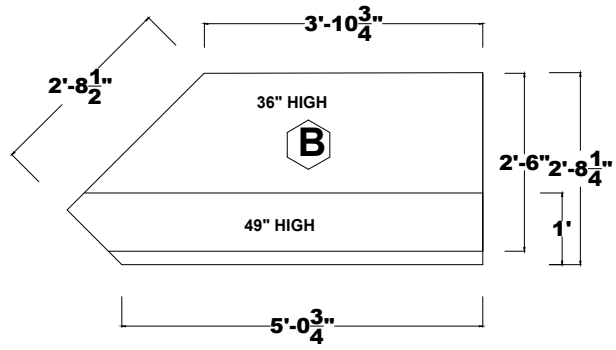
FRONT COUNTER ELEVATION



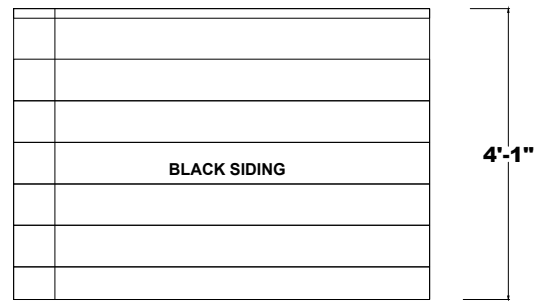
STAFF VIEW



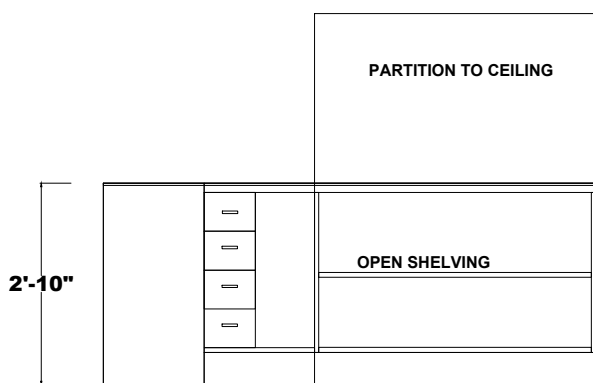
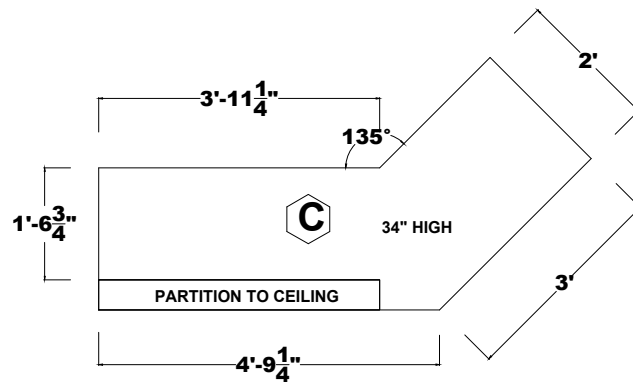
CUSTOMER VIEW



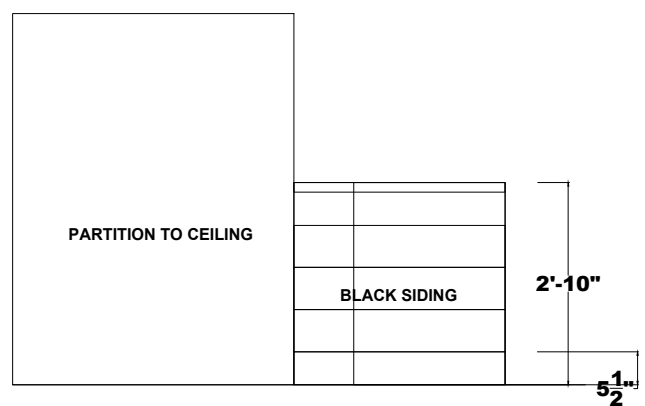
STAFF VIEW



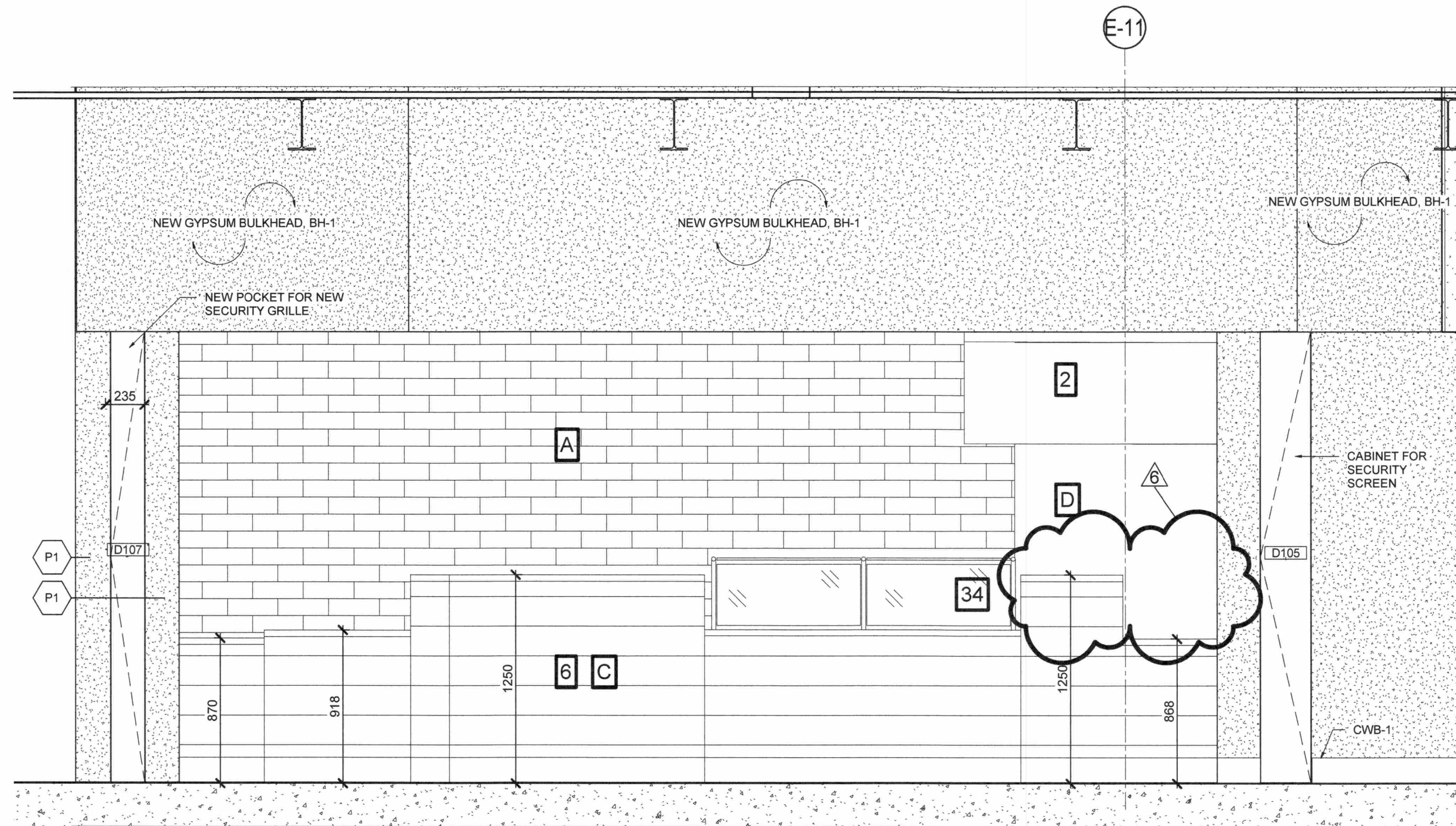
CUSTOMER VIEW



STAFF VIEW

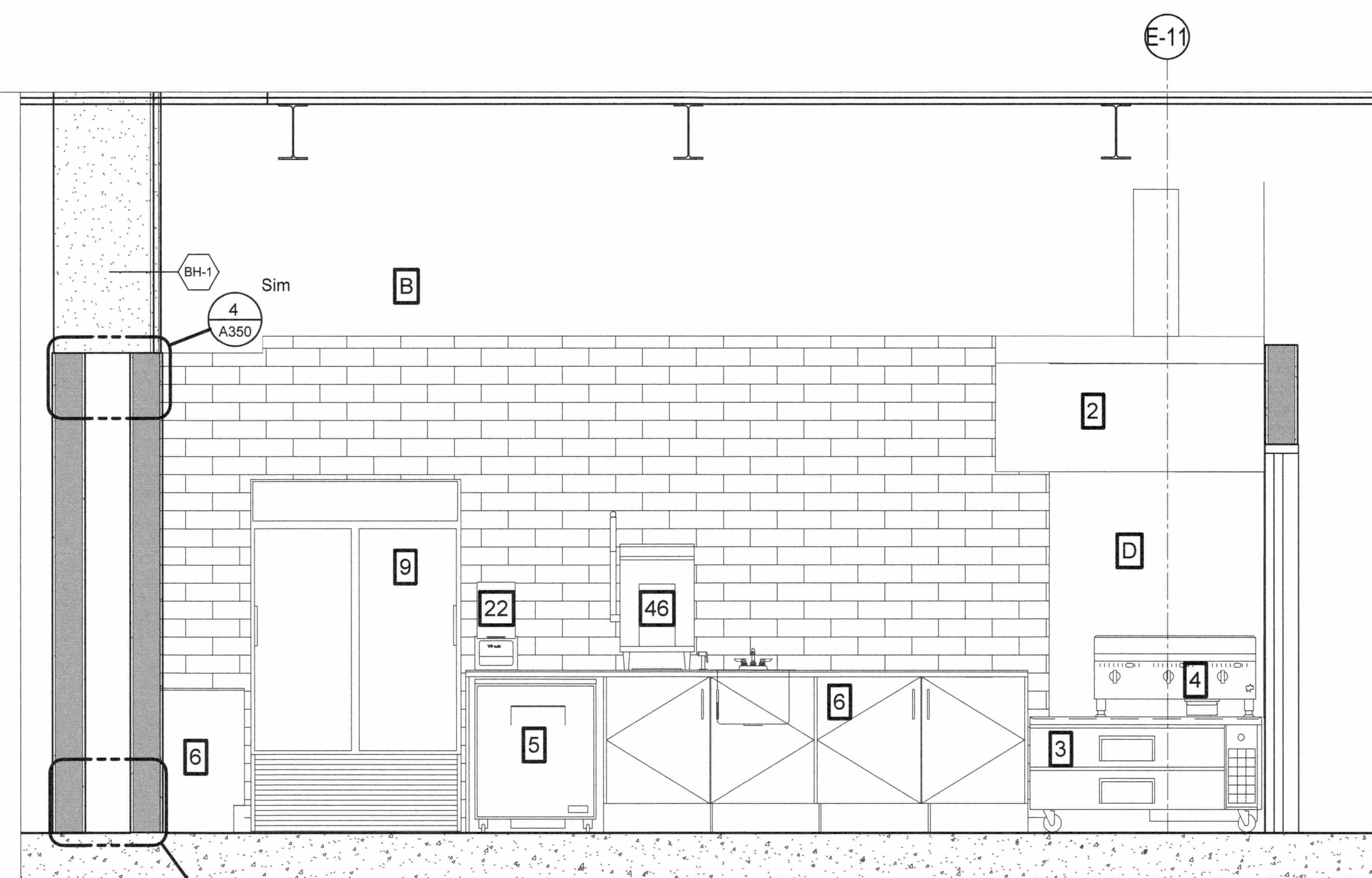


CUSTOMER VIEW



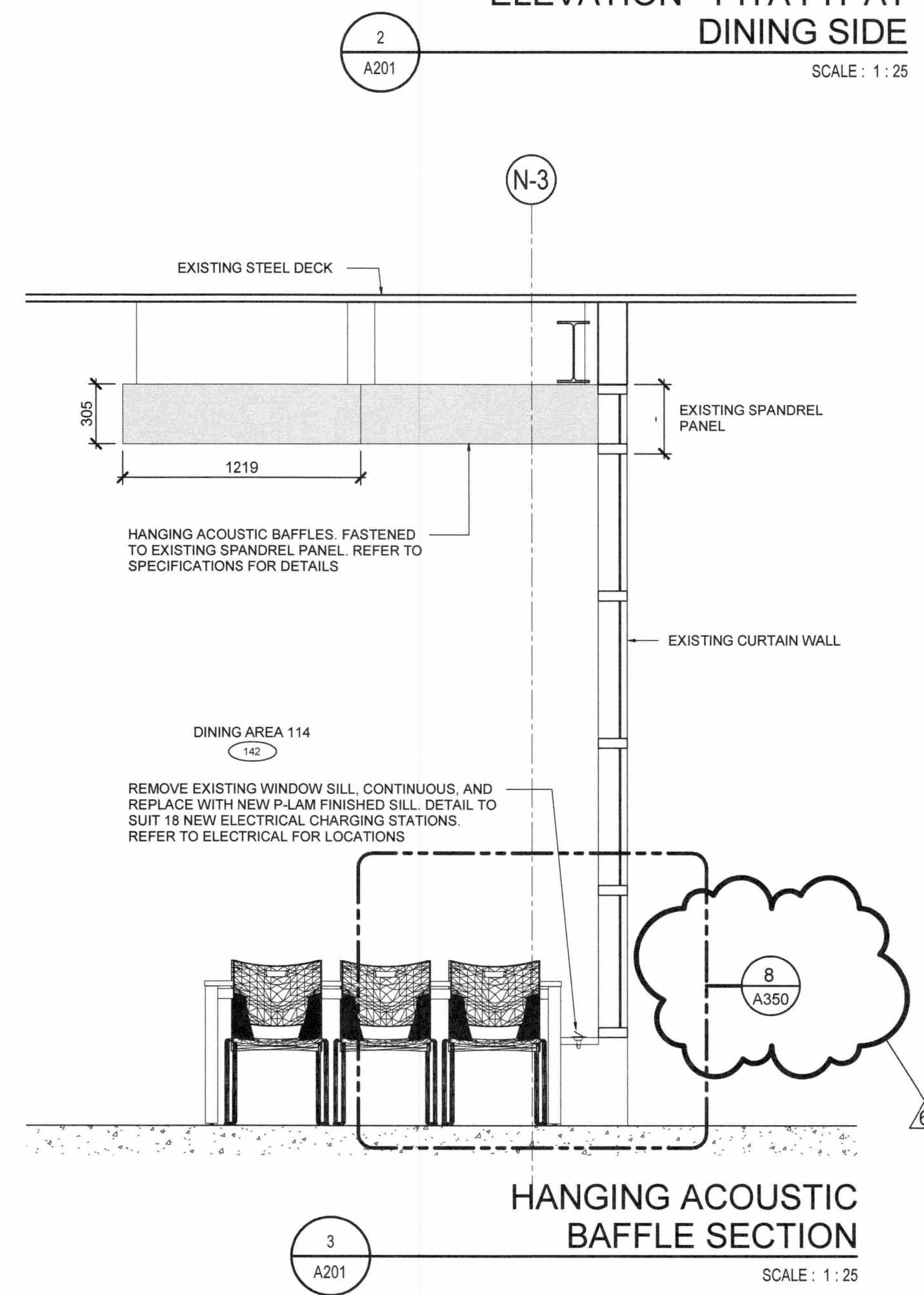
**COUNTER PACKAGE & EQUIPMENT LEGEND - PITA PIT**  
REFER TO MECHANICAL FOR EQUIPMENT DETAILS

1. PITA STATION
  2. EXHAUST SYSTEM
  3. CHEF BASE
  4. GRIDDLE
  5. SMOOTHIE COOLER
  6. COUNTER CABINETS
  8. MICROWAVE
  9. BEVERAGE COOLER
  11. POS
  22. BLENDER
  34. SNEEZE GUARD
  35. 49" DIGITAL MENU BOARDS - 25.5"H x 43.5"W REFER TO 1/A701
  39. STEAMER/WARMER
  40. PITA TOASTER
  45. YOGEN FREEZER
  46. YOGURT MACHINE
  47. TRACK LIGHTING. REFER TO 1/A701
- A. 4x16 WHITE TILE  
B. PAINTED WALL  
C. BLACK SLIDING CABINETS  
D. STAINLESS STEEL

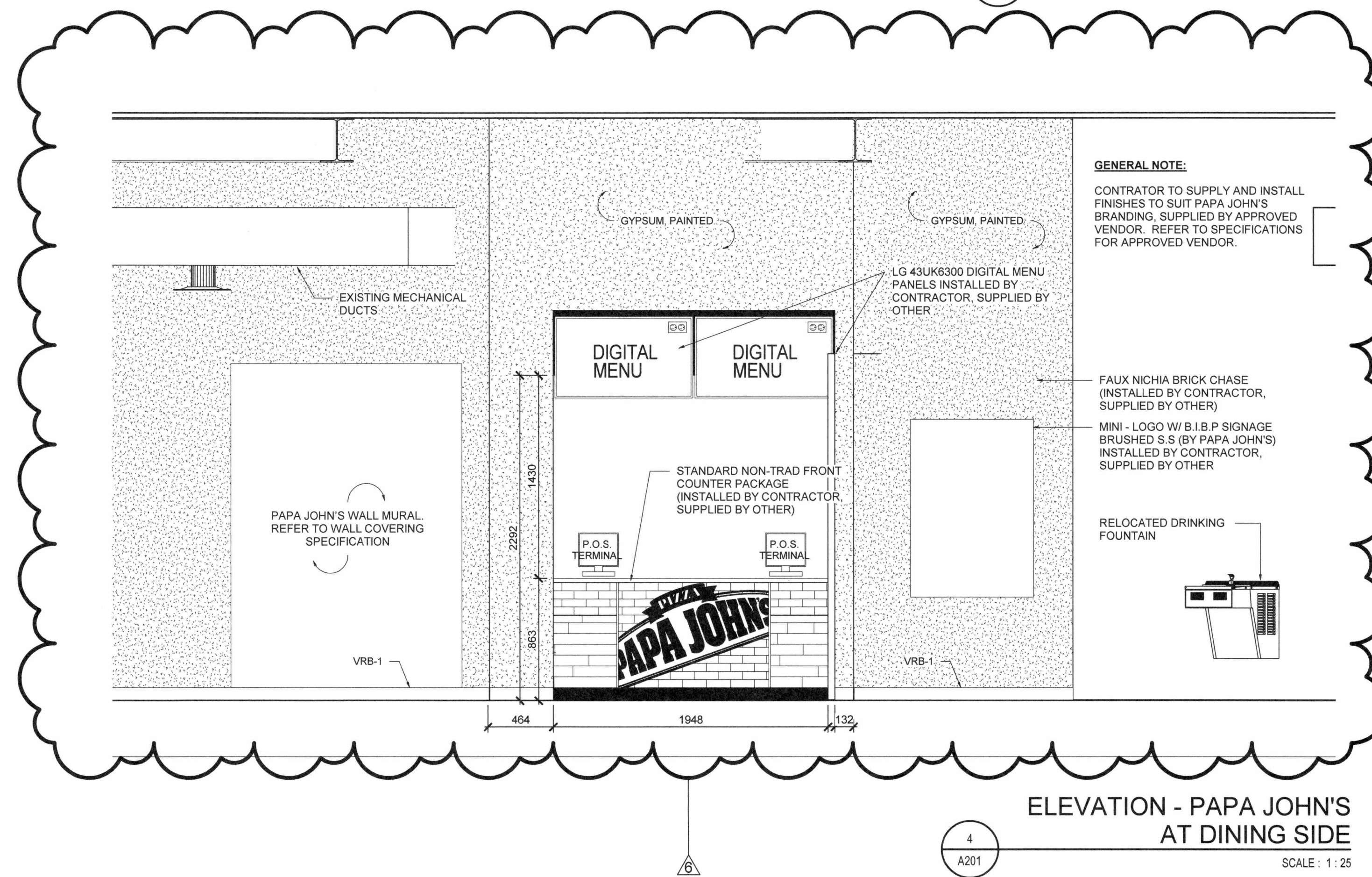


**ELEVATION - PITA PIT AT DINING SIDE**  
SCALE: 1:25

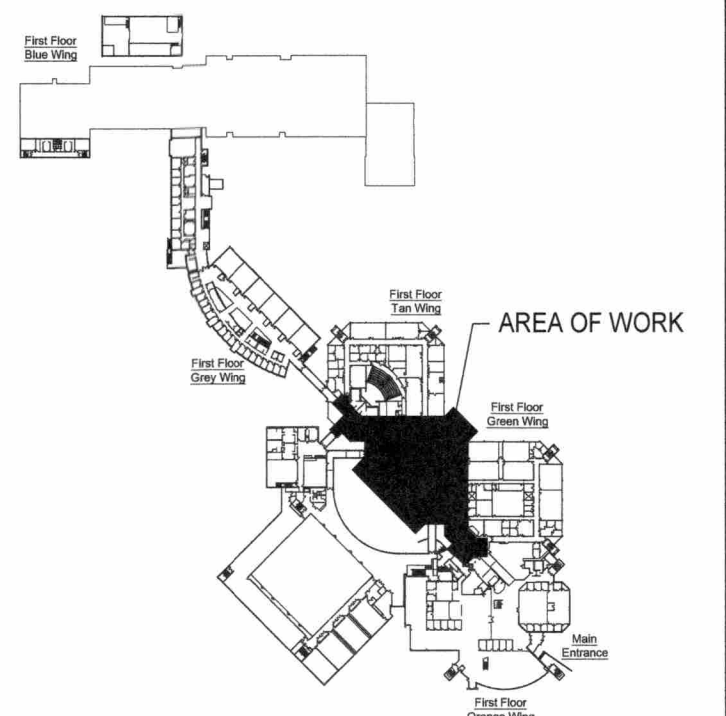
**ELEVATION - PITA PIT**  
SCALE: 1:25



**HANGING ACOUSTIC BAFFLE SECTION**  
SCALE: 1:25



**ELEVATION - PAPA JOHN'S AT DINING SIDE**  
SCALE: 1:25



KEY PLAN

**PRELIMINARY**  
**NOT FOR**  
**CONSTRUCTION**  
EXTERNAL DESIGN REVIEW (30%)

NO.	ISSUE/REVISION	DDMMYY
6	ADDENDUM 04	02/05/19
5	ISSUED FOR TENDER	18/04/19
4	ISSUED FOR CLIENT REVIEW	18/04/19

This drawing is copyright protected and may not be reproduced for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.

VERIFY SHEET SIZE AND SCALES. BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING. 0 25m

CLIENT  
**St. Lawrence College**

CONSULTANT  
**JLR J.L. Richards**  
ENGINEERS - ARCHITECTS - PLANNERS  
www.jlrichards.ca

CONSULTANT

PROFESSIONAL ASSOCIATION OF ARCHITECTS  
MARIN KATOV  
LICENCE 8982  
Sept 2019

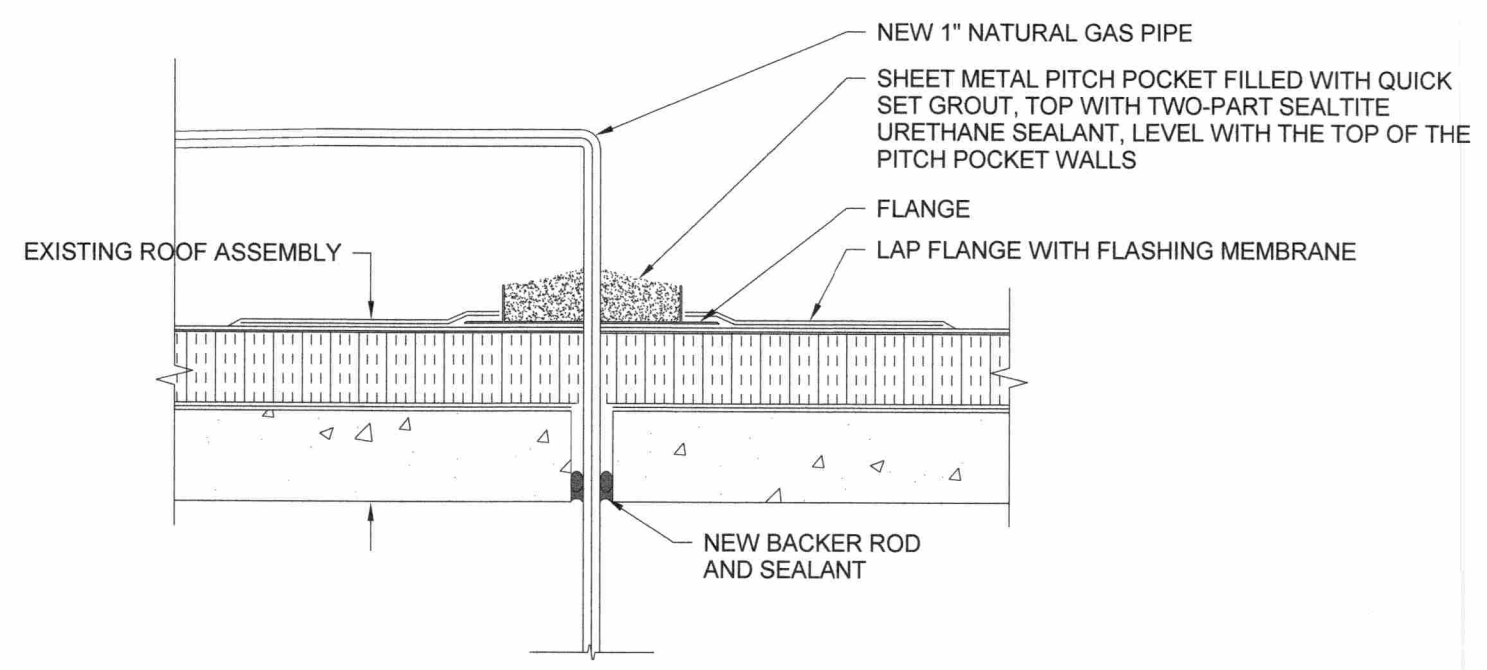
PROJECT  
**ST LAWRENCE COLLEGE**  
**CAFETERIA RENOVATION**  
100 Portsmouth Avenue, Kingston Ontario

DRAWING  
**INTERIOR SECTIONS AND ELEVATIONS**

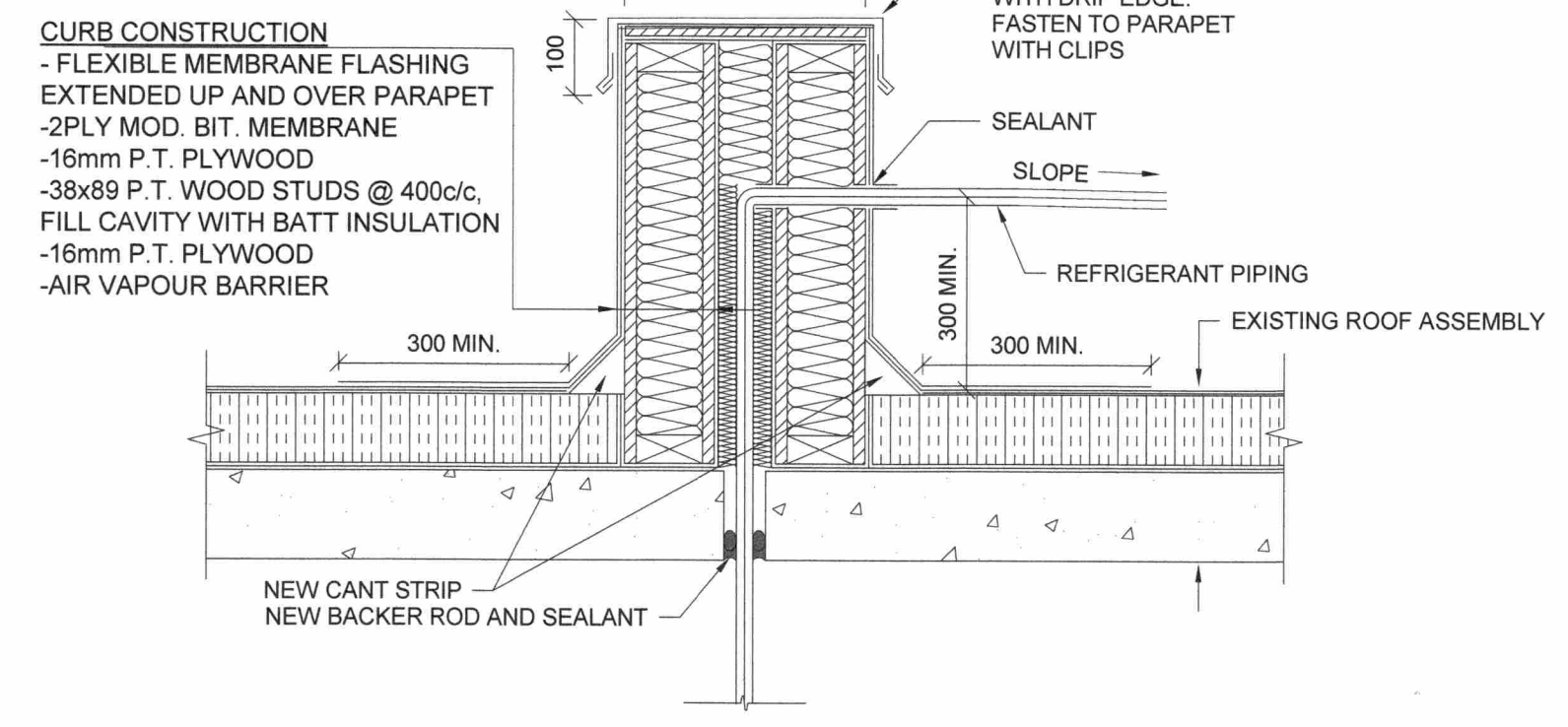
DESIGN **LM**  
DRAWN **DF**  
CHECKED **MK**  
JLR 28389

DRAWING  
**A201**

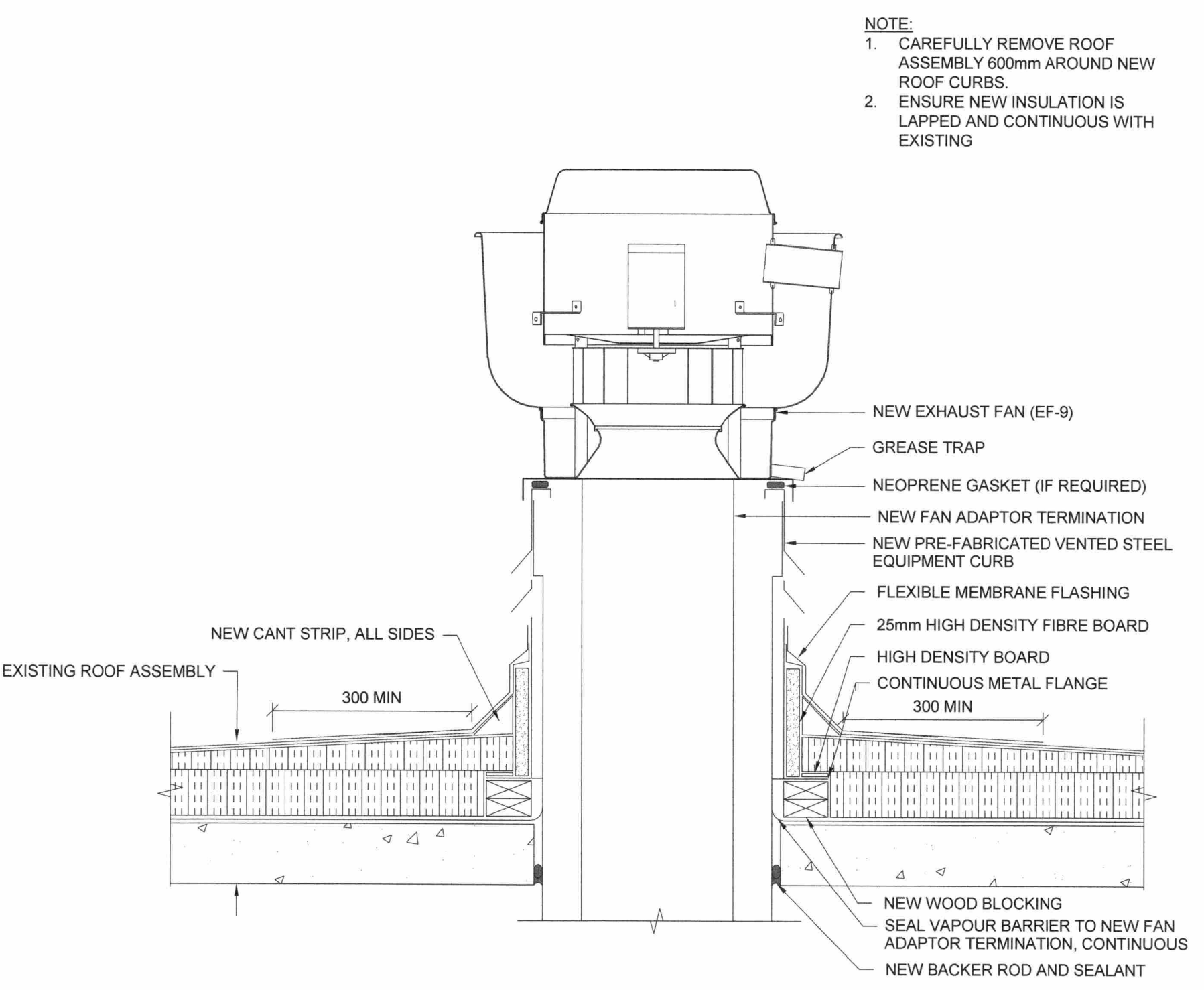




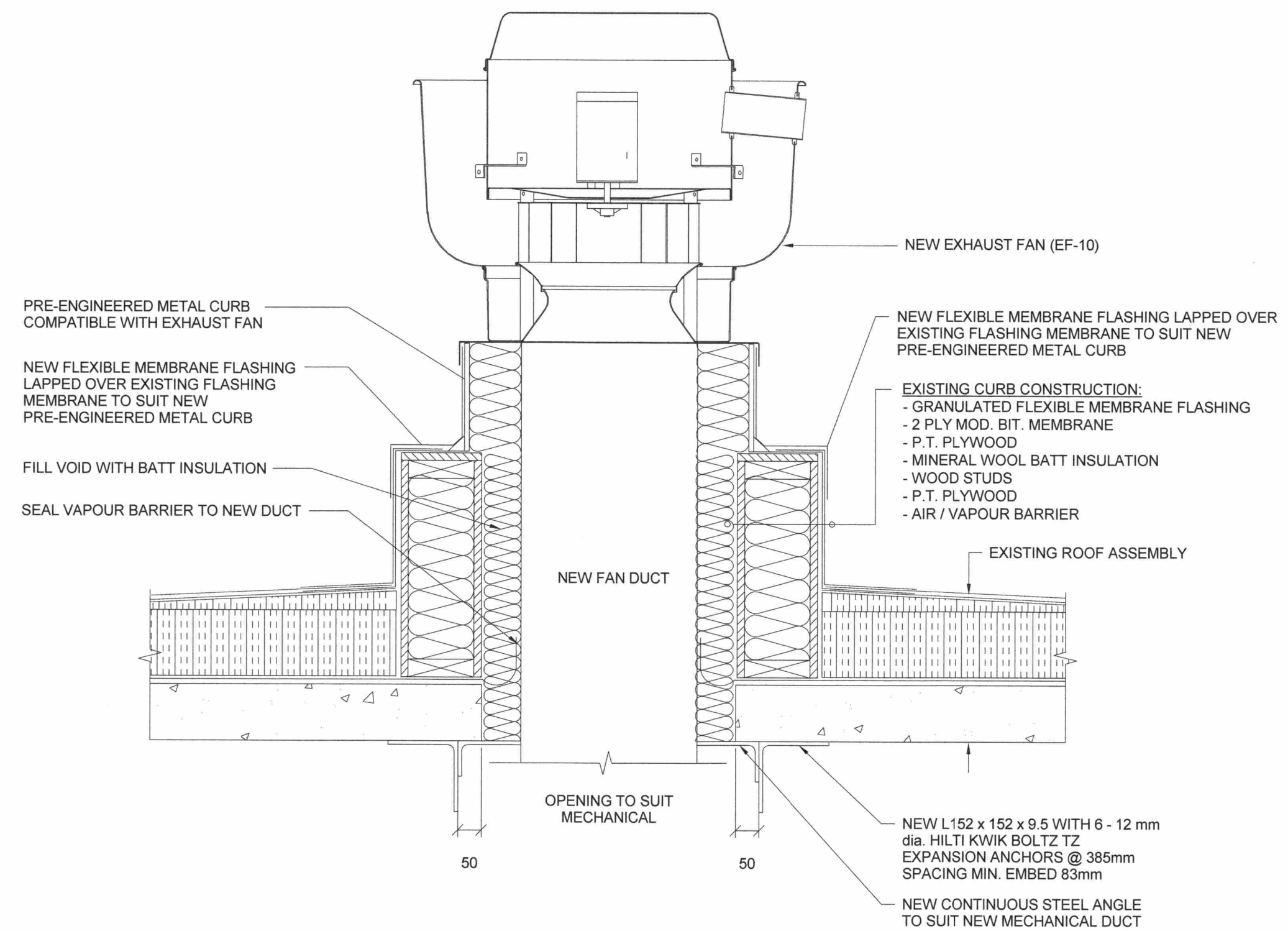
1  
A351 TYPICAL ROOF PENETRATION AT NATURAL GAS SERVICE  
SCALE 1:10



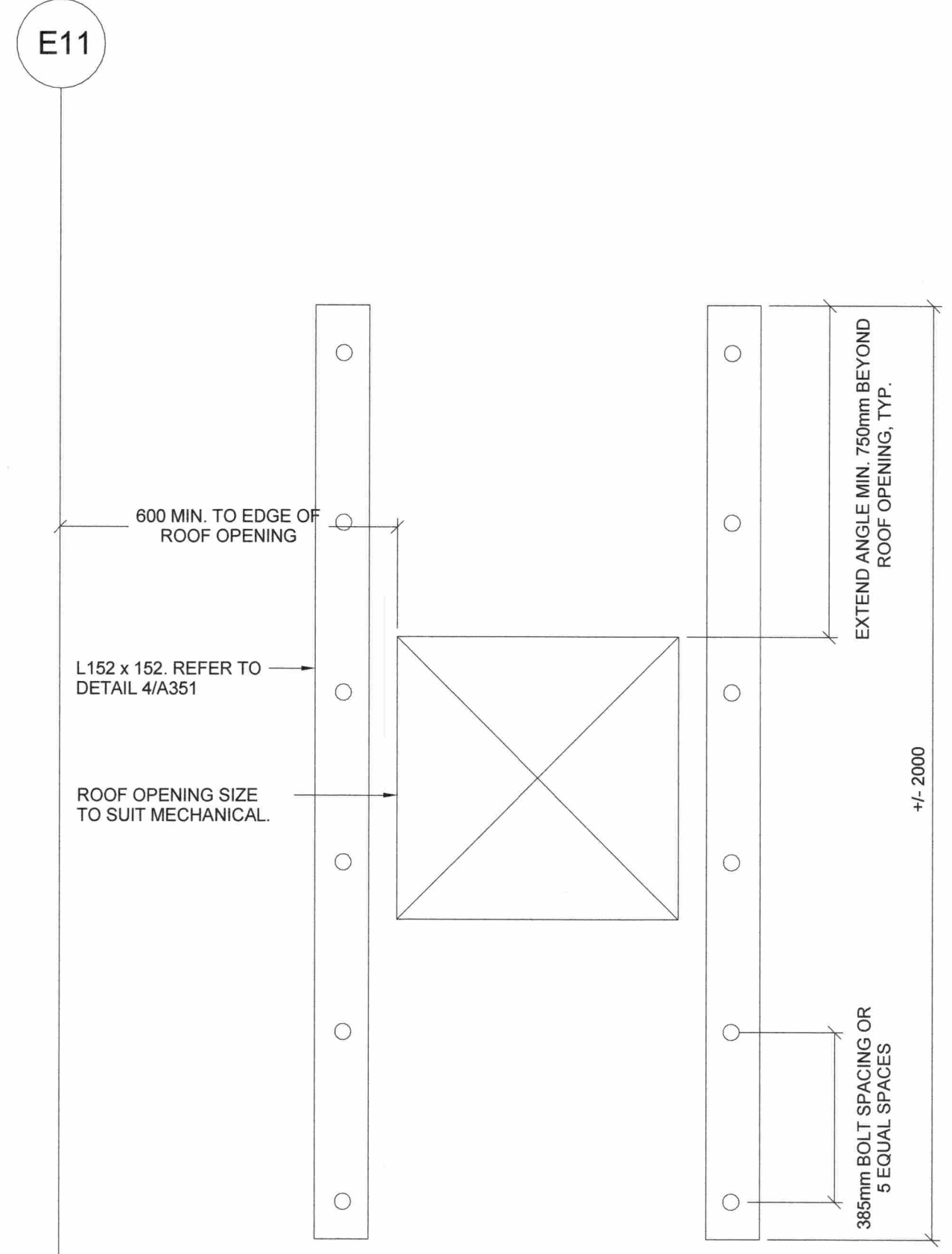
2  
A351 TYPICAL ROOF PENETRATION AT REFRIGERANT PIPING  
SCALE 1:10



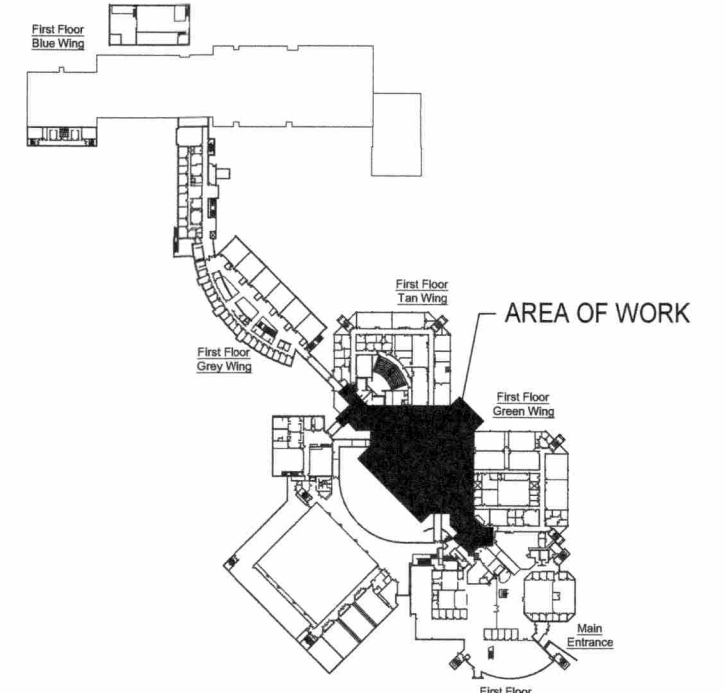
3  
A351 NEW ROOF PENETRATION AT PITA PIT EXHAUST FAN (EF-9)  
SCALE 1:10



4  
A351 EXISTING CURB MODIFICATION AT NEW PAPA JOHN'S EXHAUST FAN (EF-10)  
SCALE 1:10



2  
A351 STRUCTURAL REINFORCEMENT AT NEW ROOF OPENING FOR EF-9 SERVING PITA PIT  
SCALE 1:10



KEY PLAN

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**  
EXTERNAL DESIGN REVIEW (30%)

6	ADDENDUM 04	02/05/19
NO.	ISSUE/REVISION	DDMMYY

This drawing is copyright protected and may not be reproduced used for purposes other than execution of the described work the express written consent of J.L. Richards & Associates Limited  
VERIFY SHEET SIZE AND SCALES. BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING.

SCALE

CLIENT  
**St. Lawrence College**

CONSULTANT  
**J.L. Richards**  
ENGINEERS - ARCHITECTS - PLANNERS  
www.jlrichards.ca

CONSULTANT  
PROFESSIONAL ASSOCIATION OF ARCHITECTS  
MARIN KATOV  
LICENCE 8682

PROJECT  
**ST LAWRENCE COLLEGE  
CAFETERIA RENOVATION**  
100 Portsmouth Avenue, Kingston Ontario

DRAWING  
**ROOF PENETRATION  
DETAILS**

DESIGN	DF	DRAWING
DRAWN	DF	
CHECKED	MK	
JLR	28389	<b>A351</b>

File Location: k:\28000\28389-000.0 s/c - cafeteria renovations\3-jlr.dwg\6-Elect\28389-000 - LEGEND.dwg

LUMINAIRE SCHEDULE			
TYPE:	SPECIFIED PRODUCT:	LAMP TYPE:	FIXTURE MOUNTING HEIGHT: (UNLESS OTHERWISE NOTED)
"F2"	GREY 12 INCH CYLINDRICAL STEM MOUNTED PENDANT  LUMENPULSE: LACYM-A-PSF-MLG-M3-D-120-13-dL20-40K-CR80-W-DA1-NA-MLG LUMINIS: SY605-L1L25-R55-120-GRT OR APPROVED EQUIVALENT	LED	3350MM A.F.F.
"P"	609MM x 70MM x 64MM, DIFFUSED ILLUMINATION WITH HIGH EFFICIENCY OPAL INSERT, 100% DIRECT, INTEGRAL DRIVER CANOPY, 3 POINT SUSPENSION MOUNTING, BLACK FINISH  EDISON LIGHTING GROUP: ED RING+24INCH-50WLED-DL-120V-SS/3POINT-BK-40K OR APPROVED EQUIVALENT	LED	3050MM A.F.F.
"P1"	609MM x 70MM x 64MM, DIFFUSED ILLUMINATION WITH HIGH EFFICIENCY OPAL INSERT, 70% DIRECT, 30% INDIRECT, INTEGRAL DRIVER CANOPY, 3 POINT SUSPENSION MOUNTING, GREY FINISH  EDISON LIGHTING GROUP: ED RING+24INCH-50WLED-UD-120V-SS/3POINT-GR-40K OR APPROVED EQUIVALENT	LED	3050MM A.F.F.
"TR"	8' TRACK LIGHTING DOWN ROD MOUNTED  LITELINE: DA2010-40-38-80-BK (FIXTURE) RODR6224-BK (ROD) LEC6270-BK (WIRE COVER) CREE: S-CT-RLGR-50W-P20-120B-BK OR APPROVED EQUIVALENT	PAR20 BASE LED LAMP	2600MM A.F.F.
"B"	RED GLASS PENDANT  BRUCK: ALEXANDER 223-962-MC-MP TECH LIGHTING: 700-MP-FIR-F-R-C-LEDS930 OR APPROVED EQUIVALENT	LED	900MM A.F.F.
"D"	24IN DRUM STEM MOUNTED, BLACK FINISH  EDISON LIGHTING GROUP: ED DRUM+24INCH-50WLED-120V-DL-SM/**-BK-40K LUMENWERX: SHEP-24-HLO-90-5000lm-40-120-D1-1-IDB-B-SSW#-BK-NG OR APPROVED EQUIVALENT	LED	2700MM A.F.F.
"C"	EXISTING TASK LIGHTING		
"E"	1X4 SHALLOW SUSPENDED MOUNT  H.E. WILLIAMS: PTS-14-L45/840-RA-DIM-UNV VISIONEERING: LRT-H-1X4-LED840K040LUNV OR APPROVED EQUIVALENT	LED	2700MM A.F.F.
"EBU"	120V EMERGENCY LIGHTING 12 VOLT BATTERY PACK C/W INTEGRAL AND REMOTE HEADS. SEALED LONG LIFE (10 YEARS) BATTERY SIZED TO MAINTAIN LOAD FOR 1/2 HOUR MINIMUM.  THOMAS AND BETTS: READY-LITE LDX SERIES OR APPROVED EQUIVALENT		
"A"	2X4 LED TROFFER  H.E. WILLIAMS: 50-G-S-24-L59/840-F-AF12125-TG-WET-DIM-UNV VISIONEERING: LRTA-C29-2X4-LED840K063LUNV-P97 OR APPROVED EQUIVALENT	LED	2700MM A.F.F.
"G"	EXISTING TROFFER LIGHTING		
"H"	EXISTING SKYLIGHT LIGHTING		

AS REVISED BY  
 ADDENDUM No: 4  
 LINE ITEM No: A4.12.2

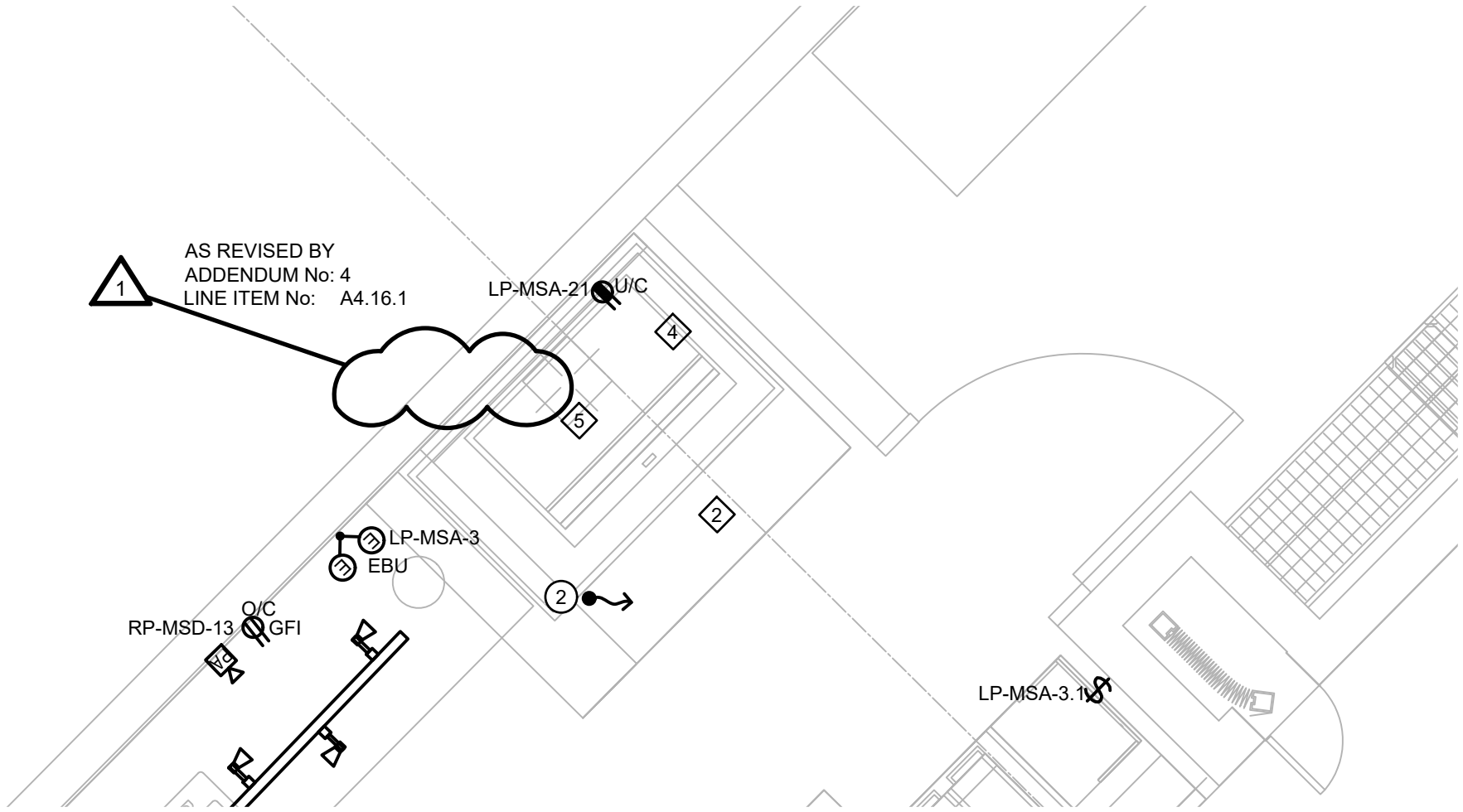
PROJECT: **ST. LAWRENCE COLLEGE CAFETERIA RENOVATION**  
 100 Portsmouth Avenue, Kingston, Ontario

DRAWING: **LUMINAIRE SCHEDULE**

 <small>www.jrichards.ca</small> <b>J.L. Richards</b> <small>ENGINEERS-ARCHITECTS-PLANNERS</small>	This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.	DESIGN: BM	ADDENDUM No. 4  DRAWING #: <b>SKE2-1</b>
		DRAWN: HV	
		CHECKED: BM	
		JLR #: 28389	

PLOT DATE: Thursday, May 2, 2019 2:44:24 PM

File Location: k:\28000\28389-000.0 slc - cafeteria renovations\3-jlr.dwg\6-Elect\28389-000 - PWR.dwg



1  
SKE8-1

**PITA PIT PLAN**



PROJECT: **ST. LAWRENCE COLLEGE CAFETERIA RENOVATION**  
100 Portsmouth Avenue, Kingston, Ontario

DRAWING: **PITA PIT PLAN**

**J.L. Richards**  
ENGINEERS-ARCHITECTS-PLANNERS  
www.jlrichards.ca

This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.

DESIGN: BM  
DRAWN: HV  
CHECKED: BM  
JLR #: 28389

ADDENDUM No. 4  
DRAWING #:  
**SKE8-1**

PLOT DATE: Thursday, May 2, 2019 2:44:30 PM


File Location: k:\28000\28389-000.0 slc - cafeteria renovations\3-ivr.dwg\6-Elect\28389-000 - PANEL SCHEDULE.dwg

LP-MSA  
 120/208 VOLT, 3PH, 4W  
 225 AMP MAINS  
 SURFACE MOUNTED  
 100A FUSED DISCONNECT

LOAD	DESCRIPTION	BKR	CCT		CCT	BKR	DESCRIPTION	LOAD
	CORRIDOR LIGHTS	20A, 1P	1	•	2	20A, 1P	RM 11835 - 4' FLUR (x13)	
	PITA PIT LIGHTING	15A, 1P	3	•	4	20A, 1P	S-257	
	SPARE	20A, 1P	5	•	6	20A, 1P	S-258	
	PROJECTION - 240	20A, 1P	7	•	8	20A, 1P	RM 11840 - 4' FLUR (x16)	
	RM 11830 - 4' FLUR (x8)	20A, 1P	9	•	10	20A, 1P	PITA PIT YOGURT MACHINE	
	S-250	20A, 1P	11	•	12	20A, 1P	PITA PIT SMOOTHIE COOLER	
	LOUNGE RECEPT	20A, 1P	13	•	14	20A, 1P	DRY STORAGE FRIDGE	
	RM 11830 - 4' FLUR (x14)	20A, 2P	15	•	16	15A, 1P	RM 11850 - S 4' FLUR (x5)	
	SPARE	15A, 1P	17	•	18	15A, 1P	RM 11850 - S 4' FLUR (x6) OFFICE LIGHT	
	HUM RECPT RM 1950	15A, 1P	19	•	20	20A, 1P	S-250	
	PITA PIT CHEFS BASE	20A, 1P	21	•	22	15A, 1P	VENDING MACHINE	
	PITA PIT CHEFS BASE SHUNT TRIP		23	•	24	15A, 1P	SPARE	
	SPARE	15A, 1P	25	•	26	15A, 2P	SPARE	
	SPARE	15A, 1P	27	•	28	15A, 1P	SPARE	
	PITA PIT HOOD FAN CONTROL	15A, 1P	29	•	30	15A, 1P	SPARE	
	PITA PIT HOOD EXHAUST FAN	15A, 1P	31	•	32	15A, 1P	SPARE	
	C113 - W REC.	15A, 1P	33	•	34	15A, 1P	SPARE	
	SPARE	15A, 1P	35	•	36	15A, 1P	SPARE	
	SPARE	15A, 1P	37	•	38	15A, 1P	SPARE	
	SPLIT - MALL MICROWAVE	15A, 2P	39	•	40	15A, 1P	C.P&P S-217	
			41	•	42	15A, 1P	C-115-CF RECESSED (x28)	

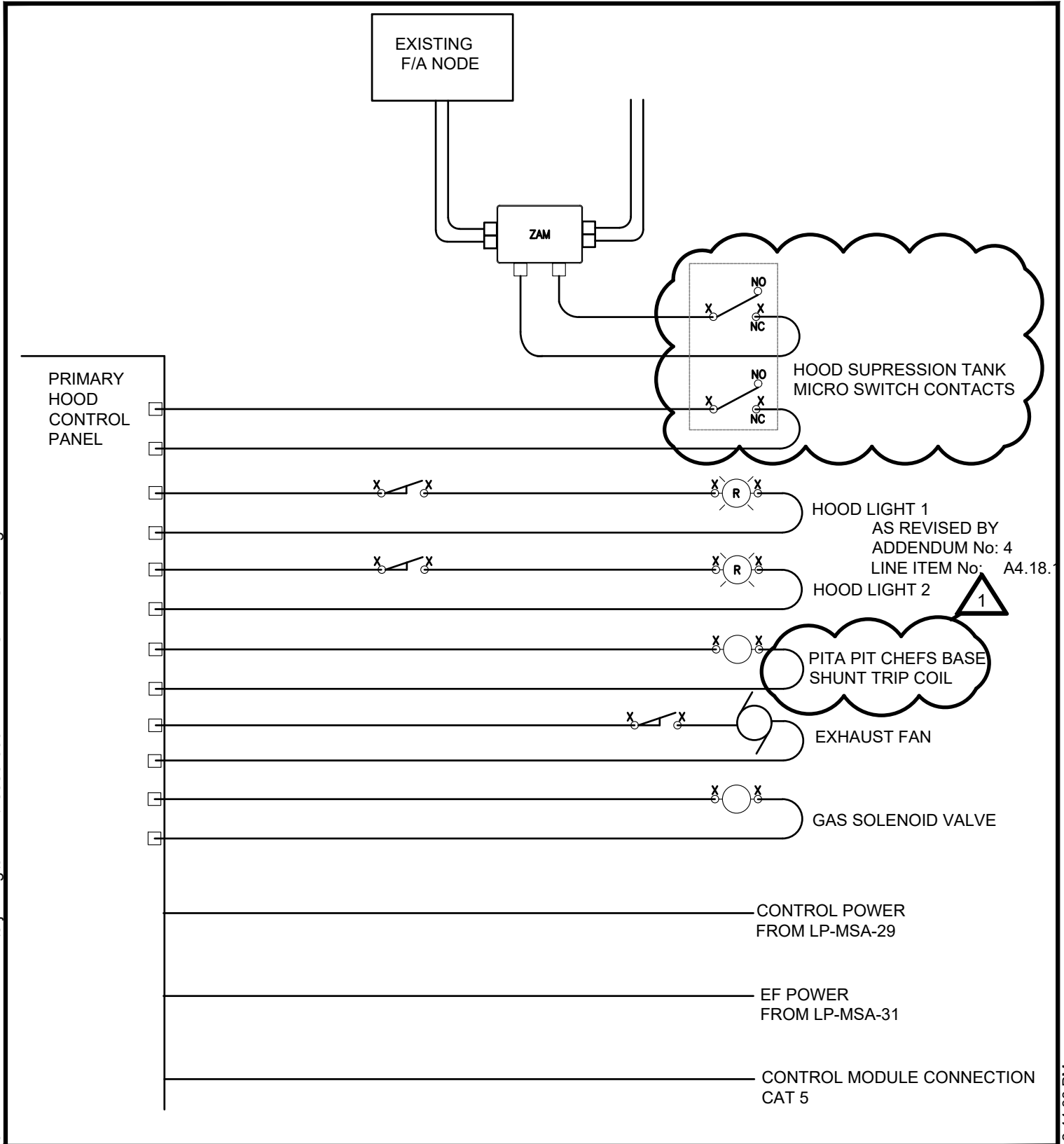
1

AS REVISED BY  
 ADDENDUM No: 4  
 LINE ITEM No: A4.17.1

PROJECT:		<b>ST. LAWRENCE COLLEGE CAFETERIA RENOVATION</b> 100 Portsmouth Avenue, Kingston, Ontario	
DRAWING:		<b>LP-MSA</b>	
 www.jlrichards.ca <b>J.L. Richards</b> ENGINEERS-ARCHITECTS-PLANNERS	This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.	DESIGN: BM	ADDENDUM No. 4  DRAWING #: <b>SKE10-1</b>
		DRAWN: HV	
		JLR #: 28389	


PLOT DATE: Thursday, May 2, 2019 2:44:34 PM

File Location: k:\28000\28389-000.0 slc - cafeteria renovations\3-jlr dwg\6-Elect\28389-000 - PANEL SCHEDULE.dwg



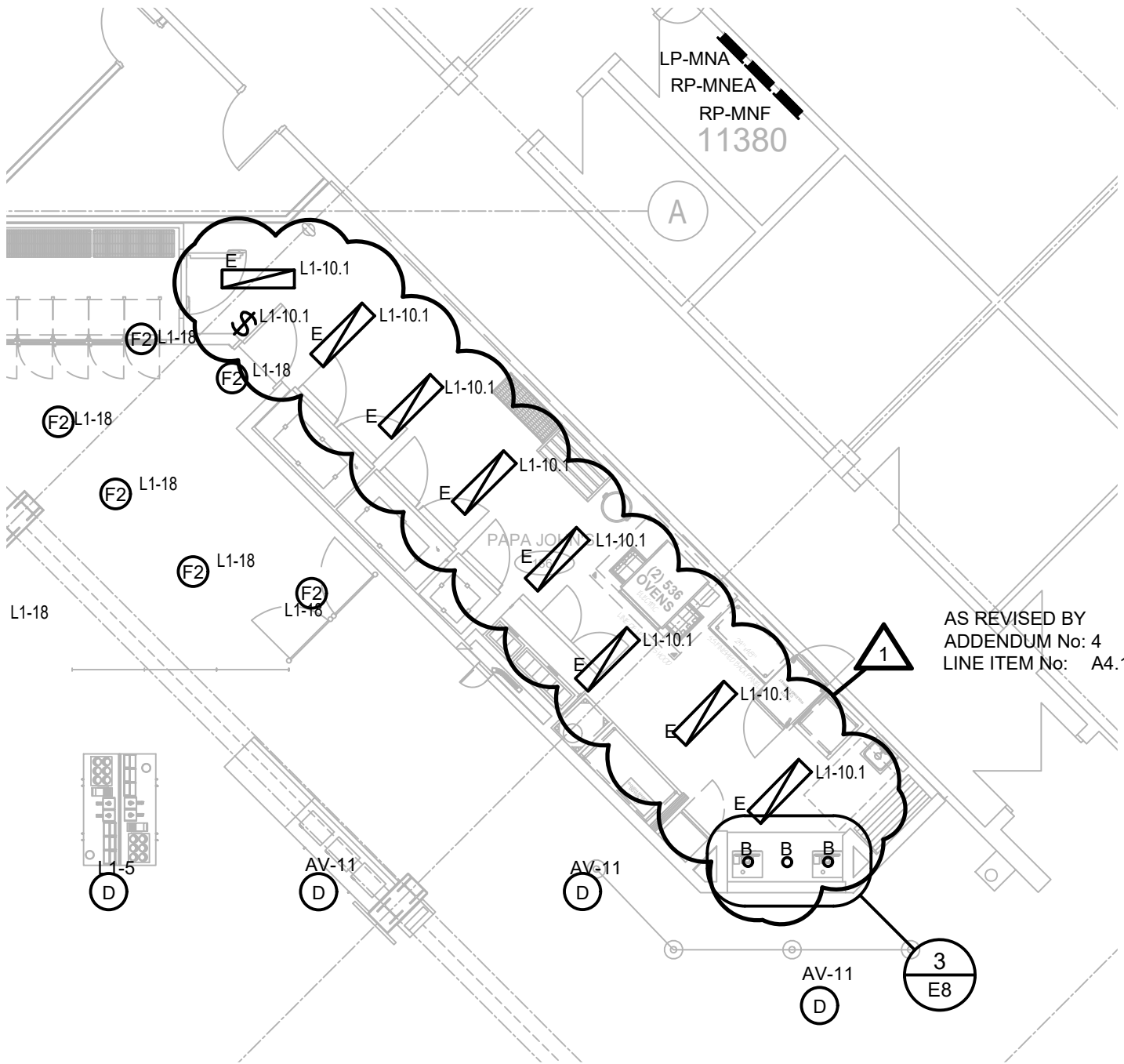
PROJECT: ST. LAWRENCE COLLEGE CAFETERIA RENOVATION  
100 Portsmouth Avenue, Kingston, Ontario

DRAWING: PITA PIT HOOD WIRING SCHEMATIC

 <p>J.L. Richards ENGINEERS-ARCHITECTS-PLANNERS</p>	<p>This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards &amp; Associates Limited.</p>	DESIGN: BM	ADDENDUM No. 4
		DRAWN: HV	
		CHECKED: BM	DRAWING #:
		JLR #: 28389	<b>SKE12-1</b>

PLOT DATE: Thursday, May 2, 2019 2:44:38 PM

File Location: k:\28000\28389-000.0 slc - cafeteria renovations\3-jlr dwg\6-Elect\28389-000 - LTG.dwg



AS REVISED BY  
ADDENDUM No: 4  
LINE ITEM No: A4.15.

**1** FIRST FLOOR LIGHTING PLAN  
 SKE7-1 SCALE: 1:100

PROJECT: **ST. LAWRENCE COLLEGE CAFETERIA RENOVATION**  
 100 Portsmouth Avenue, Kingston, Ontario

DRAWING: **FIRST FLOOR LIGHTING PLAN**

**J.L. Richards**  
 ENGINEERS-ARCHITECTS-PLANNERS

www.jlrichards.ca

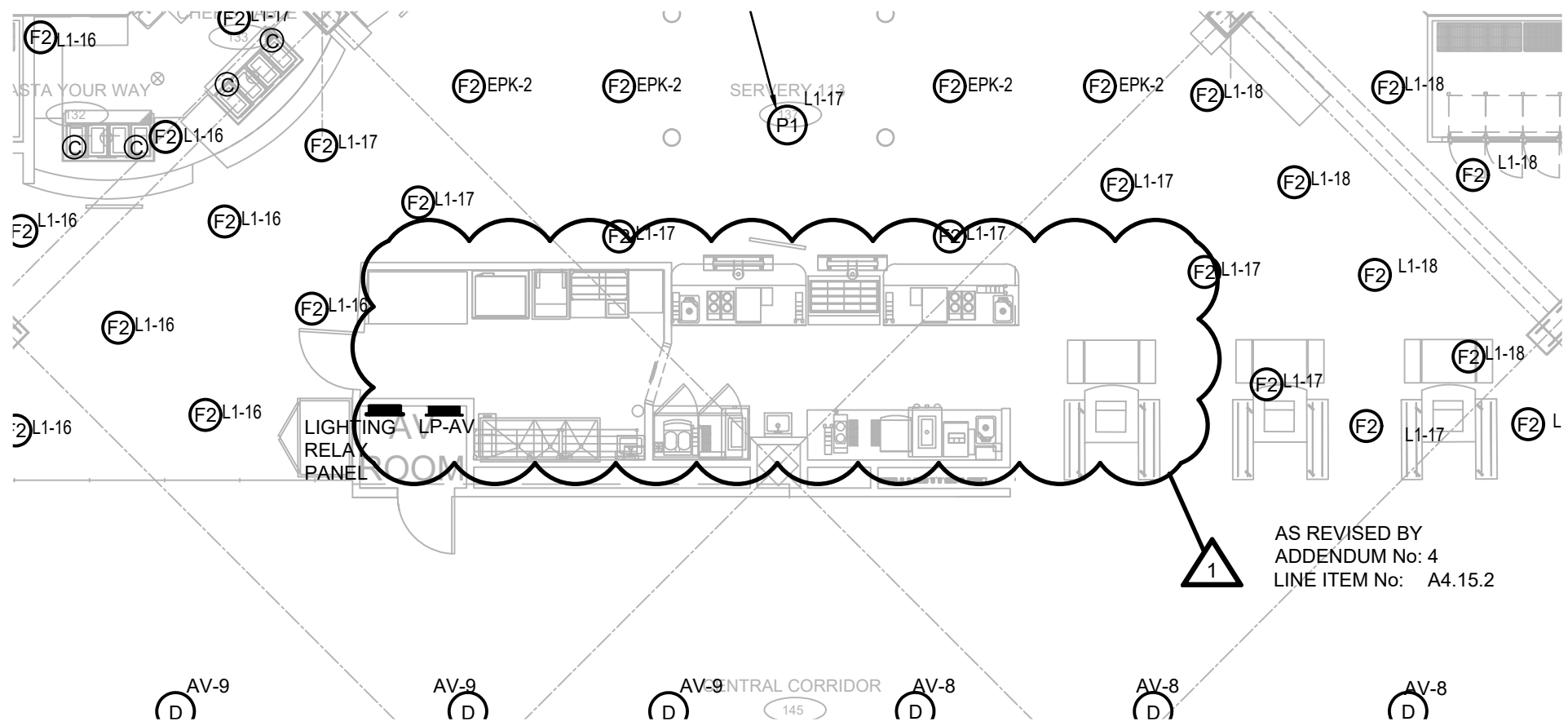
This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.

DESIGN:	BM
DRAWN:	HV
CHECKED:	BM
JLR #:	28389


ADDENDUM No. 4
DRAWING #:
<b>SKE7-1</b>

PLOT DATE: Thursday, May 2, 2019 2:44:45 PM

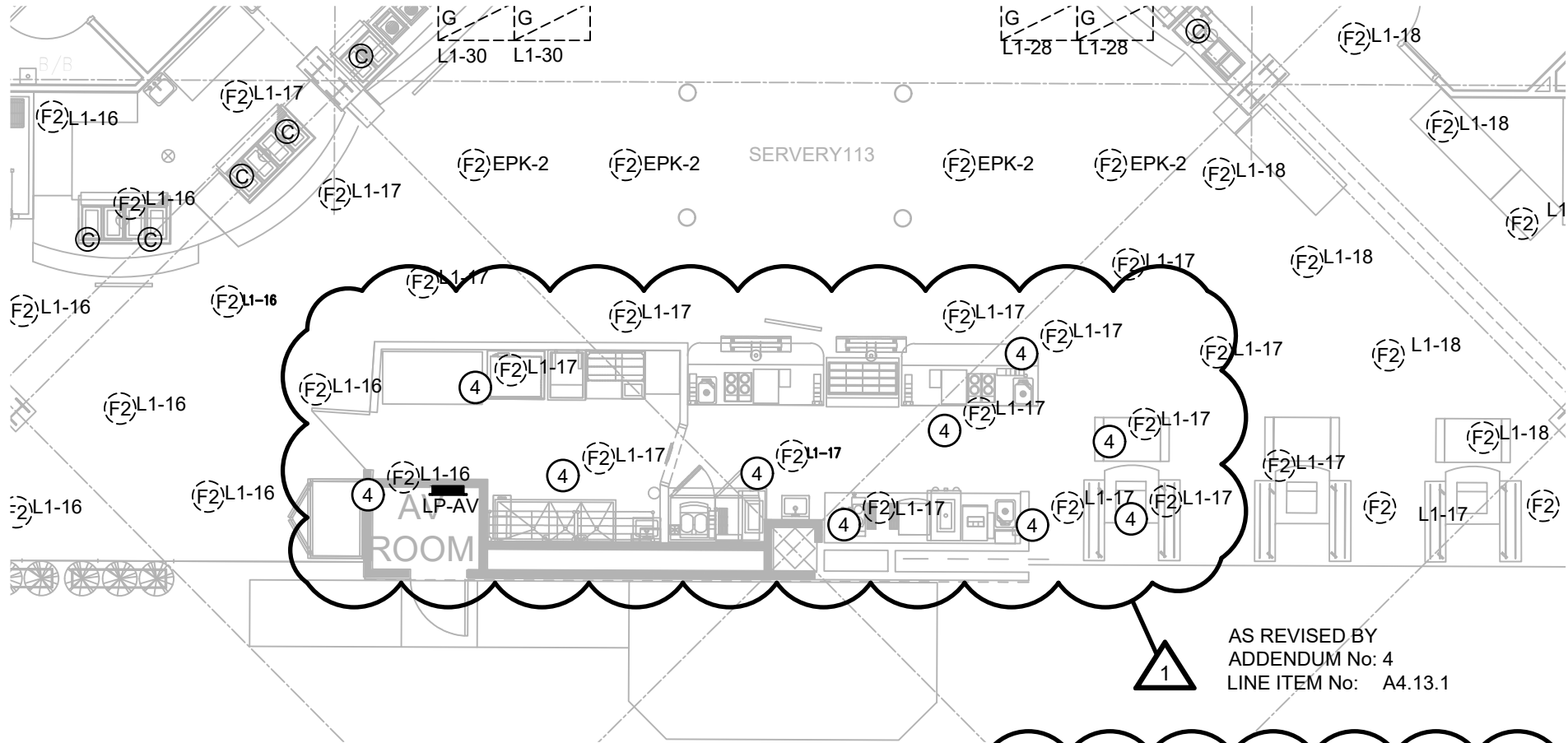
File Location: k:\28000\28389-000.0 slc - cafeteria renovations\3-jlr-dwg\6-Elect\28389-000 - LTG.dwg



**1** FIRST FLOOR LIGHTING PLAN  
SKE7-2 SCALE: 1:100

PROJECT:			<b>ST. LAWRENCE COLLEGE CAFETERIA RENOVATION</b> 100 Portsmouth Avenue, Kingston, Ontario		
DRAWING:			<b>FIRST FLOOR LIGHTING PLAN</b>		
 www.jlrichards.ca This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.	DESIGN: BM	ADDENDUM No. 4			
	DRAWN: HV				
	CHECKED: BM	DRAWING #:			
	JLR #: 28389	<b>SKE7-2</b>			

PLOT DATE: Thursday, May 2, 2019 2:44:48 PM




1  
SKE3-1

**DEMOLITION LIGHTING PLAN**

SCALE: 1:100

4 REMOVE EXISTING STEM MOUNTED LIGHT FIXTURES AND PULL BACK WIRING TO BACK BOX. MAKE SAFE AND CAP BOX.

AS REVISED BY  
ADDENDUM No: 4  
LINE ITEM No: A4.13.1

PROJECT:		<b>ST. LAWRENCE COLLEGE CAFETERIA RENOVATION</b>	
		100 Portsmouth Avenue, Kingston, Ontario	
DRAWING:		<b>DEMOLITION LIGHTING PLAN</b>	
 www.jlrichards.ca This drawing is copyright protected and may not be reproduced or used for purposes other than execution of the described work without the express written consent of J.L. Richards & Associates Limited.	DESIGN: BM	ADDENDUM No. 4	
	DRAWN: HV		DRAWING #:
	CHECKED: BM	<b>SKE3-1</b>	
	JLR #: 28389		

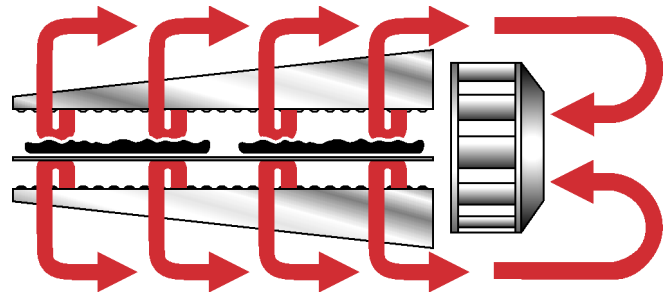


**APPENDIX A**  
**EQUIPMENT INFORMATION SHEETS FOR**  
**VENDOR EQUIPMENT**



**Principle**

Middleby Marshall PS Series conveyor ovens bake both faster and at a lower temperature than other ovens. Patented vertical columns of hot air move heat aerodynamically instead of using high temperatures. The streams of hot air remove the boundary layers of cool heavy air which tend to insulate the product. This gives very rapid baking without burning. All Middleby ovens are designed to cook a multitude of products including pizza, seafood, bagels, ethnic foods and more.



**General Information**

The PS536 conveyor oven is ideally suited for Kiosk and express-style locations where smaller ovens are required.

**Standard Features**

- **Impingement PLUS!** low oven profile and dual air return
- 36"/914mm long cooking chamber
- 20"/508mm-wide, 60"/1524mm long conveyor belt
- Stackable up to three units high
- Patented "Jet Sweep" impingement process that delivers constant heat to the chamber
- Microprocessor-controlled bake time/conveyor speed
- Customer-specific adjustable jet fingers that allow control of heating in 8"/203mm zones
- Stainless steel front, sides, top and interior
- Front-loading window with cool handle
- Reversible conveyor direction

**Optional Features**

- Split belt - two 9-1/2"/241mm belts with individually-adjustable speed settings
- High speed conveyor
- 76"/1930mm-long conveyor
- Lower shelf
- No window

**Conserves Energy**

Middleby ovens provide very efficient heat transfer to product. Energy is conserved as air is recycled from heater to product, with minimum flue or vent loss.

**Cleanability**

PS536 ovens are designed for easy cleaning. Removable parts include: crumb pans, end panels, air fingers, exit tray, and a removable conveyor belt assembly.

**Easily Serviced**

Control compartment is designed for quick and easy access.

**Warranty**

All PS536 models have a one year parts and labor warranty. Oven start-up and demonstration are included at no additional charge (USA only).

**Ventilation**

Use of a ventilation hood is strongly recommended.

\* Patent pending

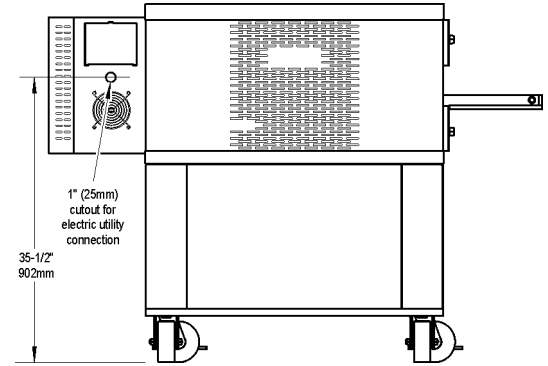
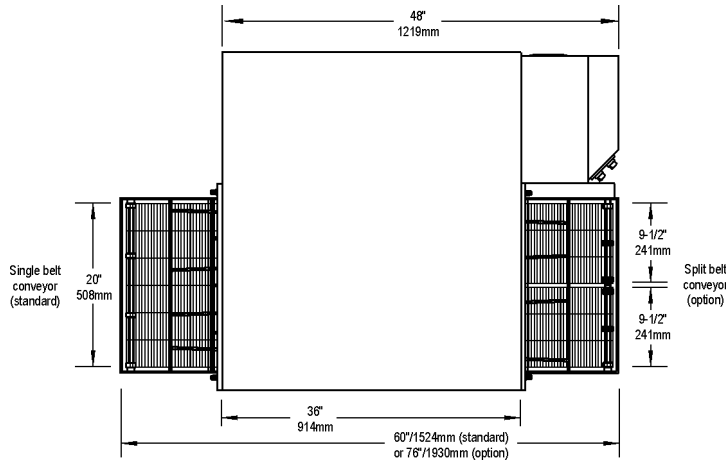


# PS536 Series Electrically Heated Conveyor Oven

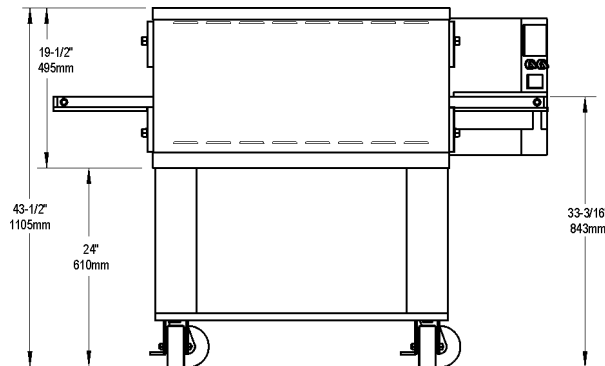
Scale: Approx. 1/24 (1/2"/13mm = 1'/305mm)

**NOTE:** Height dimensions are shown for standard leg extensions. Customer-specific leg extensions will affect these dimensions.

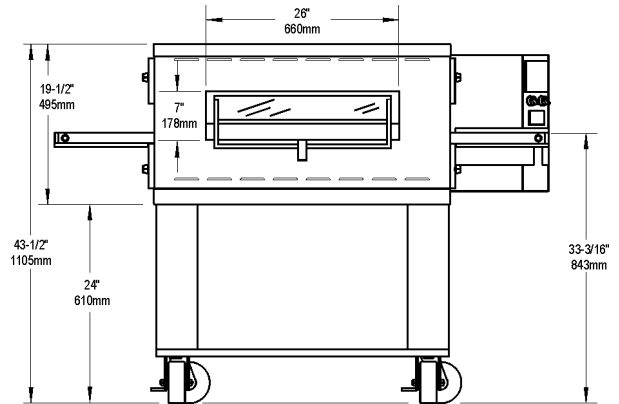
**NOTE:** All units are shown with the optional lower shelf. The dimensions of the oven are not changed by the presence or absence of the lower shelf.



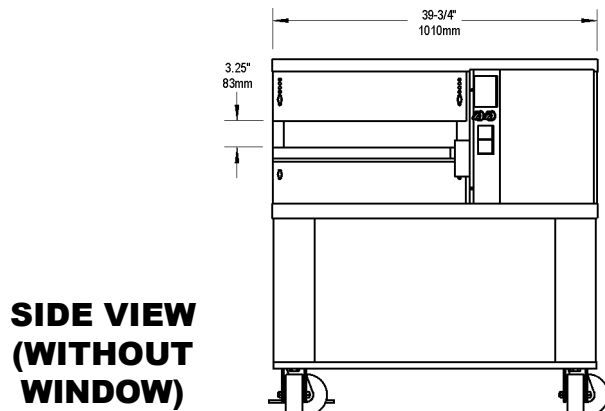
**BACK VIEW**



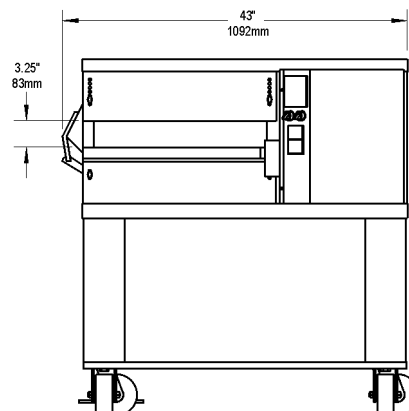
**FRONT VIEW  
(WITHOUT WINDOW)**



**FRONT VIEW  
(WITH WINDOW)**



**SIDE VIEW  
(WITHOUT WINDOW)**



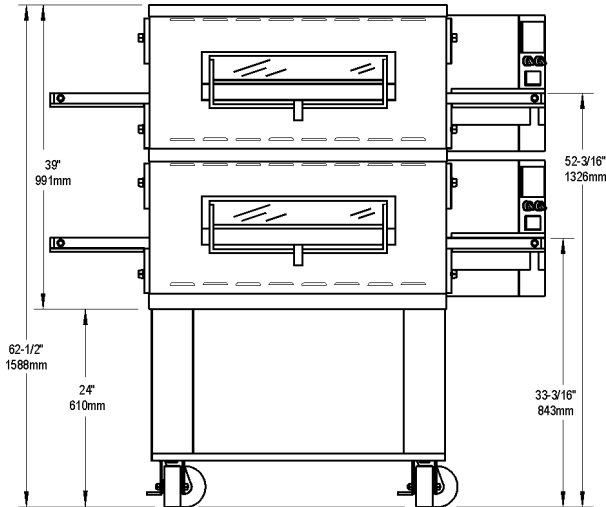
**SIDE VIEW  
(WITH WINDOW)**

Scale: Approx. 1/24 (1/2"/13mm = 1'/305mm)

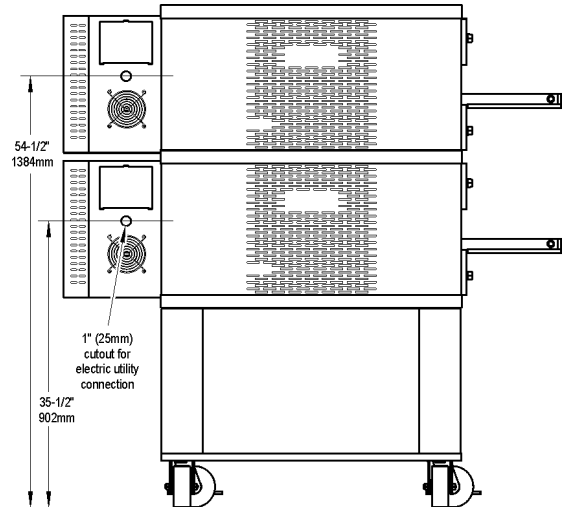
*NOTE: Height dimensions are shown for standard leg extensions. Customer-specific leg extensions will affect these dimensions.*

*NOTE: All units are shown with the optional lower shelf. The dimensions of the oven are not changed by the presence or absence of the lower shelf.*

## PS536-2

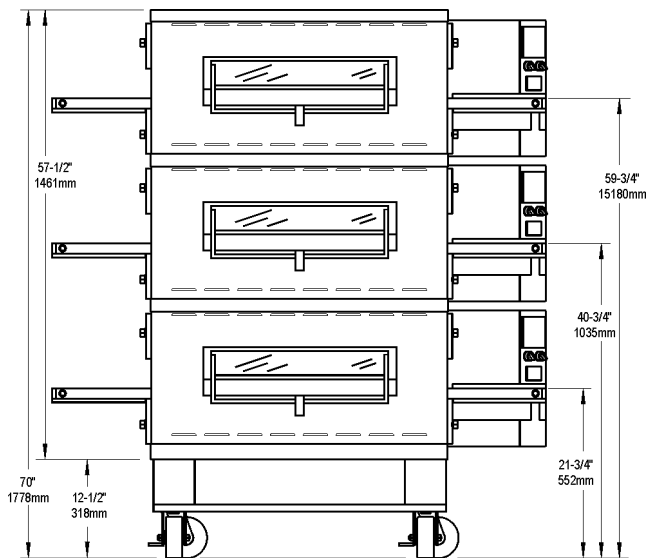


**FRONT VIEW**

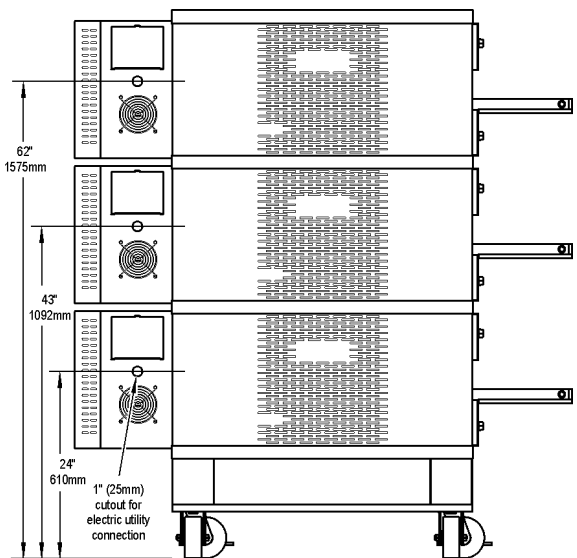


**BACK VIEW**

## PS536-3



**FRONT VIEW**



**BACK VIEW**

**RECOMMENDED MINIMUM CLEARANCES**




Rear of oven to wall	Control end of oven to wall	Non-control end of oven to wall
3" (76mm)	18" (457mm)	3" (76mm)

**GENERAL INFORMATION**

	Heating Zone	Baking Area	Belt Length	Belt Width	Overall Length (exit tray not installed)	Height	Depth (without window)	Max. Operating Temp.	Bake Time Range	Ship Wt.	Ship Cube
PS536-1 with 17.5" (446mm) leg extensions	36" 914mm	5 sq. ft. 0.465m <sup>2</sup>	60" 1524mm OR 76" 1930mm	20" 508mm OR 2 x 9-1/2" 241mm	60" 1524mm OR 76" 1930mm	43-1/2" * 1105mm	39-3/4" 1010mm	600°F 316°C	2:40- 29:50	658 lbs. 299kg	35.2 ft. <sup>3</sup> 0.99m <sup>3</sup>
PS536-2 with 17.5" (446mm) leg extensions	72" 1828mm	10 sq. ft. 0.930m <sup>2</sup>	60" 1524mm OR 76" 1930mm	20" 508mm	60" 1524mm OR 76" 1930mm	62-1/2" * 1588mm	39-3/4" 1010mm	600°F 316°C	2:40- 29:50	1255 lbs. 570kg	70.4 ft. <sup>3</sup> 1.97m <sup>3</sup>
PS536-3 with 6" (152mm) leg extensions	108" 2743mm	15 sq. ft. 1.395m <sup>2</sup>	60" 1524mm OR 76" 1930mm	20" 508mm	60" 1524mm OR 76" 1930mm	70" * 1778mm	39-3/4" 1010mm	600°F 316°C	2:40- 29:50	2449 lbs. 1112kg	105.6 ft. <sup>3</sup> 2.96m <sup>3</sup>

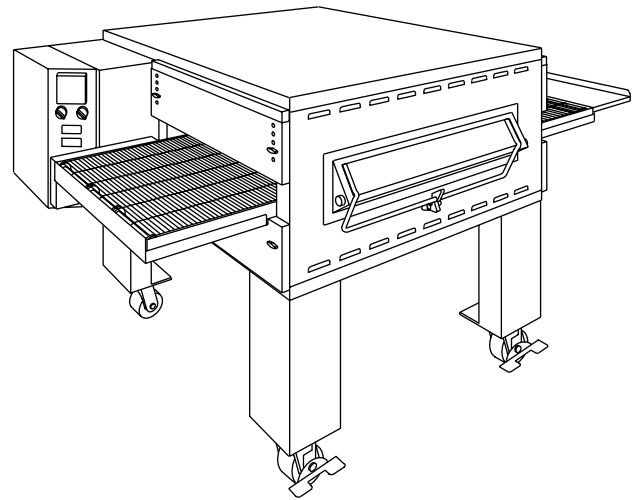
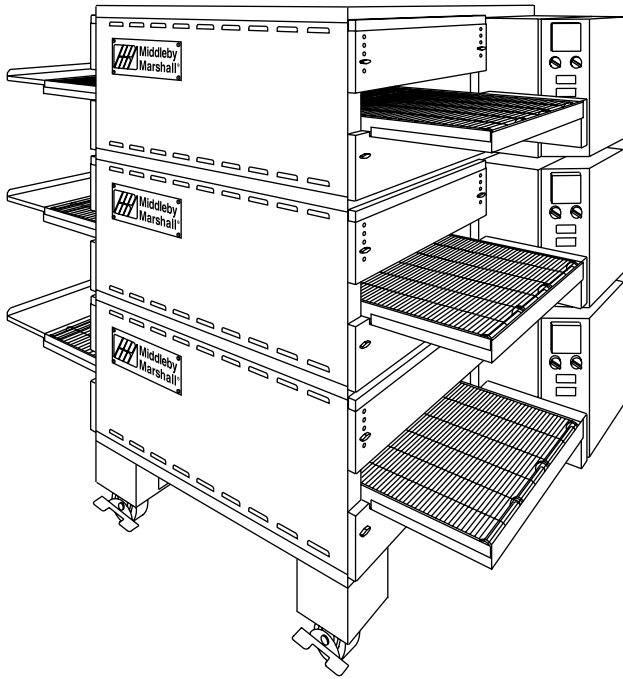
\* Overall height is shown for standard leg extensions. Customer-specific leg extensions will affect the overall height of the oven.

**ELECTRICAL SPECIFICATIONS**

Version	Voltage	Phase	Freq.	Current Draw *	Rated Heat Input	Supply	Breakers
	208V	3	60 Hz	50A	16.0kW	3 pole, 4 wire (3 hot, 1 ground)	As per local codes
	230V	3	60 Hz	45A	16.0kW	3 pole, 4 wire (3 hot, 1 ground)	As per local codes
--	380V	3	50/60 Hz	25A	16.0kW	4 pole, 5 wire (3 hot, 1 neutral, 1 ground)	As per local codes
	380V	3	50 Hz	25A	17.0kW	4 pole, 5 wire (3 hot, 1 neutral, 1 ground)	As per local codes

\* The current draw ratings shown above are average values for normal operation. The initial amperage draw on oven startup may exceed the listed value.

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.**



ENGLISH  
 page 1

FRANÇAIS  
 page 29

ESPAÑOL  
 página 57

# PS536 Gas and Electric Ovens

## Models:

- PS536

## Combinations:

- Single Oven
- Double Oven (Two-Stack)
- Triple Oven (Three-Stack)

## OWNER'S OPERATING AND INSTALLATION MANUAL





*for domestic and standard export ovens*

© 2001 Middleby Marshall, Inc.



**Middleby  
 Marshall®** is a registered trademark of Middleby Marshall, Inc. All rights reserved.

Middleby Cooking Systems Group • 1400 Toastmaster Drive • Elgin, IL 60120 • (847)741-3300 • FAX (847)741-4406

PS536 GAS		
PS536 ELECTRIC 208/230V models		
PS536 ELECTRIC 380V models		—

**NOTICE:**

This Owner's Operating and Installation Manual should be given to the user. The operator of the oven should be familiar with the functions and operation of the oven.

This manual must be kept in a prominent, easily reachable location near the oven.

Gas ovens are designed for use with EITHER natural gas OR liquid propane gas, as specified on the serial plate. Where permitted by local and national codes, the oven can be converted from natural gas to propane operation, or from propane to natural gas operation. This conversion requires the installation of the appropriate Middleby Marshall Gas Conversion Kit by an Authorized Service Agent.

It is suggested to obtain a service contract with a Middleby Marshall Authorized Service Agent.

**WARNING**

**POST, IN A PROMINENT LOCATION, THE EMERGENCY TELEPHONE NUMBER OF YOUR LOCAL GAS SUPPLIER AND INSTRUCTIONS TO BE FOLLOWED IN THE EVENT YOU SMELL GAS.**

Instructions to be followed in the event the user smells gas shall be obtained by consulting the local gas supplier. If the smell of gas is detected, immediately call the emergency phone number of your local Gas Company. They will have personnel and provisions available to correct the problem.

**FOR YOUR SAFETY**

**Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.**

**WARNING:**

**Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.**

**IMPORTANT**

**An electrical wiring diagram for the oven is located inside the machinery compartment.**

**IMPORTANT**

**It is the customer's responsibility to report any concealed or non-concealed damage to the freight company. Retain all shipping materials until it is certain that the equipment has not suffered concealed shipping damage.**

**NOTICE:** CONTACT YOUR MIDDLEBY MARSHALL AUTHORIZED SERVICE AGENT TO PERFORM MAINTENANCE AND REPAIRS. AN AUTHORIZED SERVICE AGENCY DIRECTORY IS SUPPLIED WITH YOUR OVEN.

**NOTICE:** Using any parts other than genuine Middleby Marshall factory manufactured parts relieves the manufacturer of all warranty and liability.

**NOTICE:** Middleby Marshall (Manufacturer) reserves the right to change specifications at any time.

**NOTICE:** The equipment warranty is not valid unless the oven is installed, started and demonstrated under the supervision of a factory certified installer.

**Retain This Manual For Future Reference**

Middleby Cooking Systems Group • 1400 Toastmaster Drive • Elgin, IL 60120 • USA • (847)741-3300 • FAX (847)741-4406

**24-Hour Service Hotline: 1-(800)-238-8444**

**[www.middleby.com](http://www.middleby.com)**

# TABLE OF CONTENTS

	<i>page</i>		<i>page</i>
<b>SECTION 1 - DESCRIPTION</b> .....	<b>4</b>	V. FINAL ASSEMBLY .....	12
I. OVEN USES .....	4	VI. ELECTRICAL SUPPLY .....	13
II. OVEN COMPONENTS .....	4	A. Additional Information - Gas Ovens .....	13
A. Window .....	4	B. Additional Information - Electric Ovens .....	13
B. Conveyor Exit Tray .....	4	C. Connection .....	13
C. Eyebrows .....	4	VII. GAS SUPPLY .....	13
D. End Plugs .....	4	A. Gas Utility Rough-In Recommendations .....	14
E. Control Panel .....	4	B. Connection .....	14
F. Machinery Compartment Access Panel .....	4	C. Gas Conversion .....	14
G. Serial Plate .....	4	<b>SECTION 3 - OPERATION</b> .....	<b>15</b>
H. Conveyor Drive Motor .....	4	I. LOCATION AND DESCRIPTION OF CONTROLS ..	15
I. Crumb Pans .....	4	A. BLOWER (☼) Switch .....	15
J. Conveyor .....	4	B. CONVEYOR (☐) Switch .....	15
K. Gas Burner or Heating Elements .....	4	C. Conveyor Speed Controller .....	15
L. Blowers .....	4	D. Digital Temperature Controller .....	15
M. Air Fingers .....	4	E. Machinery Cpt. Access Panel Safety Switch ..	15
III. OVEN SPECIFICATIONS .....	4	II. NORMAL OPERATION, STEP-BY-STEP .....	16
A. Dimensions .....	4	A. Daily Startup Procedure .....	16
B. General Specifications .....	4	B. Daily Shutdown Procedure .....	17
C. Electrical Specifications - Electric Ovens .....	5	III. QUICK REFERENCE: DIGITAL TEMPERATURE	
D. Electrical Specifications - Gas Ovens .....	5	CONTROLLERS .....	18
E. Gas Orifice and Pressure Specifications .....	5	IV. QUICK REFERENCE: TROUBLESHOOTING .....	20
<b>SECTION 2 - INSTALLATION</b> .....	<b>6</b>	<b>SECTION 4 - MAINTENANCE</b> .....	<b>21</b>
I. INSTALLATION KIT .....	7	I. MAINTENANCE - DAILY .....	21
II. BASE PAD KIT .....	7	II. MAINTENANCE - MONTHLY .....	22
III. VENTILATION SYSTEM .....	8	III. MAINTENANCE - EVERY 3 MONTHS .....	22
A. Requirements .....	8	IV. MAINTENANCE - EVERY 6 MONTHS .....	24
B. Recommendations .....	8	V. KEY SPARE PARTS KIT .....	24
C. Other Ventilation Concerns .....	8	<b>SECTION 5 - ELECTRICAL WIRING DIAGRAMS</b> .....	<b>25</b>
IV. ASSEMBLY .....	9	I. WIRING DIAGRAM, PS536 GAS OVEN, .....	25
A. Top Panel and Base Pad Assembly .....	9	208/230V, 60 Hz, 1 Ph	
B. Stacking .....	10	II. WIRING DIAGRAM, PS536 ELECTRIC, .....	26
C. Restraint Cable Installation .....	10	208/230V, 60 Hz, 3 Ph	
D. Conveyor Installation .....	11	III. WIRING DIAGRAM, PS536 ELECTRIC OVEN, .....	27
		380V, 50 Hz, 3 Ph	

# SECTION 1 - DESCRIPTION

## I. OVEN USES

PS536 Ovens can be used to bake and/or cook a wide variety of food products, such as pizza, pizza-type products, cookies, sandwiches and others.

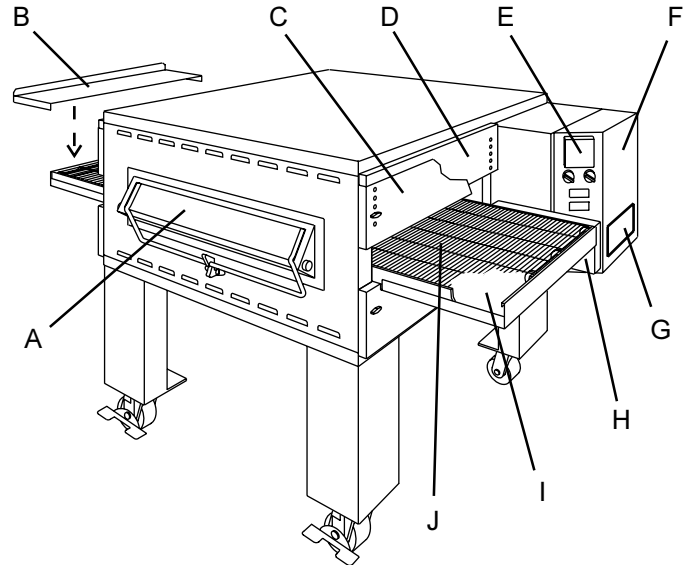
## II. OVEN COMPONENTS - see Figure 1-1.

- A. **Window (on ovens so equipped):** Allows the user to see and access food products inside the baking chamber.
- B. **Conveyor Exit Tray:** Prevents food products from falling off the end of the moving conveyor.
- C. **Eyebrows (on ovens so equipped):** Can be adjusted to various heights to prevent heat loss into the environment.
- D. **End Plugs:** Allow access to the oven's interior.
- E. **Control Panel:** Location of the operating controls for the oven. Refer to Section 3, Operation, for details.
- F. **Machinery Compartment Access Panel:** Allows access to the oven's interior components. No user-servicable parts are located inside the machinery compartment.
- G. **Serial Plate:** Provides specifications for the oven that affect installation and operation. Refer to Section 2, Installation, for details.
- H. **Conveyor Drive Motor:** Moves the conveyor.
- I. **Crumb Pans:** Catch crumbs and other material that drop through the conveyor belt. One crumb pan is located underneath each end of the conveyor.
- J. **Conveyor:** Moves the food product through the oven.

Not Shown:

- K. **Gas Burner (gas ovens) or Heating Elements (electric ovens):** Heat(s) air, which is then projected to the air fingers by the blowers.
- L. **Blowers:** Fans that project hot air from the gas burner or heating elements to the air fingers.
- M. **Air Fingers:** Project streams of hot air onto the food product.

Fig. 1-1 - Oven Components



## III. OVEN SPECIFICATIONS

Table 1-1: Dimensions


<b>Overall Height:</b>	single oven with 17-1/2" (446mm) legs	43-1/2" (1105mm)
	double oven with 17-1/2" (446mm) legs	63" (1600mm)
	triple oven with 6" (152mm) legs	71" (1803mm)
<b>Overall Depth:</b>	without front window	39-3/4" (1010mm)
	with front window	43" (1092mm)
<b>Overall Length:</b>	without exit tray installed	60" (1524mm)
	with exit tray installed	68-1/4" (1734mm)
<b>Baking Chamber Length</b>		36" (914mm)
<b>Conveyor Width:</b>	Single Belt	20" (508mm)
	Split Belt	2 x 9-1/2" (241mm)
<b>Conveyor Length</b>		60" (1524mm)
<b>Recommended Minimum Clearances:</b>		
	Rear of oven to wall	3" (76mm)
	Control end of conveyor to wall	18" (457mm)
	Non-control end of oven to wall	3" (76mm)

Table 1-2: General specifications (per oven cavity)

<b>Weight</b>	400 lbs. (182kg)
<b>Rated Heat Input:</b>	
	Natural gas ovens 50,000 BTU (12,600 kcal, 14.65 kW/hr.)
	Propane ovens 45,000 BTU (11,340 kcal, 13.19 kW/hr.)
	Electric ovens 16kW
<b>Operating Temperature</b>	200-600°F (93-316°C)
<b>Warmup Time</b>	25 minutes

**Table 1-3: Electrical specifications for electric ovens (per oven cavity)**

Main Blower Voltage	Control Circuit Voltage	Phase	Freq.	Current Draw				kW Rating	Poles	Wires
				L1	L2	L3	N			
208V	120V conv. speed control, drive motor, contactor, & temp. control; all others 208V	3 Ph	60 Hz	50A	50A	50A	--	16.0 kW at 208V	4 Pole	4 Wire (3 hot, 1 gnd)
230V	120V conv. speed control, drive motor, contactor, & temp. control; all others 230V	3 Ph	60 Hz	45A	45A	45A	--	16.0 kW at 230V	4 Pole	4 Wire (3 hot, 1 gnd)
380V *	120V conv. speed control, drive motor, contactor, & temp. control; 380V heating elements; all others 240V	3 Ph	50 Hz	25A	25A	28A	5A	16.0 kW at 380V	4 Pole	5 Wire (3 hot, 1 neutral, 1 gnd)

\* 380V model is not approved by  or .

**Table 1-4: Electrical specifications for gas ovens (per oven cavity)**

Main Blower Voltage	Control Circuit Voltage	Phase	Freq.	Current Draw	Poles	Wires
208/240V	120V conv. speed control, drive motor, contactor, & temp. control; all others as per line (208/240V)	1 Ph	60 Hz	6A	3 Pole	4 Wire (2 hot, 1 neut, 1 gnd)

**Table 1-5: Gas orifice and pressure specifications (per oven cavity)**

Gas Type	Main Orifice I.D.	Pilot Orifice I.D.	Supply (Inlet) Pressure	Orifice (Manifold) Pressure
Natural	0.0935" (2.3749mm, #42 drill)	0.018" (0.46mm)	4-7" W.C. (9.95-17.4mbar) *	3.5" W.C. (8.7mbar)
Propane	0.0520" (1.3208mm, #55 drill)	0.018" (0.46mm)	11-14" W.C. (27.4-34.9mbar) *	10.5" W.C. (24.9mbar)

\* The gas supply pressures shown are for ovens installed in North America. The required gas supply pressures of other locations are dependent on the local gas type and on all applicable local codes.

**IMPORTANT**

Additional electrical information is provided on the oven's serial plate, and on the wiring diagram inside the machinery compartment.

## SECTION 2 - INSTALLATION

**WARNING** - For gas ovens, after any conversions, readjustments, or service work on the oven:

- Perform a gas leak test.
- Test for correct air supply.
- Test for proper combustion and gas supply.
- Check that the ventilation system is in operation.

### WARNING

For electric ovens, after any conversions, readjustments, or service work on the oven, check that the ventilation system (if so equipped) is in operation.

### WARNING

Keep the appliance area free and clear of combustibles.

### WARNING

The oven must be installed on an even (level) non-flammable flooring and any adjacent walls must be non-flammable. Recommended minimum clearances are specified in the *Description* section of this Manual.

### WARNING

Do not obstruct the flow of combustion and ventilation air to and from your oven. There must be no obstructions around or underneath the oven. Constructional changes to the area where the oven is installed shall not affect the air supply to the oven.

### CAUTION

For additional installation information, contact your local Authorized Service Agent.

### NOTE

There must be adequate clearance between the oven and combustible construction. Clearance must also be provided for servicing and for proper operation.

### NOTE

An electrical wiring diagram for the oven is located inside the machinery compartment.

### NOTE

*All aspects of the oven installation, including placement, utility connections, and ventilation requirements, must conform with any applicable local, national, or international codes. These codes supercede the requirements and guidelines provided in this manual.*

### NOTE

*In the USA, the oven installation must conform with local codes. In the absence of local codes, gas oven installations must conform with the National Fuel Gas Code, ANSI Z223.1. Gas and electric ovens, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code (NEC), or ANSI/NFPA70.*

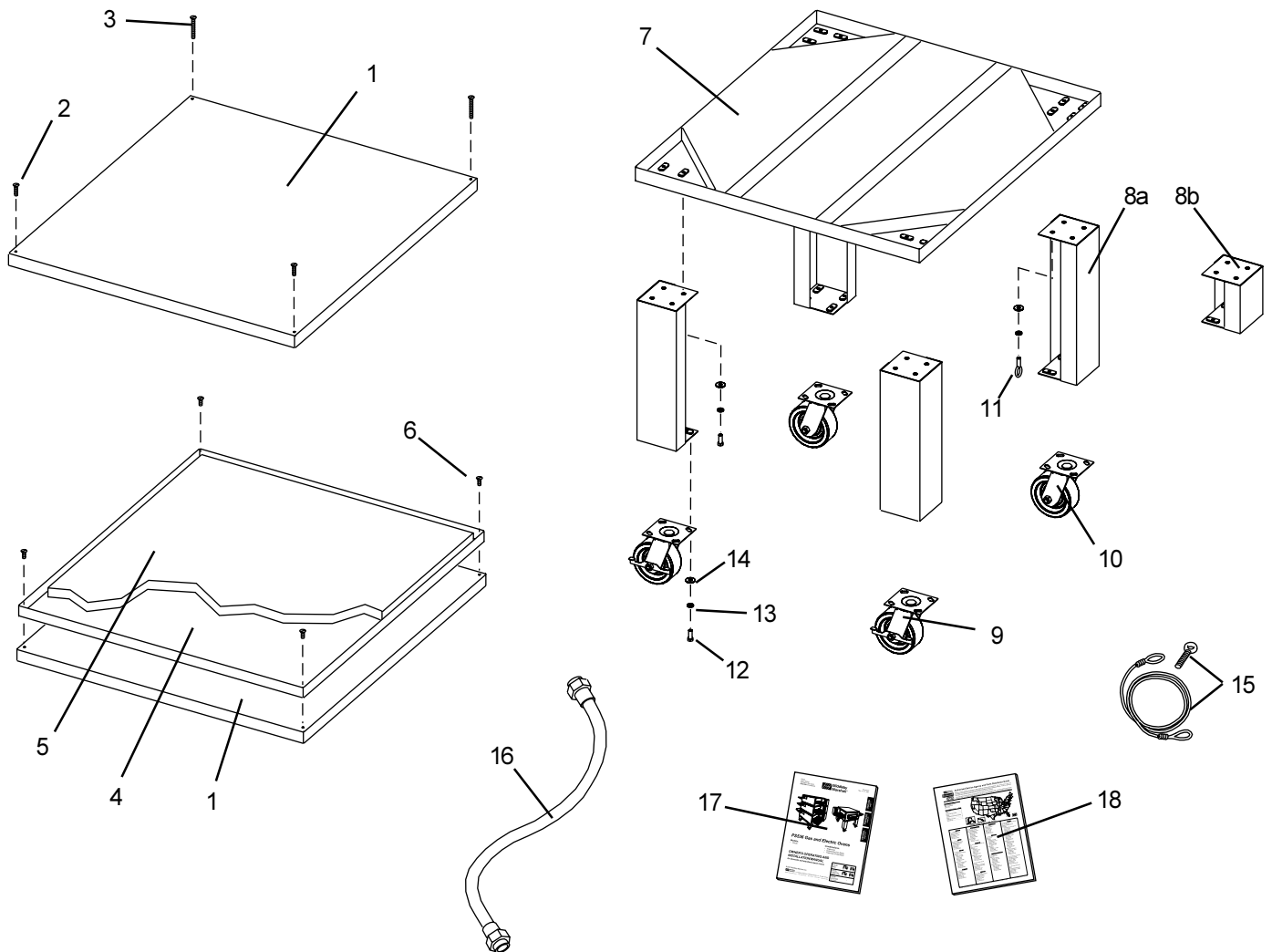
### NOTE

*In Canada, the oven installation must conform with local codes. In the absence of local codes, gas oven installations must conform with the Natural Gas Installation Code, CAN/CGA-B149.1, or the Propane Gas Installation Code, CAN/CGA-B149.2, as applicable. Gas and electric ovens, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the Canadian Electrical Code CSA C22.2.*

### NOTE

*In Australia, the oven installation must conform with any requirements of the appropriate statutory authority. Gas oven installations must conform with AGA Code, AG601.*

Figure 2-1 - Installation Kit



ENGLISH

## I. INSTALLATION KIT - see Figure 2-1

Item	Qty. Single Oven	Qty. Double Oven	Qty. Triple Oven	Part No.	Description
1	1	2	3	42882	Top panel
2	2	2	2	220352	Screw, pan head #10 x 1" (top panel - front)
3	2	2	2	3A80A8801	Screw, pan head #10 x 2" (top panel - rear)
4	--	1	2	44837	Stacking panel
5	--	1	2	44918	Insulation, stacking panel, pre-cut
6	--	4	8	4111A8815	Screw, hex head #10-32 x 1/2" (stacking panels)
7	1	1	1	42893	Base pad
8a	4	4	--	42890	17-1/2" (445mm) leg extension, for single and double ovens
8b	--	--	4	44799	6" (152mm) leg extension, for triple ovens
9	2	2	2	22290-0009	Caster, with flat plate and brake
10	2	2	2	22290-0010	Caster, with flat plate (no brake)
11	1	1	1	21392-0004	Eyebolt, 3/4"
12	31	31	31	220373	Hex bolt, 3/8"-16 x 1"
13	32	32	32	21416-0001	Flat washer, 3/8"
14	32	32	32	21422-0001	Lockwasher, 3/8"
15	1	1	1	22450-0228	Restraint cable assembly
16	1	2	3	22361-0001	Gas hose
17	1	1	1	44727	Owner's Operating Manual, PS536 Gas and Electric Ovens
18	1	1	1	1002040	Middleby Marshall Authorized Service Agency Listing

## II. VENTILATION SYSTEM

**IMPORTANT**

Where national or local codes require the installation of fire suppression equipment or other supplementary equipment, **DO NOT** mount the equipment directly to the oven.

**MOUNTING SUCH EQUIPMENT ON THE OVEN MAY:**

- **VOID AGENCY CERTIFICATIONS**
- **RESTRICT SERVICE ACCESS**
- **LEAD TO INCREASED SERVICE EXPENSES FOR THE OWNER**

## A. Requirements

**CAUTION**

Gas oven installations REQUIRE a mechanically driven ventilation system with electrical exhaust air sensing control.

A mechanically driven ventilation system is STRONGLY RECOMMENDED for electric oven installations.

PROPER VENTILATION OF THE OVEN IS THE RESPONSIBILITY OF THE OWNER.

## B. Recommendations

NOTE THAT THE HOOD DIMENSIONS SHOWN IN FIGURE 2-2 ARE RECOMMENDATIONS ONLY. LOCAL, NATIONAL AND INTERNATIONAL CODES MUST BE FOLLOWED WHEN INSTALLING THE VENTILATION SYSTEM. ANY APPLICABLE CODES SUPERSEDE THE RECOMMENDATIONS SHOWN IN THIS MANUAL.

The rate of air flow exhausted through the ventilation system may vary depending on the oven configuration and hood design. Consult the hood manufacturer or ventilation engineer for these specifications.

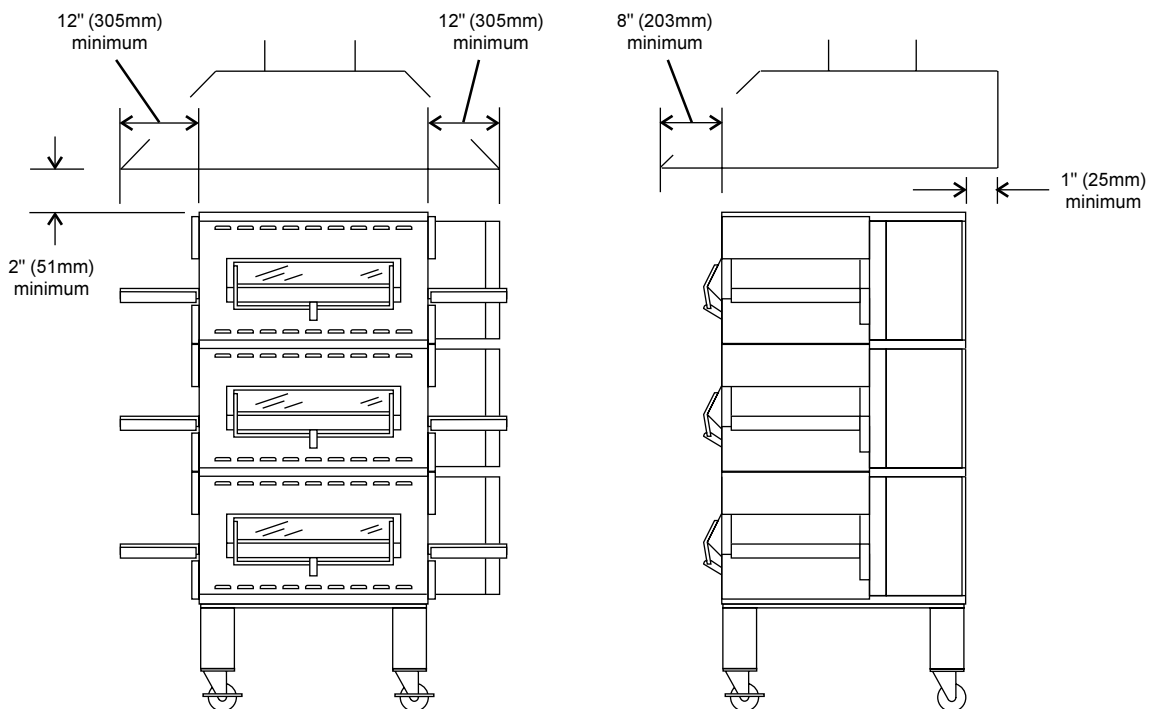
To avoid a negative pressure condition in the kitchen area, return air must be brought back to replenish the air that was exhausted. A negative pressure in the kitchen can cause heat-related problems to the oven components as if there were no ventilation at all. The best method of supplying return air is through the heating, ventilation and air conditioning (HVAC) system. Through the HVAC system, the air can be temperature-controlled for summer and winter. Return air can also be brought in directly from outside the building, but detrimental effects can result from extreme seasonal hot and cold temperatures from the outdoors.

**NOTE:** Return air from the mechanically driven system must not blow at the opening of the baking chamber. Poor oven baking performance will result.

## C. Other ventilation concerns

- Special locations, conditions, or problems may require the services of a ventilation engineer or specialist.
- Inadequate ventilation can inhibit oven performance.
- It is recommended that the ventilation system and duct work be checked at prevailing intervals as specified by the hood manufacturer and/or HVAC engineer or specialist.

Fig. 2-2 - Ventilation System



### III. ASSEMBLY

#### A. Top Panel and Base Pad Assembly

1. Install the four leg extensions onto the base pad using the 3/8"-16x1" screws, 3/8" flat washers, and 3/8" lockwashers supplied in the Base Pad Kit. See Figure 2-3. Check that the finished sides of each leg extension face OUTWARDS.

One rear leg should be attached using three 3/8"-16 x 1" screws and the 3/4" eyebolt, as shown in Figure 2-3. This eyebolt acts as the anchor point for the restraint cable assembly (see Part C, [Restraint Cable Installation](#)).

2. Install one caster onto each leg extension, as shown in Figure 2-4. Use the 3/8"-16x1" screws, 3/8" flat washers, and 3/8" lockwashers supplied in the Installation Kit. The locking casters should be installed at the FRONT of the oven. The non-locking casters should be installed at the REAR of the oven.
3. Install the top panel in place on the top oven cavity using the screws included in the base pad kit, as shown in Figure 2-4.
4. Install the lower oven cavity onto the base pad. Check that the eyebolt welded onto the pad faces the rear of the oven.

Figure 2-3 - Leg extension and casters installation

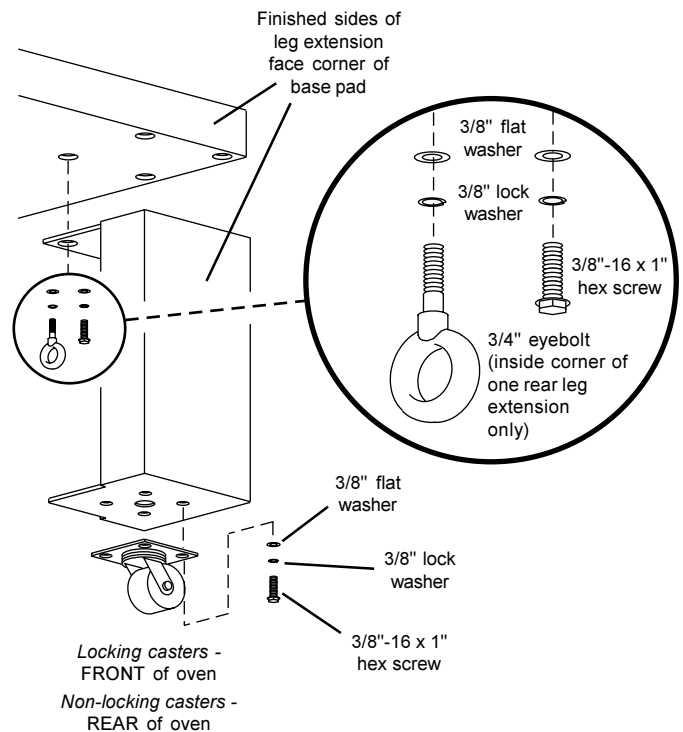
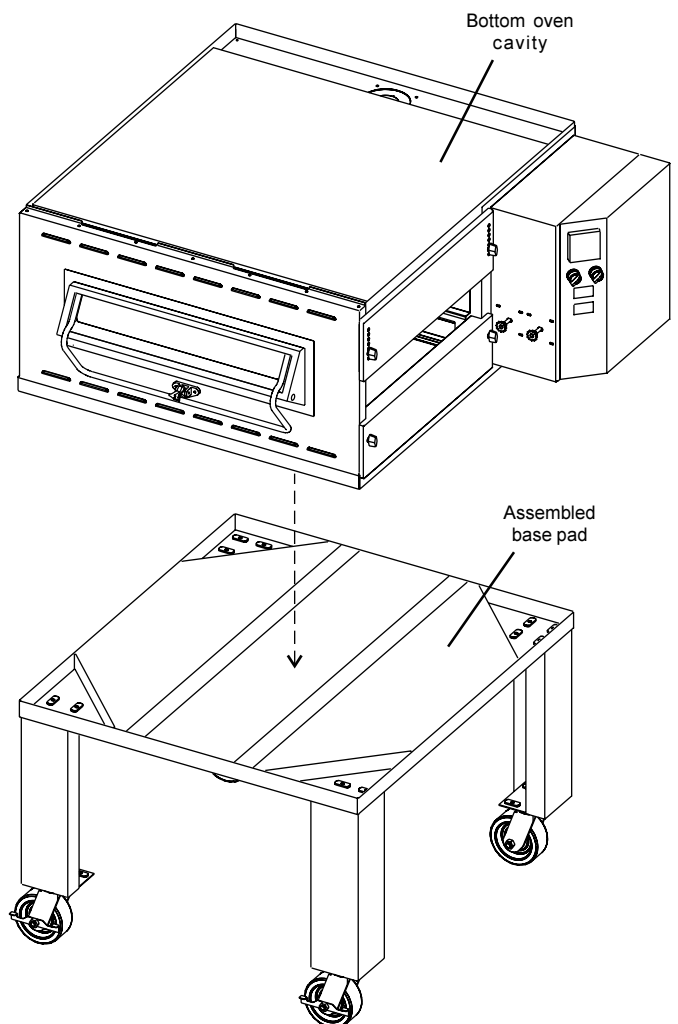
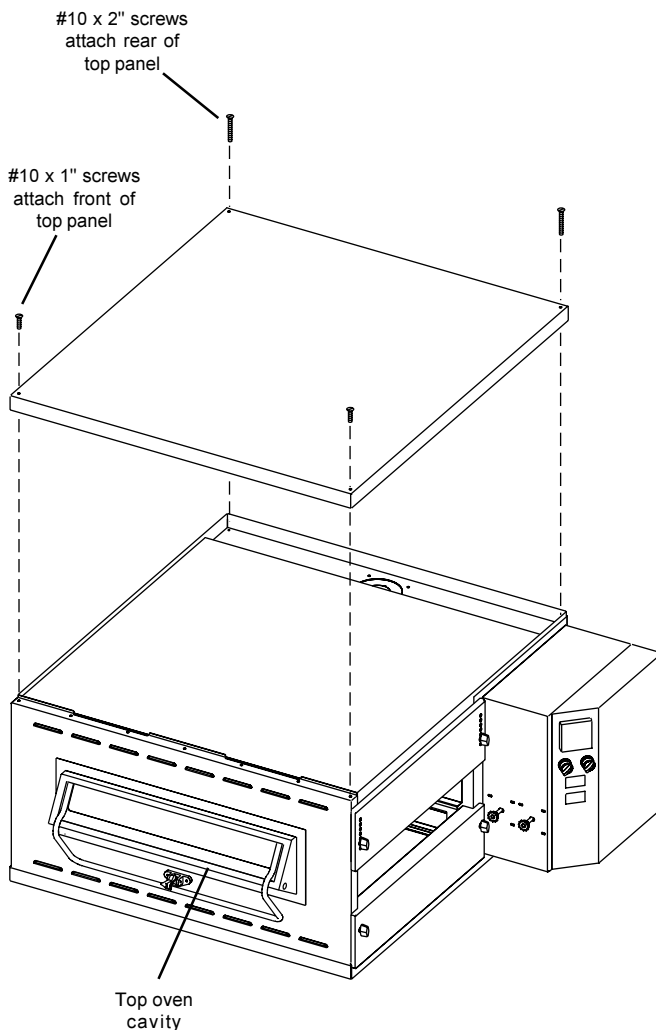


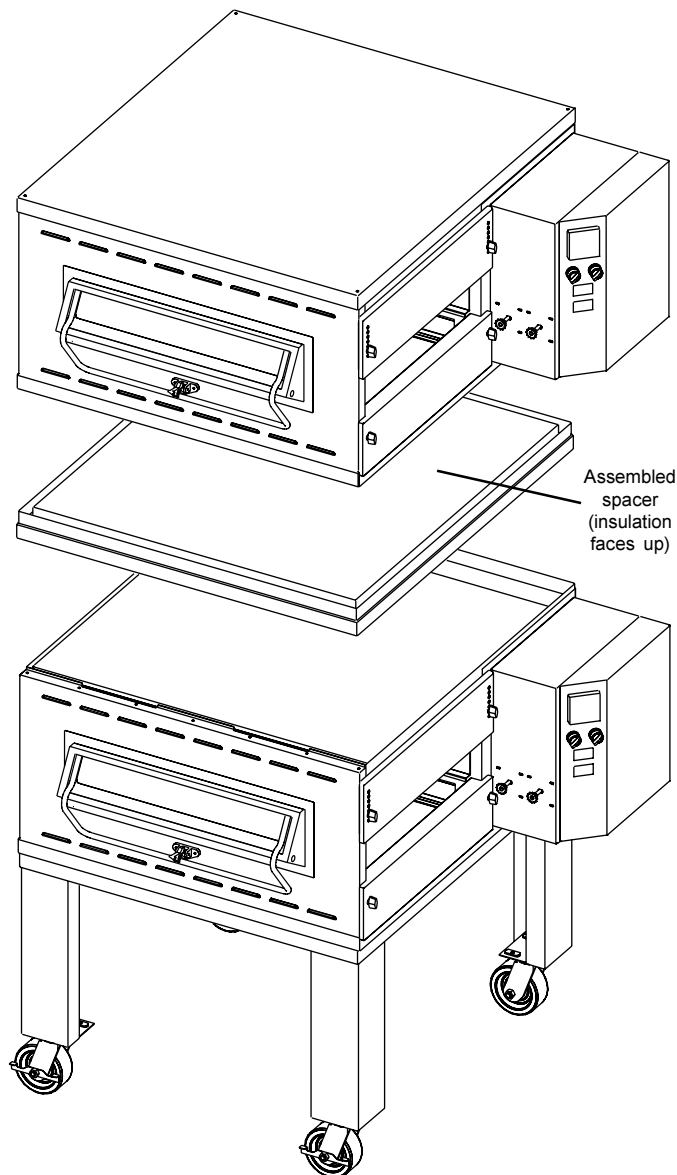
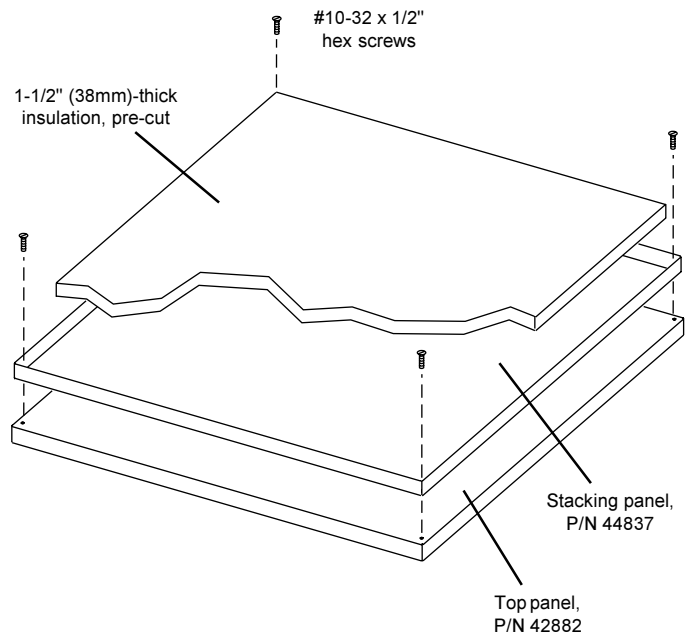
Figure 2-4 - Top panel and base pad installation



**B. Stacking**

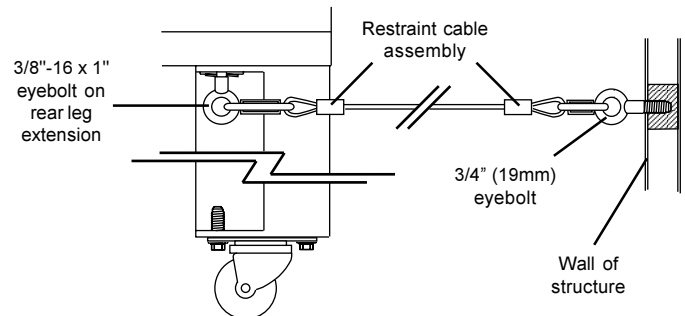
For single ovens, skip ahead to Part C, Restraint Cable Installation. For double or triple ovens, continue on to Step 1, below.

1. Assemble the stacking spacer(s) as shown in Figure 2-5. One spacer assembly is supplied for a double oven, while two are supplied for a triple oven.
2. Place one of the assembled spacers on top of the lower oven cavity, making sure that the insulation faces up.
3. Place the center oven cavity (for triple ovens) or the top oven cavity (for double ovens) on top of the spacer. Check that all four sides of the spacer overlap the base of the oven, and that the oven is level and firmly seated. See Figure 2-6.
4. For triple ovens, repeat Steps 2 and 3 to install the top oven cavity.

**Figure 2-6 - Stacking****Figure 2-5 - Assembling the stacking spacers****C. Restraint Cable Installation**

Because the oven is equipped with casters, a restraint cable assembly must be installed to limit the movement of the appliance without depending on the connector and the quick disconnect device or its associated piping. One end of the cable is anchored to the eyebolt on one of the rear leg extensions, while the other is anchored to the wall. See Figure 2-7.

After connecting the restraint cable, move the oven to its final location. Then, lock the two front casters.

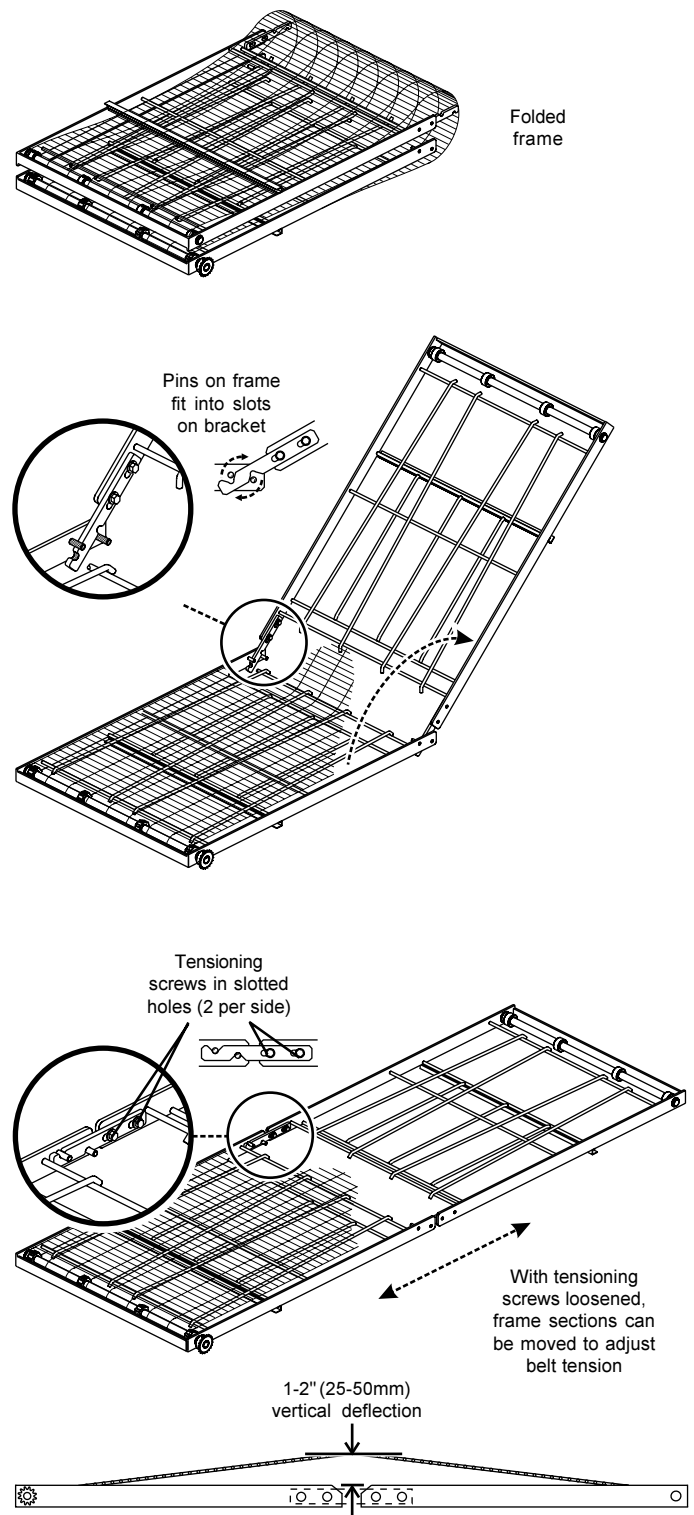
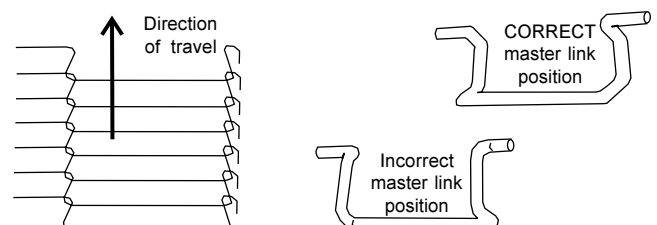
**Figure 2-7 - Installing the Restraint Cable**

**D. Conveyor Installation**

1. Unfold the conveyor frame so that it lies flat on the floor. As you unfold the frame, check that the locator pins shown in Figure 2-8 lock into the slots on the bracket.
2. Refer to Figure 2-8. Note the locations of the four tensioning screws (2 per side) in the slotted holes on the brackets. Loosen these screws to allow the conveyor to be properly tensioned.
3. Lift the conveyor belt away from the frame, as shown in Figure 2-8, to check the belt tension. The belt should lift between 1-2" (25-50mm).

If it is necessary to adjust the belt tension, gently push the two conveyor frame sections closer together, or further apart, as required. Then, re-check the tension of the conveyor belt. Repeat this step as necessary until the proper belt tension is achieved.

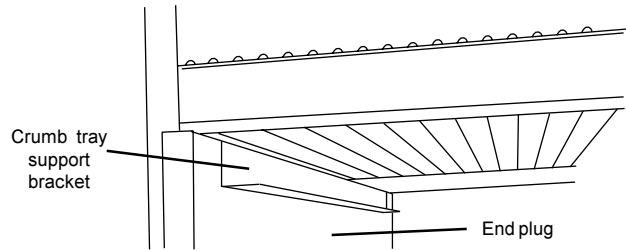
4. When the belt tension is correctly adjusted, tighten the two tensioning screws on each side of the conveyor frame. This fastens the two frame sections together at the correct belt tension.
5. If it is necessary to add or remove conveyor links to achieve the correct tension, OR if it is necessary to reverse the conveyor belt for correct orientation, the belt will need to be removed from the conveyor frame. If this is necessary, perform the following procedure:
  - a. Remove the master links using long-nose pliers. Then, roll up the belt along the length of the conveyor frame.
  - b. Add or remove belt links as necessary to achieve the correct belt tension.
  - c. Replace the belt on the conveyor frame. Check the following:
    - The conveyor belt links must be oriented as shown in Figure 2-9.
    - The smooth side of the conveyor belt must face UP.
  - d. Connect the inside master links. Check that the links are oriented as shown in Figure 2-9.
  - e. Connect the outside master links. Note that the outside master links each have an open hook on one side. This hook aligns with the hooks along the sides of the other conveyor links. See Figure 2-9.

**Figure 2-8 - Assembling and tensioning the conveyor****Figure 2-9 - Conveyor and Master Link Orientation**

SECTION 2 - INSTALLATION

6. Lift the conveyor and position it in the oven. The conveyor can only be installed from the end of the oven with the drive motor.
7. Continue moving the conveyor into the oven until the conveyor frame is positioned properly. The inside supports for the crumb trays should rest firmly against the lower end plugs, as shown in Figure 2-10.
8. When the conveyor is positioned properly, check for freedom of movement of the conveyor belt by pulling it for about 2-3 feet (60 to 90 cm) with your fingers. The conveyor must move freely.
9. Install the drive chain between the conveyor drive sprocket and the motor sprocket. To install the chain, it will be necessary to lift the drive end of the conveyor slightly.

Figure 2-10 - Conveyor placement



V. FINAL ASSEMBLY

1. Install the conveyor drive motor cover as shown in Figure 2-11.
  2. Install the crumb trays as shown in Figure 2-11. First, place the inside edge of each tray onto its support bracket. Then, hook the outside edge of the tray over the end of the conveyor frame.
- Note that crumb trays for the lower (or a single) oven are solid, while those for all upper ovens have perforated openings, as shown in Figure 2-12.
3. Press the conveyor exit tray down over the edge of the conveyor frame at the exit end of the oven. See Figure 2-11.

Figure 2-11 - Final assembly

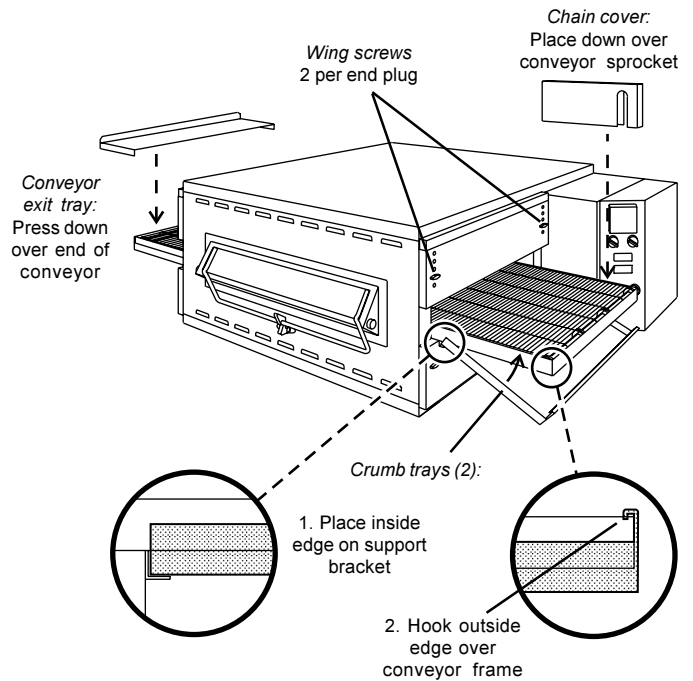
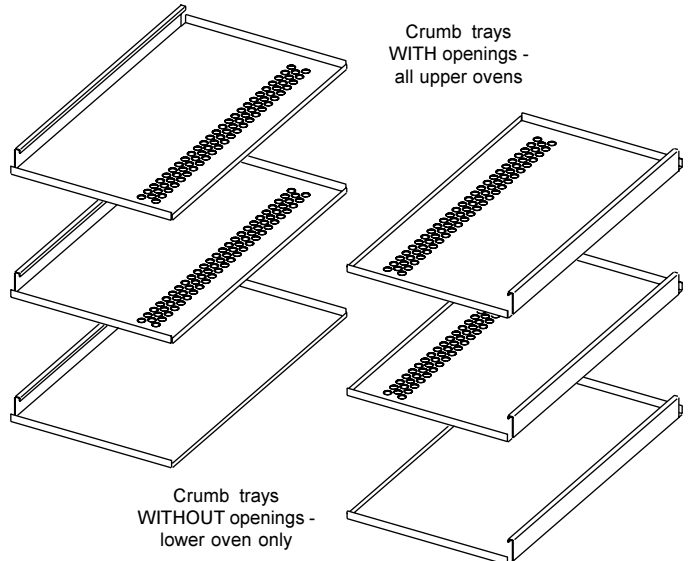


Figure 2-12 - Crumb trays



## VI. ELECTRICAL SUPPLY



### WARNING

Authorized supplier personnel normally accomplish the connections for the ventilation system, electric supply, and gas supply, as arranged by the customer. Following these connections, the factory-authorized installer can perform the initial startup of the oven.

**NOTE:** The electric supply installation must satisfy the requirements of the appropriate statutory authority, such as the National Electrical Code (NEC), ANSI/NFPA70, (U.S.A.); the Canadian Electrical Code, CSA C22.2; the Australian Code, AG601; or other applicable regulations.

**NOTE:** The electric supply connection must meet all national and local electrical code requirements.

Check the oven serial plate before making any electric supply connections. Electric supply connections must agree with data on the oven serial plate. The location of the serial plate is shown in Figure 1-1 (in Section 1, [Description](#)).

A fused disconnect switch or a main circuit breaker (customer furnished) **MUST** be installed in the electric supply line for each oven cavity. It is recommended that this switch/circuit breaker have lockout/tagout capability.

The supply conductors must be of the size and material (copper) recommended. Refer to the wiring diagram inside the machinery compartment of the oven. Electrical specifications are also listed on the oven's serial plate and in Tables 1-3 and 1-4, [Electrical Specifications](#) (in Section 1, [Description](#)).

The oven requires a ground connection to the oven ground screw located in the electrical junction box. (The box is shown in Figure 2-13.) If necessary, have the electrician supply the ground wire. **Do NOT use the wiring conduit or other piping for ground connections!**

### A. Additional Information - Gas Ovens

All electric supply connections are made at the terminal block located in the electrical junction box, shown in Figure 2-13. The power lines then connect to the oven circuits through a safety switch located inside the machinery compartment. This switch interrupts electric power to the oven when the Machinery Compartment Access Panel is opened.

### B. Additional Information - Electric Ovens

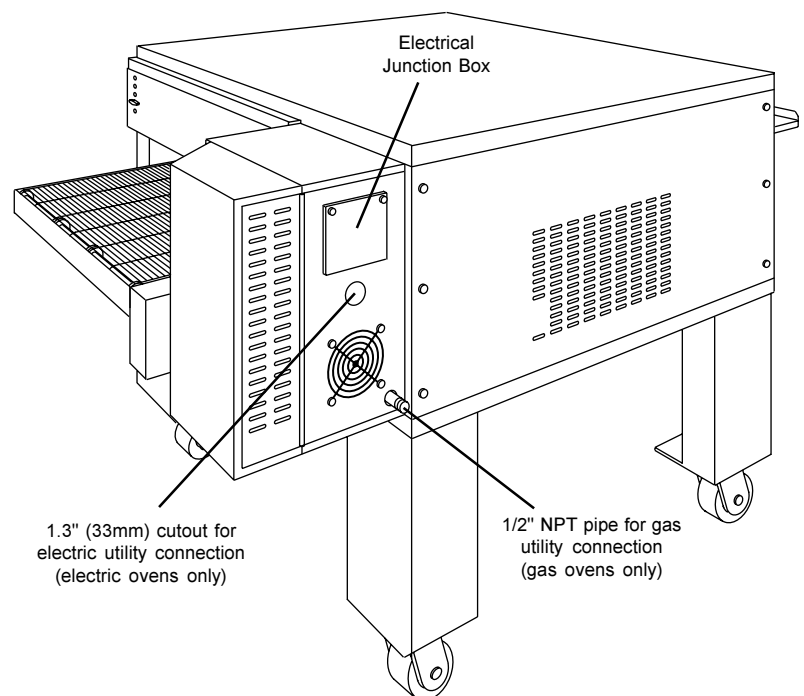
A 1.3" (33mm) dia. cutout in the back wall of the machinery compartment provides access to the electrical supply connections. The actual wiring connections are made at the terminal block located in the electrical junction box.

Using flexible cables for the electric power supply conductors requires a 1.3" (33mm) strain-relief fitting (not furnished with the oven) to enable safe access to the terminal block.

### C. Connection

Refer to the wiring diagram inside the machinery compartment of the oven to determine the correct connections for the electrical supply lines. Connect the supply as indicated on the wiring diagram.

Figure 2-13 - Utility connection locations



## VII. GAS SUPPLY

### CAUTION

DURING PRESSURE TESTING NOTE ONE OF THE FOLLOWING:

1. The oven and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 psi (3.45 kPa).
2. The oven must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressure equal to or less than 1/2 psi (3.45 kPa).

3. If incoming pressure is over 14" W.C. (35mbar), a separate regulator **MUST** be installed in the line **BEFORE** the individual shutoff valve for the oven.

**WARNING:** To prevent damage to the control valve regulator during initial turn-on of gas, it is **very important** to open the manual shutoff valve **very slowly**.

After the initial gas turn-on, the manual shutoff valve must remain open except during pressure testing as outlined in the above steps or when necessary during service maintenance.

SECTION 2 - INSTALLATION

**A. Gas Utility Rough-In Recommendations**

The following gas system specifications are **STRONGLY RECOMMENDED**. Deviating from these recommendations may affect the baking performance of the oven.

*Gas Meter* - 650 cfh meter

*Gas Line*

- DEDICATED LINE from the gas meter to the oven
- 2" (50.8mm) pipe for natural gas
- 1-1/2" (38.1mm) pipe for propane
- Maximum length: 200' (61m). Each 90° elbow equals 7' (2.13m) of pipe.

**B. Connection**

Check the oven's gas supply requirements before making the gas utility connection. Gas supply requirements are listed on the oven's serial plate and in Table 1-5, Gas Orifice and Pressure Specifications (in Section 1, Description).

Check the serial plate to determine the type of gas (Propane or Natural) to be used with the oven.

Refer to the instructions in the gas hose package (included in the Installation Kit) before connecting the gas line. One gas line connection method is shown in Figure 2-14; however, compliance with the applicable standards and regulations is mandatory.

Inlet and regulated gas pressure readings can be taken using a "U" tube manometer at the tap locations shown in Figure 2-15.

**NOTE**

*In the USA, the installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1.*

*In Canada, the installation must conform with local codes, or in the absence of local codes, with the Natural Gas Installation Code, CAN/CGA-B 149.1, or the Propane Installation Code, CAN/CGA-B 149.2, as applicable.*

*In Australia, the installation must conform with AGA Code AG601 and with any requirements of the appropriate statutory authority.*

Certain safety code requirements exist for the installation of gas ovens; refer to the beginning of Section 2 for a list of the installation standards. In addition, because the oven is equipped with casters, the gas line connection shall be made with:

- A connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 (in USA), or Connectors for Movable Gas Appliances, CAN/CGA-6.16 (in Canada), AND
- A quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41 (in USA.), or, if applicable, Quick-Disconnect Devices for Use With Gas Fuel, CAN1-6.9 (in Canada).

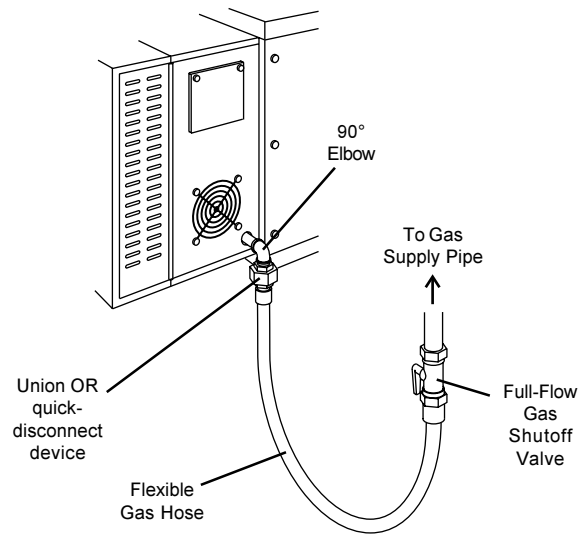
**C. Gas Conversion**

Where permitted by local and national codes, it is possible to convert ovens from natural to propane gas, or from propane to natural gas. Use the appropriate Middleby Marshall Gas Conversion Kit for the specific oven model.

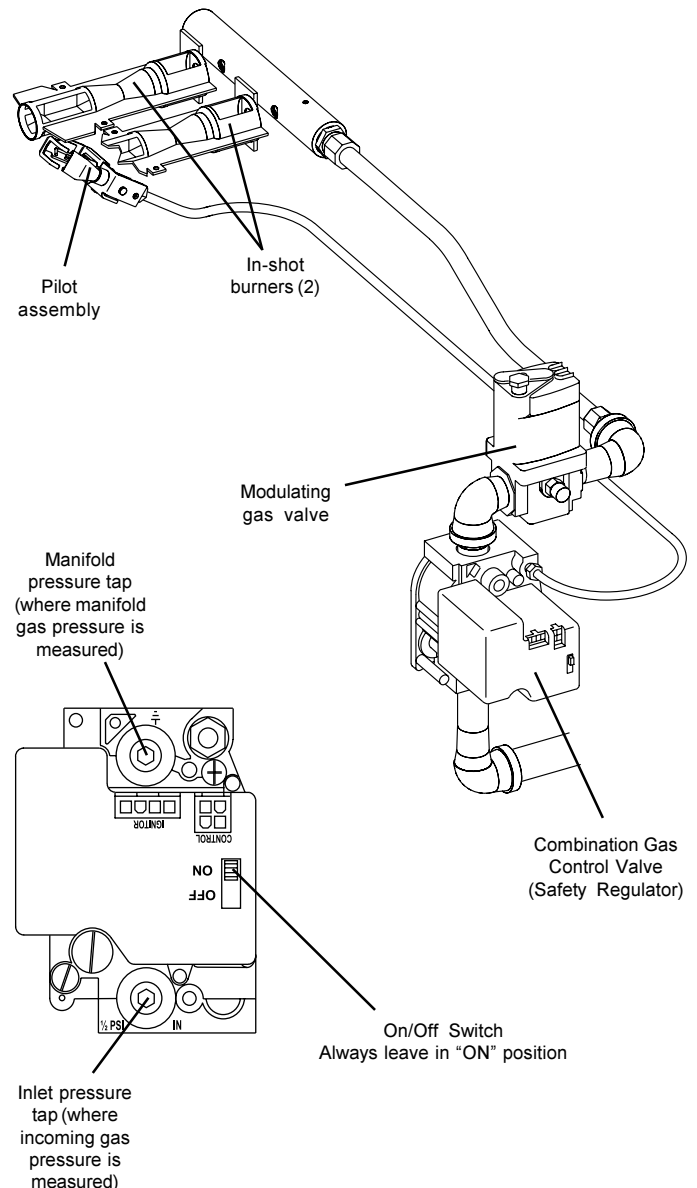
**CAUTION**

*The terms of the oven's warranty require all start-ups, conversions and service work to be performed by a Middleby Marshall Authorized Service Agent.*

**Figure 2-14 - Flexible Gas Hose Installation**



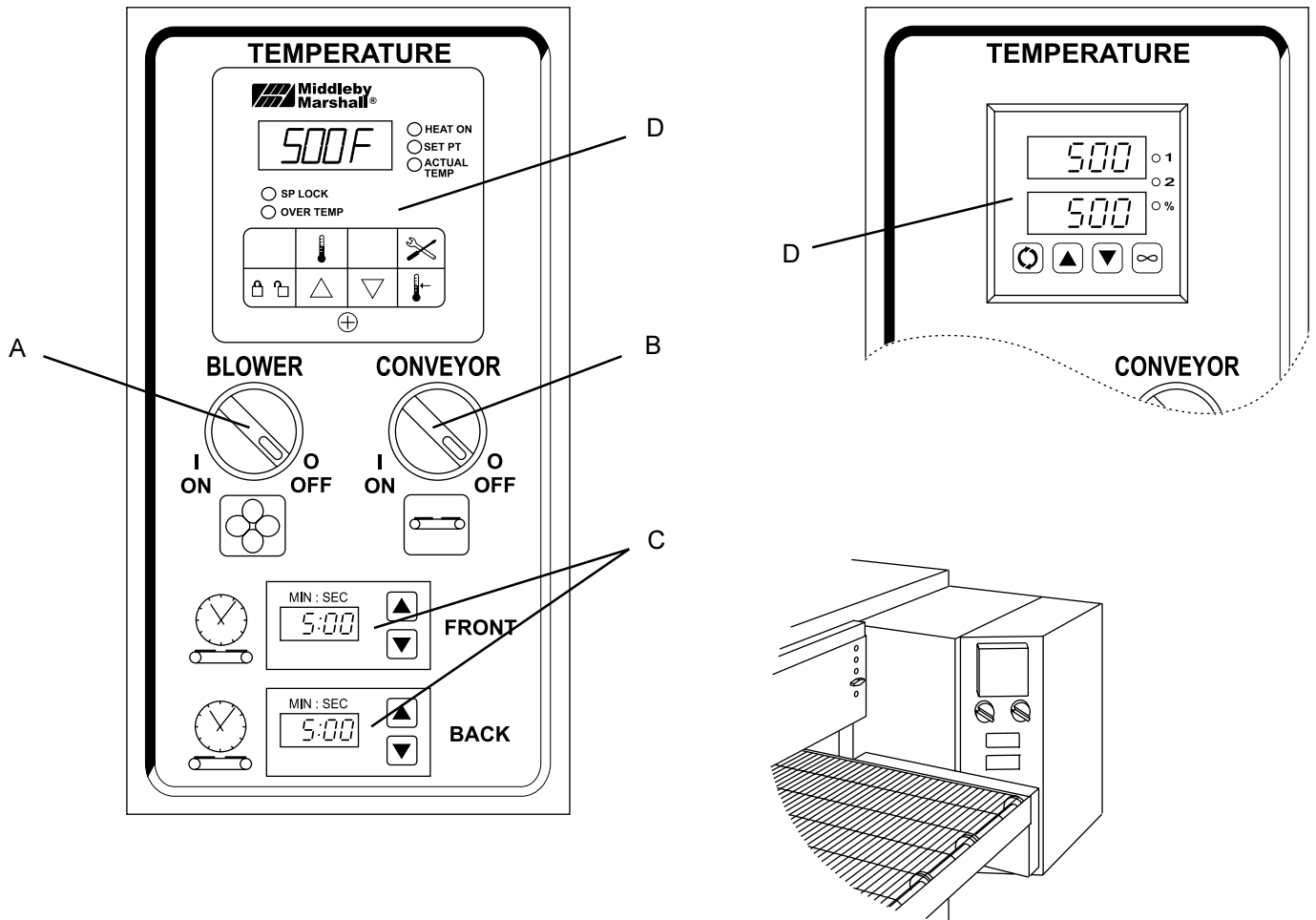
**Figure 2-15 - Gas Burner and Piping Assembly**




# SECTION 3 - OPERATION


## I. LOCATION AND DESCRIPTION OF CONTROLS


Fig. 3-1 - Control Panel




ENGLISH

A.  **"BLOWER" Switch:** Turns the blowers and cooling fans on and off. When set to the "ON" (I) position, it also allows the burner (gas ovens) or heating elements (electric ovens) to activate. Activation is determined by the settings on the Digital Temperature Controller.

B.  **"CONVEYOR" Switch:** Turns the conveyor drive motor on and off.

C.  **Conveyor Speed Controller:** Adjusts and displays the bake time. Single-belt ovens have one controller. Split belt ovens have one controller for each conveyor belt, labeled "FRONT" and "BACK."

D.  **Digital Temperature Controller:** Continuously monitors the oven temperature. Settings on the Digital Temperature Controller control the activation of the burner or heating elements. Keypad controls allow the operator to select the cooking temperature and monitor oven operation.

Note that two different models of Digital Temperature Controller are used on PS536 ovens. This section provides instructions specific to each controller.

**NOT SHOWN:**

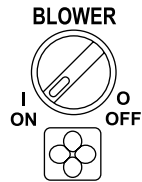
E. **Machinery Compartment Access Panel Safety Switch:** Disconnects electrical power to the controls and the blowers when the machinery compartment access panel is opened. The panel should only be opened by authorized service personnel.

## II. NORMAL OPERATION - STEP-BY-STEP

### A. DAILY STARTUP PROCEDURE

1. Check that the circuit breaker/fused disconnect is in the on position. Check that the window (if so equipped) is closed.

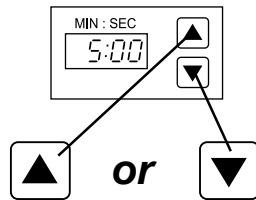
2. Turn the "BLOWER" (☸) switch to the "ON" ("I") position.



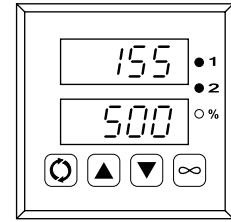
3. Turn the "CONVEYOR" (☷) switch to the "ON" ("I") position.



4. If necessary, adjust the conveyor speed setting by pressing the ▲ or ▼ pushbuttons on the conveyor speed controller to change the displayed bake time.

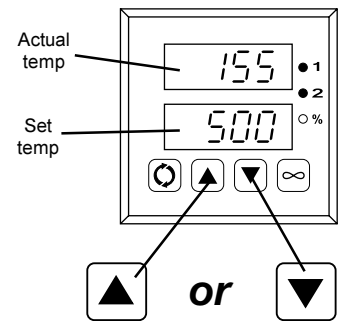


### If the oven uses this Digital Temperature Controller:



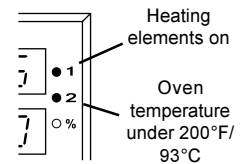
- 5a. Press the ▲ or ▼ pushbuttons on the digital temperature controller to adjust the set temperature, if necessary.

Note that the set temperature is shown in the lower window of the display, while the actual oven temperature is shown in the upper window.



- 6a. Check that the "1" light illuminates. This shows that the burner or heating elements have been turned on.

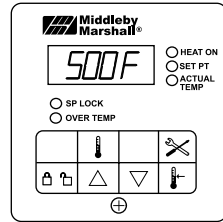
The "2" light will illuminate while the oven heats to its minimum normal operating temperature of 200°F/93°C.



- 7a. Wait for the oven to heat to the set point temperature. Higher set point temperatures will require a longer wait. The oven can reach a temperature of 500°F (232°C) in approximately 15 minutes.

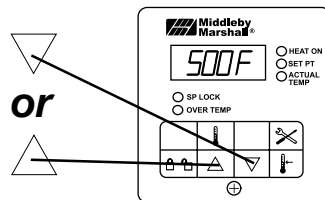
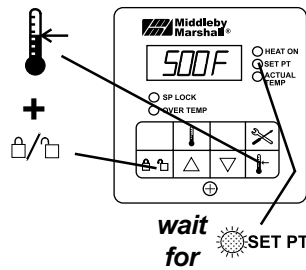
- 8a. Allow the oven to preheat for 10 minutes after it has reached the set point temperature.

## If the oven uses this Digital Temperature Controller:

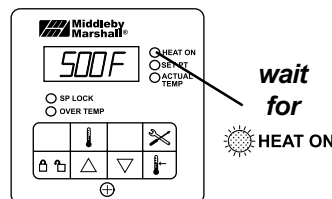


- 5b. Adjust the temperature controller to a desired set temperature, if necessary.

- Press the Set Point and Unlock keys at the same time. Wait for the "SET PT" light to turn on.
- Press the Up Arrow and Down Arrow Keys as necessary to adjust the set-point.

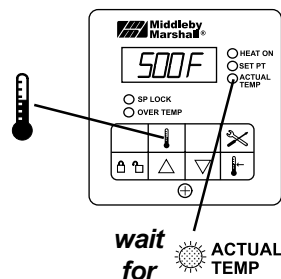


- 6b. Check that the "HEAT ON" light illuminates. This shows that the burner or heating elements have been turned on.



- 7b. Wait for the oven to heat to the setpoint temperature. Higher setpoint temperatures will require a longer wait. The oven can reach a temperature of 500°F (232°C) in approximately 5 minutes.

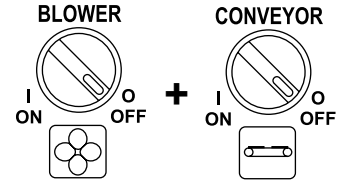
- 8b. (Optional) Press the Temperature key to show the Actual Temperature in the display, and wait for the "ACTUAL TEMP" light to turn on. This allows you to monitor the oven temperature as it rises to the setpoint.



- 9b. Allow the oven to preheat for 10 minutes after it has reached the set point temperature.

## B. DAILY SHUTDOWN PROCEDURE

1. Turn the "BLOWER" and "CONVEYOR" switches to the "OFF" ("O") position. Open the window (if so equipped) to allow the oven to cool faster.



Note that the blowers will remain in operation until the oven has cooled to below 200°F (93°C).

3. After the oven has cooled and the blowers are off, switch the circuit breaker/fused disconnect to the off position.

### IMPORTANT

On gas ovens, if the "HEAT ON" light will not illuminate, OR if the oven does not heat, the gas burner may not have lit. Turn the "BLOWER" and "CONVEYOR" switches to the "OFF" ("O") position. Wait for AT LEAST FIVE MINUTES before restarting the oven. Then, repeat the Daily Startup procedure.

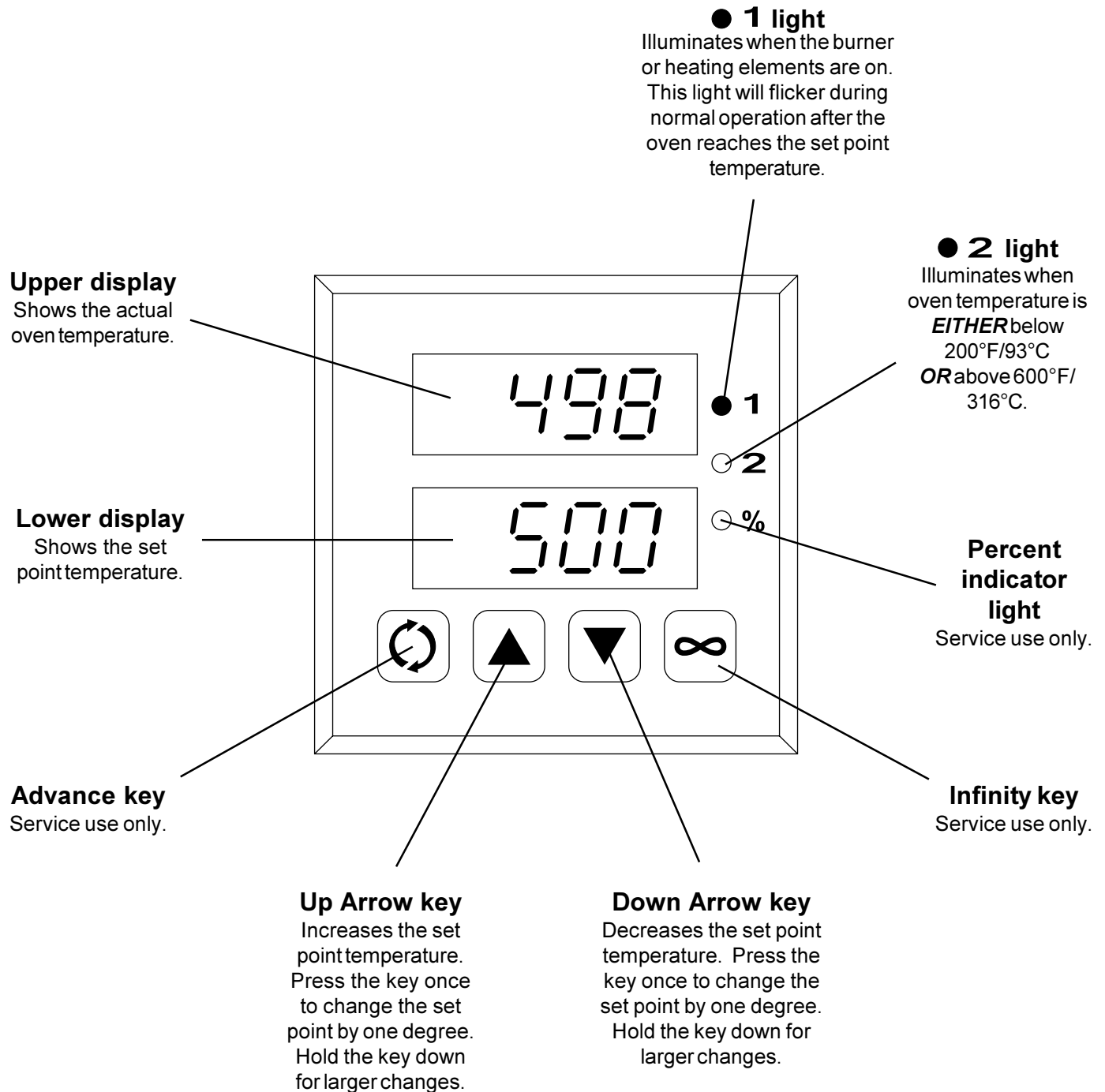
### CAUTION

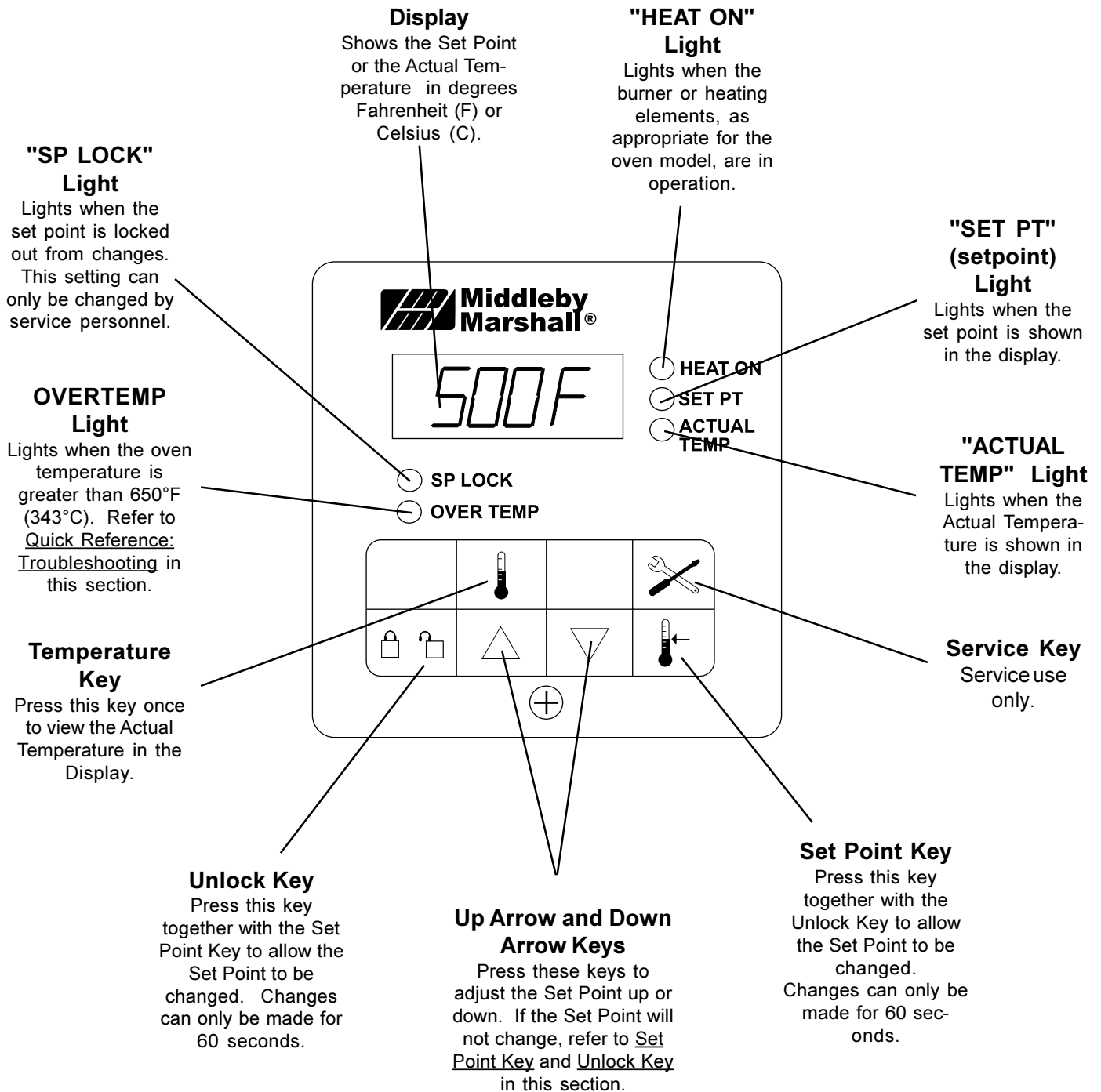
In case of power failure, turn all switches to the "OFF" ("O") position, open the oven window (if so equipped), and remove the product. After the power has been restored, perform the normal startup procedure. IF THE OVEN WAS SWITCHED OFF FOR LESS THAN 5 MINUTES, WAIT FOR AT LEAST FIVE MINUTES BEFORE RESTARTING THE OVEN.

**No attempt should be made to operate the oven during a power failure. In gas ovens, the burner will not operate and gas will not flow through the burner without electric power.**






## III. QUICK REFERENCE: DIGITAL TEMPERATURE CONTROLLERS

ENGLISH





## IV. QUICK REFERENCE: TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION
 <p>● <b>2</b> light illuminates <i>after</i> oven has been operating normally</p>	The oven temperature is in excess of 600°F (316°C). If the oven is left in operation, the temperature may rise to 650°F (343°C) and cause a shutdown.	<ul style="list-style-type: none"> <li>Turn the oven off according to the <a href="#">Daily Shutdown Procedure</a>.</li> <li>Allow the oven to cool. Regardless of the time that is required for the oven to cool, wait for AT LEAST FIVE MINUTES before restarting the oven.</li> <li>Repeat the <a href="#">Daily Startup Procedure</a>.</li> </ul>
 <p>Oven shuts down completely <i>during</i> operation</p>	The oven temperature exceeded 650°F (343°C), and the oven was automatically shut down.	<ul style="list-style-type: none"> <li>Turn the oven off according to the <a href="#">Daily Shutdown Procedure</a>. Contact your Middleby Marshall Authorized Service Agent to determine and correct the cause of the condition to prevent damage to the oven.</li> </ul>
 <p><b>OVERTEMP</b> light is lit, oven will not heat</p>		
 <p>Oven shuts down shortly after it is turned on (gas ovens only)</p>	The gas burner did not light within 90 seconds of turning the "BLOWER" (☼) Switch to the "ON" ("I") position. This engages a safety lockout mode.	<ul style="list-style-type: none"> <li>Turn the "BLOWER" (☼) and "CONVEYOR" (⇐⇒) switches to the "OFF" ("O") position.</li> <li>Wait for AT LEAST FIVE MINUTES before restarting the oven.</li> <li>Repeat the Daily Startup procedure.</li> </ul>
 <p><b>RESET</b> appears in display, oven is not heating</p>	The oven did not reach 200°F (93°C) within 15 minutes of startup, and has stopped heating.	<ul style="list-style-type: none"> <li>Turn the "BLOWER" (☼) and "CONVEYOR" (⇐⇒) switches to the "OFF" ("O") position.</li> <li>Wait for AT LEAST FIVE MINUTES before restarting the oven.</li> <li>Repeat the Daily Startup procedure.</li> </ul>
Oven will not turn on at all	Electrical power may not be reaching the oven, or the controls may be set incorrectly.	<ul style="list-style-type: none"> <li>Check that the circuit breaker/fused disconnect is turned on.</li> <li>Check that the "BLOWER" (☼) Switch is in the "ON" ("I") position. The burner cannot engage until the blowers are in operation.</li> </ul>
Oven will not heat	Controls may be set incorrectly.	<ul style="list-style-type: none"> <li>Check that the Set Point is correctly set.</li> <li>Check that the "BLOWER" (☼) Switch is in the "ON" ("I") position.</li> <li>If the oven still will not heat, turn the oven off according to the instructions in the <a href="#">Daily Shutdown Procedure</a>.</li> <li>Wait for AT LEAST FIVE MINUTES before restarting the oven.</li> <li>Repeat the <a href="#">Daily Startup Procedure</a>. Check that the Set Point is above 200°F (93°C).</li> </ul>
Oven is operating, but little or no air is blowing from air fingers	Air fingers may have been reassembled incorrectly after cleaning.	<ul style="list-style-type: none"> <li>Turn the oven off according to the <a href="#">Daily Shutdown Procedure</a>.</li> <li>Refer to Section 4, <a href="#">Maintenance</a>, for instructions on reassembling the air fingers.</li> </ul>
	Blower belt may be broken.	<ul style="list-style-type: none"> <li>Turn the oven off according to the <a href="#">Daily Shutdown Procedure</a>. Contact your Middleby Marshall Authorized Service Agent to correct the problem.</li> </ul>
Conveyor moves with a jerky motion, or will not move at all	Conveyor may be jammed on an object in the oven, or conveyor belt or drive chain may be overtightened.	<ul style="list-style-type: none"> <li>Turn the oven off according to the <a href="#">Daily Shutdown Procedure</a>.</li> <li>Check if the conveyor is blocked by an object inside the oven.</li> <li>Check that the conveyor drive chain is not overtightened.</li> <li>Refer to Section 4, <a href="#">Maintenance</a>, for instructions on checking the conveyor belt tension.</li> </ul>
Food products are overcooked or undercooked	Controls may be set incorrectly.	<ul style="list-style-type: none"> <li>Check that the set temperature and bake time settings are correct.</li> </ul>

**IF THESE STEPS FAIL TO RESOLVE THE PROBLEM, CONTACT YOUR LOCAL MIDDLEBY MARSHALL AUTHORIZED SERVICE AGENT. A SERVICE AGENCY DIRECTORY IS SUPPLIED WITH YOUR OVEN.**

## SECTION 4 - MAINTENANCE

### WARNING

Before ANY cleaning or servicing of the oven, perform the following procedure:

1. Switch off the oven and allow it to cool. Do NOT service the oven while it is warm.
2. Turn off the electric supply circuit breaker(s) and disconnect the electric supply to the oven.
3. If it is necessary to move a gas oven for cleaning or servicing, disconnect the gas supply before moving the oven.

When all cleaning and servicing is complete:

1. If the oven was moved for servicing, return the oven to its original location.
2. For gas ovens, reconnect the gas supply.
3. Reconnect the electrical supply.
4. If the restraint cable was disconnected to clean or service the oven, reconnect it at this time.
5. For gas ovens, turn on the full-flow gas safety valve. Test the gas line connections for leaks using approved leak test substances or thick soap suds.
6. Turn on the electric supply circuit breaker(s).
7. Perform the normal startup procedure.

### WARNING

Possibility of injury from moving parts and electrical shock exists in this oven. Switch off and lockout/tagout the electric supply BEFORE beginning to disassemble, clean, or service any oven. Never disassemble or clean an oven with the BLOWER switch or any other circuit of the oven switched on.

### CAUTION

NEVER use a water hose or pressurized steam-cleaning equipment when cleaning this oven. DO NOT use excessive amounts of water, to avoid saturating the oven insulation. DO NOT use a caustic oven cleaner, which can damage the bake chamber surfaces.

### NOTE

ANY replacement parts that require access to the interior of the oven may ONLY be replaced by a Middleby Marshall Authorized Service Agent. It is also strongly recommended that the 3-Month Maintenance and 6-Month Maintenance procedures in this section be performed ONLY by a Middleby Marshall Authorized Service Agent.

## I. MAINTENANCE - DAILY

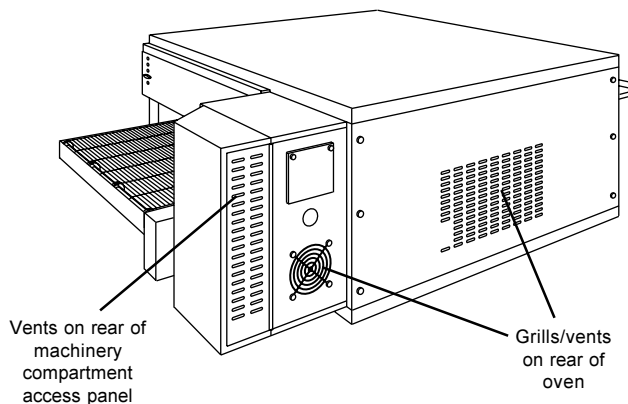
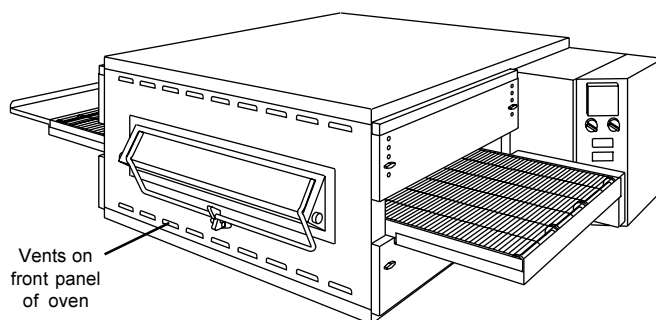
- A. Check that the oven is cool and the power is disconnected, as described in the warning at the beginning of this Section.
- B. Clean ALL of the cooling fan grills and vent openings with a stiff nylon brush. Refer to Figure 4-1 for the locations of the grills and vents.
- C. Clean the outside of the oven with a soft cloth and mild detergent.
- D. Check that ALL cooling fans are operating properly.

### CAUTION

*If a cooling fan is not operating correctly, it must be replaced IMMEDIATELY. Operating the oven without adequate cooling can seriously damage the oven's internal components.*

- E. Clean the conveyor belts with a stiff nylon brush. This is more easily accomplished by allowing the conveyor to run while you stand at the exit end of the conveyor. Then, brush the crumbs off the conveyor as it moves.
- F. Remove and clean the crumb trays. Be sure to replace the trays in the same positions from which they were removed, because they are NOT identical. Refer to Figure 2-12 (in Section 2, Installation).
- G. Clean the window (if so equipped) in place.

Figure 4-1 -Cooling Vents and Grills



## II. MAINTENANCE - MONTHLY

- A. Check that the oven is cool and the power is disconnected, as described in the warning at the beginning of this Section.
- B. Refer to Part D, Conveyor Installation, in the Installation section of this Manual. Then, remove the following components from the oven:
- Conveyor exit tray
  - Crumb trays
  - Chain cover
  - End plugs
  - Conveyor assembly
- C. Slide the air fingers and blank plates out of the oven, as shown in Figure 4-2. AS EACH FINGER OR PLATE IS REMOVED, WRITE A "LOCATION CODE" ON IT WITH A MARKER to make sure that it can be reinstalled correctly.

Example of markings:

(Top Row)      T1   T2   T3   T4

(Bottom Row)   B1   B2   B3   B4

- D. Disassemble the air fingers. See Figure 4-3. AS EACH FINGER IS DISASSEMBLED, WRITE THE "LOCATION CODE" FOR THE FINGER ON ALL THREE OF ITS PIECES. This will help you in correctly reassembling the air fingers.

### CAUTION

*Incorrect reassembly of the air fingers will change the baking properties of the oven.*

- E. Clean the air finger components and the interior of the baking chamber using a vacuum cleaner and a damp cloth. Refer to the boxed warnings at the beginning of this Section for cleaning precautions.
- F. Reassemble the air fingers. Then, replace them in the oven, using the "location code" as a guide.
- G. Install the end plugs on the oven. Then, reinstall the conveyor.
- I. Reattach the drive chain. Replace the chain cover.
- J. Check the tension of the conveyor belt as shown in Figure 2-9 (in Section 2, Installation). The belt should lift between 1-2" (25-50mm). If necessary, adjust the belt tension using the procedure in Part D (Conveyor Installation) in the Installation section of this Manual.
- K. Replace the crumb trays and exit tray onto the oven.

## III. MAINTENANCE - EVERY 3 MONTHS

- A. Check that the oven is cool and the power is disconnected, as described in the warning at the beginning of this Section.
- B. Open the machinery compartment access panel. Vacuum the inside of the compartment using a shop vacuum.
- C. Tighten all electrical control terminal screws.
- D. **Split Belt Disassembly and Cleaning**

For split belt ovens ONLY, disassemble, clean and lubricate the conveyor shaft components as described below.

1. Refer to Part D, Conveyor Installation, in the Installation section of this Manual. Then, remove the following components from the oven:
  - Conveyor exit tray
  - Crumb trays
  - Chain cover
  - End plugs
  - Conveyor assembly
2. Remove the master links from each conveyor belt. Then, roll the belts up along the length of the conveyor to remove them from the frame.

Figure 4-2 - Removing Air Fingers and Plates

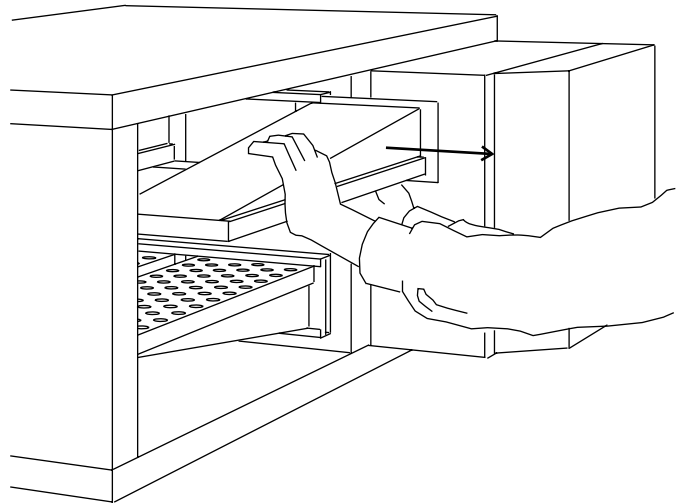
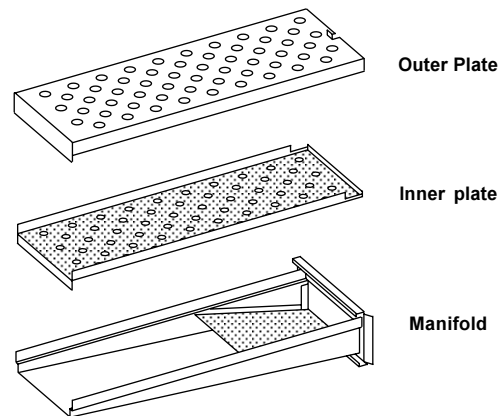


Figure 4-3 - Disassembling the Air Fingers



3. Disassemble and clean the drive and idler shafts using the following procedure.
  - a. Loosen (DO NOT REMOVE) the set screw on the outer drive sprocket. Then, slide the drive sprocket off the end of the drive shaft. See Figure 4-4.
  - b. Loosen (DO NOT REMOVE) the set screws on all four steel spacers (2 per shaft), AND on all twelve conveyor belt sprockets (6 per shaft).
  - c. Gently work the shaft sections out of the conveyor frame, removing the conveyor belt sprockets as necessary. See Figures 4-4 and 4-5.
  - d. Slide the two sections of each shaft apart.
  - e. Clean all of the shaft components thoroughly using a rag. Then, lubricate each solid inner shaft, AND the interiors of each hollow shaft, using an FDA-approved light food-grade lubricant. **DO NOT** lubricate the shafts using WD40 or a similar product. This can cause the shafts to wear rapidly.
  - f. Slide the hollow shaft sections over the solid inner shafts. Check that the hollow section that has a drive sprocket attached is placed at the end of the drive shaft.
  - g. Slide the reassembled shafts into the conveyor frame. As the shafts are replaced, slide the steel spacers and conveyor belt sprockets onto the shafts. Refer to Figures 4-4 and 4-5.
  - h. After the shafts are properly aligned, position the steel spacers against the ends of the bushings on the conveyor frame. Tighten the set screws on the spacers to hold them in place. Leave the conveyor belt sprockets loose at this time.
  - i. Replace the outer drive sprocket. Tighten its set screw to hold it in place.
  - j. Refer to Part D, [Conveyor Installation](#), in the [Installation](#) section of this Manual to replace the conveyor belt. As you replace the belt, position the conveyor belt sprockets.
  - k. After the belt is in place and the sprockets are correctly positioned, tighten the set screws to hold the sprockets in place.
4. Reinstall the end plugs and conveyor onto the oven.
5. Reattach the drive chains. Replace the chain cover.
7. Check the tension of the conveyor belt as shown in Figure 2-9 (in Section 2, [Installation](#)). The belt should lift between 1-2" (25-50mm). If necessary, adjust the belt tension using the procedure in Part D ([Conveyor Installation](#)) in the [Installation](#) section of this Manual.
8. Replace the crumb trays and exit tray onto the oven.

Figure 4-5 - Disassembling the drive shaft

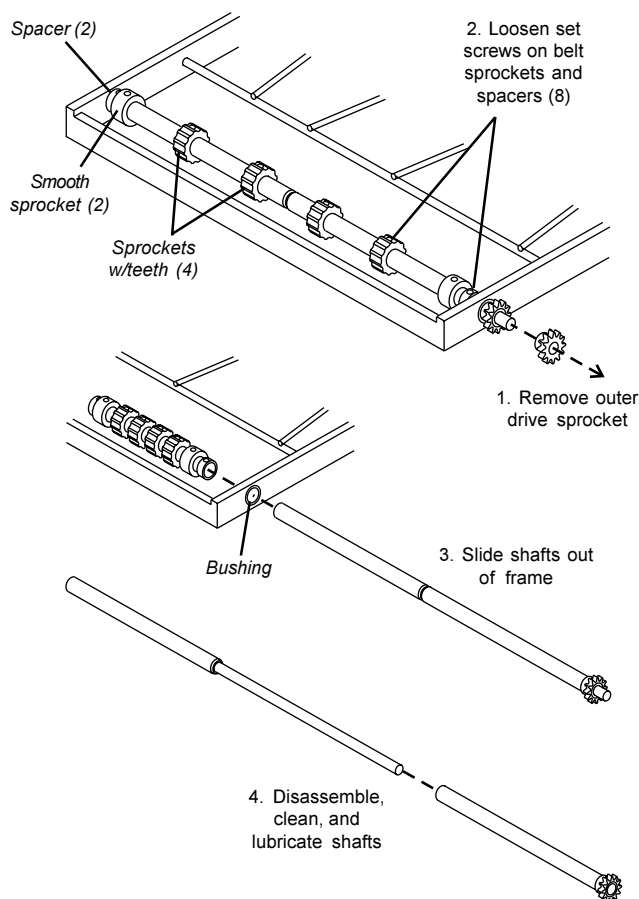
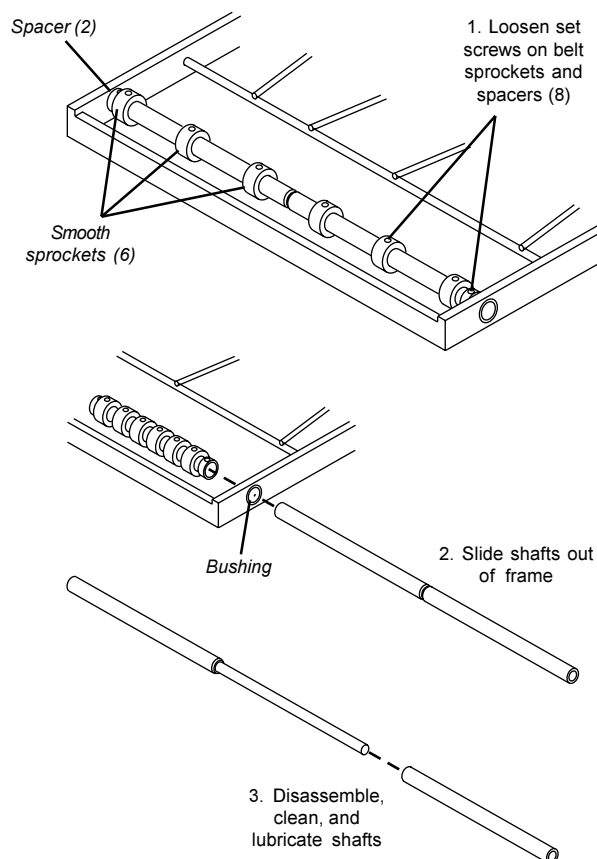


Figure 4-5 - Disassembling the idler shaft



**E. Blower Belt**

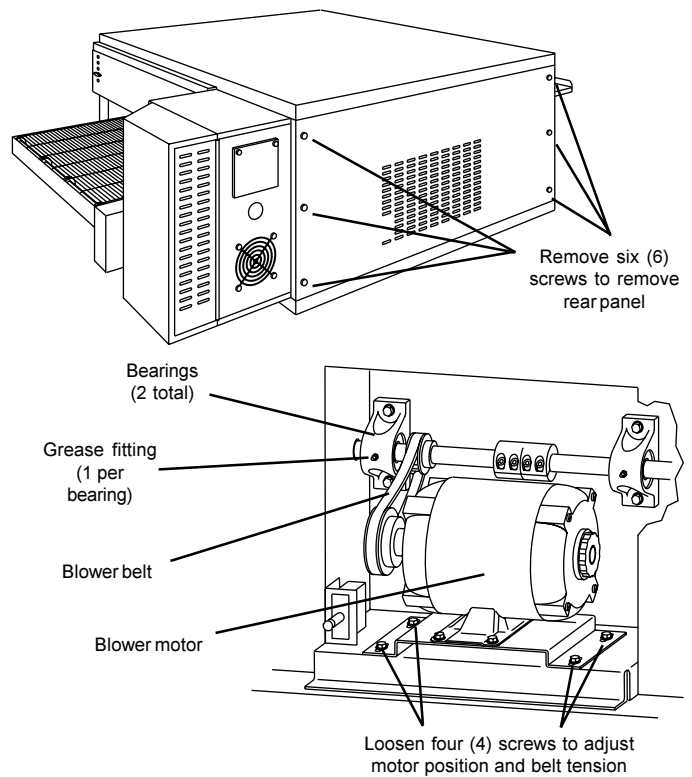
1. Remove the six screws shown in Figure 4-6. Then, remove the rear panel from the oven.
2. Check the blower belt for the proper 1/4" (6.4mm) deflection at the center, and for cracking or excessive wear. See Figure 4-6. Overtightening the belt will cause premature bearing failure and possible vibrations. A loose belt may also cause vibrations.
3. If necessary, adjust the tension of the belt by loosening the four motor mounting bolts. Reposition the motor as necessary until the correct 1/4" (6.4mm) deflection is reached, then tighten the bolts.

**F. Lubricating the Blower Fan Bearings**

1. Use a grease gun to lubricate the main blower fan shaft bearings, as shown in Figure 4-6.

When lubricating the bearings:

- Use a high-quality NLGI #2, lithium soap grease with petroleum oil, such as Middleby P/N 17110-0015.
  - Add the grease slowly until a small bead of grease is present at the seals. **AVOID OVERGREASING.** Excessive greasing may cause harm to the bearing.
2. Manually turn the blower shaft by pulling on the belt to purge the grease. Wipe off any excess grease.
  3. Replace the rear panel onto the oven.

**Figure 4-6 - Rear panel access****IV. MAINTENANCE - EVERY 6 MONTHS**

- A. Check that the oven is cool and the power is disconnected, as described in the warning at the beginning of this Section.
- B. Check for excessive wear on the conveyor drive motor brushes. The brushes should be replaced if they are worn to less than 1/4" (6.4mm) in length. Be sure to replace the brushes in exactly the same position.
- C. For gas ovens, inspect and clean the burner nozzle and the spark electrode assembly.
- D. Check the conveyor drive shaft bushings and spacers. Replace the components if they are worn.

**V. KEY SPARE PARTS KIT - Available separately. See Figure 4-7.**

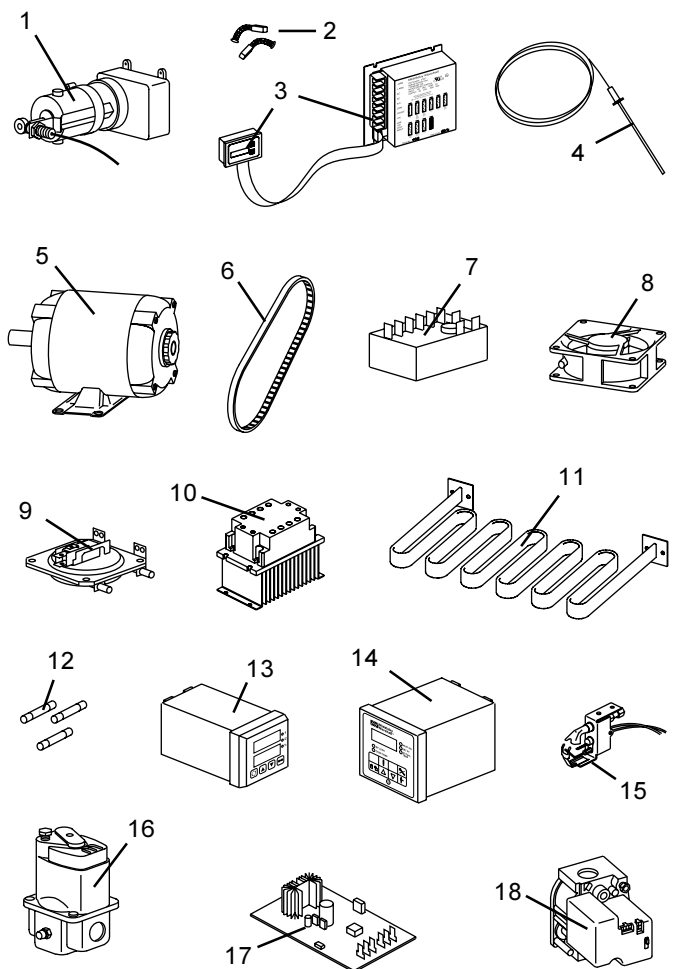
Item	Qty.	Part No.	Description
1	1	44695	Conveyor Drive Motor w/Pickup Assy.
2	2	30153	Drive Motor Brushes
3	1	37337	Kit, Conveyor Speed Controller
4	1	33985	Kit, Thermocouple
5	1	44687	Motor, Blower
6	1	44685	Belt, Blower
7	1	33983	High Limit Control Module, 230V
8	1	97525	Axial Cooling Fan, 230V
9	1	39530	Air Switch, 230V

**ELECTRIC OVENS ONLY:**

10	1	44585	Relay and Heat Sink Assembly
11a	1	43094	Heating Element, 208V 8 kW
11b	1	44800	Heating Element, 230V 8 kW
11c	1	45281	Heating Element, 380V 8 kW
12	3	44701	Fuse, 60A
13	1	44783	Kit, Digital Temperature Controller

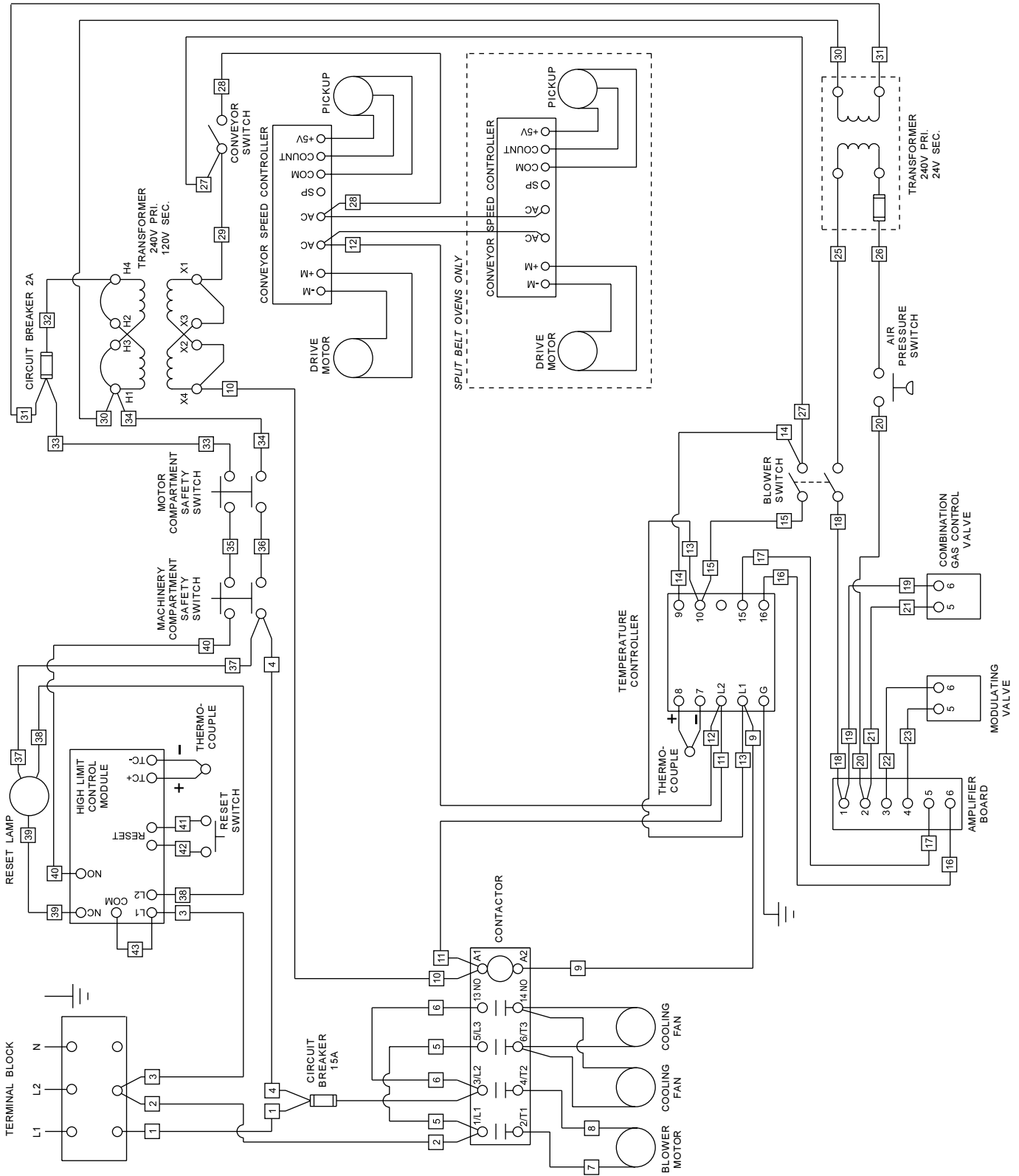
**GAS OVENS ONLY:**

14	1	36939	Kit, Digital Temperature Controller
15	1	44802	Pilot Assembly
16	1	41647	Modulating Gas Valve, 1/2"
17	1	31651	Amplifier Board
18	1	44801	Combination Gas Control Valve

**Fig. 4-7 - Key Spare Parts Kit**

# SECTION 5 - ELECTRICAL WIRING DIAGRAMS

Fig. 5-1 - Wiring diagram, PS536 Gas Oven  
208/230V, 60 Hz, 1 Ph

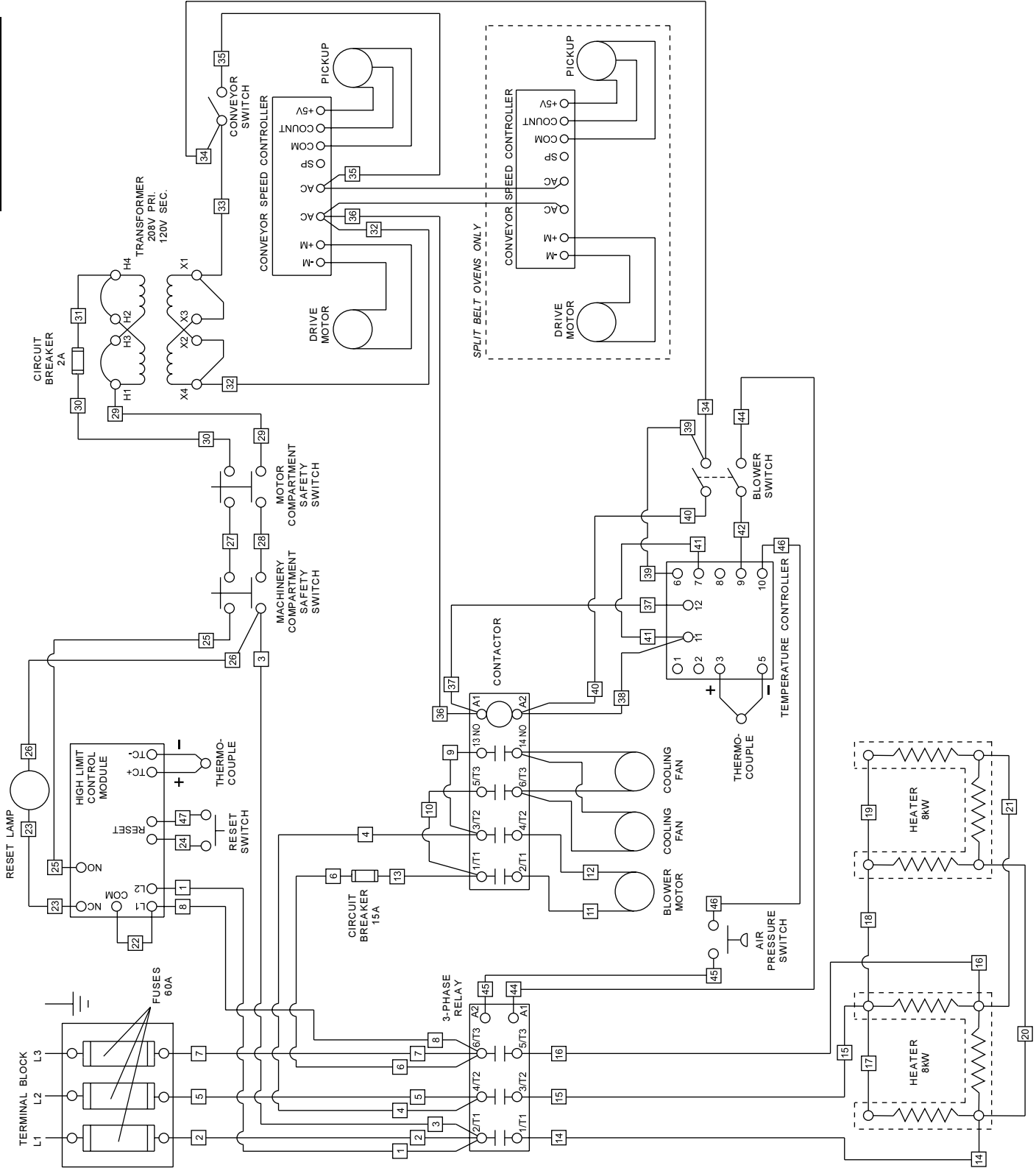


ENGLISH

**IMPORTANT**  
An electrical wiring diagram for the oven is also located inside the machinery compartment.

Fig. 5-2 - Wiring diagram, PS536 Electric Oven  
208/230V, 60 Hz, 3 Ph

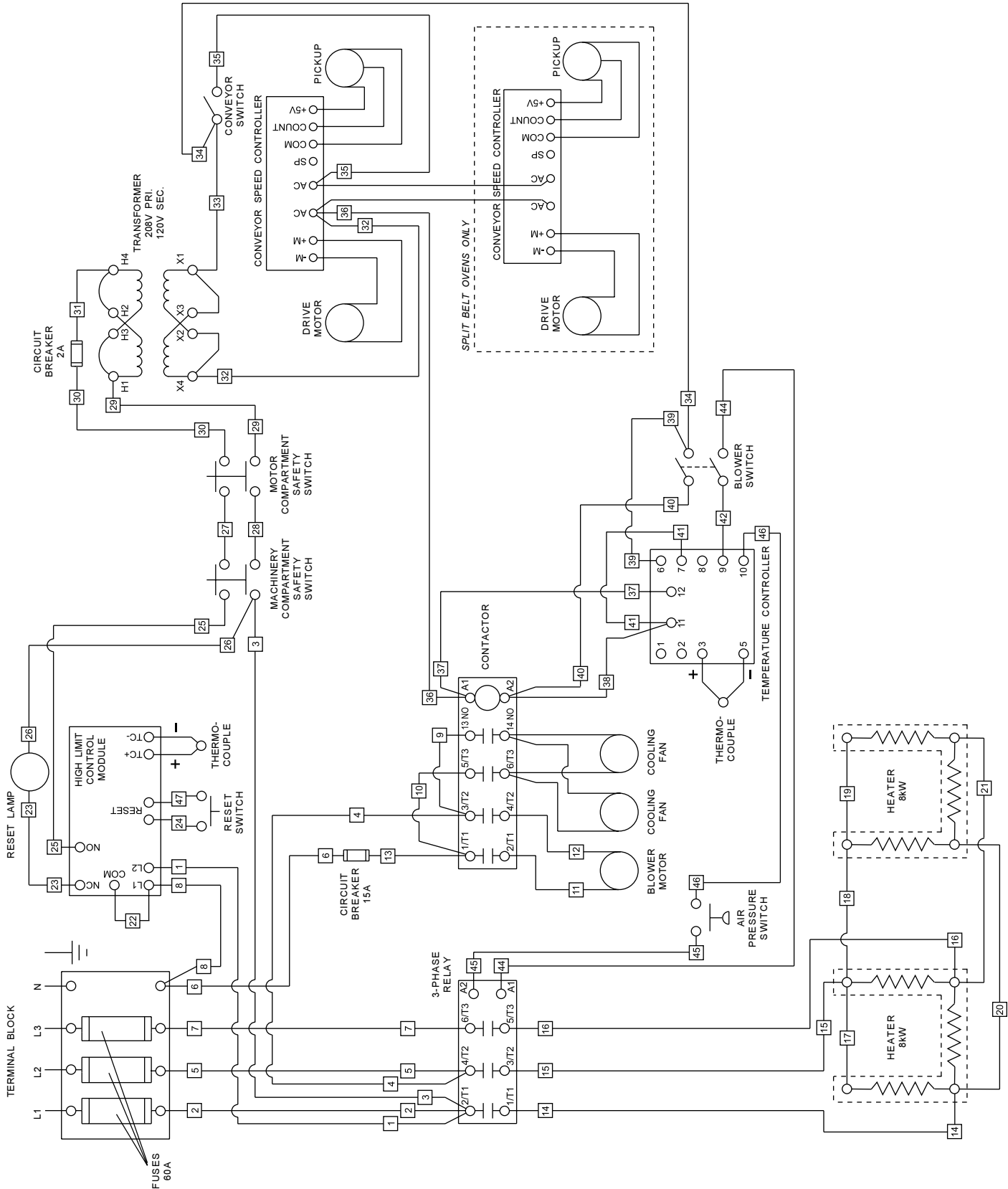
ENGLISH



**IMPORTANT**

An electrical wiring diagram for the oven is also located inside the machinery compartment.

**Fig. 5-2 - Wiring diagram, PS536 Electric Oven  
380V, 50 Hz, 3 Ph**



**ENGLISH**

**IMPORTANT**

An electrical wiring diagram for the oven is also located inside the machinery compartment.

**ENGLISH**  
page 1

**FRANÇAIS**  
page 29

**ESPAÑOL**  
página 57

Middleby Cooking Systems Group • 1400 Toastmaster Drive • Elgin, IL 60120 • USA • (847)741-3300 • FAX (847)741-4406

**24-Hour Service Hotline: 1-(800)-238-8444**

**[www.middleby.com](http://www.middleby.com)**



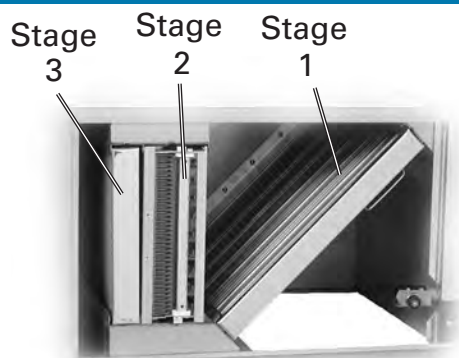
# Ventless Hood

## Model PO-VH



- The compact and simple design of the ventless hood eliminates the need for expensive roof modifications and the hassle of dealing with multiple vendors supplying separate hood and electrical systems.
- Our one-of-a-kind, type 2, stainless steel hood, which incorporates our patented Electrostatic Air Cleaner, provides vapor removal requirements for a variety of food service applications and equipment.

### Design Features



### Ventless Hood System

This Ventless Hood consists of a Three-stage Air Purification System.

- Stage 1.** A Stainless Steel Baffle Filter traps large grease particles.
- Stage 2.** A Electrostatic Air Cleaning Filter (EAC) which consist of ionizers that charge particles of dirty air allowing them to be collected by an electrostatic force.
- Stage 3.** A Disposable Charcoal Filter helps eliminate odor.

### Appliance Constrains

Equipment Type	Max. Input Power (kW)	Clearances
Ovens	50	6" [153mm] maximum from hood skirt bottom to door top. 1" [25.4mm] minimum from hood skirt bottom to oven top. 6" minimum hood skirt over hang to heated oven opening.
Conveyor Ovens	50	30" [762mm] maximum from hood skirt bottom to top of conveyor belt. 1" [25.4mm] minimum from hood skirt bottom to oven top. 6" minimum hood skirt over hang to heated oven opening.
Rotisseries	6.2	6" [153mm] maximum from hood skirt bottom to door top. 1" [25.4mm] minimum from hood skirt bottom to oven top. 6" minimum hood skirt over hang to heated oven opening.

**Note: To be used with electric appliances only.**

**We have specifically developed the PO-VH for many appliances, please contact us to see if we have developed one for yours.**

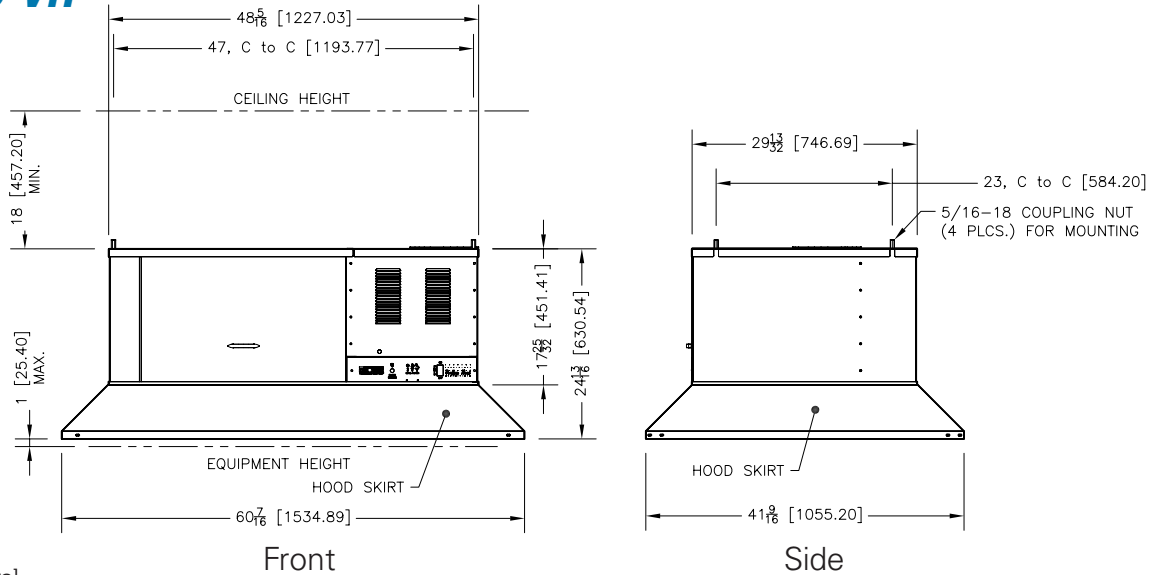
### Listings



# Ventless Hood

## Model PO-VH

Item No.: \_\_\_\_\_  
 Quantity: \_\_\_\_\_  
 Project Name: \_\_\_\_\_  
 SIS#: \_\_\_\_\_  
 AIA/CSI#: \_\_\_\_\_



Inches [millimeters]

### Specifications

We reserve the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements additions or replacements or previously purchased equipment.

#### Construction:

20Ga to 18Ga Stainless Steel

#### Dimensions:

Width: 60-7/16" [1535 mm]

Depth: 41-9/16" [1055 mm]

Height: 24-13/16" [631 mm]

#### Ventless Hood:

Exhaust CFM: 314 - 448

Approx. Decibel Level: 65

Uncrated Weight: 221 lbs [100.2 kg]

#### Electrical Specifications:

Available voltages: 208/220/240

1 phase - 208/220/240V - 5/5/5 AMPS

(No service cord provided)

#### Product Designation:

PO-VH (see "How to Specify" below)

#### Shipping Specifications:

Crated Weight: 337 lbs [152.8 kg]

Crated Cube Size: 68" X 49" X 34" = 65.5 cu ft

[1727mm X 1245mm X 864mm = 1.855 cu meters]

### Accessories Included

Unit is shipped with (1) Baffle Filter, (1) EAC Filter, (1) Charcoal Filter, (1) EAC Soak Tank and (1) Manual.

### How To Specify

#### 1. Local Codes

Ensure your local codes permit Ventless Hoods.

#### 2. Appliance Constraints

Ensure the appliance is within the specified constraints of the hood (see front of this page). Contact Giles to see if we have specifically designed an PO-VH for your appliance.

#### 3. Location

Ensure the location you are installing the Ventless Hood meets the proper clearances specified above.

#### 4. Electrical Specifications

Determine the electrical specifications from the available Voltages, Hz., and Phase.

#### 5. ILS Option (Interlocking Start)

Specify if your county requires the hood to shut-down if the appliance underneath is not operating. Check with your local officials for this requirement.

#### 6. Determine PO-VH Part Number

If after contacting Giles and we do not have a PO-VH specifically designed for your appliance, select an PO-VH Universal Ceiling Mount (UCM) and specify the part number from the following:

	Voltage	Hz.	Phase	ILS	Part Number
<input type="checkbox"/>	208	60	1	No	79769
<input type="checkbox"/>	208	60	1	Yes	79771
<input type="checkbox"/>	240	60	1	No	79770
<input type="checkbox"/>	240	60	1	Yes	79772

#### 7. Accessories (additional charges)

Specify the part number and quantity of the following accessory items needed:

	Qty	Description	Part Number
<input type="checkbox"/>		EAC Filter	20520
<input type="checkbox"/>		Charcoal Filter	31964

#### 8. Shipping

Specify the shipping method

### Giles Foodservice Equipment

2750 Gunter Park Drive West • Montgomery, AL 36109 USA  
 334.272.1457 • Fax 334.272.3561 • Phone Toll Free 1.800.554.4537  
 Web Site: www.gilesent.com • Email: info@gilesent.com



The National Fire Protection Association (NFPA) recommends employees be instructed in personal safety and the operation of the fire suppression system. Johnson Controls provides this owner's guide with each Restaurant Fire Suppression System.

This owner's guide has been provided to help you understand...

- ...how your restaurant system works
- ...your responsibilities for maintenance
- ...what to do in case of fire

This owner's guide is not intended to cover all requirements detailed in the Installation, Operation, Recharge, Inspection, and Maintenance Manual (Part No. 418087). This guide is solely for the use of the end-user to become more knowledgeable with the fire suppression system and the steps necessary in the event of a fire.

### YOUR ROLE IN FIRE PROTECTION

Your ANSUL® Fire Suppression System is of the highest quality. It has been carefully engineered to be reliable, manufactured to exacting standards, proven by over 50 years of service, and custom designed to protect your particular hazard.

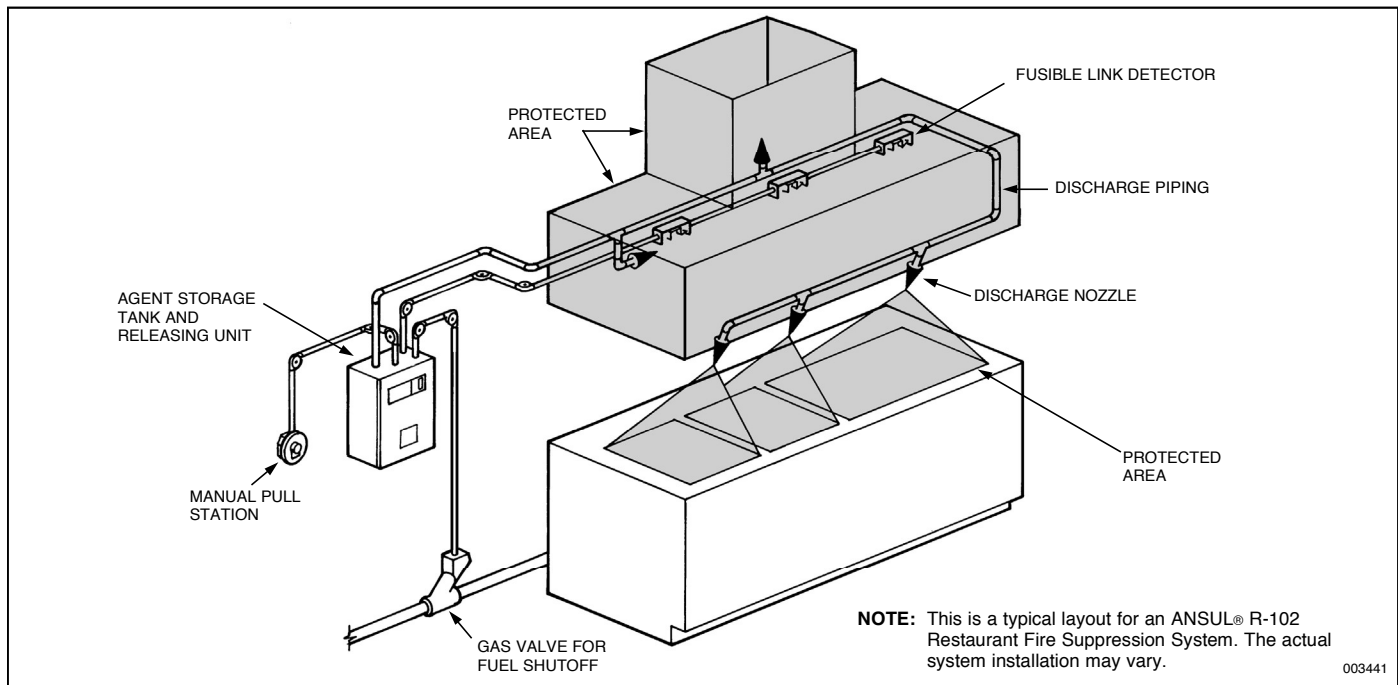
If properly maintained, the system should provide years of protection. However, the primary objective of this guide is to provide enough basic information to help personnel prevent a disastrous fire. By observing some fundamental rules, you can greatly reduce the risk of serious fire damage.

1. Keep all kitchen equipment free of grease build-up, including gas flues which are not intended to be grease coated.
2. Never use flammable solvents or cleaners. Flammable residues could be left in the hazard area.
3. Never store flammable materials near cooking equipment or gas flue areas.
4. Make certain obstructions, such as utensils, pots, pans, cooking materials, etc., are not stored in areas that can obstruct the fire suppression system discharge.
5. Operate the appliance exhaust system whenever the appliance is pre-heating, heating, cooking or cooling. This helps to prevent excessive heat build up which could actuate the fire suppression system.
6. Never operate filter-equipped exhaust systems without the filters in place. Excessive grease may build-up in the hood and duct system. Cooking with filters removed can impact air movement and/or temperatures, which may result in fire suppression system discharge. Use only UL listed filters.
7. Never restrict air intake passages; this can reduce the efficiency of the exhaust system. Cooking with filters containing excessive amounts of grease can impact air movement and/or temperatures, which may result in fire suppression system discharge.
8. Operate all UL tested grease extractors following the manufacturer's instructions to ensure effective grease removal from the hood and duct system.
9. Never tamper with the fire suppression system components (i.e., detectors, nozzles, agent storage container(s) or releasing unit(s)).
10. Before revising your kitchen equipment layout or making changes which affect the basic configuration of the protected area, contact your trained, Authorized ANSUL® Distributor for a system update evaluation. The fire suppression system is made up of components tested within limitations contained in the detailed installation manual. The system designer must be consulted whenever changes are planned for the system or area of protection.
11. Do not allow anyone except an Authorized ANSUL® Distributor to perform maintenance on your R-102 Restaurant Fire Suppression System. Maintenance to your system must be performed semi-annually. It is essential that the system be maintained properly.
12. Post operating instructions in an obvious place in the kitchen and make sure employees know what to do in case of fire.
13. Make certain hand portable extinguishers are properly placed and compatible with the restaurant system. An Authorized ANSUL® Distributor can assist with selection and placement.

**OWNER'S GUIDE**  
**R-102 RESTAURANT FIRE SUPPRESSION SYSTEM**

(Part No. 418127)

PAGE 2 REV. 04 2018-NOV-29



**HOW THE ANSUL® R-102 SYSTEM OPERATES**

1. A fire starts in the protected area.
2. Heat sensitive fusible link detectors activate the system.
3. Appliance energy sources are automatically shut off by accessory equipment appropriate for the type of fuel used by your cooking equipment.
4. The fire suppressing agent is discharged into the plenum and duct and onto the cooking appliances.
5. The agent and the hot grease mix to form a foam. This temporarily seals combustible vapors, helping to inhibit re-ignition. This seal must not be disturbed.

**INSPECTING THE R-102 SYSTEM**

Your ANSUL® R-102 system should be inspected at least monthly. **Should you discover any irregularities, contact an Authorized ANSUL® Distributor immediately.**

1. Never use corrosive cleaning solutions on the fusible links or cables. Check to make certain there is no corrosion to any of the detection system components. Certain high alkaline cleaners could cause corrosion.
2. Ensure that metal fusible links are replaced semi-annually. Deterioration of these links could cause the system to be actuated or to malfunction in case of a fire.
3. Make certain the releasing unit has not been tampered with, and that visual seals are not broken or missing.
4. At daily intervals check your system for loose pipes and missing or grease covered nozzle caps. Make certain

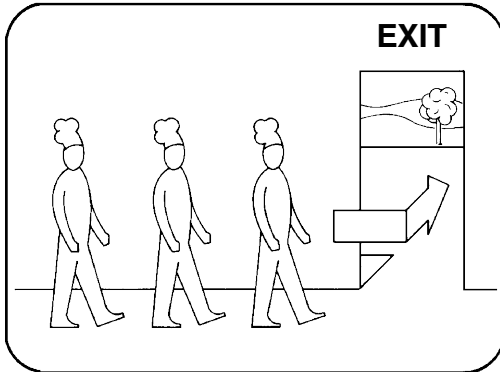
nozzle caps are in place over the ends of each nozzle. Temporarily remove cap, check to make certain it is not brittle, and snap back on nozzle.

**Note:** If caps are damaged or missing, contact the Authorized ANSUL® Distributor for immediate replacement.

5. Check each metal blow-off cap and make certain the cap can be turned freely on the nozzle.
6. Periodically check your visual indicator on the releasing unit to make certain the system is cocked.
7. Have your system inspected by an Authorized ANSUL® Distributor at a maximum of 6 month intervals and immediately after major hood and duct cleaning. Often fusible links are wired shut during the cleaning process to prevent accidental activation. This will prevent the system from operating automatically. It's also possible that your system might have been disconnected, damaged, or has accumulated excessive deposits of grease causing your system to become inoperative.
8. Check that the manual pull station is not obstructed, has not been tampered with, and is ready for operation.
9. Make certain that each tank and releasing unit is mounted in an area with a temperature range of 32 °F to 130 °F (0 °C to 54 °C).
10. Make certain the agent storage tank is not in an area in which the temperature can exceed 130 °F (54 °C) or can be heated to a temperature exceeding 130 °F (54 °C) due to conductivity through heated discharge piping.

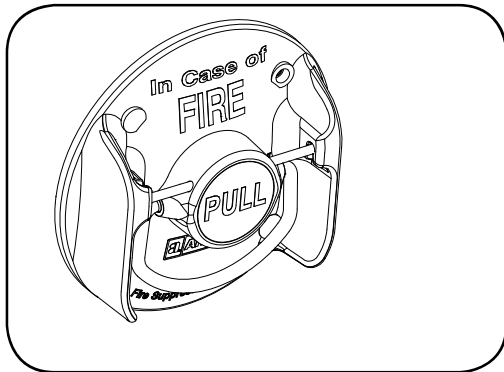
**IN THE EVENT OF FIRE IN THE PROTECTED AREA**

1. Evacuate others from the premises. In a loud, clear voice say: "WE HAVE A FIRE-PLEASE LEAVE THE BUILDING CAREFULLY, BUT QUICKLY."



001633

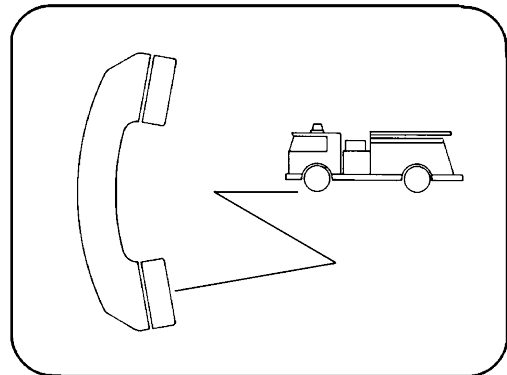
2. If the automatic actuation has not yet taken place, operate the system manually as follows:
  - Pull handle or pull ring straight out on manual pull station with enough force to actuate the fire suppression system.



008326

- Once the fire suppression system is actuated, equipment to shut off the fuel supply to the cooking appliances will operate.

3. Call the local fire department or emergency number.

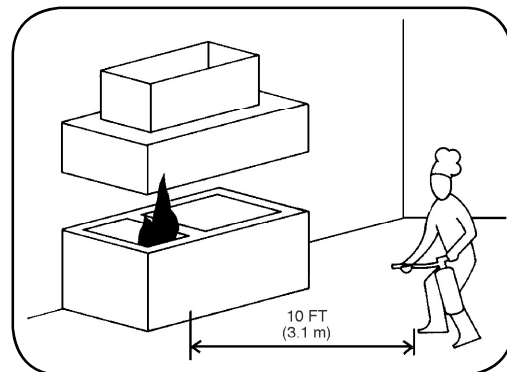


001635

4. Stand by with a wet chemical hand portable fire extinguisher.

If you need to use the extinguisher:

- a. Pull pin
- b. Stand back 10 ft (3.0 m)
- c. Aim at base of fire, squeeze handle and sweep side to side



001636

**CAUTION**

1. Do not attempt to extinguish a grease fire with a hand portable fire extinguisher before the Fire Suppression System has been manually or automatically actuated.
2. Do not discharge wet chemical agent from the wet chemical hand portable fire extinguisher unless the fire suppression system will not operate or a re-flash has occurred.
3. Do not attempt to use a Class ABC Multipurpose Dry Chemical, CO<sub>2</sub>, or Water type hand portable fire extinguisher in/on an appliance with burning cooking oil or grease.

## OWNER'S GUIDE

### R-102 RESTAURANT FIRE SUPPRESSION SYSTEM

(Part No. 418127)

PAGE 4 REV. 04 2018-NOV-29

#### BEFORE RESUMING BUSINESS

1. Immediately after discharge, call your Authorized ANSUL® Distributor to inspect and recharge your Fire Suppression System.
2. Have the Authorized ANSUL® Distributor determine the cause of the system actuation.
3. Area must be cleaned up within 24 hours after discharge using warm water and cleaning detergents.

#### CLEANUP PROCEDURES

Although there is no unusual cleanup procedure for ANSULEX or ANSULEX LpH agents, due to the alkaline nature of these agents, all agent should be cleaned from kitchen surfaces within 24 hours after system discharge. The reaction from the wet chemical agent on cooking grease or oil produces a foamy bi-product that can be wiped up with a cloth or sponge. The following procedures should be followed:

#### CAUTION

1. Before attempting any cleanup, make certain that all fuel sources to the equipment to be cleaned have been shut off. Make certain that the exhaust hood and all appliance electrical controls have been de-energized to avoid any chance of electrical shock resulting from the cleaning process or from electrically conductive alkaline liquid agent and/or its residue.
2. Make certain all surfaces to be cleaned have cooled down to room temperature.
3. Do not use water to clean any appliances that contain hot grease or cooking oils. Doing so may result in violent steaming and/or spattering

1. The fire suppression system agent is non-toxic; however, food product and cooking grease/oil that has come in contact with the agent will no longer be suitable for human consumption and should be discarded.
2. Sponge as much of the agent as possible using sponges or clean rags. Dispose of these sponges or rags in a local sanitary land fill site in accordance to local authorities.

**Note:** Wear rubber gloves during cleanup as sensitive skin may become irritated. If the ANSULEX agent or its residue comes in contact with skin or eyes, flush thoroughly with clean water.

3. Using hot, soapy water and either a clean cloth or sponge, wipe away all foamy residue and thoroughly scrub all surfaces that have come in contact with the agent.

**Note:** Wear rubber gloves during cleanup as sensitive skin may become irritated. If the ANSULEX agent or its residue comes in contact with skin or eyes, flush thoroughly with clean water.

4. After thoroughly cleaning all affected surfaces, adequately rinse and allow to completely dry before re-energizing the equipment.

For repairs, parts and service of the ANSUL® R-102 System, contact your Authorized ANSUL® Distributor (at [www.ansul.com](http://www.ansul.com): "Find A Distributor").

Safety Data Sheets (SDS) are available at [www.ansul.com](http://www.ansul.com)

**Note:** The converted values in this document are provided for dimensional reference only and do not reflect an actual measurement.

ANSUL, ANSULEX, and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited.



**TRUE FOOD SERVICE  
EQUIPMENT, INC.**

2001 East Terra Lane • O'Fallon, Missouri 63366  
(636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl Fax# (001)636-272-7546  
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

Project Name: \_\_\_\_\_

Location: \_\_\_\_\_

Item #: \_\_\_\_\_ Qty: \_\_\_\_\_

Model #: \_\_\_\_\_

A/A #

SIS #

Model:  
**TPP-67**

**Food Prep Table:**  
*Solid Door Pizza Prep Table*



**TPP-67**

- ▶ True's pizza prep tables are designed with enduring quality that protects your long term investment.
- ▶ Oversized, environmentally friendly (R134A) forced-air refrigeration system holds 33°F to 41°F (.5°C to 5°C).
- ▶ Complies with and listed under ANSI/NSF-7-1997-6.3.
- ▶ All stainless steel front, top and ends. Matching aluminum finished back.
- ▶ Stainless steel, patented, foam insulated flat lids keep pan temperatures colder, lock in freshness, and minimize condensation.
- ▶ Extra-deep 19 1/2" (496 mm) full length removable cutting board included. Sanitary, high density, NSF approved white polyethylene provides tough preparation surface.
- ▶ Heavy duty PVC coated wire shelves.
- ▶ Foamed-in-place using Ecomate. A new, innovative, high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

**ROUGH-IN DATA**

Specifications subject to change without notice.  
Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number).

Model	Doors	Shelves	Pans (top)	Cabinet Dimensions (inches) (mm)			HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
				L**	D†	H*						
TPP-67	2	4	9	67 1/4	32 1/4	35 3/4	1/3	115/60/1	8.6	5-15P	7	405
				1709	820	909	1/3	230-240/50/1	3.9	▲	2.13	184

\*\* Length does not include 1/4" (7 mm) each side for cutting board brackets and thumb screws.

† Depth does not include 1" (26 mm) for rear bumpers and 3" (77 mm) for cutting board.

\* Height does not include 6 1/4" (159 mm) for castors or 6" (153 mm) for optional legs.

▲ Plug type varies by country.



APPROVALS:

AVAILABLE AT:

Model:  
**TPP-67**

# Food Prep Table: Solid Door Pizza Prep Table



## STANDARD FEATURES

### DESIGN

- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

### REFRIGERATION SYSTEM

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Oversized, factory balanced refrigeration system with guided airflow to provide uniform temperature in food pan rail and cabinet interior.
- Forced-air design holds 33°F to 41°F (.5°C to 5°C) product temperature in food pans and cabinet interior. Complies with and listed under ANSI/NSF-7-1997-6.3.
- Condensing unit accessed from behind front removable panel, slides out for easy maintenance.

### CABINET CONSTRUCTION

- Exterior - stainless steel front, top and ends. Matching aluminum finished back.
- Interior - attractive, NSF approved, white aluminum liner. 300 series stainless steel floor with coved corners.
- Insulation - entire cabinet structure and solid doors are foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- 5" (127 mm) diameter stem castors. 36" (915 mm) work surface height.

### DOORS

- Stainless steel exterior with white aluminum liner to match cabinet interior.

- Each door fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Positive seal doors swing within cabinet dimensions.
- Magnetic door gaskets of one piece construction, removable without tools for ease of cleaning.

### SHELVING

- Four (4) adjustable, heavy duty PVC coated wire shelves 23<sup>5</sup>/<sub>8</sub>" L x 28" D (601 mm x 712 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on 1/2" (13 mm) increments.

### MODEL FEATURES

- Evaporator is epoxy coated to eliminate the potential of corrosion.
- Extra-deep 19<sup>1</sup>/<sub>2</sub>" (496 mm), full length removable cutting board included. Sanitary, high-density, NSF approved white polyethylene provides tough preparation surface.
- Stainless steel, patented, foam insulated flat lids keep pan temperatures colder, lock in freshness, and minimize condensation.
- Refrigerated pan rail comes standard with nine (1/2 size) 12<sup>3</sup>/<sub>4</sub>" L x 6<sup>1</sup>/<sub>4</sub>" W x 6" D (324 mm x 159 mm x 153 mm) NSF approved clear polycarbonate insert pans.
- NSF-7 compliant for open food product.

### ELECTRICAL

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.

### OPTIONAL FEATURES/ACCESSORIES

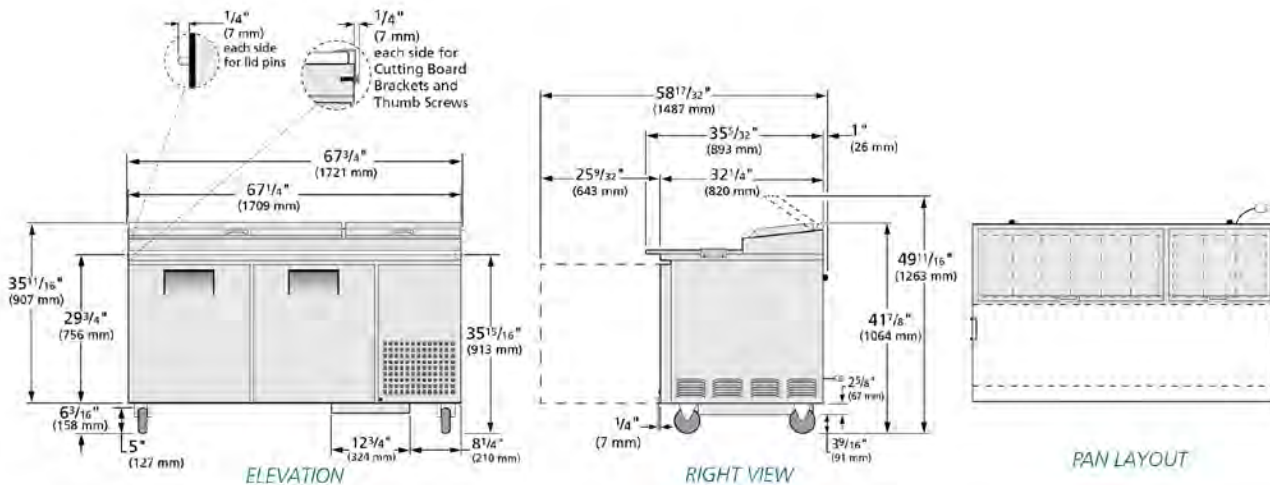
Upcharge and lead times may apply.

- 230 - 240V / 50 Hz.
- 6" (153 mm) standard legs.
- 6" (153 mm) seismic/flanged legs.
- 4" (102 mm) diameter castors.
- 3" (85 mm) diameter castors.
- 2<sup>1</sup>/<sub>2</sub>" (64 mm) diameter castors.
- Barrel locks (factory installed). Requires one per door.
- Garnish rack.
- Single overshelf.
- Double overshelf.
- Half bun tray rack. Each holds up to eleven 18" L x 26" D (458 mm x 661 mm) sheet pans (sold separately).
- 19<sup>1</sup>/<sub>2</sub>" (496 mm) deep, 1/2" (13 mm) thick, white polyethylene cutting board.
- 19<sup>1</sup>/<sub>2</sub>" (496 mm) deep, 1/2" (13 mm) thick, composite cutting board.
- Half bun tray rack(s). Holds up to eleven 18" L x 26" D (458 mm x 661 mm) sheet pans (sold separately).
- Exterior round digital temperature display (factory installed).
- Remote cabinets (condensing unit supplied by others; system comes standard with 404A expansion valve and requires R404A refrigerant). Consult factory technical service department for BTU information. All remote units must be hard wired during installation.



115/60/1  
NEMA-5-15R

## PLAN VIEW



**WARRANTY**  
One year warranty on all parts and labor and an additional 4 year warranty on compressor. (U.S.A. only)

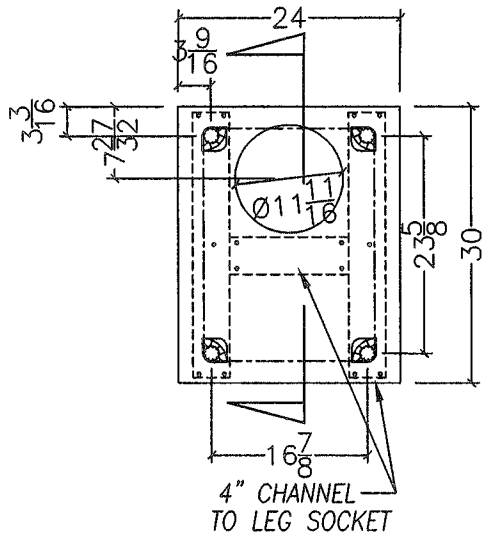
METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER  
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
TPP-67	TFQY11E	TFQY15S	TFQY11P	TFQY113	

## TRUE FOOD SERVICE EQUIPMENT

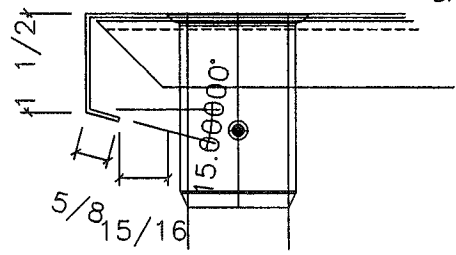
2001 East Terra Lane • O'Fallon, Missouri 63366 • (636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl. Fax# (001)636-272-7546 • www.truemfg.com



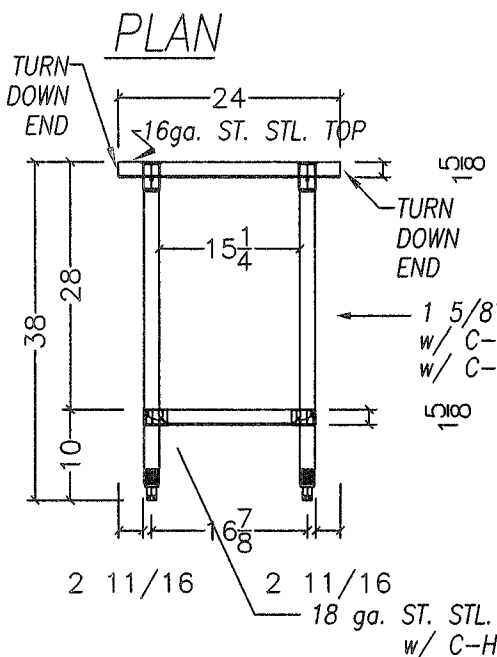
LOCATION: SALISBURY, MD  
 JOB #: SO-250087  
 MAKE: 1  
 PART# PJWUSC24

TOP- 1-16ga. ST. STL. 33 7/8 x 33 1/8  
CHANNELS- 1-18ga. GALV. 6 x 12 3/4  
 3-18ga. GALV. 6 x 28 3/4 BEVELED  
UNDERSHELF- 1-18ga. ST. STL. 29 5/16 x 28 5/8  
CHANNEL- 1-18ga. GALV. 6 x 23 1/2 BEVELED

BREAK CHANNELS 1 1/16" DEEP

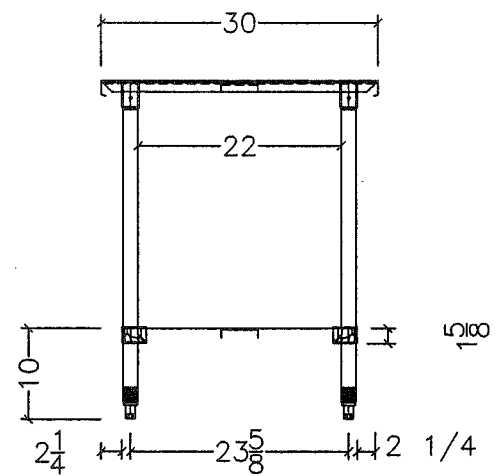


TYPICAL EDGE TOP AND UNDERSHELF



- 4 - GALV. LEG SOCKET SS66420
- 4 - PLASTIC GRAY FOOT SS66620
- 4 - CORNER BRACKET SS66434

1 5/8" O.D. TUBULAR GALV. LEGS  
 w/ C-H A10-0841 ADJ. BULLET FEET  
 w/ C-H A28-0207 LEG SOCKETS



SECTION

FRONT ELEVATION

		DATE: 4-1-99
		DWG NAME: P:\JSS\WORKTABL\PJWUSC24
	24" S.S. TABLE W/UN. SH. CUTOUT CENTER	SCALE: N.T.S.
		DRAWN BY: I. ROGERS

FORT SMITH DIVISION  
 7400 SOUTH 28th STREET  
 FORT SMITH, AR. 72908  
 PH: 800-643-2980  
 FAX: 479-646-5517



DL12SP



DL12DP

**DL12SP & DL12DP**

“Superior *quality* product  
at an *affordable* price !”

**COUNTERTOP CRUST SHEETER**

**Standard Features**

- Sanitary plastic precision ground rollers
- Synthetic rollers eliminate dough build up
- Compact design, ideal for use in limited space
- Sanitary, heavy duty, all stainless steel welded construction
- Stainless steel spring loaded scrapers easily removable for cleaning
- Simple handle adjustments for exact uniform dough thickness
- Ergonomic design for easy operation
- Convenient side or front operation
- Maintenance free drive mechanism
- Drive mechanism isolated from roller area
- Sealed ball bearings, permanently lubricated
- Will sheet up to 12” (305 mm) diameter
- One operator can make up to 250 pieces per hour
- Safe and easy operation
- ETL & ETL Sanitation listed
- One year parts and labor limited warranty

**OPTIONAL**

- Foot switch control for DL12DP
- 220V - 1PH - 50 Hz
- Model conform to requirements of RSST, conforms to the following norms and requirements:
  - EN 954-1 article 6.2.1
  - CSA Z432-04, articles 6.2.1.9.2, 6.2.1.9.3, 6.2.1.9.4, 6.2.3.2, 7.17, 10.2
  - RSST articles 172 à 175, 182, 184, 187, 189, 190, 192

**DL12 series Counter top sheeter**

The Doyon DL12 series dough sheeter is an efficient one (DL12SP) or two stage (DL12DP) machine featuring a front infeed and discharge. Ergonomic design makes it easy and simple to operate.

Sheeting is made easy with this compact, counter top design that is simple to use. Back strain is reduced since rolling pin work is minimized or eliminated. Save time and effort

Sheet dough up to 12” (305 mm) in diameter to a uniformed thickness in seconds. One operator can make up to 250 pieces per hour in just two easy steps.

The Quick Change Index System quickly changes the gap between the dough rollers. Sheet all types of dough including cinnamon rolls, doughnuts, perogies, danish and puff pastry up to 12” (305 mm).

OVERALL DIMENSIONS

DL12SP

17" W X 10 5/8" D X 12 1/2" H  
(432 mm X 270 mm X 318 mm)

Rollers: 2" X 12" (51 mm X 308 mm)

DL12DP

17" W X 10 5/8" D X 25 1/4" H  
(432 mm X 270 mm X 641 mm)

Bottom Rollers: 2" X 12" (51 mm X 308 mm)

ELECTRICAL SYSTEM

120V - 1 PH - 370 Watts - 60 Hz

Heavy duty, maintenance free 1/2 HP motor

CAPACITY

Sheets from 1oz to 10.5 oz (30g to 300g) of dough  
Maximum rollers gap : 13/64" (5 mm)  
Up to 250 dough pieces per hour

FINISH

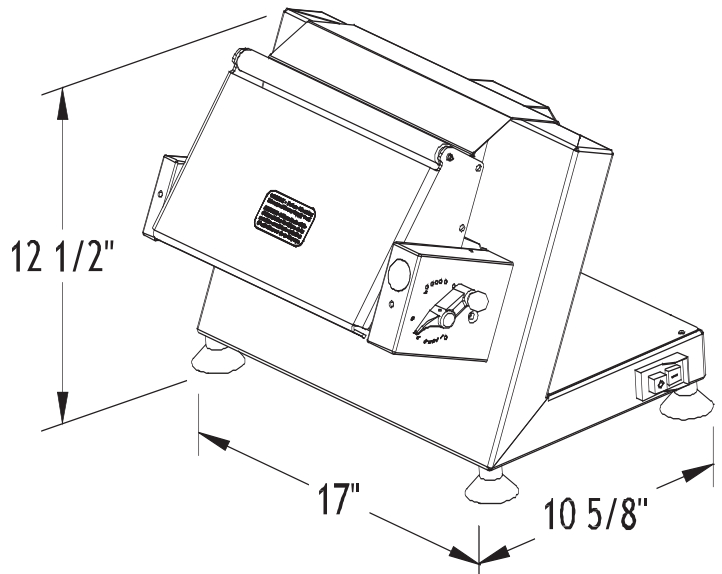
Stainless steel

SHIPPING WEIGHT

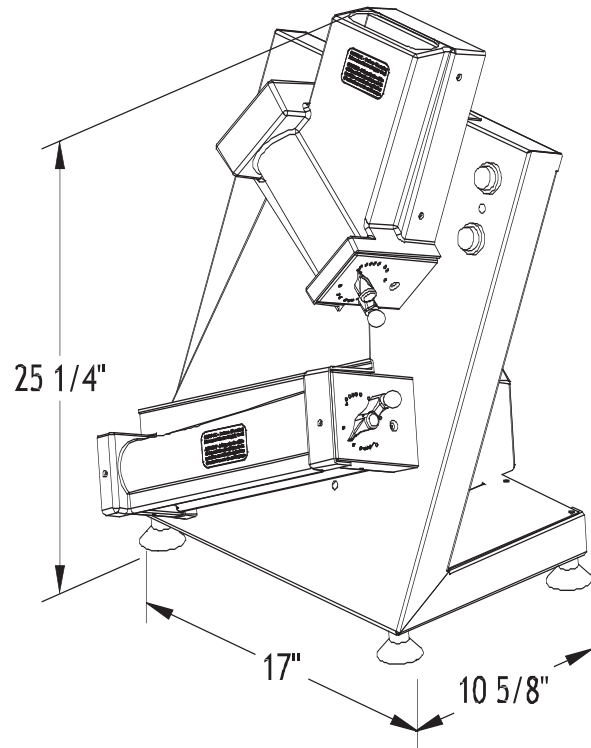
60 lb (27 kg) approximately

Specifications and design subject to change without notice.

DL12SP



DL12DP

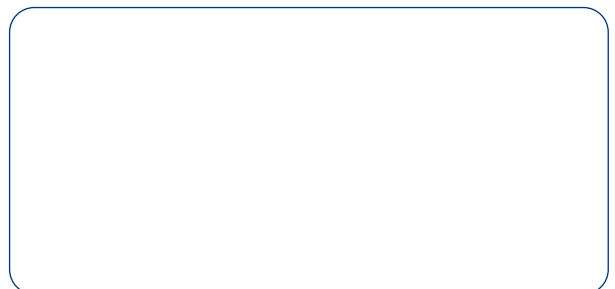


Foot switch pedal for DL12DP



Conforms to ANSI/UL std. 763 Conforms to Certified to CSA C22.2 no.195 ANS/NSFB

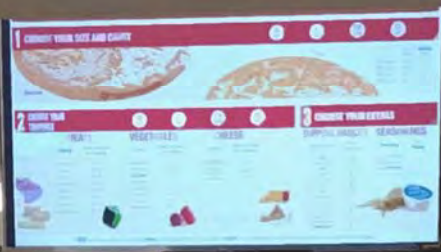
Your local distributor:



1255, rue Principale  
Linière, Beauce, Québec, Canada G0M 1J0

Telephone : (418) 685-3431 Fax: (418) 685-3948  
Canada : (800) 463-1636 U.S.: (800) 463-4273  
E-Mail : doyon@doyon.qc.ca Internet: http://www.doyon.qc.ca





# DIGITAL MENU SOLUTIONS

## Guide to Digital Menu Boards



# DIGITAL MENU SOLUTIONS



## Overview

Papa John's allows the use of Digital Menu Boards in its Non-Traditional locations. Through Preferred Marketing Solutions, approved digital menu files and digital creative files will be provided in a JPEG format. These JPEG files are then placed onto a flash/usb drive and played as a slide show through a digital menu panel. The information in this guide covers the process of producing the creative files for digital menu boards and the selection of the hardware for the Digital Menu option.

## Developing Your Menu Content and Digital Files

During the development process of a new Non-Traditional Papa John's you will work with your Papa John's Franchise Development Director (FDD), Franchise Business Director (FBD) and Marketing Director to fine tune our menu to meet the needs of the location. Papa John's menu is typically made up of what we call "Core or Signature" items and it can be complimented with side items, desserts or regional offerings. Typically, your FDD will begin the process by providing a sample menu to you from a location with similar consumer/operational needs. This will begin the discussion/feedback cycle with your FBD which will ultimately lead to a proposed opening menu. Next, the proposed opening menu information is provided to our Marketing Director, who approves it. Once approved, franchisees or operators will provide the information to Preferred Marketing Solutions, and they will produce the digital creative.

## Digital Displays

Our minimum requirements for digital displays are as follows:

- The screen size can be no less than 32 inches measured diagonally (NOTE: the needs of the site or the distance from the counter to the mounted position of the display may require the minimum size to be increased. The recommended size is 43 inches measured diagonally).
- Papa John's requires a minimum of 3 displays of equal size (**NOTE: menu size and site needs could require the minimum number to be increased or decreased with written approval from PJI.**)
- The displays must have a USB port with "multimedia" capability.
- The slide show transition should contain a configurable timer for the slides.
- The slide transition itself should be seamless (this means that if two identical slides are shown back-to-back the transition from the first slide to the second slide should not be discernable when viewing). This is important, as often we will utilize multiple slides with the same content to balance the content view for the consumer between Menu Information and Creative Images.

### **Additional Information**

There are several models now that have USB ports integrated and will run a jpeg slide show. TV models and functionality change frequently. We have found it is easiest to provide the requirements list above to your electronics supplier and ask to see models that meet those requirements.

Another thing to consider is the viewing angle of the panel. It is a good idea to evaluate the units viewing angle prior to purchasing. Typically, Plasma type models offer the widest viewing angle, however...some of the newer LED/ULED/LCD models offer comparable angles. See below.

### **Viewing Angle**

---

In [display technology](#) parlance, **viewing angle** is the maximum [angle](#) at which a display can be viewed with acceptable visual performance. In a technical context, this angular range is called [viewing cone](#) defined by a multitude of [viewing directions](#).

The image may seem garbled, poorly saturated, of poor [contrast](#), blurry or too faint outside the stated viewing angle range, the exact mode of "failure" depends on the display type in question. For example, some screens reflect more light perpendicular to the screen and less light to the sides, making the screen appear much darker (and sometimes colors distorted) if the viewer is not in front of the screen.

The viewing angle is measured from one direction to the opposite, giving a maximum of 180° for a flat, one-sided screen. Some display devices exhibit different behavior in horizontal and vertical axis, requiring users and manufacturers to specify maximum usable viewing angles in both directions. Usually the screens are aligned and used to facilitate greater viewing angle in horizontal level, and smaller angle in the vertical level, should the two of them be different in magnitude.

### **Other Display Considerations**

Other considerations will be to determine the total amount of space and based on the size of the menu, the number and size of the panels desired. Panel orientation (vertical / horizontal) is also a consideration. Our typical orientation is horizontal, but we can accommodate vertical orientation if linear space constraints require it.

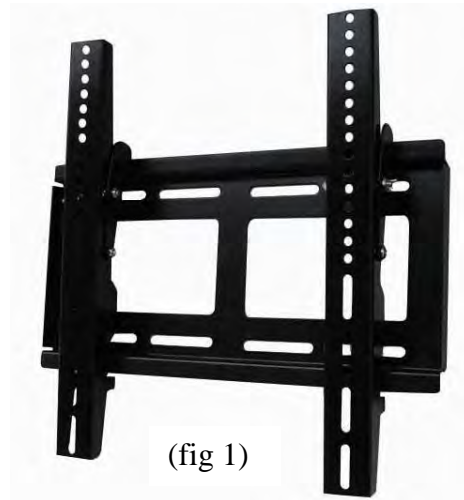
### **Mounting Systems**

There are several mounting systems available on the market as well. Finding a solution that meets the needs of the application should be as simple as an Internet search. Below is some additional information regarding the various types of mounting systems.

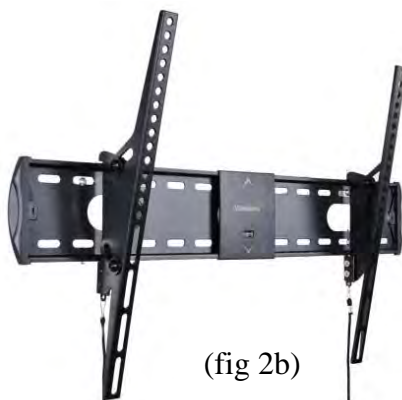
TV wall mounts are made from steel and constructed to hold specific ranges of weight, usually defined by screen size. A basic flat panel wall mount might be rated for 26-42 inch (66-107 cm) displays with a maximum weight of 100 pounds (45 kilograms), while the next type might be for 42-50 inch (107-127 cm) displays with a maximum weight of 150 pounds (68 kg). TV wall mounts designed to hold larger displays are sometimes called "two-stud" mounts. The [wall plates](#) are designed to attach to two studs rather than one. If the TV is being mounted to a concrete wall, cement anchors might be used. Lag bolts and other necessary hardware should come with the mounting kit.

## Standard Wall Mount

Standard TV wall mounts (fig 1) are made to keep a flat screen display within one inch (25 mm) of the wall. With this type of mount, the television cannot be tilted. It must be hung at the correct height within the prime viewing range and will be viewed from this stationary position. Since in a menu configuration, the panels are typically hung above a straight forward line of site, non-tilting mounts can limit the ability to adjust for viewing angle and typically should be avoided.



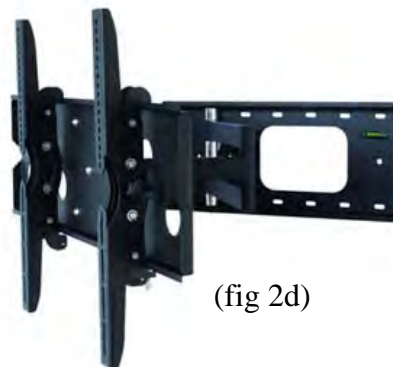
## Tilting Wall Mount



For wall mounted menu applications, there are tilt style wall mounts. A tilt style mount is very similar to stationary models, but it holds the display further from the wall. This allows the bottom of the flat panel to be pushed towards the wall, bringing the top forward.

Tilt style wall mounts will have differing degrees of tilt, depending on the model and manufacturer. Aside from the degree of tilt, another important factor to consider is the design. Some tilt style wall mounts work on a ratchet principle whereby the tilt is adjusted by simply moving the display by hand to the desired angle (fig 2a). Other tilt mounts include a tool that is required to change the angle (fig 2b). If you will be changing the angle often, the former model will probably be worth the extra expense for its convenience.

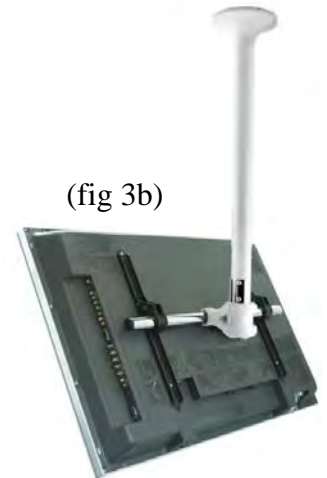
Some TV wall mounts allow the display to be swung away from the wall on an arm, tilted up or down, or swiveled left and right (fig 2c and 2d). This type of mount is called an *articulating* wall mount and is used mainly with smaller LCD displays.



## Ceiling Mount

For some applications one might opt for a ceiling mount. The ceiling mount consists of a small base with extended downward arm complete with tilt and pitch features (fig 3a). This allows the flat panel TV to be positioned within a furnished area that does not have walls close by.

There are also TV wall mounts that allow a 90-degree swivel (fig 3b). This might come in handy for a stadium venue where based on volume, the ingress/egress points could change. Some TV wall mounts have "security features" which allow you to padlock the TV to the wall plate to discourage theft. TV wall mounts range in price from about US\$60 to over US\$350, and while options make a difference, often basic styles without added functionality or benefit can range just as widely. Make sure the mount you choose provides adequate visibility of your menu panels. As long as the mount is rated for the correct size flat panel and weight, and the specifications are satisfactory, the product should work nicely regardless of price tag.



Any questions or concerns should be directed to your FDD.

Provided below is information on the model of the monitors that PJI uses in our corporate non trad locations. You are not required to use that model, but it is a commercial grade and one that is known to work and provide the needed functionality in some of our existing corporate locations. If you want to source the digital monitors/TVs locally, please refer to the information in the previous sections. Keep in mind that you will need a minimum of QTY-3 monitors. The length of the soffit/bulkhead where you are placing them should be used to determine the size of the monitors. The default is a 43" diagonally measured monitor. In applications where the bulkhead length may not allow for the required quantity in that size, a 32-inch version can be used.

Subject: Digital /Menu Monitors

Specific model used for corporate non trads:

[https://www.usa.philips.com/p-p/BDL4330QL\\_00/signage-solutions-q-line-display](https://www.usa.philips.com/p-p/BDL4330QL_00/signage-solutions-q-line-display)

The monitors can be ordered off of Amazon. They run about \$600 each for the 43 inch monitors.

[https://www.amazon.com/gp/aw/d/B01M1AHITX/ref=gp\\_aw\\_ybh\\_a\\_127?ie=UTF8&psc=1&refRID=V5CK8KBMA4EHNHJ38DTJ](https://www.amazon.com/gp/aw/d/B01M1AHITX/ref=gp_aw_ybh_a_127?ie=UTF8&psc=1&refRID=V5CK8KBMA4EHNHJ38DTJ)

Here is another link provided by a franchisee for a 43" LG model that was used in their stores. They run around \$279 each from Sam's Club if they are still available.

<https://www.samsclub.com/sams/43-uhd-smart-120hz-3-hdmi-wifi/prod21401273.ip>

For wall mount applications... Here is a link to some mounts that we have used in a few corporate locations.

1 - per monitor of course

[https://www.amazon.com/Mounting-Dream-MD2268-MK-Tilting-Capacity/dp/B00NKZ5R28/ref=sr\\_1\\_7?s=audio-video-accessories&ie=UTF8&qid=1500306232&sr=1-7&keywords=tv+mount#customerReviews](https://www.amazon.com/Mounting-Dream-MD2268-MK-Tilting-Capacity/dp/B00NKZ5R28/ref=sr_1_7?s=audio-video-accessories&ie=UTF8&qid=1500306232&sr=1-7&keywords=tv+mount#customerReviews)

For ceiling applications, swivel style ceiling mounts will need to be used.

Also, 1 – per monitor

[https://www.amazon.com/Ceiling-Display-400x400mm-Adjustable-MC4602/dp/B01M4JI8Y5/ref=sr\\_1\\_20?ie=UTF8&qid=1537284523&sr=8-20&keywords=tv+mount+ceiling](https://www.amazon.com/Ceiling-Display-400x400mm-Adjustable-MC4602/dp/B01M4JI8Y5/ref=sr_1_20?ie=UTF8&qid=1537284523&sr=8-20&keywords=tv+mount+ceiling)

# DIGITAL MENU SOLUTIONS - CREATIVE

Digital Menu Board Creative will need to be ordered through Preferred Marketing Solutions:

The charge for New Digital Menu Board Creative is \$75 and a charge for an update is \$35.

NOTE: The lead time for creative is ~ 4 weeks.

If you need new digital creative or updates, please contact Preferred Marketing Solutions at:

## PREFERRED MARKETING SOLUTIONS

**Blayne Stephens or Holly Freville:** Digital Menu Board Creative Support.

Contact the Main Line for: Print Items, Promotional Items, Uniforms, Grand Opening Materials.

**Blayne Stephens**  
[blayne\\_stephens@papajohns.com](mailto:blayne_stephens@papajohns.com)  
[502.261.2701](tel:502.261.2701)

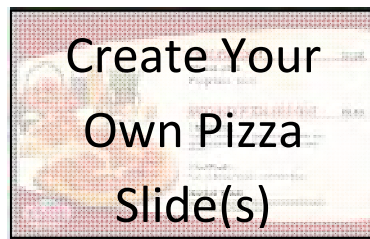
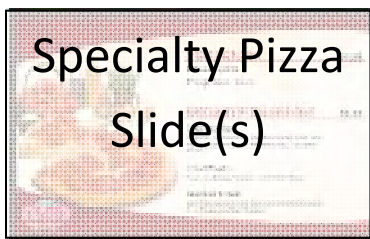
**Holly Freville**  
[holly\\_freville@papajohns.com](mailto:holly_freville@papajohns.com)  
[502.261.2649](tel:502.261.2649)

**Main Line**  
[preferredms\\_orders@papajohns.com](mailto:preferredms_orders@papajohns.com)  
[1-800-270-1769](tel:1-800-270-1769) Opt 1

**Estimated total cost typically runs from \$1,100 - \$2,000 for three monitors, mounts and digital creative + installation. The monitors only require 110V power (no data connection is required) and to be mounted into place. A USB flash drive is used to load the digital files onto the monitors, so no data connections are required.**

The digital creative files are provided to each franchisee in a .PPT (Power Point) format. The item pricing is editable and must be entered by the franchisee/operator for each location, however, the menu items and caloric information contained on the menu “slides” are static and can only be edited by contacting Preferred Marketing Solutions. The hi-res .PPT files will be provided via download from an FTP site. Once the pricing information is entered, the files must be converted to a .JPEG format and uploaded to a thumb/flash drive.

The flash drive is then plugged into each digital monitor and run as a slide show. The slides should be assigned to each monitor as follows:



For general questions pertaining to digital menu boards or creative, contact Mike Bradford

Mike Bradford – Dir. Of Development  
Email: [Mike\\_Bradford@papajohns.com](mailto:Mike_Bradford@papajohns.com)  
Phone: 502-261-4787





#### Limited One Year Warranty

T&S warrants to the original purchaser (other than for purposes of resale) that such product is free from defects in material and workmanship for a period of one (1) year from the date of purchase. During this one-year warranty period, if the product is found to be defective, T&S shall, at its options, repair and/or replace it. To obtain warranty service, products must be returned to...

*T&S Brass and Bronze Works, Inc.  
Attn: Warranty Repair Department  
2 Saddleback Cove  
Travelers Rest, SC 29690*

Shipping, freight, insurance, and other transportation charges of the product to T&S and the return of repaired or replaced product to the purchaser are the responsibility of the purchaser. Repair and/or replacement shall be made within a reasonable time after receipt by T&S of the returned product. This warranty does not cover items which have received secondary finishing or have been altered or modified after purchase, or for defects caused by physical abuse to or misuse of the product, or shipment of the products.

Any express warranty not provided herein, and any remedy for Breach of Contract which might arise, is hereby excluded and disclaimed. Any implied warranties of merchantability or fitness for a particular purpose are limited in duration to the warranty period provided on the product. Under no circumstances shall T&S be liable for loss of use or any special consequential costs, expenses or damages.

Some states do not allow limitations on how long and implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Specific rights under this warranty and other rights vary from state to state.

#### Attention California Residents:

"WARNING: This product contains chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm."

P/N: 098-019542-45 Rev.1  
Date: 07-21-17  
Drawn: TEH  
Checked: DMH 07-27-17  
Approved: JHB 08-03-17

# Installation and Maintenance Instructions



## B-1100 SERIES WORKBOARD FAUCET WITH ETERNA OR CERAMA CARTRIDGES

ES

#### Español:

Instrucciones de instalación y mantenimiento

FR

#### Français:

Instructions pour l'installation et la maintenance

DE

#### Deutsch:

Installations- und Wartungsanleitungen

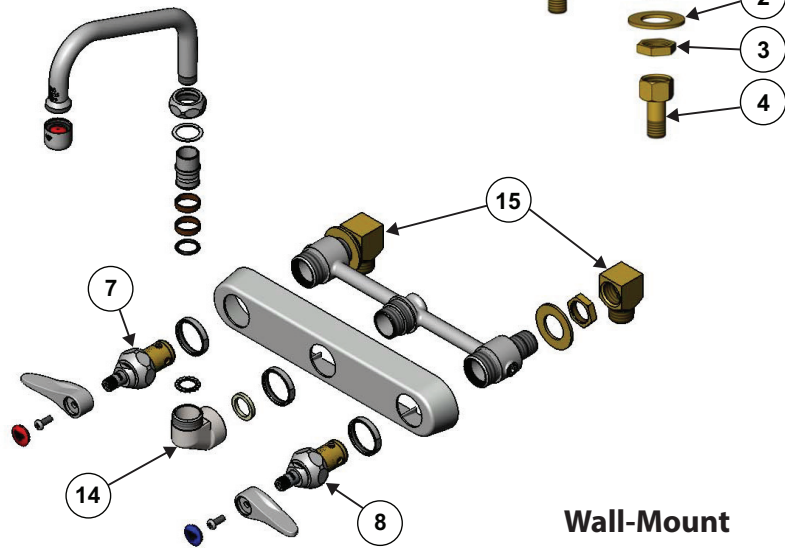
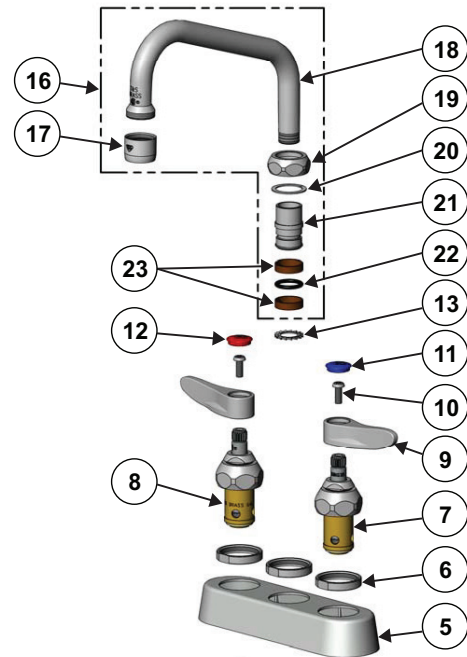
CN

#### 中文:

安装与维护说明

# Exploded View

Deck-Mount



Wall-Mount

# Part Number Guide

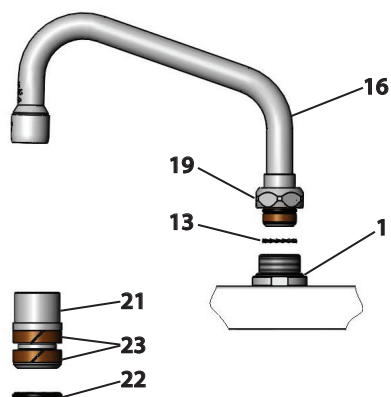
## Base Faucet Assemblies

1	Base Faucet	N/A
2	Lock Washer, Shank	000999-45
3	Locknut, Shank	002954-45
4	Nut & Tailpiece	150A
5	Escutcheon: B-1100 Eterna Workboard (3-1/2" centers)	019356-40
	Escutcheon: B-1110 Eterna Workboard (4" centers)	019374-40
	Escutcheon: B-1120 Eterna Workboard (8" centers)	019375-40
6	Locknut, Escutcheon	019376-40
7	Eterna Cartridge: Quarter-Turn w/ Spring Check LTC (new style)	012442-40NS
	Cerama Cartridge: Quarter-Turn w/ Check Valve LTC (new style)	012395-25NS
8	Eterna Cartridge: Quarter-Turn w/ Spring Check RTC (new style)	012443-40NS
	Cerama Cartridge: Quarter-Turn w/ Check Valve RTC (new style)	012394-25NS
9	Handle, Lever (new style)	001638-45NS
	Handle, Wrist Action (new style)	B-WH4-NS
10	Screw, Handle	000925-45
11	Index, Blue Button, Press-in (new style)	018506-19NS
12	Index, Red Button, Press-in (new style)	001193-19NS
13	Star Washer, Anti-Rotation	014200-45
	<b>(ITEMS 14-15 FOR WALL-MOUNT ONLY)</b>	
14	B-1100 Knob	000082-40
15	*Optional Supply Connector Kit	B-1100-K

\*Order separately

## Nozzle Assemblies

16	Asm, Swing Nozzle w/ 2.2 GPM Aerator	
	Swing Nozzle - 6"	059X-A22
	Swing Nozzle - 8"	060X-A22
	Swing Nozzle - 10"	061X-A22
	Swing Nozzle - 12"	062X-A22
	Swing Nozzle - 14"	063X-A22
	Asm, Swivel Gooseneck w/ 2.2 GPM Aerator	
	Swivel Gooseneck - 3"	131X-A22
	Swivel Gooseneck - 2-11/16"	132X-A22
	Swivel Gooseneck - 5-3/4"	133X-A22
	Swivel Gooseneck - 8-13/16"	135X-A22
17	Aerator, 2.2 GPM , 55/64"-27 UN Female	B-0199-01
18	Nozzle (See models)	N/A
19	Nut, Swivel (new style)	N/A
20	Washer, Swivel	009538-45
21	Swivel Piece	N/A
22	O-Ring	001074-45
23	Sleeve, Swivel (2)	011429-45



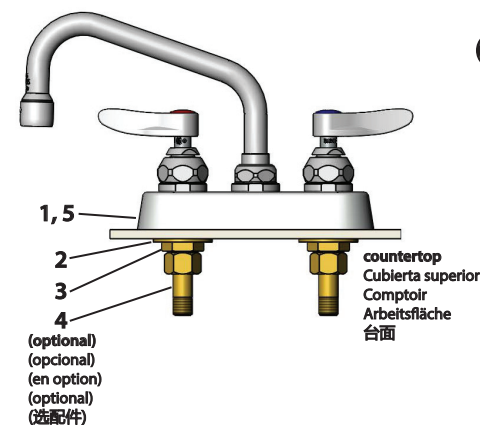
**NOTE:** See repair kit 011643-45 for replacement of no.22 and no.23.

**NOTA:** Vea el kit de reparación 011643-45 para las refacciones de las piezas n.º 22 y 23.

**REMARQUE:** Voir le kit de réparation 011643-45 pour le remplacement des No 22 et 23.

**HINWEIS:** Reparatursatz 011643-45 zum Ersatz von Nr. 22 und Nr. 23.

**注意:** 22、23号的配件包型号为.011643-45



### EN Faucet Installation

3. Drill (2) two holes into sink or countertop where you are installing no.1.
- Note: Inlet spacing: 3-1/2", 4" or 8" center to center.*
4. Apply Plumber's Putty to the bottom face of no.5. Position no.1 into the drilled countertop.
5. Install no.2 and no.3 on each no.1 shank and tighten. Install no.4 if they are to be used.
6. Connect water supply to no.1 shanks or no.4 (if applicable) and check for leaks.

### EN Nozzle Installation

*Note: Nozzle should be installed first. See diagram below.*

1. Shut off water supply and drain lines. Insert no.16 into no.1 and rotate to front of sink. For a rigid nozzle, install no.13 into no.1 outlet.
2. Tighten no.19 firmly with a wrench.

### ES Instalación de la boquilla

*Nota: Se debe instalar la boquilla en primer lugar. Véase el siguiente diagrama.*

1. Corte el suministro de agua y drene las líneas. Inserte la pieza n.º 16 en la n.º 1 y gire hacia el frente del fregadero. En el caso de una boquilla rígida, instale la pieza n.º 13 en la salida n.º 1.
2. Apriete firmemente la pieza n.º 19, con una llave.

### FR Installation de la lance

*Remarque : La lance doit être installée en premier. Voir le schéma ci-dessous.*

1. Coupez l'alimentation en eau et les conduites d'évacuation. Insérez le No 16 dans le No 1 et faites pivoter vers l'avant de l'évier. Pour une lance rigide, installez le 13 dans la sortie No 1.
2. Serrez bien le No 19 avec une clé.

### DE Einbau der Düse

*Hinweis: Düse muss zuerst montiert werden. Siehe Abbildung unten.*

1. Wasserzufuhr ausschalten und Rohre entleeren. Nr. 16 in Nr. 1 einsetzen und zur Vorderseite des Beckens drehen. Bei starrer Düse Nr. 13 in Nr. 1 Auslass einsetzen.
2. Nr. 19 mit einem Schraubenschlüssel fest anziehen.

### CN 水嘴安装

*注意：水嘴要最先安装。请参见下方图解。*

1. 关闭供水及排水管道，将16号插入1号内并旋转至水池前方。如果是固定水嘴，则应将13号放入1号出水口内。
2. 用扳手将19号拧紧。

### ES Instalación del grifo

3. Perfore dos (2) orificios en el fregadero o en la cubierta superior, en donde está instalando la pieza n.º 1.

*Nota: Espaciado en la entrada: Distancia entre centros de 8.89, 10.16 o 20.32 cm (3-1/2", 4" o 8").*

4. Coloque masilla de plomería en la superficie inferior de la pieza n.º 5. Coloque la pieza n.º 1 en la cubierta superior perforada.
5. Instale las piezas n.º 2 y n.º 3 en cada vástago n.º 1 y apriete. Instale las piezas n.º 4 si van a usarse.
6. Conecte el suministro de agua a los vástagos de la pieza n.º 1 o a la pieza n.º 4 (si aplica) y compruebe que no haya fugas.

### FR Faucet Installation

3. Forez (2) trous dans l'évier ou le comptoir à l'endroit où vous installez le No 1.

*Remarque : Espacement entre les entrées : 3 1/2 po., 4 po. ou 8 po. entre les axes.*

4. Appliquez du mastic de plombier sur la face inférieure du No 5. Mettez en place le No 1 dans le comptoir percé.
5. Installez les No 2 et 3 sur chacune des douilles No 1 et serrez. Installez les No 4 s'ils doivent être utilisés.
6. Raccordez l'arrivée d'eau aux douilles No 1 ou No 4 (le cas échéant) et recherchez des fuites.

### DE Montage der Armatur

3. Zwei (2) Bohrlöcher in die Spüle oder die Arbeitsplatte an der Stelle bohren, wo Nr. 1 eingebaut wird.

*Hinweis: Abstand des Einlass: 3-1/2", 4" oder 8" von Mitte zu Mitte.*

4. Den Kitt auf die Unterseite von Nr. 5 auftragen. Nr. 1 in die Bohrungen der Arbeitsplatte platzieren.
5. Nr. 2 und Nr. 3 an jedem Schaft Nr. 1 montieren und festziehen. Nr. 4 einbauen, falls sie verwendet werden sollen.
6. Wasserzufuhr zum Schaft Nr. 1 oder Nr. 4 (falls zutreffend) anschließen und auf Dichtheit überprüfen.

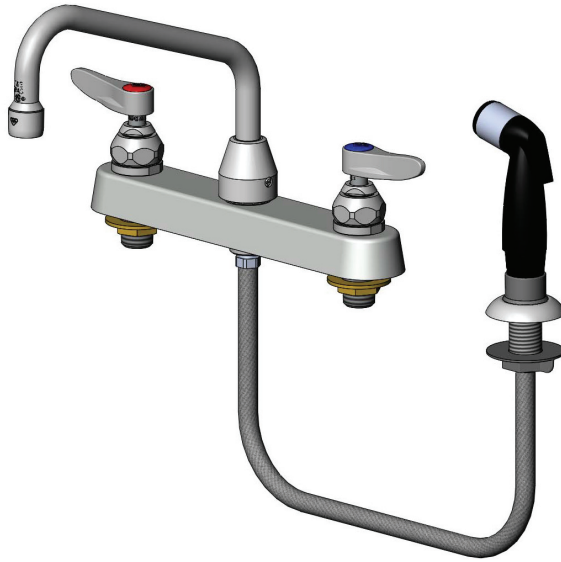
### CN 龙头安装

3. 在需安装龙头的水槽或者工作台上钻两(2)个孔。

*注意：两孔间距据具体安装的型号而定，可为3-1/2"(89mm)，4"(102mm)或者8"(203mm)。*

4. 在5号的底面涂上油灰，将1号安置到钻好孔的工作台面上。
5. 把2号和3号安装到相应的1号接头上并拧紧。根据需求选装4号配件。
6. 在1号接头处或者4号(如果有使用)处连接供水，并检查是否漏水。

## RELATED T&S BRASS PRODUCT LINE



**B-1172**  
**Workboard Faucet with**  
**Side Spray**

---

## T&S BRASS AND BRONZE WORKS, INC.

A firm commitment to application-engineered plumbing products

2 Saddleback Cove, P.O. Box 1088,  
Travelers Rest, SC 29690

*Phone:* (864) 834-4102

*Fax:* (864) 834-3518

*E-mail:* [tsbrass@tsbrass.com](mailto:tsbrass@tsbrass.com)

T & S Brass-Europe  
'De Veenhoeve'  
Oude Nieuwveenseweg 84  
2441 CW Nieuwveen  
The Netherlands



RELIABILITY BUILT IN™



PROJECT NAME	LOCATION	AIA #
ITEM #	QTY	MODEL #
		SIS #

# SPEC SERIES®

ROLL-IN SOLID SWING DOOR REFRIGERATOR

models	STR1RRI-1S	STA1RRI-1S	STG1RRI-1S
--------	------------	------------	------------

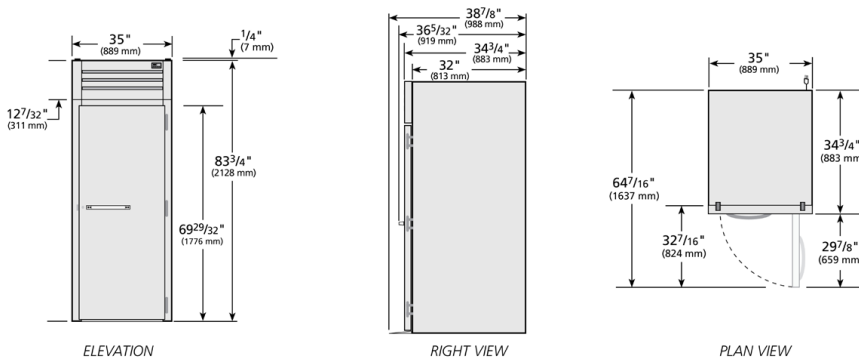


STR1RRI-1S	
<b>Exterior</b>	Stainless steel door, front & sides.
<b>Interior</b>	Stainless steel side walls, back, floor, door liner, & ceiling.

STA1RRI-1S	
<b>Exterior</b>	Stainless steel door, front & sides.
<b>Interior</b>	Aluminum side walls & back. Stainless steel floor & ceiling.

STG1RRI-1S	
<b>Exterior</b>	Stainless steel door, with matching aluminum sides.
<b>Interior</b>	Aluminum side walls & back. Stainless steel floor & ceiling.

## plan view



SPECIFICATIONS		
Dimensions	in.	mm.
Length	35	889
Depth	34 3/4	883
Height	83 3/4	2128
Electrical	U.S.	International
Horsepower	1/3	N/A
Amps	8.9	N/A
Voltage	115/60/1	
NEMA	5-15P	
Cord Length	9 ft.	2.74 M.
115/60/1 NEMA-5-15R † Depth does not include 4 1/4" (108 mm) for ramp. * Height does not include 1" (26 mm) for system mechanical components.		

Specifications subject to change without notice.  
 Chart dimensions are rounded up to the nearest 1/8" (millimeters rounded up to the next whole number).



PROJECT NAME	LOCATION	AIA #
ITEM #	QTY	MODEL #
		SIS #

# SPEC SERIES®

ROLL-IN SOLID SWING DOOR REFRIGERATOR

models	STR1RRI-1S	STA1RRI-1S	STG1RRI-1S
--------	------------	------------	------------



## standard features

### REFRIGERATION SYSTEM

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C) for the best in food preservation.
- Sealed, cast iron, self-lubricating evaporator fan motor(s) and larger fan blades give True roll-in's a more efficient low velocity, high volume airflow design. This unique design ensures faster temperature recovery and shorter run times in the busiest of foodservice environments.
- Top mounted refrigeration system with evaporator positioned out of food zone to maximize capacity.

### CABINET CONSTRUCTION

- Insulation - entire cabinet structure and solid door are foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- One (1) heavy gauge stainless steel ramp.
- Designed to accept roll-in racks (inboard castors) with maximum dimensions of 27"L x 29"D x 66"H (686 mm x 737 mm x 1677 mm)(supplied by others).

### DOOR

- Lifetime guaranteed bolt style door lock standard.
- Door lock standard.
- Lifetime guaranteed heavy duty all metal working door handle.
- Positive seal self-closing door with 120° stay open feature. Lifetime guaranteed external cam lift door hinges, Three (3) per door section.
- Magnetic door gasket of one piece construction, removable without tools for ease of cleaning.

### LIGHTING

- Incandescent interior lighting, safety shielded.

### MODEL FEATURES

- Exterior digital temperature display, available with either °F or °C .
- Evaporator epoxy coated to eliminate the potential of corrosion
- Interior bumpers protect cabinet walls from abuse caused by roll-in carts.
- NSF-7 compliant for open food product.

### ELECTRICAL

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.

### OPTIONAL FEATURES/ ACCESSORIES

*(upcharge & lead times may apply)*

- Stainless back. (STR, STA, STG)
- Field reversible hinge

#### WARRANTY

Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
ST( )1RRI-1S					



PROJECT NAME		LOCATION		AIA #
ITEM #	QTY	MODEL #		SIS #

# SPEC SERIES®

ROLL-IN SOLID SWING DOOR REFRIGERATOR

models	STR2RRI-2S	STA2RRI-2S	STG2RRI-2S
--------	------------	------------	------------

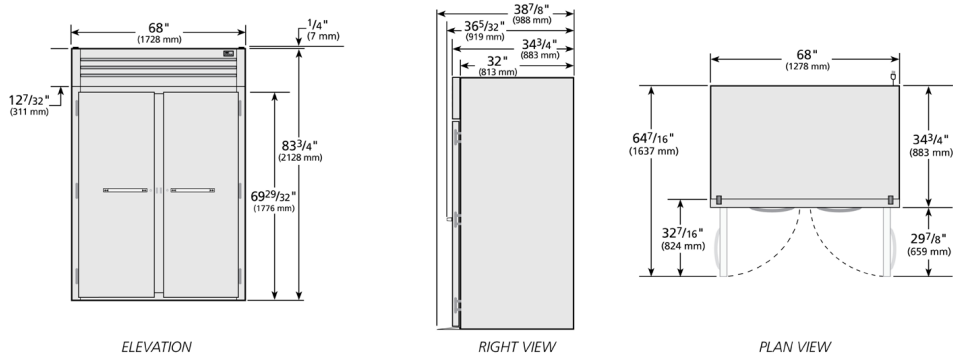


STR2RRI-2S	
<b>Exterior</b>	Stainless steel door, front & sides.
<b>Interior</b>	Stainless steel side walls, back, floor, door liner, & ceiling.

STA2RRI-2S	
<b>Exterior</b>	Stainless steel door, front & sides.
<b>Interior</b>	Aluminum side walls & back. Stainless steel floor & ceiling.

STG2RRI-2S	
<b>Exterior</b>	Stainless steel door, with matching aluminum sides.
<b>Interior</b>	Aluminum side walls & back. Stainless steel floor & ceiling.

## plan view



SPECIFICATIONS		
Dimensions	in.	mm.
Length	68	1728
Depth †	34 3/4	883
Height *	83 3/4	2128
Electrical	U.S.	International
Horsepower	1/2	N/A
Amps	11.8	N/A
Voltage	115/60/1	
NEMA	5-15P	
Cord Length	9 ft.	2.74 M.
115/60/1 NEMA-5-15R		
† Depth does not include 4 1/4" (108 mm) for ramp. * Height does not include 1" (26 mm) for system mechanical components.		

Specifications subject to change without notice.  
 Chart dimensions are rounded up to the nearest 1/8" (millimeters rounded up to the next whole number).



PROJECT NAME	LOCATION	AIA #
ITEM #	QTY	MODEL #
		SIS #

# SPEC SERIES®

ROLL-IN SOLID SWING DOOR REFRIGERATOR

models	STR2RRI-2S	STA2RRI-2S	STG2RRI-2S
--------	------------	------------	------------



## standard features

### REFRIGERATION SYSTEM

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C) for the best in food preservation.
- Sealed, cast iron, self-lubricating evaporator fan motor(s) and larger fan blades give True roll-in's a more efficient low velocity, high volume airflow design. This unique design ensures faster temperature recovery and shorter run times in the busiest of foodservice environments.
- Top mounted refrigeration system with evaporator positioned out of food zone to maximize capacity.

### CABINET CONSTRUCTION

- Insulation - entire cabinet structure and solid door are foamed-in-place using a high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- Designed to accept roll-in racks (inboard castors) with maximum dimensions of 27"L x 29"D x 66"H (686 mm x 737 mm x 1677 mm)(supplied by others).
- One (1) heavy gauge stainless steel ramp.

### DOORS

- Lifetime guaranteed bolt style door locks standard.
- Lifetime guaranteed heavy duty all metal working door handle.
- Positive seal self-closing door with 120° stay open feature. Lifetime guaranteed external cam lift door hinges, Three (3) per door section.
- Magnetic door gasket of one piece construction, removable without tools for ease of cleaning.

### LIGHTING

- Interior lighting, safety shielded.

### MODEL FEATURES

- Exterior digital temperature display, available with either °F or °C .
- Evaporator epoxy coated to eliminate the potential of corrosion
- Interior bumpers protect cabinet walls from abuse caused by roll-in carts.
- NSF/ANSI Standard 7 compliant for open food product.

### ELECTRICAL

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.

### OPTIONAL FEATURES/ ACCESSORIES

*(upcharge & lead times may apply)*

- Stainless back. (STR, STA, STG)
- Field reversible hinge.

#### WARRANTY

Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
ST( )2RRI-2S					




# HA4519

## CVap® Holding Cabinet

### Full size model with fan

Electronic differential control

#### General Specifications

- **CVap Holding Cabinets are designed for high quality holding of a wide variety of menu items for extended times.**
- Patented Controlled Vapor Technology (U.S. patent #5,494,690) establishes that the water vapor content in the cabinet is the same as that of the food. This unique process minimizes evaporation and saturation so crisp foods stay crisp, moist foods stay moist.
- Two electronic differential control dials are easy to understand and reliable. Never need field calibration.  
FOOD TEMPERATURE DIAL allows precise control of food temperature from 90°F (32°C) to 180°F (82°C).  
FOOD TEXTURE DIAL maintains just-cooked texture with settings labeled moist, soft moist, firm moist, and crisp. No guesswork required.
- Built to last quality craftsmanship with high grade stainless steel construction and full 1 1/2 inch insulation on top, sides, and doors.
- Features radial fan for fast heat recovery, full perimeter door seals, magnetic door latches, lift off doors, removable side racks, and digital readout for water temperature.
- CVap equipment complies with all domestic, and most international requirements, such as UL, C-UL, UL Sanitation, CE, MEA 38-95-E, NSF-equivalent, and others.

**Functions:** Proof & Hold

**Capacity:** 14 Sheet Pans



Winston Industries, LLC.

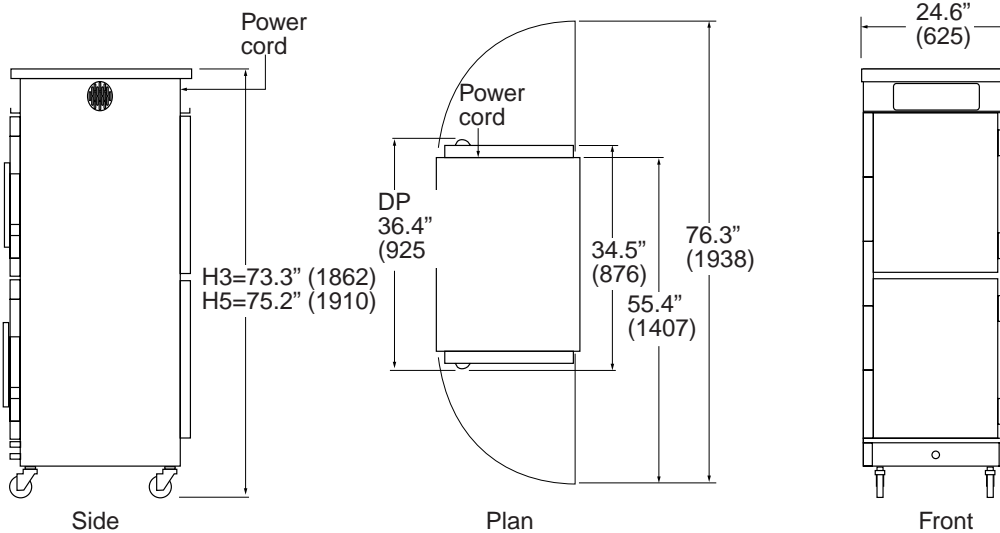


Winston Products International, Ltd.



# HA4519 CVap® Holding Cabinet Full size model with fan

Electronic differential control



Drawings not to scale

Capacity	Size in (mm)	Volts	Hertz	PH	Amps	Watts	Circuit Amps	Ship Wt lb (kg)	Ship Cube ft (M)	Class	Plug Type
14 SP	H3=73.3" (1862) H5=75.2" (1910) W=24.6" (625) D=34.5" (876) DP=36.4" (925)	<b>US/Canada</b>									
		120	60	1	19.1	2290	US 20 CAN 30	369 (168)	60.0 (1.7)	100	US 5-20 CAN 5-30
		<b>International</b>									
		230	50	1	10.2	2346	N/A	w/skid 394 (179)	w/skid call factory	N/A	N/A

SP=Sheet Pan (18"x26"x1.25") • H3=Height w/3" casters • H5=height w/ 5" casters DP=Depth for Pass Thru

### Short Form Specs

Shall be Winston CVap Holding Cabinet, Model HA4519 with electronic differential controls to provide precise food temperature from 90°F to 180°F and maintain food texture with settings labeled moist, soft moist, firm moist and crisp. Utilizes Controlled Vapor Technology (patent #5,494,690) as a method and apparatus for holding hot foods, consisting of an air heater and water heater to establish ideal water vapor content that is in relation with the moistness characteristics for the food.

### Construction

**Materials:** To be commercial and institutional grade stainless steel interior and exterior to provide ease of cleaning and long service life with reasonable use and care.

**Rack supports:** Adjustable, normally spaced 3.5" (89mm). Removable for easy cleaning.

**Doors:** Field reversible hinges to allow door lift off to facilitate cleaning. Magnetic door latch.

**Casters:** Includes 2 locking, 2 non-locking, heavy duty, non-marking.

**Insulation:** Full-perimeter.

**Controller:** Electronic differential control with dials labeled Food Temperature and Food Texture.

**Water fill:** Operated manually. Low mineral potable water is recommended, otherwise use deionizer/demineralizer to prevent corrosive damage.

**Ventilation:** Allow 2" ventilation clearance on sides, back, and top of appliance. Install with supplied legs or casters. Refer to use & care manual for specific installation instructions. Generally this appliance does not need to be installed under a mechanical ventilation system (vent hood). Check local health and fire codes for requirements specific to your location.

**Electrical:** Supplied with 7.5' power cord and plug.

**Load limit:** 65 lbs. (29.25 kg) per rack.

### Warranty

Limited 1 year warranty (excluding gaskets, lamps, hoses, power cords, glass panels, and evaporators). Warranty disclaimer for failure to clean. Ask for complete warranty disclosure.

### Model

HA4519-3

HA4519-5

HA4519-W-3

HA4519-W-5

### Pass Thru

HA4519-PT-3

HA4519-PT-5

HA4519-PTW-3

HA4519-PTW-5

### Description

CVap, hold/proof, fan, 3" casters

CVap, hold/proof, fan, 5" casters

CVap, hold/proof, fan, window, 3" casters

CVap, hold/proof, fan, window, 3" casters

CVap, hold/proof, fan, pass thru, 3" casters

CVap, hold/proof, fan, pass thru, 5" casters

CVap, hold/proof, fan, pass thru, window, 3" casters

CVap, hold/proof, fan, pass thru, window, 5" casters

Ask about availability of hinging configurations.

### Optional Accessories

PS2192/12

ScaleKleen™ packets (12 pack)

PS1463

Tray - Vegetable

PS1465

Tray - Racking

PS1466

Tray - Perforated

Winston Industries, LLC.



Winston Products International, Ltd.

## R-102 Restaurant Fire Suppression Systems

### Features

- Low pH Agent
- Proven Design
- Reliable Gas Cartridge Operation
- Aesthetically Appealing
- UL Listed – Meets Requirements of UL 300
- ULC Listed – Meets Requirements of ULC/ORD-C1254.6
- CE Marked

### Application

The ANSUL® R-102 Restaurant Fire Suppression System is an automatic, pre-engineered, fire suppression system designed to protect areas associated with ventilating equipment including hoods, ducts, plenums, and filters. The system also protects auxiliary grease extraction equipment and cooking equipment such as fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite, or gas-radiant char-broilers; and woks.

The system is ideally suitable for use in restaurants, hospitals, nursing homes, hotels, schools, airports, and other similar facilities.

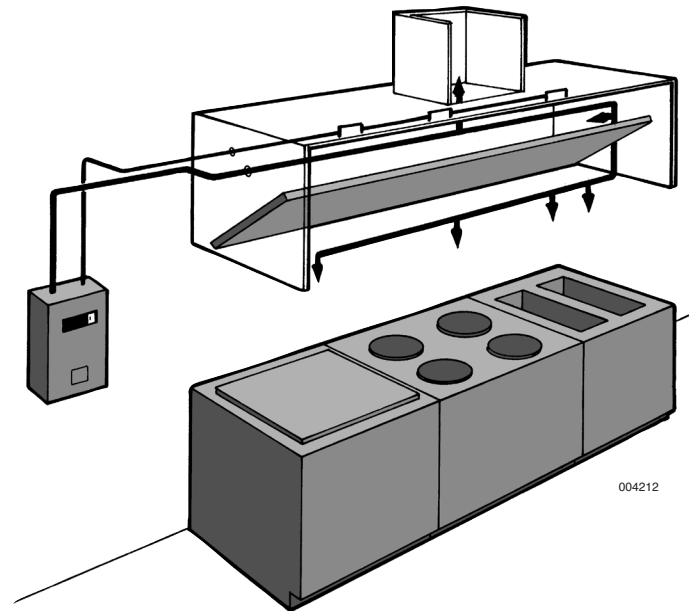
Use of the R-102 system is limited to indoor applications or locations that provide weatherproof protection within tested temperature limitations. The regulated release and tank assemblies must be mounted in an area where the air temperature will not fall below 32 °F (0 °C) or exceed 130 °F (54 °C). The system must be designed and installed within the guidelines of the UL/ULC Listed Design, Installation, Recharge, and Maintenance Manual.

### System Description

The restaurant fire suppression system is a pre-engineered, wet chemical, cartridge-operated, regulated pressure type with a fixed nozzle agent distribution network. It is listed with Underwriters Laboratories (UL/ULC).



004215



004212

The system is capable of automatic detection and actuation as well as remote manual actuation. Additional equipment is available for building fire alarm panel connections, electrical shut-down and/or interface, and mechanical or electrical gas line shut-off applications.

The detection portion of the fire suppression system allows for automatic detection by means of specific temperature-rated alloy type fusible links, which separate when the temperature exceeds the rating of the link, allowing the regulated release to actuate.

A system owner's guide is available containing basic information pertaining to system operation and maintenance. A detailed technical manual, including system description, design, installation, recharge and resetting instructions, and maintenance procedures, is available to qualified individuals.

The system is installed and serviced by authorized distributors that are trained by the manufacturer.

The basic system consists of an AUTOMAN regulated release assembly which includes a regulated release mechanism and a wet chemical storage tank housed within a single enclosure. Nozzles with blow-off caps, detectors, cartridges, agent, and pulley elbows are supplied in separate packages in the quantities needed for fire suppression system arrangements.

Additional equipment includes a remote manual pull station(s), mechanical and electrical gas valves, and electrical switches for automatic equipment and gas line shut-off. Accessories can be added such as alarms, warning lights, etc., to installations where required.

Additional tanks and corresponding equipment can be used in multiple arrangements to allow for larger hazard coverage. Each tank is limited to a listed maximum amount of flow numbers.



009368

## Component Description

**Wet Chemical Agent** – The extinguishing agent is a mixture of organic salts designed for rapid flame knockdown and foam securement of grease related fires. It is available in plastic containers with instructions for wet chemical handling and usage.

**Agent Tank** – The agent tank is installed in a stainless steel enclosure or wall bracket. The tank is constructed of stainless steel.

Tanks are available in two sizes: 1.5 gallon (5.7 L) and 3.0 gallon (11.4 L). The tanks have a working pressure of 110 psi (7.6 bar), a test pressure of 330 psi (22.8 bar), and a minimum burst pressure of 660 psi (45.5 bar).

The tank includes an adaptor/tube assembly. The adaptor assembly includes a chrome-plated steel adaptor with a 1/4 in. NPT female gas inlet, a 3/8 in. NPT female agent outlet, and a stainless steel agent pick-up tube. The adaptor also contains a bursting disc seal which helps to prevent the siphoning of agent up the pipe during extreme temperature variations.

**Regulated Release Mechanism** – The regulated release mechanism is a spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one, two, or three agent tanks depending on the capacity of the gas cartridge used. It contains a factory installed regulator deadset at 110 psi (7.6 bar) with an external relief of approximately 180 psi (12.4 bar). It has automatic actuation capabilities by a fusible link detection system and remote manual actuation by a mechanical pull station.

The regulated release mechanism contains a release assembly, regulator, expellant gas hose, and agent storage tank housed in a stainless steel enclosure with cover. The enclosure contains knock-outs for 1/2 in. conduit. The cover contains an opening for a visual status indicator.

It is compatible with mechanical gas shut-off devices; or, when equipped with a field or factory-installed switch and manual reset relay, it is compatible with electric gas line or appliance shut-off devices.

**Regulated Actuator Assembly** – When more than two agent tanks (or three 3.0 gallon (11.4 L) tanks in certain applications) are required, the regulated actuator is available to provide expellant gas for additional tanks. It is connected to the cartridge receiver outlet of the regulated release mechanism providing simultaneous agent discharge. It contains a regulator deadset at 110 psi (7.6 bar) with an external relief of approximately 180 psi (12.4 bar). It has automatic actuation capabilities using pressure from the regulated release mechanism cartridge.

The regulated actuator assembly contains an actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover. The enclosure contains knockouts to permit installation of the expellant gas line.

**Discharge Nozzles** – Each discharge nozzle is tested and listed with the R-102 system for a specific application. Nozzle tips are stamped with the flow number designation (1/2, 1, 2, or 3). Each nozzle must have a metal or rubber blow-off cap to keep the nozzle tip orifice free of cooking grease build-up.

**Agent Distribution Hose** – Kitchen appliances manufactured with or resting on casters (wheels/rollers) may include an agent distribution hose as a component of the suppression system. This allows the appliance to be moved for cleaning purposes without disconnecting the appliance fire suppression protection. The hose assembly includes a restraining cable kit to limit the appliance movement within the range (length) of the flexible hose.

**Flexible Conduit** – Flexible conduit allows for quicker installations and the convenience of being able to route the cable over, under and around obstacles. Flexible conduit can be used as a substitute for standard EMT conduit or can be used with EMT conduit. Flexible conduit can be used only with the Molded Remote Manual Pull Station and with the Mechanical Gas Valve Assembly.

**Pull Station Assembly** – The remote manual pull station is made out of a molded red composite material. The red color makes the pull station more readily identifiable as the manual means for fire suppression system operation. The pull station is compatible with the ANSUL Flexible Conduit and with 1/2 in. EMT conduit.

## Approvals

- UL/ULC Listed
- CE Marked
- New York City Department of Buildings — COA #5663
- LPCB
- TFRI
- Marine Equipment Directive (MED)
- DNV
- ABS
- Lloyd's Register
- Meets requirements of NFPA 96 (Standard for the Installation of Equipment for the Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment)
- Meets requirements of NFPA 17A (Standard on Wet Chemical Extinguishing Systems)

## Ordering Information

Order all system components through your local authorized ANSUL Distributor.

## Specifications

An ANSUL R-102 Fire Suppression System shall be furnished. The system shall be capable of protecting all hazard areas associated with cooking equipment.

### 1.0 GENERAL

#### 1.1 References

- 1.1.1 Underwriters Laboratories (UL)
  - 1.1.1.1 UL Standard 1254
  - 1.1.1.2 UL Standard 300
- 1.1.2 Underwriters Laboratories of Canada (ULC)
  - 1.1.2.1 ULC/ORD-C 1254.6
- 1.1.3 National Fire Protection Association (NFPA)
  - 1.1.3.1 NFPA 96
  - 1.1.3.2 NFPA 17A

#### 1.2 Submittals

- 1.2.1 Submit two sets of manufacturer's data sheets
- 1.2.2 Submit two sets of piping design drawings

#### 1.3 System Description

- 1.3.1 The system shall be an automatic fire suppression system using a wet chemical agent for cooking grease related fires.
- 1.3.2 The system shall be capable of suppressing fires in the areas associated with ventilating equipment including hoods, ducts, plenums, and filters as well as auxiliary grease extraction equipment. The system shall also be capable of suppressing fires in areas associated with cooking equipment, such as fryers; griddles and range tops; upright, natural charcoal, or chain-type broilers; electric, lava rock, mesquite or gas-radiant char-broilers; and woks.
- 1.3.3 The system shall be the pre-engineered type having minimum and maximum guidelines established by the manufacturer and listed by Underwriters Laboratories (UL/ULC).
- 1.3.4 The system shall be installed and serviced by personnel trained by the manufacturer.
- 1.3.5 The system shall be capable of protecting cooking appliances by utilizing either dedicated appliance protection and/or overlapping appliance protection.

#### 1.4 Quality Control

- 1.4.1 Manufacturer: The R-102 Restaurant Fire Suppression System shall be manufactured by a company with at least forty years experience in the design and manufacture of pre-engineered fire suppression systems. The manufacturer shall be ISO 9001 registered.
- 1.4.2 Certificates: The wet agent shall be a specially formulated, aqueous solution of organic salts with a pH range between 7.7 – 8.7, designed for flame knockdown and foam securement of grease-related fires.

### 1.5 Warranty, Disclaimer, and Limitations

- 1.5.1 The pre-engineered restaurant fire suppression system components shall be warranted for five years from date of delivery against defects in workmanship and material.

### 1.6 Delivery

- 1.6.1 Packaging: All system components shall be securely packaged to provide protection during shipment.

### 1.7 Environmental Conditions

- 1.7.1 The R-102 system shall be capable of operating within a temperature range of 32 °F to 130 °F (0 °C to 54 °C).

## 2.0 PRODUCT

### 2.1 Manufacturer

- 2.1.1 Johnson Controls, One Stanton Street, Marinette, Wisconsin 54143-2542, Telephone (715) 735-7411.

### 2.2 Components

- 2.2.1 The basic system shall consist of an AUTOMAN regulated release assembly which includes a regulated release mechanism and a wet chemical storage tank housed within a single enclosure. Nozzles, blow-off caps, detectors, cartridges, agent, fusible links, and pulley elbows shall be supplied in separate packages in the quantities needed for fire suppression system arrangements. Additional equipment shall include remote manual pull station, mechanical and electrical gas valves, and electrical switches for automatic equipment and gas line shut-off, and building fire alarm control panel interface.
- 2.2.2 Wet Chemical Agent: The extinguishing agent shall be a specially formulated, aqueous solution of organic salts with a pH range between 7.7 – 8.7, designed for flame knockdown and foam securement of grease related fires.
- 2.2.3 Agent Tank: The agent tank shall be installed in a stainless steel enclosure or wall bracket. The tank shall be constructed of stainless steel. Tanks shall be available in two sizes; 1.5 gallon (5.7 L) and 3.0 gal (11.4 L). The tank shall have a working pressure of 110 psi (7.6 bar), a test pressure of 330 psi (22.8 bar), and a minimum burst pressure of 660 psi (45.5 bar). The tank shall include an adaptor/tube assembly containing a burst disc union.

## Specifications (Continued)

- 2.2.4 Regulated Release Mechanism: The regulated release mechanism shall be a spring-loaded, mechanical/pneumatic type capable of providing the expellant gas supply to one or two agent tanks depending on the capacity of the gas cartridge used or three 3.0 gallon (11.4 L) agent storage tanks in certain applications. It shall contain a factory installed regulator deadset at 110 psi (7.6 bar) with an external relief of approximately 180 psi (12.4 bar).
- It shall have the following actuation capabilities: automatic actuation by a fusible link detection system and remote manual actuation by a mechanical pull station.
- The regulated release mechanism shall contain a release assembly, regulator, expellant gas hose, and agent storage tank housed in a stainless steel enclosure with cover. The enclosure shall contain knock-outs for 1/2 in. conduit. The cover shall contain an opening for a visual status indicator.
- It shall be compatible with mechanical gas shut-off devices; or, when equipped with a field or factory-installed switch(es), it shall be compatible with electric gas line or appliance shut-off devices, or connections to a building fire alarm control panel.
- 2.2.5 Regulated Actuator Assembly: When more than two agent tanks or three agent tanks in certain applications are required, the regulated actuator shall be available to provide expellant gas for additional tanks. It shall be connected to the cartridge receiver outlet of the regulated release mechanism providing simultaneous agent discharge. The regulator shall be deadset at 110 psi (7.6 bar) with an external relief of approximately 180 psi (12.4 bar). The regulated actuator assembly shall contain an actuator, regulator, expellant gas hose, and agent tank housed in a stainless steel enclosure with cover. The enclosure shall contain knockouts to permit installation of the expellant gas line.
- 2.2.6 Discharge Nozzles: Each discharge nozzle shall be tested and listed with the R-102 system for a specific application. Nozzles tips shall be stamped with the flow number designation (1/2, 1, 2, or 3). Each nozzle shall have a metal or rubber blow-off cap to keep the nozzle tip orifice free of cooking grease build-up.
- 2.2.7 Distribution Piping: Distribution piping shall be Schedule 40 black iron, chrome-plated, or stainless steel conforming to ASTM A120, A53, or A106.
- 2.2.8 Detectors: The detectors shall be the fusible link style designed to separate at a specific temperature, or shall be electric thermal detectors designed to operate at a factory preset temperature.
- 2.2.9 Cartridges: The cartridge shall be a sealed steel pressure vessel containing either carbon dioxide or nitrogen gas. The cartridge seal shall be designed to be punctured by the releasing device supplying the required pressure to expel wet chemical agent from the storage tank.

- 2.2.10 Agent Distribution Hose: An optional agent distribution hose shall be available for kitchen appliances manufactured with or resting on casters (wheels/rollers). This shall allow the appliance to be moved for cleaning purposes without disconnecting the appliance fire suppression protection. Hose assembly shall include a restraining cable kit to limit the appliance movement within the range (length) of the flexible hose.
- 2.2.11 Flexible Conduit: The manufacturer supplying the Restaurant Fire Suppression System shall offer flexible conduit as an option to rigid EMT conduit for the installation of pull stations and/or mechanical gas valves. The flexible conduit shall be UL Listed and include all approved components for proper installation.
- 2.2.12 Pull Station Assembly: The Fire Suppression System shall include a remote pull station for manual system actuation. The pull station shall be designed to include a built-in guard to protect the pull handle. The pull station shall also be designed with a pull handle to allow for three finger operation and shall be red in color for quick visibility.

## 3.0 IMPLEMENTATION

### 3.1 Installation

- 3.1.1 The R-102 fire suppression system shall be designed, installed, inspected, maintained, and recharged in accordance with the manufacturer's listed instruction manual.

### 3.2 Training

- 3.2.1 Training shall be conducted by representatives of the manufacturer.

**Note:** The converted values in this document are for dimensional reference only and do not reflect an actual measurement.

ANSUL, R-102, and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited.



**TRUE FOOD SERVICE  
EQUIPMENT, INC.**

2001 East Terra Lane • O'Fallon, Missouri 63366  
(636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl Fax# (001)636-272-7546  
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

**# 1**

Model:

**TSSU-72-30M-B-ST**

**Food Prep Table:**

*Mega-Top Solid Door Sandwich/Salad Unit*



**TSSU-72-30M-B-ST**

- ▶ True's salad/sandwich units are designed with enduring quality that protects your long term investment.
- ▶ Oversized, environmentally friendly (134A), patented forced-air refrigeration system holds 33°F to 41°F (.5°C to 5°C).
- ▶ Complies with and listed under ANSI/NSF-7-1997-6.3.
- ▶ All stainless steel front, top and ends. Matching aluminum finished back.
- ▶ Stainless steel, patented, foam insulated lids and hoods keep pan temperatures colder, lock in freshness and minimize condensation. Removable for easy cleaning.
- ▶ 87/8" (226 mm) deep, 1/2" (13 mm) thick, full length removable cutting board included. Sanitary, high density, NSF approved white polyethylene provides tough preparation surface.
- ▶ Heavy duty PVC coated wire shelves.
- ▶ Foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).



Scan code for video

**ROUGH-IN DATA**

Specifications subject to change without notice.  
Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number).

Model	Doors	Shelves	Pans (top)	Cabinet Dimensions (inches) (mm)			HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
				L	D†	H*						
TSSU-72-30M-B-ST	3	6	30	723/8 1839	341/8 867	403/8 1026	1/2 1/2	115/60/1 230-240/50/1	10.3 6.7	5-15P ▲	7 2.13	470 214

† Depth does not include 1" (26 mm) for rear bumpers.

\* Height does not include 6 1/4" (159 mm) for castors or 6" (153 mm) for optional legs.

▲ Plug type varies by country.

	<b>APPROVALS:</b>	<b>AVAILABLE AT:</b>
3/13 Printed in U.S.A.		

Model:  
TSSU-72-30M-B-ST

# Food Prep Table: Mega-Top Solid Door Sandwich/Salad Unit



## STANDARD FEATURES

### DESIGN

- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

### REFRIGERATION SYSTEM

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Oversized, factory balanced refrigeration system with guided airflow to provide uniform temperature in food pans and cabinet interior.
- Patented forced-air design holds 33°F to 41°F (5°C to 5°C) product temperature in food pans and cabinet interior. Complies with and listed under ANSI/NSF-7-1997-6.3.
- Sealed, cast iron, self-lubricating evaporator fan motor(s) and larger fan blades give True sandwich/salad units a more efficient, low velocity, high volume airflow design.
- Condensing unit access in back of cabinet, slides out for easy maintenance.

### CABINET CONSTRUCTION

- Exterior - stainless steel front, top and ends. Matching aluminum finished back.
- Interior - attractive, NSF approved, white aluminum liner. Stainless steel floor with coved corners.
- Insulation - entire cabinet structure and solid doors are foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- 5" (127 mm) diameter stem castors - locks provided on front set. 36" (915 mm) work surface height.

### DOORS

- Stainless steel exterior with white aluminum liner to match cabinet interior.

- Each door fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Positive seal self-closing door(s) with 90° stay open feature. Door(s) swing within cabinet dimensions.
- Magnetic door gasket(s) of one piece construction, removable without tools for ease of cleaning.

### SHELVING

- Six (6) adjustable, heavy duty PVC coated wire shelves. Two (2) right and two (2) left door shelf dimensions are 219/16"L x 16"D (548 mm x 407 mm). Two (2) center door shelf dimensions are 23 1/2"L x 16"D (597 mm x 407 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on 1/2" (13 mm) increments.

### MODEL FEATURES

- Evaporator is epoxy coated to eliminate the potential of corrosion.
- 87/8" (226 mm) deep, 1/2" (13 mm) thick, full length removable cutting board. Sanitary, high-density, NSF approved white polyethylene provides tough preparation surface.
- Stainless steel, patented, foam insulated lids and hood keep pan temperatures colder, lock in freshness and minimize condensation. Removable for easy cleaning.
- Comes standard with 30 (1/6size) 67/8"L x 6 1/4"W x 4"D (175 mm x 159 mm x 102 mm) clear polycarbonate, NSF approved, food pans in countertop prep area. Also accommodates 6" (153 mm) and 8" (204 mm) deep food pans (supplied by others).
- Countertop pan opening designed to fit varying size pan configurations with available pan divider bars. Varying size pans supplied by others.
- NSF-7 compliant for open food product.

### ELECTRICAL

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.



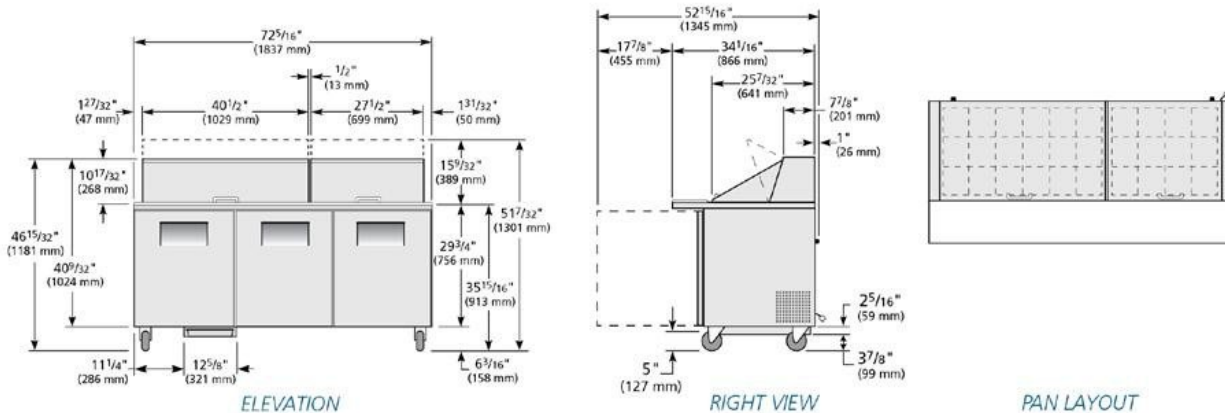
115/60/1  
NEMA-5-15R

### OPTIONAL FEATURES/ACCESSORIES

Upcharge and lead times may apply.

- 230 - 240V / 50 Hz.
- 6" (153 mm) standard legs.
- 6" (153 mm) seismic/flanged legs.
- 2 1/2" (64 mm) diameter castors.
- Barrel locks (factory installed). Requires one per door.
- Additional shelves.
- Single overshef.
- Double overshef.
- Flat lid.
- Sneezeguard.
- 87/8" (226 mm) deep, 1/2" (13 mm) thick, composite cutting board.
- Crumb catcher. Requires crumb catcher cutting board for proper installation.
- Pan dividers.
- Exterior rectangular digital temperature display (factory installed).
- ADA compliant model with 34" (864 mm) work surface height.
- Remote cabinets (condensing unit supplied by others; system comes standard with 404A expansion valve and requires R404A refrigerant). Consult factory technical service department for BTU information. All remote units must be hard wired during installation.

## PLAN VIEW



**WARRANTY**  
Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER  
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
TSSU-72-30M-B-ST	TFN056E	TFN048S	TFN056P	TFN0563	

## TRUE FOOD SERVICE EQUIPMENT

2001 East Terra Lane • O'Fallon, Missouri 63366 • (636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl. Fax# (001)636-272-7546 • www.truemfg.com

**HOOD INFORMATION - Job#3808816**

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM RISER(S)								HOOD CONSTRUCTION	HOOD CONFIG.	
					TOTAL EXH. CFM	WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.	S.P.		END TO END	ROW
1	KH-1	4824 ND-2	4' 0"	450 Deg.	800	9'	8'	4'		800	1600	-0.461'	430 SS Where Exposed	ALONE	ALONE

**PATENT NUMBERS**

Exhaust Hoods ND-2/BD-2/SND-2 (Canada) - CA Patent 2520435 C

**HOOD INFORMATION**

HOOD NO.	TAG	FILTER(S)					LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WGHT	
		TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM		ELECTRICAL			SWITCHES
1	KH-1	Captrate Solo Filter	2	20"	20"	85% See Filter Spec.	2	Screw In 12W LED	NO	Right	12"x48"x24"	TYPE	SIZE	MODEL #	QUANTITY	NO	338 LBS

**HOOD OPTIONS**

HOOD NO.	TAG	OPTION
1	KH-1	FIELD WRAPPER 12.00' High Front, Left, Right
		BACKSPASH 80.00' High X 48.00' Long 430 SS Vertical
		LEFT QUARTER END PANEL 23' Top Width, 0' Bottom Width, 23' High 430 SS
		RIGHT QUARTER END PANEL 23' Top Width, 0' Bottom Width, 23' High 430 SS

**SPECIFICATION: CAPTRATE® GREASE-STOP® SOLID FILTER**

THE CAPTRATE GREASE-STOP SOLID FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

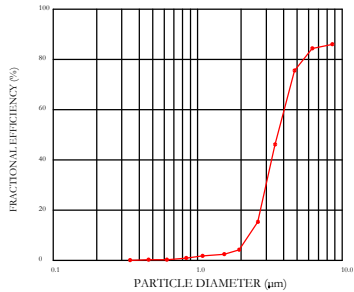
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

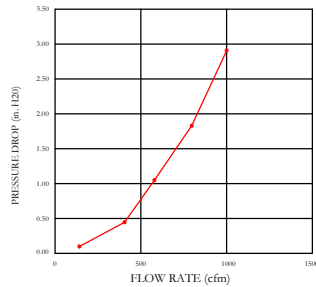
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLID WAS TESTED TO ASTM STANDARD ASTM F2519-05.

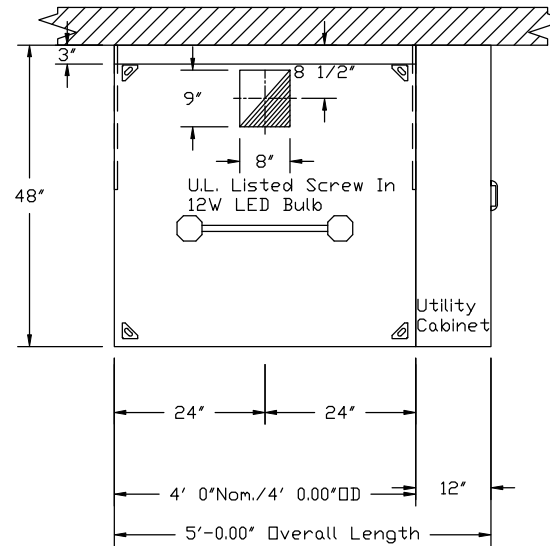
EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



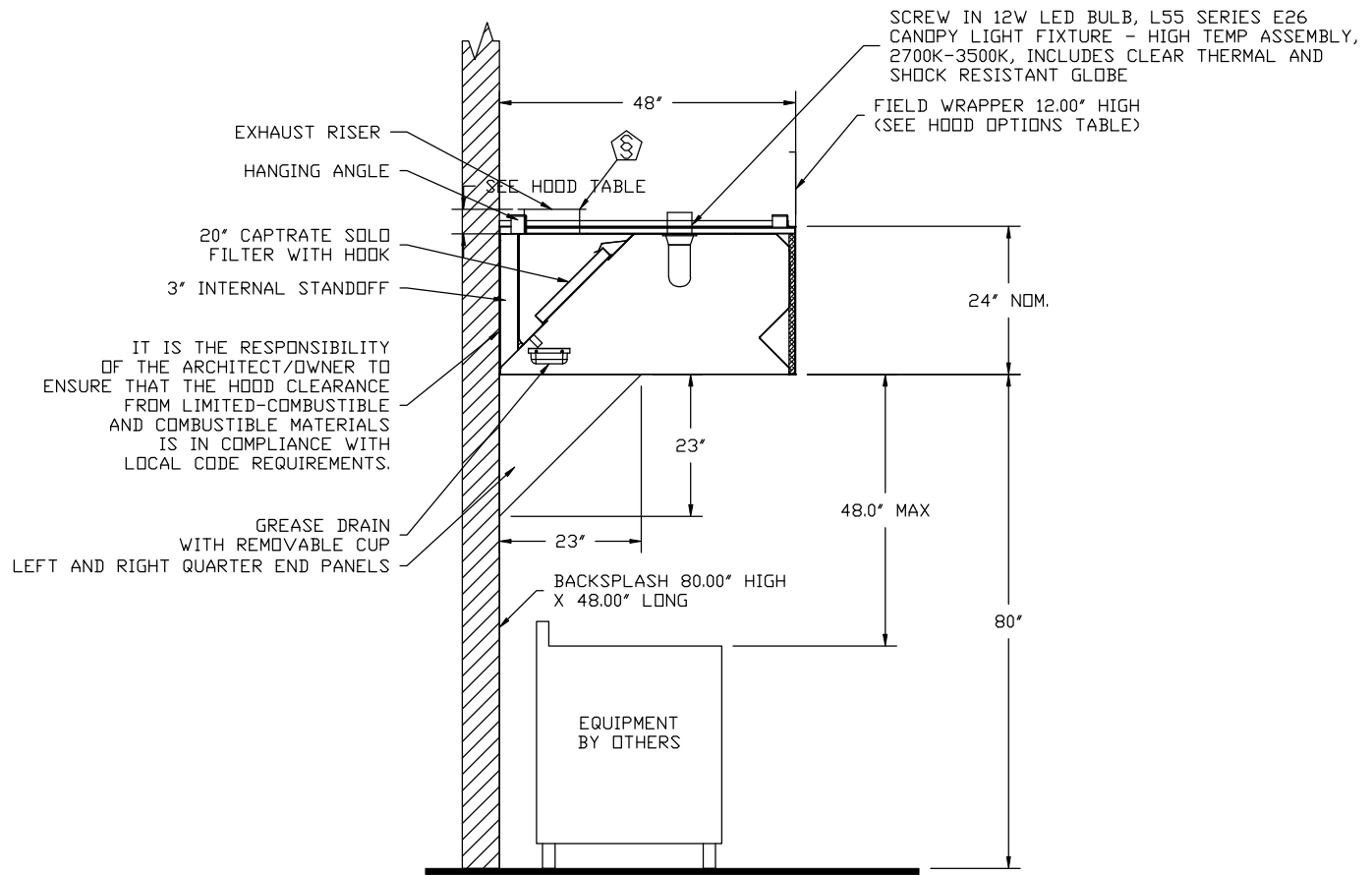
CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:  
 NFPA #96  
 NSF STANDARD #2  
 UL STANDARD #1046  
 INT. MECH. CODE (IMC)  
 ULC-S649



**PLAN VIEW - Hood #1 (KH-1)**  
 4' 0.00" LONG 4824ND-2



JOB Pita Pit - Kingston - no mua	
LOCATION KINGSTON, ON, K7L 2Z3	
DATE 4/26/2019	JOB # 3808816
DWG # 1	DRAWN BY
REV.	SCALE 3/8" = 1'-0"



*SECTION VIEW - MODEL 4824ND-2  
HOOD - #1 (KH-1)*



**CAPTIVEAIR**

JOB Pita Pit - Kingston - no mua	
LOCATION KINGSTON, ON, K7L 2Z3	
DATE 4/26/2019	JOB # 3808816
DWG # 2	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

**EXHAUST FAN INFORMATION - Job#3808816**

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SDNES
1	EF-1	DU50HFA	800	1.050	1434	0.500	0.3230	1	115	8.4	304 FPM	84	14.6

**FAN OPTIONS**

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	EF-1	1 - Grease Box 1 - 3 Year Extended Motor Warranty

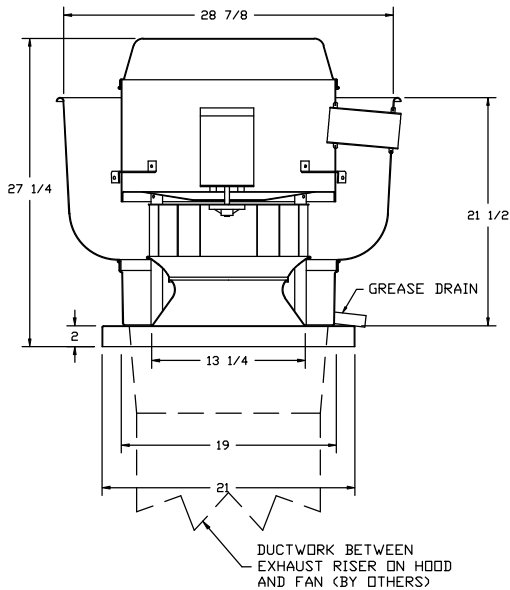
**FAN ACCESSORIES**

FAN UNIT NO.	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	EF-1	YES						

**CURB ASSEMBLIES**

NO.	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-1	34 LBS	Curb	19.500"W x 19.500"L x 24.000"H Vented Hinged

FAN #1 DU50HFA - EXHAUST FAN (EF-1)



**FEATURES:**

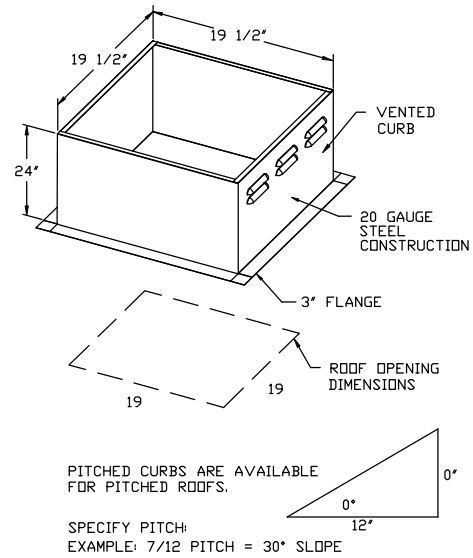
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

**NORMAL TEMPERATURE TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**ABNORMAL FLARE-UP TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

**OPTIONS**

- GREASE BOX.
- 3 YEAR EXTENDED MOTOR WARRANTY.



JOB Pita Pit - Kingston - no mua	
LOCATION KINGSTON, ON, K7L 2Z3	
DATE 4/26/2019	JOB # 3808816
DWG # 3	DRAWN BY
REV.	SCALE 3/8" = 1'-0"



**GREASE DUCT & CHIMNEY SPECIFICATIONS:**

PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW" DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURES INSTALLATION GUIDE.

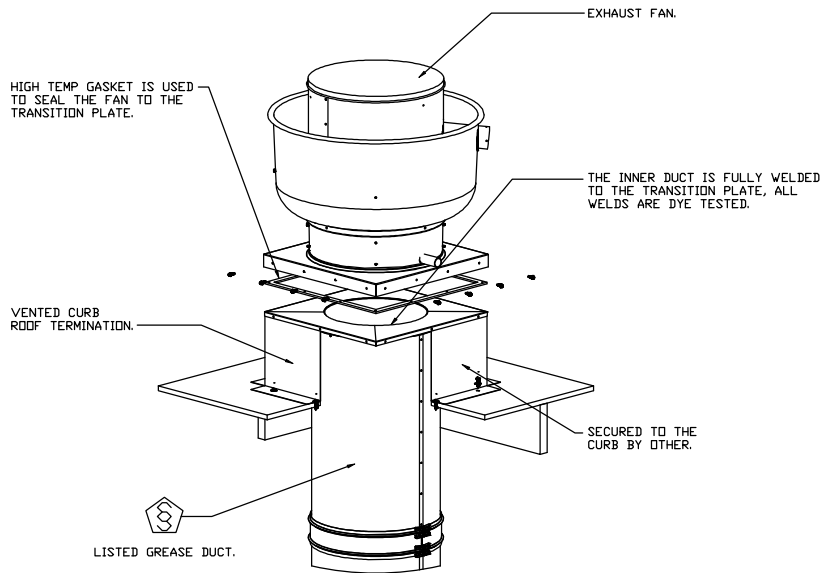
PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURES LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12". DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

**CUSTOMER APPROVAL TO MANUFACTURE:**

- Approved as Noted
- Approved with NO Exception Taken
- Revise and Resubmit

SIGNATURE \_\_\_\_\_  
Your Title \_\_\_\_\_ Date \_\_\_\_\_



JOB Pita Pit - Kingston - no mua	
LOCATION KINGSTON, ON, K7L 2Z3	
DATE 4/26/2019	JOB # 3808816
DWG # 4	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

# Exhaust Fan Wiring

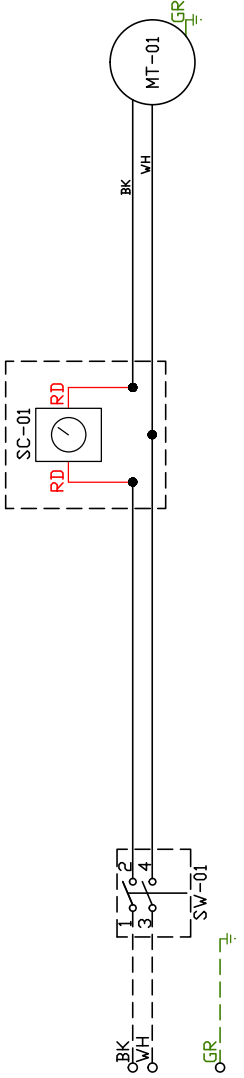
JOB 3808816 - Pita Pit - Kingston - no mua

DRAWING NUMBER EXH3808816-1

SHIP DATE 4/26/2019

MODEL DU50HFA

Installed Options  
Speed Control



Label	Component Description	Location
MT-01	Fan Motor	[2]
MT-02	Damper Motor	[2]
QD-01	Quick Disconnect	[2]
SC-01	Speed Control	[1]
SW-01	Main disconnect switch	[2]

MOTOR INFO  
EXHAUST 0.5HP-115V-IP-84FLA

ELECTRICAL INFORMATION  
MOTOR/CTRL MCA: 10.5A  
MOTOR/CTRL MDP: 15A

- NOTES
- DENOTES FIELD WIRING
  - DENOTES INTERNAL WIRING
- WIRE COLOR
- BK - BLACK
  - BL - BLUE
  - BR - BROWN
  - DR - ORANGE
  - RD - RED
  - VH - WHITE
  - YW - YELLOW
  - GR - GREEN
  - GY - GRAY
  - PR - PURPLE
  - PK - PINK

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

**ELECTRICAL PACKAGE - Job#3808816**

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	Ø	H.P.	VOLT	FLA
1	SC-1	SC-11011028	Utility Cabinet Right	04 - Utility Cabinet Right Hood # 1	1 Light 1 Fan	Smart Controls Basic w/ Relay On/Off with Supply	EF-1	Exhaust	1	0.500	115	8.4



**CAPTIVEAIR**

<i>JOB</i> Pita Pit - Kingston - no mua	
<i>LOCATION</i> KINGSTON, ON, K7L 2Z3	
<i>DATE</i> 4/26/2019	<i>JOB #</i> 3808816
<i>DWG #</i> 6	<i>DRAWN BY</i>
<i>REV.</i>	<i>SCALE</i> 3/8" = 1'-0"

JOB NO  
3808816

MODEL NUMBER  
SC-11011028

DRAWN BY  
SCHEMATIC TYPE  
INSTALL

DESCRIPTION OF OPERATION:  
120V 1 Phase w/ control for 1 Exhaust Fan, Exhaust on In Fire, Lights out in Fire, Relay On/Off with Supply Fan.

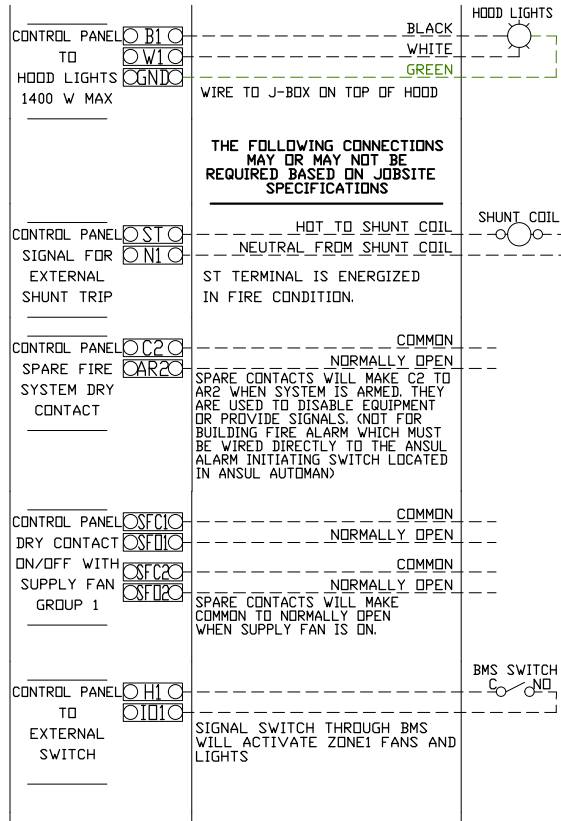
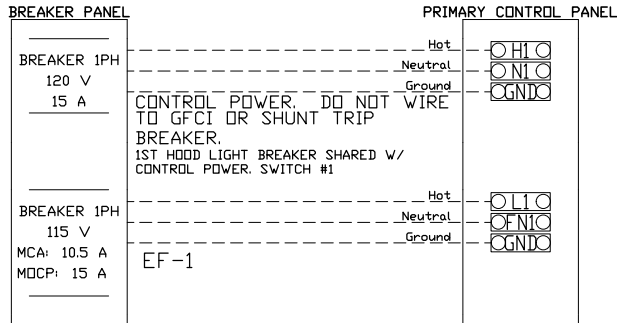
JOB NAME  
Pita Pit - Kingston - no mua

DATE  
4/26/2019  
DWG NO  
ECP #1-1

**BREAKER PANEL TO PRIMARY CONTROL PANEL**

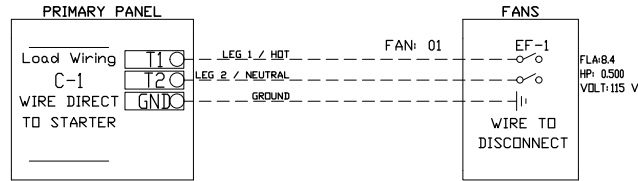
Responsibility: Electrician

BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED



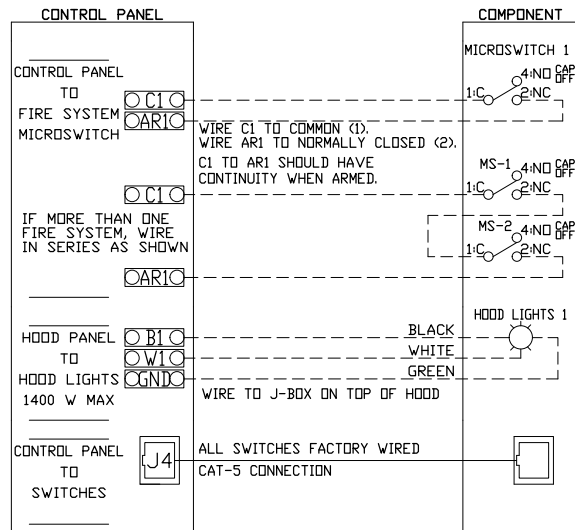
**CONTROL PANEL TO FANS**

Responsibility: Electrician

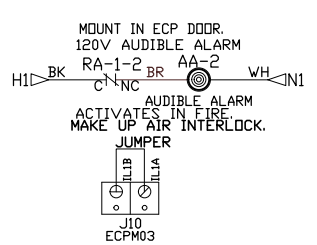
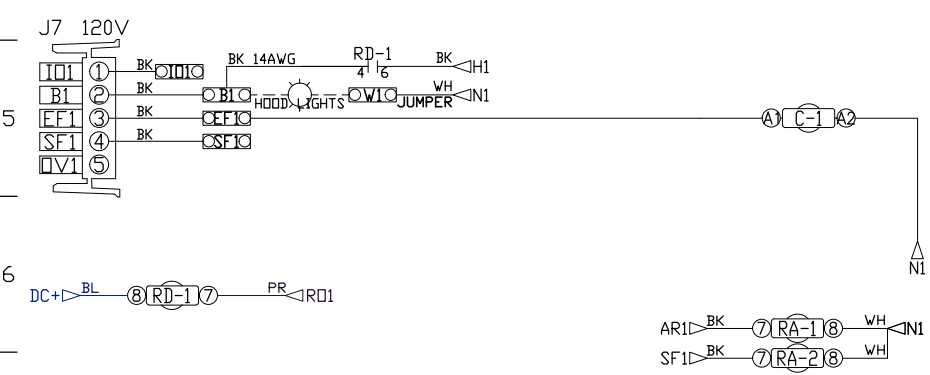
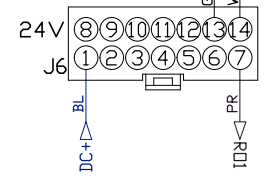
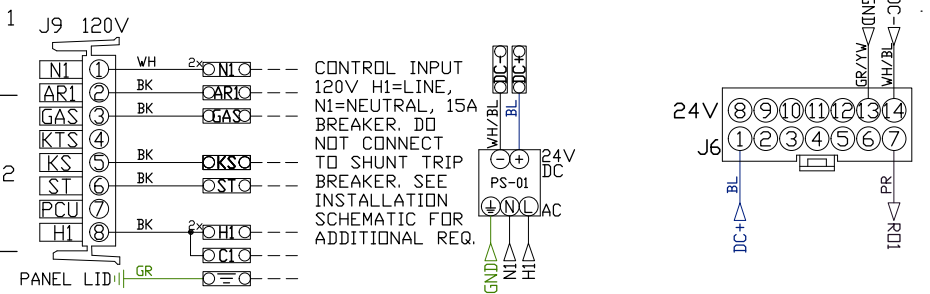


**CONTROL PANEL TO ACCESSORY ITEMS**

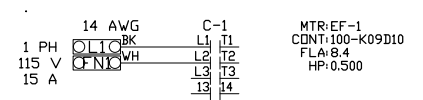
Responsibility: Electrician



UNLESS SPECIFIED OTHERWISE, ALL FACTORY AC WIRING 16 AWG. ALL FACTORY DC WIRING 18 AWG.



MOTOR POWER CIRCUIT



FACTORY WIRING SCHEMATIC CIRCUIT BOARDS DCV Rev. 2.10.00 HMI Rev. 2.10.00

RA-x 120 VAC RELAY	RD-x 24 VDC RELAY
NO 4 3	NO 4 3
NC 2 1	NC 2 1
COIL 8 7	COIL 8 7
COM 6 5	COM 6 5

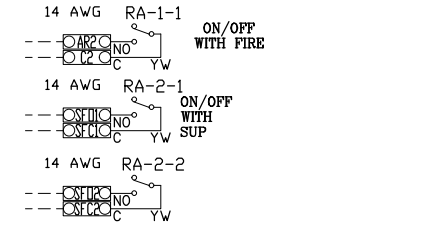
COMPONENT LIST

LABEL	DESCRIPTION
ST-X	Starter P/N varies
OL-X	Overload P/N varies
C-X	Contactors P/N varies
PS-1	Power Sup. 24VDC PNM0P18-24A-1C
RA-x	120V Relay DPDT PN341100184.0
RD-x	24VDC Light Relay PN341100188.0
AA-2	Audible Alarm PN-SCE120LA3FP1B

LEGEND

---	FIELD WIRING
---	FACTORY WIRING
BK-	BLACK
BL-	BLUE
BR-	BROWN
CR-	ORANGE
WH-	WHITE
GR/YW-	YELLOW
GY-	GREY
PR-	PURPLE
RD-	RED
GR-	GREEN
OR/BL-	OR/BL STRIPE
BL/RD-	BL/RD STRIPE
RD/GN-	RD/GN STRIPE
WH/BL-	WH/BL STRIPE

DRY CONTACTS (SHOWN DE-ENERGIZED)



JOB NAME

Pita Pit - Kings...

DRAWING TITLE

SC-11011028

DESCRIPTION OF OPERATION

120V 1 Phase w/ control for 1 Exhaust Fan, Exhaust on in Fire, Lights out in Fire, Relay On/Dff with Supply Fan.

JOB NO 3808816	DRAWN BY
TYPE FACTORY	DATE 4/26/2019
DWG NO ECP #1-2	



**TRUE FOOD SERVICE  
EQUIPMENT, INC.**

2001 East Terra Lane • O'Fallon, Missouri 63366  
(636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl Fax# (001)636-272-7546  
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

**# 3**

Model:  
**TRCB-52**

**Chef Base:**  
*Drawered Refrigerator*



Scan code  
for video

## TRCB-52

- ▶ True's refrigerated chef bases are designed with enduring quality that protects your long term investment.
- ▶ Designed using the highest quality materials and components to provide the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.
- ▶ Oversized, environmentally friendly (134A) forced-air refrigeration system holds 33°F to 38°F (.5°C to 3.3°C).
- ▶ Cabinet top is one piece, heavy duty reinforced stainless steel. Drip resistant "V" edge protects against spills. Supports up to 717 lbs. (326 kg).
- ▶ All stainless steel front, top and sides. Matching aluminum finished back.
- ▶ Each drawer accommodates three (3) full size 12"L x 20"W x 4"D (305 mm x 508 mm x 102 mm) food pans (sold separately).
- ▶ Heavy-duty stainless steel drawer slides and rollers. Removable without tools for easy cleaning.
- ▶ Foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

## ROUGH-IN DATA

Specifications subject to change without notice.  
Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number).

Model	Drawers	Cabinet Dimensions (inches) (mm)			HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
		L	D†	H*						
TRCB-52	2	51 7/8	32 1/8	20 3/8	1/3	115/60/1	8.1	5-15P	7	340
		1318	816	518	1/3	230-240/50/1	3.8	▲	2.13	155

† Depth does not include 1" (26 mm) for rear bumpers.

\* Height does not include 5" (127 mm) for castors or 6" (153 mm) for optional legs.

▲ Plug type varies by country.



APPROVALS:

AVAILABLE AT:

3/13

Printed in U.S.A.

Model:  
**TRCB-52**

**Chef Base:**  
*Drawered Refrigerator*



**STANDARD FEATURES**

**DESIGN**

- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

**REFRIGERATION SYSTEM**

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Oversized, factory balanced refrigeration system with guided airflow to provide uniform product temperatures.
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser; maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C) for the best in food preservation.
- Sealed, cast iron, self-lubricating evaporator fan motors and larger fan blades give True chef base units a more efficient, low velocity, high volume airflow design. This unique design ensures faster temperature recovery and shorter run times in the busiest of food service environments.
- Condensing unit accessed from behind side grill; slides out for easy maintenance.

**CABINET CONSTRUCTION**

- Exterior - stainless steel front, top and sides. Matching aluminum finished back.
- Interior - attractive, NSF approved, white aluminum liner. Stainless steel floor with coved corners.

- Insulation - entire cabinet structure and drawer facings are foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- 4" (102 mm) diameter plate castors - locks provided on front set.
- Cabinet top is one piece, heavy duty reinforced 300 series stainless steel. Drip resistant "V" edge protects against spills. Supports up to 717 lbs. (326 kg).

**DRAWERS**

- Stainless steel exterior drawer facings and liners. Stainless steel drawer frames.
- Each drawer fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Heavy-duty stainless steel drawer slides and rollers. Removable without tools for easy cleaning.
- Magnetic drawer gaskets of one piece construction, removable without tools for ease of cleaning.
- Each drawer accommodates three (3) full size 12"L x 20"W x 4"D (305 mm x 508 mm x 102 mm) food pans (sold separately).
- Drawers support a wide variety of incremental pan size configurations; each drawer standard with two (2) full length removable divider bars.

**MODEL FEATURES**

- Evaporator is epoxy coated to eliminate the potential of corrosion.
- Exterior digital temperature display.
- NSF-7 compliant for open food product.

**ELECTRICAL**

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.



115/60/1  
NEMA-5-15R

**RECOMMENDED OPERATING CONDITIONS**

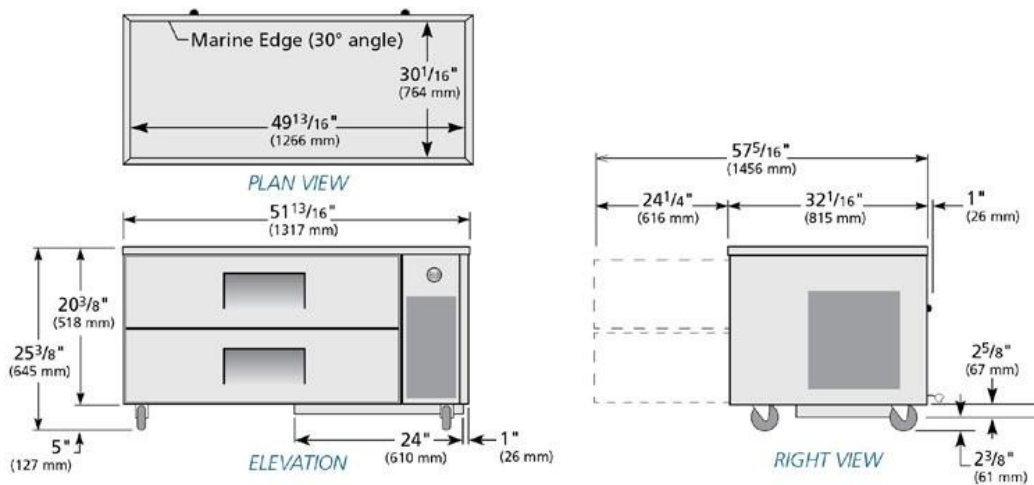
- Counter-top cooking equipment should be used in conjunction with the manufacturer supplied legs. Minimum clearance of 4" (102 mm) is required between bottom of cooking equipment heating element and the TRCB top. Failure to provide clearance voids manufacturer warranty.
- Installation of a heat shield is recommended for optimum performance (supplied by others).

**OPTIONAL FEATURES/ACCESSORIES**

Upcharge and lead times may apply.

- 230 - 240V / 50 Hz.
- 6" (153 mm) standard legs (1 set of 4 leg mounting plates required).
- 6" (153 mm) seismic/flanged legs (1 set of 4 leg mounting plates required).
- Heavy duty, 16 gauge top.
- Flat top (no marine edge).
- Additional size drawer divider bars.
- Remote cabinets (condensing unit supplied by others; system comes standard with 404A expansion valve and requires R404A refrigerant). Consult factory technical service department for BTU information. All remote units must be hard wired during installation.

**PLAN VIEW**



**WARRANTY**  
Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER  
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
TRCB-52	TFQY135E	TFQY135S	TFQY135P	TFQY1353	

**TRUE FOOD SERVICE EQUIPMENT**



# *New* **STAR-MAX<sup>®</sup> GAS GRIDDLES WITH THERMOSTATIC CONTROLS**

**Models 615TF, 624TF, 636TF & 648TF**

### Features/Benefits:

- ★ *NEW* highly polished 1" thick polished steel plate for superior heat distribution, fast recovery and energy efficient operation.
- ★ *NEW* Throttling thermostat inserted into the griddle plate 5/16" from the cooking surface, adjusts from 150° to 450°F providing quick response to surface temperature change.
- ★ Available in 15", 24", 36" and 48" widths to meet your space and volume requirements.
- ★ All stainless steel construction and front panel for long lasting attractive appearance and ease of cleaning.
- ★ *NEW* longer lasting, heavy-duty metal knobs.
- ★ *NEW* custom designed 28,300 BTU aluminized U-shaped steel burner every 12" of cooking surface provide even heat distribution.
- ★ Double wall construction and enclosed bottom helps reduce heat loss.
- ★ Heavy-duty all-welded body construction with stainless steel front, bull nose and 4-1/2" high tapered splash guard.
- ★ Cool-to-the-touch stainless steel bull nose front provides knob protection and comfortable work zone.
- ★ Spatula wide 3-1/4" front grease trough and grease chute for easy cleaning.
- ★ Large 4-1/2 quart stainless steel grease drawer.
- ★ Gas convertible in the field conversion kit supplied. Units are shipped Natural Gas.
- ★ Heavy-duty 4" adjustable legs to fit your countertop line-up requirements.



**Model 636TF**

### Applications:

Star-Max<sup>®</sup> thermostatically controlled griddles provide maximum cooking performance and reliability. Breakfast, lunch or dinner, Star has a griddle to fit your menu needs.

### Quality Construction:

Star-Max<sup>®</sup> griddles feature 1" thick polished steel griddle plate with 4-1/2" high wrap-around stainless steel splash guard and 3-1/4" wide front access grease trough with 4-1/2 quart grease drawer capacity. Includes a 28,300 BTU aluminized burner every 12" of width controlled by a throttling thermostat, 3/4" N.P.T. male gas connection with convertible pressure regulator, and 4" adjustable legs. These units are approved for installation within 6" of non-combustible surfaces. Griddles operate on Natural or Propane gas.

### *New* Warranty:

Star-Max<sup>®</sup> gas griddles are covered by Star's **TWO YEAR** parts and labor warranty.

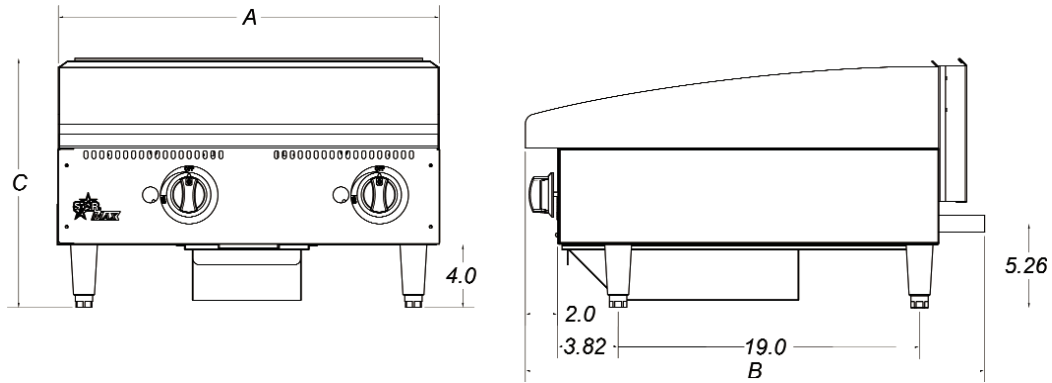




Star Manufacturing

Star-Max® Gas Griddle with Thermostatic Controls

*New* **STAR-MAX® GAS GRIDDLES WITH THERMOSTATIC CONTROLS**  
**Models 615TF, 624TF, 636TF & 648TF**



**Specifications**

Model No.	Dimensions			Number of Thermostats	BTU	Grid Area	Plate Thickness Inches (cm)	Weight	
	(A) Width Inches (cm)	(B) Depth Inches (cm)	(C) Height Inches (cm)					Installed lbs. (kg)	Shipping lbs. (kg)
615TF	15 (38.1)	29 (73.7)	15-1/2 (39.4)	1	28,300	304 sq. in. 1961.4 sq cm	1 (2.5)	83 (37.7)	90 (40.8)
624TF	24 (61.0)	29 (73.7)	15-1/2 (39.4)	2	56,600	498 sq. in. 3213.1 sq cm	1 (2.5)	165 (74.8)	175 (79.4)
636TF	36 (91.4)	29 (73.7)	15-1/2 (39.4)	3	84,900	747 sq. in. 4819.6 sq cm	1 (2.5)	247 (112.0)	262 (118.8)
648TF	48 (121.9)	29 (73.7)	15-1/2 (39.4)	4	113,200	996 sq. in. 6426.2 sq cm	1 (2.5)	330 (149.7)	350 (159.0)

**Typical Specifications**

Gas griddles are constructed with stainless steel front panel and double wall aluminized steel side panels. Griddle plate is 1" thick highly polished steel plate with 4-1/2" high tapered wrap-around stainless steel splash guard. Unit has a 3-1/4" (8.3 cm) wide front grease trough with grease chute and a 4-1/2 qt. (4.26 L) stainless steel grease drawer. Unit has a 28,300 BTU aluminized steel burner for every 12" (30.5 cm) of width and is controlled by a throttling type thermostat inserted into the griddle plate 5/16" from the cooking surface. Thermostat knobs are protected by stainless steel bull nose front. A standing pilot is provided. Griddles are supplied with 4" (10.2 cm) high die cast nickel plated steel legs that have a 1-3/8" (3.5 cm) adjustment. Gas connection is 3/4" N.P.T. male and a convertible pressure regulator is provided. Units are approved for installation within 6" (15.2 cm) of combustible and non-combustible surfaces and are UL Gas Certified and UL Sanitation listed to NSF Standard 4 Listed. Printed in the U.S.A.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Star Manufacturing exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

Star Manufacturing - 10 Sunnen Drive - P.O. Box 430129 - St. Louis, MO 63143-3800  
 Phone: (314) 678-6303 - FAX: (314) 781-5445 - www.star-mfg.com



**TRUE FOOD SERVICE  
EQUIPMENT, INC.**

2001 East Terra Lane • O'Fallon, Missouri 63366  
(636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl Fax# (001)636-272-7546  
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

**# 5**

Model:  
**TUC-27**

**Undercounter:**  
*Solid Door Refrigerator*

**UNIT MUST BE PLACED TO THE RIGHT SIDE OF TUC-27F**



Scan code  
for video

## TUC-27

- ▶ True's undercounter units are designed with enduring quality that protects your long term investment.
- ▶ Designed using the highest quality materials and components to provide the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.
- ▶ Oversized, environmentally friendly (134A) forced-air refrigeration system holds 33°F to 38°F (.5°C to 3.3°C).
- ▶ All stainless steel front, top and ends. Matching aluminum finished back.
- ▶ Front breathing.
- ▶ Heavy duty PVC coated wire shelves.
- ▶ Foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

## ROUGH-IN DATA

Specifications subject to change without notice.  
Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number).

Model	Doors	Shelves	Cabinet Dimensions (inches) (mm)			HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
			L	D†	H*						
TUC-27	1	2	27 <sup>5</sup> / <sub>8</sub> 702	30 <sup>1</sup> / <sub>8</sub> 766	29 <sup>3</sup> / <sub>4</sub> 756	1/6 1/4	115/60/1 230-240/50/1	3.9 2.9	5-15P ▲	7 2.13	195 89

† Depth does not include 1" (26 mm) for rear bumpers.

\* Height does not include 6 1/4" (159 mm) for castors or 6" (153 mm) for optional legs.

▲ Plug type varies by country.



APPROVALS:

AVAILABLE AT:

Model:  
**TUC-27**

## Undercounter: Solid Door Refrigerator



### STANDARD FEATURES

#### DESIGN

- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

#### REFRIGERATION SYSTEM

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Oversized, factory balanced refrigeration system with guided airflow to provide uniform product temperatures.
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser; maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C) for the best in food preservation.
- Sealed, cast iron, self-lubricating evaporator fan motor(s) and larger fan blades give True undercounter units a more efficient, low velocity, high volume airflow design. This unique design ensures faster temperature recovery and shorter run times in the busiest of food service environments.
- Condensing unit access in back of cabinet, slides out for easy maintenance.

#### CABINET CONSTRUCTION

- Exterior - stainless steel front, top and ends. Matching aluminum finished back.
- Interior - attractive, NSF approved, white aluminum liner. Stainless steel floor with coved corners.

- Insulation - entire cabinet structure and solid door are foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- 5" (127 mm) diameter stem castors - locks provided on front set. 36" (915 mm) work surface height.

#### DOOR

- Stainless steel exterior with white aluminum liner to match cabinet interior.
- Door fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Positive seal self-closing door with 90° stay open feature. Door swing within cabinet dimensions.
- Magnetic door gasket of one piece construction, removable without tools for ease of cleaning.

#### SHELVING

- Two (2) adjustable, heavy duty PVC coated wire shelves 23 1/4" L x 16" D (591 mm x 407 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on 1/2" (13 mm) increments.

#### MODEL FEATURES

- Evaporator is epoxy coated to eliminate the potential of corrosion.
- NSF-7 compliant for open food product.

#### ELECTRICAL

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.



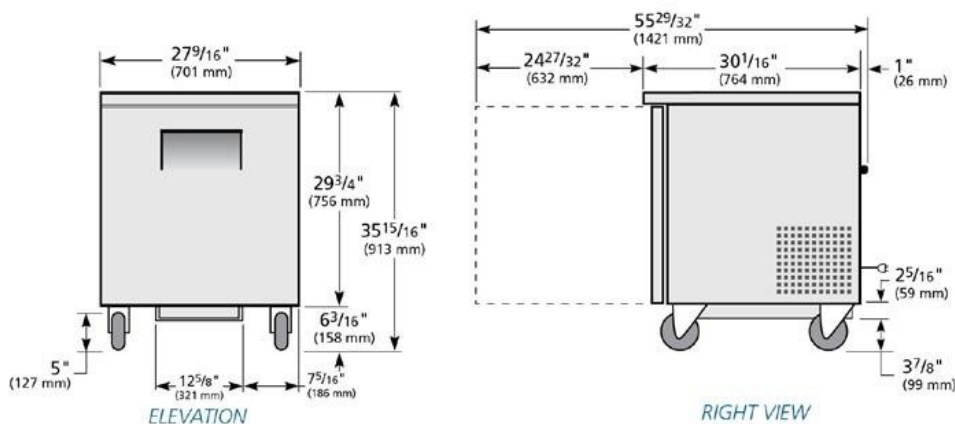
115/60/1  
NEMA-5-15R

#### OPTIONAL FEATURES/ACCESSORIES

Upcharge and lead times may apply.

- 230 - 240V / 50 Hz.
- 6" (153 mm) standard legs.
- 6" (153 mm) seismic/flanged legs.
- 2 1/2" (64 mm) diameter castors.
- Barrel lock (factory installed).
- Single overshelf.
- Double overshelf.
- TUC-27 Stacking collar.
- 30" (762 mm) deep, 1/2" (13 mm) thick, white polyethylene cutting board. Requires "L" brackets.
- 30" (762 mm) deep, 1/2" (13 mm) thick, composite cutting board. Requires "L" brackets.
- Heavy duty, 16 gauge tops.
- Exterior rectangular digital temperature display (factory installed).
- ADA compliant models with 34" (864 mm) work surface height.
- Low profile models with 31 7/8" (810 mm) work surface height.
- Remote cabinets (condensing unit supplied by others; system comes standard with 404A expansion valve and requires R404A refrigerant). Consult factory technical service department for BTU information. All remote units must be hard wired during installation.

### PLAN VIEW



**WARRANTY**  
Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER  
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
TUC-27	TFQY01E	TFQY01S	TFQY01P	TFQY013	

### TRUE FOOD SERVICE EQUIPMENT

2001 East Terra Lane • O'Fallon, Missouri 63366 • (636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl. Fax# (001)636-272-7546 • www.truemfg.com

# NE-1064

# 1000 Watt\* Commercial Microwave Oven

# #8

**SAMPLE MICROWAVE NOT SUPPLIED IN PACKAGE.  
OWER TO PURCHASE LOCALLY.**



## Technical Specifications

**Power source:** 120V, 60Hz, Single phase

**Receptacle required:** NEMA 5-15 R or NEMA 5-20 R



**Frequency:** 2,450MHz

**Required power:** 13.4A

**Output:** 1000 watts\*

**Outer dimensions:** 20 1/8" w x 16 1/8" d x 12" h

**Cavity dimensions:** 13" w x 13" d x 8 7/8" h

**Net weight:** 34 lbs.

**Shipping weight:** 39 lbs.

**Shipping box size:** 24" w x 18 3/4" d x 14 1/4" h, 3.8 cu. ft.

**Timer:** 99 Minutes, 99 Seconds

**Memory Capability:** 20 Programs

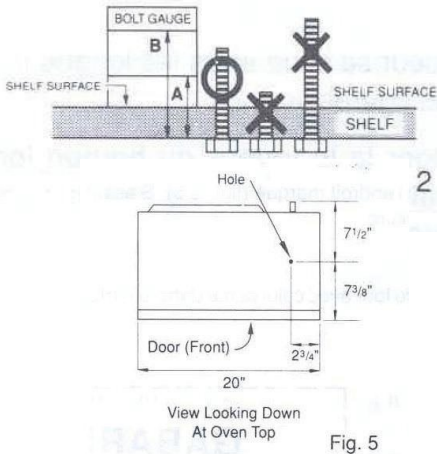
## To specify a Panasonic Commercial Microwave Oven

The NE-1064 Commercial Microwave Oven meets or exceeds all safety performance and sanitation standards set for commercial food service microwave ovens by UL, DHHS, FCC and NSF.

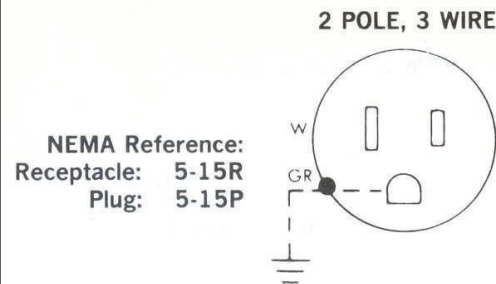
Plus, oven shall have output power 1000 Watts\*, stainless steel cabinet and cavity, bottom energy feed, 10 programmable memory pads, Braille keypad, 20-memory capability, double quantity key, 6 power levels, 2- and 3-stage cooking, programmable lock, unique "quick pick" preset times and self-diagnostics, Chef/Test Kitchen technical support and 3 year limited warranty.

*\*I.E.C. 60705 Test Procedure. Specifications subject to change without notice.*

## Security/Anti-Theft Option



## Receptacle Required

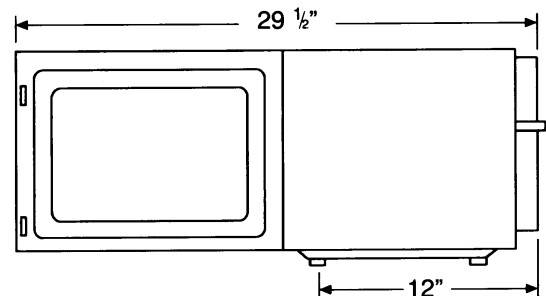
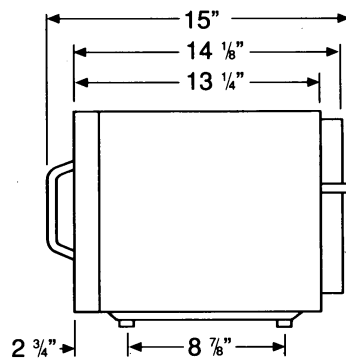
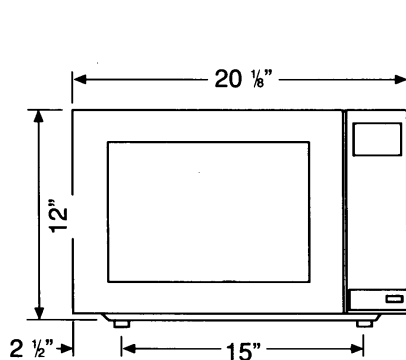


## ADA Compliance

§4.28.2 ((CFR) – 28CFR Part 36) "For Alarms".

§4.27 "For controls and operating mechanisms".

Braille controls.



**Panasonic**  
ideas for life

**Panasonic Appliance & Commercial Group**  
Division of Matsushita Electric Corporation of America  
Executive Offices:  
One Panasonic Way, Panazip 4A-1, Secaucus, NJ 07094  
Toll Free: 1-888-350-9590  
www.panasonic.com/cmo



# TRUE FOOD SERVICE EQUIPMENT, INC.

2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400  
Fax (636)272-2408 • Toll Free (800)325-6152 • Intl Fax# (001)636-272-7546  
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

Project Name: \_\_\_\_\_ #9

Location: \_\_\_\_\_

Item #: \_\_\_\_\_ Qty: \_\_\_\_\_ SIS #

Model #: \_\_\_\_\_

Model:  
**GDM-23-LD**

## Glass Door Merchandiser: Swing Door Refrigerator with LED Lighting

THIS MODEL ALSO AVAILABLE IN R290 HYDROCARBON REFRIGERANT



### GDM-23-LD

- ▶ The world's #1 manufacturer of glass door merchandisers.
- ▶ Oversized, factory balanced, refrigeration system holds 33°F to 38°F (.5°C to 3.3°C).
- ▶ Exterior - non-peel or chip black laminated vinyl; durable and permanent.
- ▶ Interior - attractive, NSF approved, white aluminum interior liner with stainless steel floor.
- ▶ Self closing door. Positive seal, torsion type closure system.
- ▶ "Low-E", double pane thermal insulated glass door assembly with extruded aluminum frame. The latest in energy efficient technology.
- ▶ LED interior lighting provides more even lighting throughout the cabinet. Safety shielded.
- ▶ Entire cabinet structure is foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

#### Bottom mounted units feature

- ▶ "No stoop" lower shelf to maximize product visibility.
- ▶ Storage on top of cabinet.
- ▶ Easily accessible condenser coil for cleaning.



Scan code for video

### ROUGH-IN DATA

Specifications subject to change without notice.  
Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number).

Model	Doors	Shelves	Cabinet Dimensions (inches) (mm)			HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
			L	D†	H						
GDM-23-LD	1	4	27	29 7/8	78 5/8	1/3	115/60/1	5.2	5-15P	9	355
			686	759	1998	1/3	230-240/50/1	3.0	▲	2.74	162

▲ Plug type varies by country.



APPROVALS:

AVAILABLE AT:

Model:  
**GDM-23-LD**

## Glass Door Merchandiser: Swing Door Refrigerator with LED Lighting



### STANDARD FEATURES

#### DESIGN

- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, and lower utility costs in an attractive merchandiser that brilliantly displays packaged food and beverages.

#### REFRIGERATION SYSTEM

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser; maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C).
- Sealed, cast iron, self-lubricating evaporator fan motors and larger fan blades give True merchandisers a more efficient low velocity, high volume airflow design. This unique design ensures faster temperature pull down of warm product, colder holding temperatures and faster recovery in high use situations.
- Bottom mounted condensing unit positioned for easy maintenance. "No stoop" lower shelf maximizes visibility by raising merchandised product to higher level.

#### CABINET CONSTRUCTION

- Exterior - non-peel or chip black laminated vinyl; durable and permanent.
- Interior - attractive, NSF approved, white aluminum liner with stainless steel floor.
- Insulation - entire cabinet structure is foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

- Welded, heavy duty steel frame rail, black powder coated for corrosion protection.
- Frame rail fitted with leg levelers.
- Illuminated exterior sign panel. Variety of sign options available.

#### DOOR

- "Low-E", double pane thermal insulated glass door assembly with extruded aluminum frame. The latest in energy efficient technology.
- Door fitted with 12" (305 mm) long integrated handle.
- Self closing door. Positive seal, torsion type closure system.
- Magnetic door gasket of one piece construction, removable without tools for ease of cleaning.

#### SHELVING

- Four (4) adjustable, heavy duty PVC coated wire shelves 22 5/16" L x 23 1/4" D (574 mm x 591 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on 1/2" (13 mm) increments.

#### LIGHTING

- LED interior lighting provides more even lighting throughout the cabinet. Safety shielded.

#### MODEL FEATURES

- Evaporator is epoxy coated to eliminate the potential of corrosion.
- See our website [www.truemfg.com](http://www.truemfg.com) for latest color and sign offerings.
- Convenient clean-out drain built in cabinet floor.

- Listed under NSF-7 for the storage and/or display of packaged or bottled product.

#### ELECTRICAL

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.



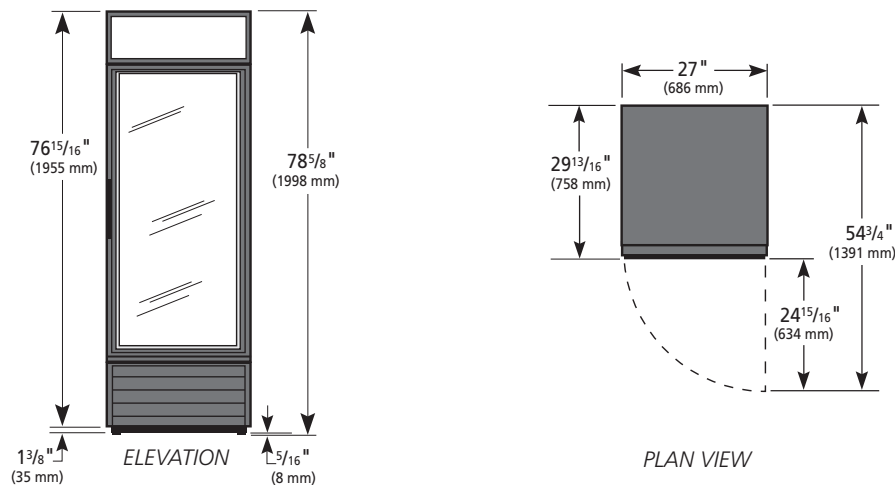
115/60/1  
NEMA-5-15R

#### OPTIONAL FEATURES/ACCESSORIES

Upcharge and lead times may apply.

- 230 - 240V / 50 Hz.
- White exterior.
- Stainless steel exterior.
- Black aluminum interior liner with black shelving.
- Stainless steel interior liner.
- 6" (153 mm) standard legs.
- 6" (153 mm) seismic/flanged legs.
- 2 1/2" (64 mm) diameter castors.
- 4" (102 mm) diameter castors.
- Red wine thermostat.
- White wine thermostat.
- Chocolate thermostat.
- Barrel lock (factory installed).
- Wine racks.
- Sliding wine racks.
- Additional shelves.
- TrueFlex gravity feed organizers.
- Pricing strips.
- Available in R290 hydrocarbon refrigerant

### PLAN VIEW



#### WARRANTY\*

Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
GDM-23-LD	TFAZ03E	TFAY03S	TFAZ03P	TFAZ033	

\*RESIDENTIAL APPLICATIONS: TRUE assumes no liability for parts or labor coverage for component failure or other damages resulting from installation in non-commercial or residential applications.

### TRUE FOOD SERVICE EQUIPMENT

2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400 • Fax (636)272-2408 • Toll Free (800)325-6152 • Intl. Fax# (001)636-272-7546 • [www.truemfg.com](http://www.truemfg.com)



### PT-5700 Point of Sale solution Highlights:

- \* Proven 2nd generation fanless design
- \* Small Footprint
- \* Integrated biometrics scanner, card reader and key pad
- \* Enhanced touch screen technology, capacitive or resistive touch
- \* Ultra fast integrated 10/100/1000 network Interface
- \* Open OS architecture for the latest POS software
- \* Multiple accessory design options to fit your needs



Model : PT-5700

CPU VIA Eden (V4 Bus) 1GHz @ 400MHz FSB  
 System RAM 512 MB DDR2 (supports up to 1GB - 1 SO SIMM Socket)  
 HDD Storage 3.5" HDD (80GB Min)  
 Touch Screen ELO 5-wire Resistive or Capacitive (optional)  
 LCD Display 15" TFT Color Display 1024 x 768  
 Magnetic Reader Track 1 & 2  
 Power Supply 110/120VAC, 19VDC (90W)  
 I/O Ports

Operating Systems 98/2000/XP/XPe/CE.net/WEPOS/Linux  
 Safety and EMI FCC, CE Class A, UL, cUL, VCCI, BSI, ROHS  
 Dimensions WxDxH: 10.1" x 8.5" x 14.1"  
 Packaged: 16.1" x 18.5" x 15.8"  
 Gross Weight 20.9 Lb

- \* 4 RS232 ports (supports 5V/12V)
- \* 1 Parallel Port
- \* 1 Ethernet 10/100/1000 Base-T
- \* 1 PS/2 Keyboard Port
- \* 1 PS/2 Mouse Port
- \* 1 VGA Port (XGA/SVGA)
- \* 4 USB 2.0 Ports (2 in front)
- \* 2 Audio (1-IN / 1-OUT)
- \* 1 RJ-11 (2 x Cashdrawers support)

### Back Office



### Cashier



## Blending Station® Advance On-Counter

# #22

### The Right Blend of Timing and Speed

The Blending Station Advance has been engineered for perfection along with a noise reducing cover for an improved customer experience.

### Smart Product Design

- The Advance™ container creates faster, smoother pouring without the mess, saving you time and money
- Powerful ≈ 3 peak motor HP for unmatched performance on the toughest blends in coffee, smoothie and ice cream shops
- 93 speeds, variable speed control, and automatic shut-off provide the ultimate in blending flexibility creating an endless number of recipes to expand your menu offering
- 34 optimized programs engineered to provide consistent results quickly and easily

### La mezcla perfecta de tiempo y velocidad

La Blending Station Advance ha sido diseñada para lograr la perfección junto con una cubierta para reducir el ruido y brindar una experiencia de cliente mejorada.

### Diseño inteligente de producto

- El recipiente Advance crea una forma de servir más suave sin ensuciar ahorrándole tiempo y dinero
- Potente motor con ≈ 3 de caballos de potencia máxima para lograr un desempeño inigualable en las mezclas más difíciles en las tiendas de café, helados y licuados
- Sus 93 velocidades, el control de velocidad variable y el apagado automático proporcionan lo último en flexibilidad de mezcla, creando una cantidad infinita de recetas para ampliar la oferta de su menú
- 34 programas optimizados diseñados para proporcionar resultados consistentes de manera rápida y fácil



## Specifications / Especificaciones

### Blending Station® Advance On-Counter: #36021

Motor: ≈ 3 peak motor horsepower  
 Electrical: 120 V, 50/60 Hz, 15 amps  
 Pack: Includes 1 Blending Station Advance On-Counter with 48 oz. high-impact, clear/stackable Advance™ container, complete with blade assembly and lid, and removeable compact cover\*.  
 Net Weight: 19.5 lbs.  
 Dimensions: 19.38 x 9.25 x 10.5 in. (H x W x D)

Assembled in the U.S.A. of U.S.A. and Swedish components.  
**FOR COMMERCIAL USE ONLY.**

**Warranty:** In the U.S.A. and Canada, the Blending Station Advance is backed by a three-year limited warranty on motor base parts and a one-year limited warranty on parts and labor on the full unit. For more information regarding this warranty, please call +1.440.235.0214 for customer service.

\* Standard 64 oz. container cannot be used with the compact cover.

### Blending Station® Advance On-Counter - No. 36021

Motor: Motor con ≈ 3 CV de pico  
 Electricidad: 120 V, 50/60 Hz, 15 A  
 Embalaje: Incluye 1 Blending Station Advance para mostrador or con recipiente Advance™ de 1,4 L transparente y apilable, altamente resistente a impactos, completo con juego de láminas y tapa y cubierta compacta removible\*.  
 Peso neto: 8,84 kg  
 Dimensiones: 49,23 x 23,50 x 26,67 cm (H x A x P)

Montado en EE.UU. con componentes norteamericanos y suecos. **SOLAMENTE PARA USO COMERCIAL.**

**Garantía:** En EE. UU. y Canadá, la Blending Station Advance está respaldada por una garantía limitada de tres años sobre las piezas básicas del motor y por una garantía limitada de un año sobre las piezas y mano de obra de toda la unidad. Para obtener más información con respecto a esta garantía, por favor contáctese con el servicio de atención al cliente llamando al +1.440.235.0214.

\* No puede usarse el recipiente estándar de 2,0 L con la cubierta compacta.

## Also Available / También disponible

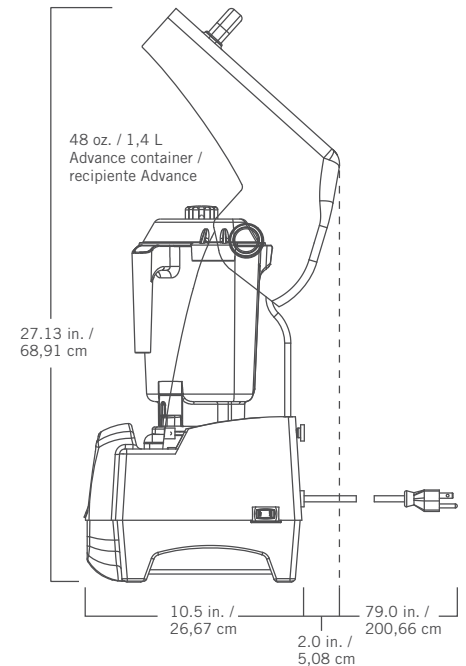
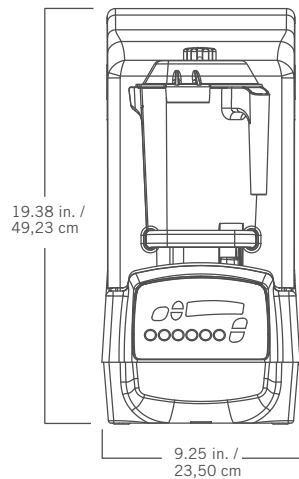
Unit is available in international voltages, please contact Vita-Mix international customer service for information.

La unidad está disponible en voltajes internacionales, por favor, entre en contacto con el servicio de atención al cliente de Vita-Mix para obtener informaciones.

Blending Station Advance with XP container  
 Blending Station Advance para mostrador con recipiente XP 36006: 120 V, 50/60 Hz, 15 amps

Additional containers / recipientes adicionales  
 Complete with blade assembly and lid.  
 Completo con juego de láminas y tapa.  
 15978: 48 oz. Advance container / 1,4 L recipiente Advance  
 15566: 48 oz. XP container / 1,4 L recipiente XP

Where Applicable / Cuando fuera aplicable



## Contact Information / Informaciones para contacto

### U.S.A. and Canada / EE.UU. y Canadá

Tel: 800.4DRINK4, 440.235.0214  
 Fax: 440.235.9670  
 E-mail: commercial@vitamix.com

### All Other Countries / Demás países

Tel: +1.440.782.2450  
 Fax: +1.440.782.2220  
 E-mail: international@vitamix.com

### www.vitamix.com/foodservice

Vita-Mix Corporation  
 8615 Usher Road  
 Cleveland, OH 44138-2103 U.S.A.

For more information, contact your local foodservice distributor.

Por más informaciones, entre en contacto con su distribuidor local de servicios alimenticios.



# SNEEZEGUARDS

TEL: 800-690-0002

FAX: 925-680-7252

#34

V  R  R     A   A

## Specifications:

### Construction:

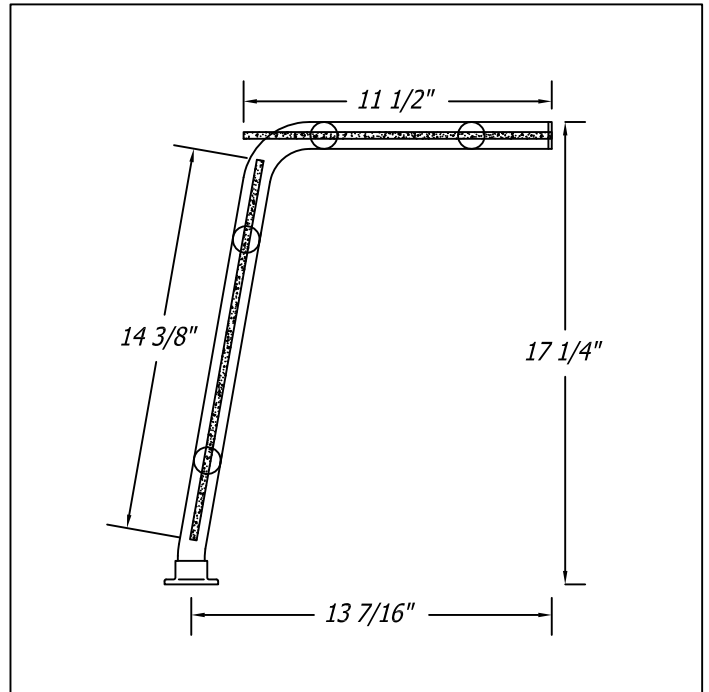
- 1" Round Tubing
- 2" Heavy Duty Flanges
- Glass Brackets accept 1/4" or 3/8"

### Available Finishes:

- #4 Brushed Stainless Steel
- #4 Brushed Aluminum
- Powder Coated Black

### Glass:

- 1/4" or 3/8" Clear Tempered Glass with Polished Edges
  - 3/4" Radiused Corners Available
  - Maximum Spacing Between Posts:
    - 42" Center to Center with 1/4" Glass\*
    - 54" Center to Center with 3/8" Glass\*
- \*Tempered Glass Required



## Options:

### End Panels:

- Left Closed End Panel
- Right Closed End Panel

### Finish:

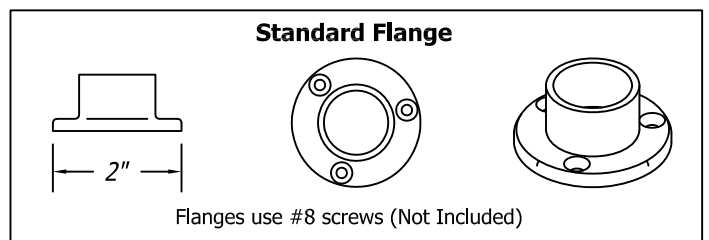
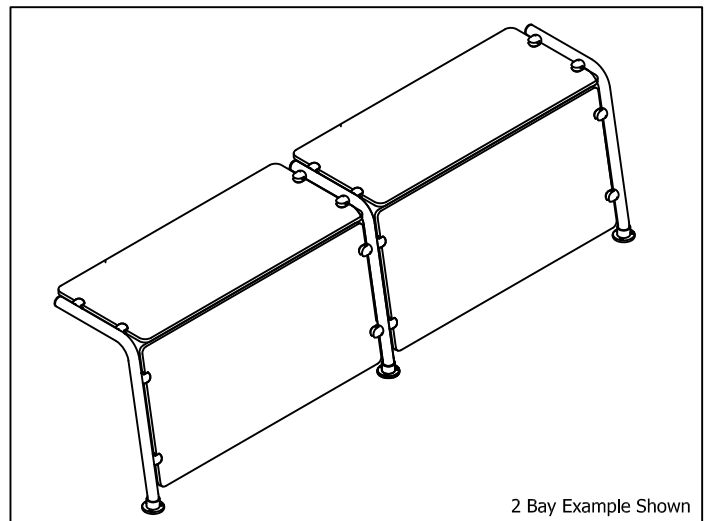
- #4 Brushed Stainless Steel
- #4 Brushed Aluminum
- Powder Coated Black

### Glass Options:

- 3/4" Radiused Corners
- Standard Square Corners

### Glass Thickness:

- 1/4" Glass (Maximum span 42")
- 3/8" Glass (Maximum span 54")



Direct LED  
Commercial Lite  
Integrated HDTV

42" class (42.16" diagonal)  
49" class (48.5" diagonal)

42LX330C

42" class (42.16" diagonal)

49LX341C

49" class (48.5" diagonal)



LG provides the ability to facilitate communications between businesses and their target audience. With our expanded line of affordable commercial display solutions, LG is aggressively meeting clients' demands for digital out-of-home technologies.

The LX330C is a great solution for many different application settings ranging from hospitality, restaurants, education, and beyond. You will discover new features and benefits that includes new welcome screen and welcome video options, self diagnostics via USB device, enhanced low power management and more!

FOR EFFICIENT MANAGEMENT



PUBLIC DISPLAY MODE

From channel selection to energy-saving features, Public Display Mode allows you to control the TV settings in your business area, prevent misuse by customers, set volume limits, or restore factory defaults on any TV. You are in control of it all.



USB CLONING

The USB Cloning feature allows you to simply copy the TV settings onto all TVs using a USB stick, a process that is fully automated to save time without having to set each TV one by one.



WELCOME SCREEN

Welcome visitors with a warm greeting message that includes your business name/logo and now with a video or both.



MULTI IR

Multi IR function eliminates the remote control signal interference between TVs in multiple dwelling rooms. This system will work using the same LG TV model. (Optional 124-213-10 required)



RS232C CONTROL

Via the TV's RS-232C port, you can remotely control multiple TVs' power and volume settings simultaneously.



FOR CONVENIENCE & ENTERTAINMENT



EXTERNAL SPEAKER OUT

Enhance the entertainment experience by adding an additional speaker, visitors to listen to and control the TV audio from anywhere in your business area, including restrooms.



IR OUT

IR OUT enables customized set-top boxes to receive IR signals via LG TV Signage. This added convenience requires only simple connections and allows easy management using a single remote control.



USB 2.0

You can play images and videos from and record TV programs to external storage devices. Immediate recording & reserved recording options are available.

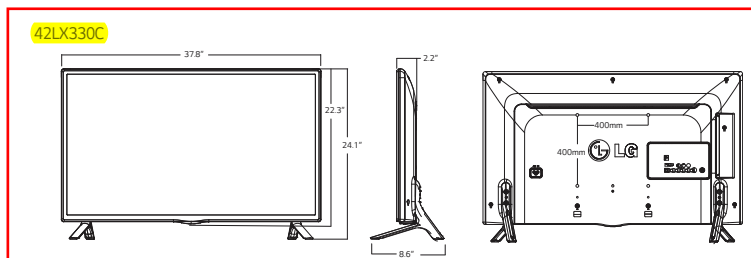


# Direct LED Commercial Lite Integrated HDTV

**42LX330C**

42" class (42.16" diagonal)

**ONLY USED IN VERY LOW CEILING LOCATIONS**



FEATURES	MODEL	42LX330C	32LX330C
Remote Diagnosis		Yes (Self Diagnosis (USB))	
HDMI-CEC		Yes (ARC Not Supported)	
HTNG-CEC		Yes	
Menu		PDM only	
Lock Mode		Yes	
External Speaker Out		1 (Variable/Fixed/Line Out, 3.5mm, Stereo, Single Ended Type (GND,L+,R+), 1W with 8Ω	
RJP Interface		Yes (RS232C,HDMI)	
RJP Compatibility		Teleadapt (RS232C), Teleadapt/Guestlink (HDMI CEC)	
USB		Yes (USB 2.0)	
USB Auto Play back		Yes	
Moving Picture Playback (SD/HD/Plus HD)		Divx HD	
Picture		JPEG	
Audio Codec		MP3, AC3, MPEG, AAC,HEAAC, CDDA, LPCM	
USB Cloning		Yes	
Multi IR Code		Yes	
Welcome Screen (Splash Image)		Yes	
Auto Off / Auto Sleep		Yes	
Motion Eye Eare		Yes	
Kensington Lock		Yes (back cover)	
INTERFACE			
HDMI In		2 (1 Rear, 1 Side)	
USB (2.0)		1	
RF In		1	
AV In		1 (Sharing w/Component in)	
Component in (Y,Pb,Pr) + Audio		1	
Digital Audio Out (Coaxial / Optical)		1 (Optical)	
HDMI/HDCP Input		1	
RGB In (D-sub 15pin) - PC		1	
PC Audio Input		1 (Sharing with Component Audio)	
RS-232C (D-Sub 9pin)		1	
External Speaker Out (3.5mm phone jack)		1 Variable/Fixed/Line Out, 3.5mm, Stereo, Single ended Type (GRD,L+,R+), 1W with 8Ω	
ACCESSORIES			
Cable		Power cord (1.55m, Angle Type)	
Manual / ESG		Simple Manual	
POWER			
Voltage		100 ~ 240V, 50/60Hz	
Typical (Based on Energy Star 7.0)		39W	28W
Stand-by		0.5W ↓	
CABINET			
Bezel Colour		Lucido Titan	
Stand Colour		Black	
Bezel Width - ON (Left/Right, Upper, Bottom)		11.0mm, 11.0mm, 16.5mm	11.6mm, 11.3mm, 16.3mm
Bezel Width - OFF (Left/Right, Upper, Bottom)		8.5mm, 8.5mm, 14.0mm	10.5mm, 10.0mm, 14.0mm
Flame Retardant		Yes	
VESA Compatible		400mm x 400mm	200mm x 200mm
WxHxD (with stand)		37.8" x 24.1" x 8.6"	28.8" x 18.9" x 8.1"
Weight		20.9lbs	13.7 lbs
WxHxD (w/o stand)		37.8" x 22.3" x 2.2"	28.8" x 17.2" x 2.2"
Weight		20.3 lbs	13.2 lbs
WxHxD (carton)		41.7" x 26.0" x 6.0"	32.1" x 20.1" x 6.0"
Weight		25.6 lbs	16.3 lbs
REQUIRED LISTING (CERTIFICATION)			
Safety		UL	
EMC		FCC	
ETC		RoHS, cUL, NOM, Energy Star 7.0	
OTHER			
UPC		719192 198111	719192 198128
WARRANTY		2-Year Limited Warranty Parts/Labour/Backlight   Extended warranty options are also available	

PANEL	MODEL	42LX330C	32LX330C
	Panel Size	42" class (42.16" diagonal)	32" class (31.65" diagonal)
	Backlight Type	Direct LED	
	Resolution	1920 x 1080 (FHD)	1366 x 768 (HD)
	Brightness	300cd/m <sup>2</sup>	
	Dynamic Contrast Ratio	1,000,000:1	
	Contrast Ratio	1200 :1	
	Viewing Angle	178°x178°	
	Response Time(G to G)	8ms	9ms
	Frame Rate	60Hz	
BROADCAST SYSTEM	Analog	Yes (NTSC)	
	Digital	ATSC/QAM/VSB	
VIDEO	Triple XD Engine	Yes	
	Dynamic Colour Enhancer	Yes	
	Real Cinema 24p (3.3 pull down)	Yes	
	Aspect Ratio	6 modes (16:9, Just scan, Set by program, 4:3, Zoom, Cinema zoom1)	
AUDIO	Audio Output	10W + 10W	
	Speaker System	2.0 ch	
	Sound Mode	6 modes (Standard, News, Music, Cinema, Sport, Game)	
	Optical Sound Sync	Yes	
	Sound Optimizer	3 modes (Normal, Wall-Mount Type, Stand Type)	
	Clear Voice	Yes	



LG Electronics Canada, Inc.  
20 Norelco Drive  
North York, ON M9L 2X6

Customer Service: 1 866 542 2623  
B2B Sales: 1 888 824 6211

All screen images are simulated. Dimensions and weights are approximate. Design, features and specifications subject to change without notice.

© Copyright 2015 LG Electronics Canada, Inc. All Rights Reserved. "LG Life's Good" is a registered trademark of LG Corp. XD Engine is a registered trademark of LG Electronics, Inc. HealthView and EcoSmart are trademarks of LG Corp. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. SRS and the SRS symbol, TruSurround XT and WOWare trademarks or registered trademarks of SRS Labs, Inc. VESA is a trademark of Video Electronics Standards Association. All other product and brand names are trademarks or registered trademarks of their respective companies.

# Edge LED Commercial Lite Integrated HDTV



**49LX341C**  
49" class (48.5" diagonal)

LG provides the ability to facilitate communications between businesses and their target audience. With our expanded line of affordable commercial display solutions, LG is aggressively meeting clients' demands for digital out-of-home technologies.



The LX341C is a great solution for many different application settings ranging from hospitality, restaurants, education, and beyond... You will discover new features and benefits that includes new welcome screen and welcome video options, self diagnostics via USB device, 90 degree straight edge corners, new screen sizes and more!

## FOR EFFICIENT MANAGEMENT

**USB CLONING**  
The USB Cloning feature allows you to simply copy the TV settings onto all TVs using a USB stick, a process that is fully automated to save time without having to set each TV one by one.



**WELCOME SCREEN**  
Welcome visitors with a warm greeting message that includes your business name/logo and now with a video or both.



**MULTI IR**  
Multi IR function eliminates the remote control signal interference between TVs in multiple dwelling rooms. This system will work using the same LG TV model. (Optional 124-213-10 required)



**RS232C CONTROL**  
Via the TV's RS-232C port, you can remotely control multiple TVs' power and volume settings simultaneously.



## FOR CONVENIENCE & ENTERTAINMENT

**EXTERNAL SPEAKER OUT**  
Enhance the entertainment experience by adding an additional speaker, visitors to listen to and control the TV audio from anywhere in your business area, including restrooms.



**USB 2.0**  
You can play images and videos from and record TV programs to external storage devices. Immediate recording & reserved recording options are available.

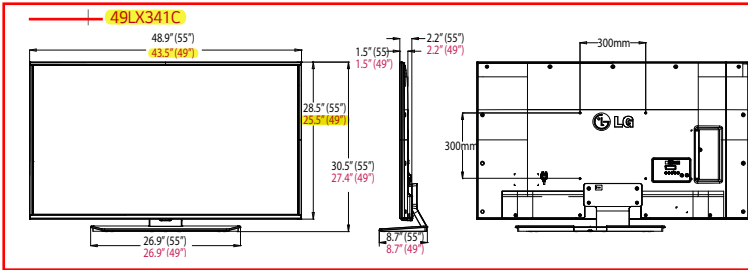
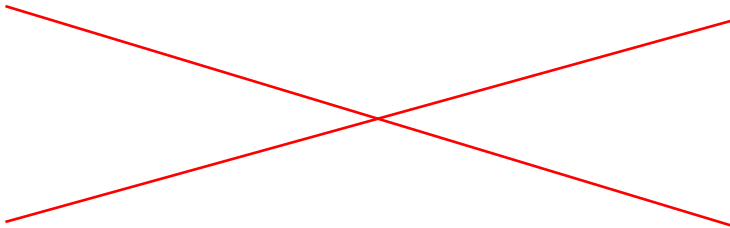


# Edge LED Commercial Lite Integrated HDTV

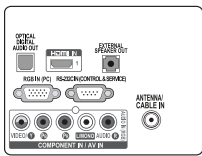


## 49LX341C

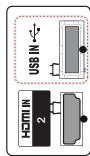
49" class (48.5" diagonal)



Rear Jack Panel



Side Jack Panel



PANEL	MODEL	65" class (64.53" diagonal)	60" class (60.10" diagonal)	55" class (54.64" diagonal)	49" class (48.5" diagonal)
PANEL	Panel Size	65" class (64.53" diagonal)	60" class (60.10" diagonal)	55" class (54.64" diagonal)	49" class (48.5" diagonal)
	Backlight Type	Edge			
	Resolution	1920 x 1080 (FHD)			
	Brightness	350cd/m <sup>2</sup>		330cd/m <sup>2</sup>	300cd/m <sup>2</sup>
	Dynamic Contrast Ratio	1,000,000:1			
	Contrast Ratio	1400 : 1	5000:1	1200:1	
	Viewing Angle	178°/178°	176° /176°	178°/178°	178°/178°
	Response Time (G to G)	8ms		9ms	
	Frame Rate	T240Hz		60 Hz	
	BROAD-CASTING SYSTEM	Analog	Yes (NTSC)		
Digital		ATSC/QAM/VSB			
VIDEO	Triple XD Engine	Yes			
	Dynamic Colour Enhancer	Yes			
	Real Cinema 24p (3.3 pull down)	Yes			
	Aspect Ratio	6 modes ( 16:9, Just scan,Set by program, 4:3,Zoom,Cinema zoom1)			
AUDIO	Audio Output	10W + 10W			
	Speaker System	2.0 ch			
	Sound Mode	6 modes (Standard, News, Music, Cinema, Sport, Game)			
	Optical Sound Sync	Yes			
	Sound Optimizer	3 modes (Normal, Wall-Mount Type, Stand Type)			
Clear Voice	Yes				

FEATURES	MODEL	65" class (64.53" diagonal)	60" class (60.10" diagonal)	55" class (54.64" diagonal)	49LX341C
FEATURES	Remote Diagnosis	Yes (Self Diagnosis (USB))			
	HDMI-CEC	Yes (ARC not supported)			
	HTNG-CEC	Yes			
	Menu	PDM only			
	Lock mode	Yes			
	External Speaker Out	Yes			
	RJP Interface	(Variable/Fixed, 3.5mm, Stereo, Single ended Type(GND,L+,R+), 1W w/8Ω)			
	RJP Compatibility	Yes (RS232C,HDMI)			
	RJP Compatibility	Teleadapt (RS232C), Teleadapt/Guestlink (HDMI CEC)			
	USB	Yes (USB 2.0)			
	USB Auto Play back	Yes			
	Moving Picture Playback (SD/HD/Plus HD)	Divx HD			
	Picture	JPEG			
	Audio Codec	MP3, AC3, MPEG, AAC,HEAAC, CDDA, LPCM			
	USB Cloning	Yes			
	Multi IR Code	Yes			
	Welcome Screen (Splash Image)	Yes			
	Auto Off/Auto Sleep	Yes			
	Motion Eye Care	Yes			
	Kensington Lock	Yes (Stand)			
INTERFACE	HDMI In	2 (1 Rear, 1 Side)			
	USB (2.0)	1			
	RF In	1			
	AV In	1 (Sharing with Component in)			
	Component in (Y,Pb,Pr) + Audio	1			
	Digital Audio Out (Coaxial / Optical)	1 (Optical)			
	HDMI/HDCP Input	1			
	RGB In (D-sub 15pin) - PC	1			
	PC Audio Input	1 (Sharing with Component Audio)			
	RS-232C	1 (D-Sub 9pin)			
ACCESSORIES	External Speaker Out (phone jack)	1 (Variable/Fixed/Line Out, 3.5mm, Stereo, Single ended Type (GND,L+,R+), 1W with 8Ω)			
	Cable	Power cord (1.55m, Angle Type)			
POWER	Manual / ESG	Manual			
	Voltage, Hz	100 - 240V, 50/60Hz			
	Typical (Based on Energy Star 7.0)	66W	63W	54W	46W
CABINET	Stand-by	0.5W ↓			
	Bezel Colour	Black			
	Bezel Width (Left/Right, Upper, Bottom)	16.1mm, 15.1mm, 21.8mm	15.1mm, 12.7mm, 17.8mm		14.9mm, 12.5mm, 17.6mm
	Bezel Width-OFF (Left/Right, Upper, Bottom)	13.6mm, 12.6mm, 19.3mm	14.1mm, 10.9mm, 15.3mm		12.6mm, 10.2mm, 15.3mm
	VESA Compatible	300mm x 300mm			
REQUIRED LISTING (CERTIFICATION)	WxHxD (with stand)	57.5"x35.4"x11.6"	53.7"x33.2"x11.6"	48.9"x 30.5" x 8.7"	43.5"x 27.4" x 8.7"
	Weight	75.0 lbs	64.6 lbs	46.1 lbs	38.8 lbs
	WxHxD (w/o stand)	57.5"x33.4"x2.3"	53.7"x31.2"x2.2"	48.9"x 28.5" x 2.2"	43.5"x 25.5" x 2.2"
	Weight	63.5 lbs	53.1 lbs	31.7 lbs	31.7 lbs
OTHER	WxHxD (carton)	60.9"x38.2"x6.3"	58.4"x 35.7" x 6.3"	52.4"x 31.9" x 6.0"	47.1"x 29.9" x 5.6"
	Weight	90.4 lbs	76.9 lbs	54.9 lbs	46.3 lbs
WARRANTY	Safety	UL			
	EMC	FCC			
OTHER	ETC.	RoHS, cUL, NOM, Energy Star 7.0			
	UPC	719192 198074	719192 198081	719192 198098	719192 198104
WARRANTY	2-Year Limited Warranty Parts/Labour/Backlight   Extended warranty options are also available				



LG Electronics Canada, Inc.  
20 Norelco Drive  
North York, ON M9L 2X6

Customer Service: 1 866 542 2623  
B2B Sales: 1 888 824 6211

All screen images are simulated. Dimensions and weights are approximate. Design, features and specifications subject to change without notice.

© Copyright 2015 LG Electronics Canada, Inc. All Rights Reserved. "LG Life's Good" is a registered trademark of LG Corp. XD Engine is a registered trademark of LG Electronics, Inc. HealthView and EcoSmart are trademarks of LG Corp. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. SRS and the SRS symbol, TruSurround XT and WOWare trademarks or registered trademarks of SRS Labs, Inc. VESAI is a trademark of Video Electronics Standards Association All other product and brand names are trademarks or registered trademarks of their respective companies.



**Steam Food Cookers**  
**Models: DFW-150, DFW-250,**  
**DFWT-150, DFWT-250,**  
**DFWF-250**

## PITA PIT WARMER



**DFW-150**



The Deluxe Food Cooker produces steam using plain tap water for quick heating and reconstituting of food items.

Simple push-button action delivers a fully adjustable impulse of steam. Because the amount of steam is consistent, it removes the guesswork and produces a uniform finished product from one operator to the next.

The Deluxe Food Cooker is manufactured from the finest materials available and assembled to Roundup's strict quality standards. All units are tested at the factory to ensure dependable trouble-free operation.

*NOTE: Units with a direct water hookup require a water pressure regulator. The psi should be between 20 and 30.*

### Features:

- 0-99 minute timed steam cooking with instant warming button.
- Non-clogging.
- Uses plain tap water.
- Models available with either a self-contained water reservoir or direct water hookup.
- Safety steam release valve.





**Steam Food Cookers**  
**Models: DFW-150, DFW-250,**  
**DFWT-150, DFWT-250,**  
**DFWF-250**

Dimensions			
Model & Mfg. No.	Width (A)	Depth (B)	Height (C)
With Self-Contained Water Tank			
DFW-150 9100104	16 5/8" (422 mm)	17 1/4" (438 mm)	8 3/4" (222 mm)
DFW-150 9100105			
DFW-150 9100106			
DFWT-150 9100124	20" (508 mm)	17 1/4" (438 mm)	8 3/4" (222 mm)
DFWT-150 9100126			
With Direct Water Hookup			
DFW-250 9100114	16 5/8" (422 mm)	17 1/4" (438 mm)	8 1/4" (210 mm)
DFW-250 9100116			
DFWT-250 9100134	20" (508 mm)	17 1/4" (438 mm)	8 3/4" (222 mm)
DFWT-250 9100136			
DFWF-250 9100146	26 7/8" (683 mm)	17 1/4" (438 mm)	9 3/8" (238 mm)
DFWF-250 9100156			

Electrical Ratings & Plug Configurations						
Model & Mfg. No.	Volts	Watts	Amp.	Hz.	Plug Description	Plug Configuration
With Self-Contained Water Tank						
DFW-150 9100104	120	1800	15	50/60	NEMA 5-15P 15 Amp., 120 Volt	
DFW-150 9100105	120	1500	12.5	50/60		
DFW-150 9100106	230	2800	12.2	50/60		
DFWT-150 9100124	120	1800	15	50/60	NEMA 5-15P 15 Amp., 120 Volt	
DFWT-150 9100126	230	2800	12.2	50/60	CEE 7/7 16 Amp., 250 Volt	
With Direct Water Hookup						
DFW-250 9100114	120	1800	15	50/60	NEMA 5-15P, 15 Amp., 120 Volt	
DFW-250 9100116	230	2800	12.2	50/60	CEE 7/7 16 Amp., 250 Volt	
DFWT-250 9100134	120	1800	15	50/60	NEMA 5-15P, 15 Amp., 120 Volt	
DFWT-250 9100136	230	2800	12.2	50/60	CEE 7/7 16 Amp., 250 Volt	
DFWF-250 9100146	208	3300	15.9	50/60	NEMA 6-20P, 20 Amp., 250 Volt	
DFWF-250 9100156	230	3300	14.4	50/60	CEE 7/7 16 Amp., 250 Volt	
Capacities						
<b>DFW Series</b>	2 7/8" (73 mm) deep 1/2-size steam table pan					
<b>DFWT Series</b>	2 7/8" (73 mm) deep 2/3-size steam table pan					
<b>DFWF Series</b>	4" (102 mm) deep full-size steam table pan					



A.J. Antunes & Co.  
 Headquarters/Manufacturing  
 180 Kehoe Boulevard  
 Carol Stream, Illinois 60188 USA  
 Phone (630) 784-1000  
 Toll Free (800) 253-2991  
 Fax: (630) 784-1650

Antunes Equipment  
 Manufacturing (Suzhou) Ltd.,  
 9 Hou Ju Road, Building #24,  
 S&T Park, SND  
 Suzhou, Jiangsu, China 215011  
 Phone: 86-512-6841-3637  
 Fax: 86-512-6841-3907



STAR MODEL PST14DPP WILL REPLACE  
STAR MODEL GR14STEPP IN FALL 2015

**STAR** Star Manufacturing



## PRO-MAX® 2.0 SMOOTH PITA TOASTER Model PST14DPP

### Features/Benefits:

- ★ Expand your menu with Star's Pro-Max specialty two sided pita toaster. Free floating tops with no cumbersome linkage allows the preparation pita bread and other menu items quickly and easily. Top platens lift parallel to bottom platen and will self-adjust to the product thickness the first three inches of platen lift.
- ★ Split top design provides left and right capability to prepare menu items at different order times.
- ★ Electronically controlled temperature provides:
  - Even top and bottom surface temperature distribution.
  - Fast recovery.
  - Even toasting of menu items on top and bottom.
  - Low energy usage.
- ★ Left and right, easy to read digital time and temperature displays. Four (4) selection buttons on each side are independently programmable to provide multiple menu item and operational flexibility. Temperature is programmable from 250°F (79°C) to 550°F (302°C).
- ★ Easy to clean.
  - Polished platen surface finish is easy to clean and reduce menu items sticking.
  - Stainless steel burn guard system allows access to easily clean top and bottom surfaces.
  - Front grease trough and grease drawer provides easy and safe access.
- ★ Durable, reliable, and long lasting design.
  - Heavy duty aluminum platens provide superior heat performance and long life.
  - Counter balance hinge system that has been a proven design for over 10 years.
  - Heavy duty stainless steel construction.
  - Minimal fasteners.
  - Water resistant electronic wire enclosure.
  - No cumbersome linkage to maintain.



Model PST14DPP



### Applications:

Star's two-sided pita toaster can prepare pita bread and many other menu items quickly and easily. Split-top design provides maximum menu flexibility and cooking production.

### Quality Construction:

The rugged body is constructed of 18 gauge stainless steel. The toaster is supplied with grease trough and stainless steel grease drawer. The counter balance mechanism is constructed from hardened aluminum. The 6 foot lead-in cord has a special covering that is resistant to water and oil and the wires are protected by metallic braiding. Cord comes complete with plug (see typical specifications).

### Warranty:

Two-sided grill is covered by Star's one year parts and labor warranty.



Star Manufacturing - 10 Sunnen Drive - P.O. Box 430129 - St. Louis, MO 63143-3800  
Phone: (314) 678-6303 - FAX: (314) 781-5445 - www.star-mfg.com

S275/09-15

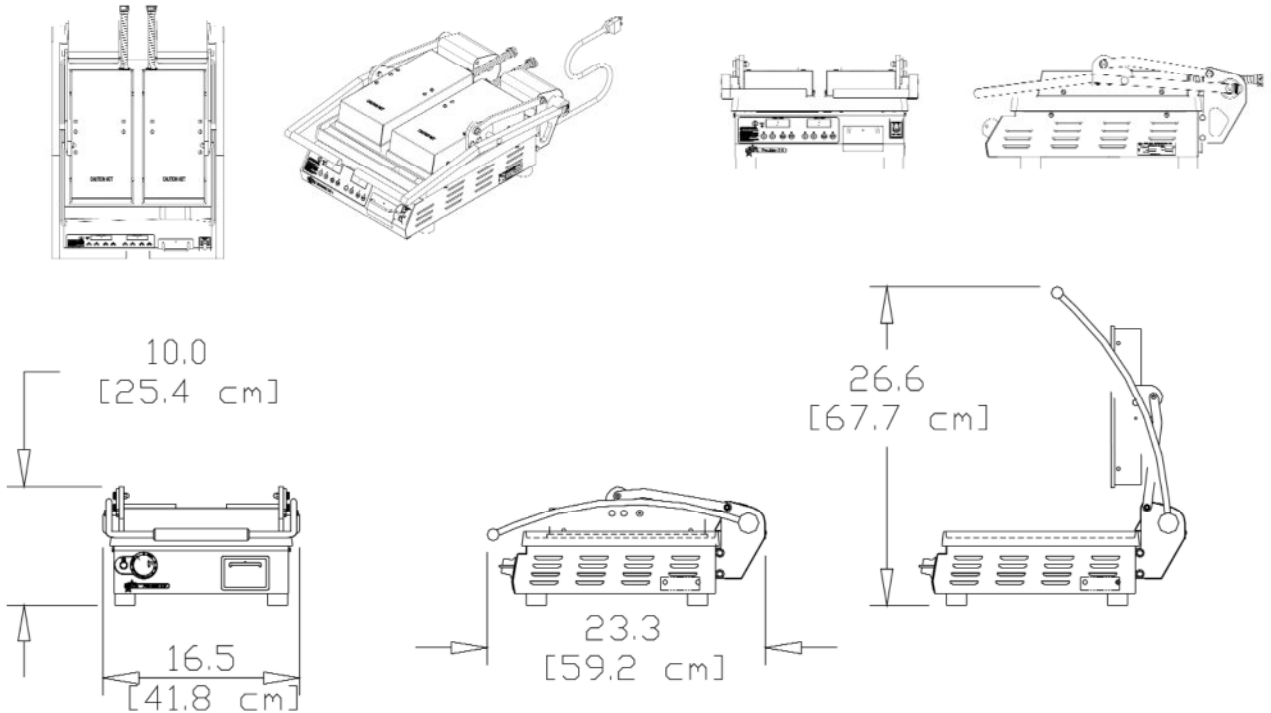
Pro-Max® Smooth Specialty Pita Toaster



**STAR** Star Manufacturing

Pro-Max® Smooth Specialty Pita Toaster

## PRO-MAX® 2.0 SMOOTH PITA TOASTER Model PST14DPP



EXTERIOR DIMENSIONS - ALL MODELS

### Model and Specifications

Model No.	Grid Surface	Width Inches (cm)	Depth Inches (cm)	Closed Inches (cm)	Open Inches (cm)	Voltage	Wattage	Amps	NEMA Plug	Approximate Weight	
										Shipping lbs. (kg)	Installed lbs. (kg)
PST14DPP	Alum.	16.8 (42.6)	23.125 (58.7)	12.9 (32.8)	29.7 (75.4)	240			6-15P	81	68

### Typical Specifications

Pita toaster is constructed with a stainless steel body and aluminum smooth platens. Designed with electric controls for precise temperature control and digital timer for select menu items. Toasting height between platens is up to 3" with hinge system providing 3-4 pounds of pressure to the cooking product placed on bottom platen. Metal sheathed tubular elements and non-skid feet are standard. Unit has pilot light, six foot power cord with NEMA plug. Printed in the U.S.A.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Star Manufacturing exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

Star Manufacturing - 10 Sunnen Drive - P.O. Box 430129 - St. Louis, MO  
Phone: (314) 678-6303 - FAX: (314) 781-5445 - www.star-mfg.com



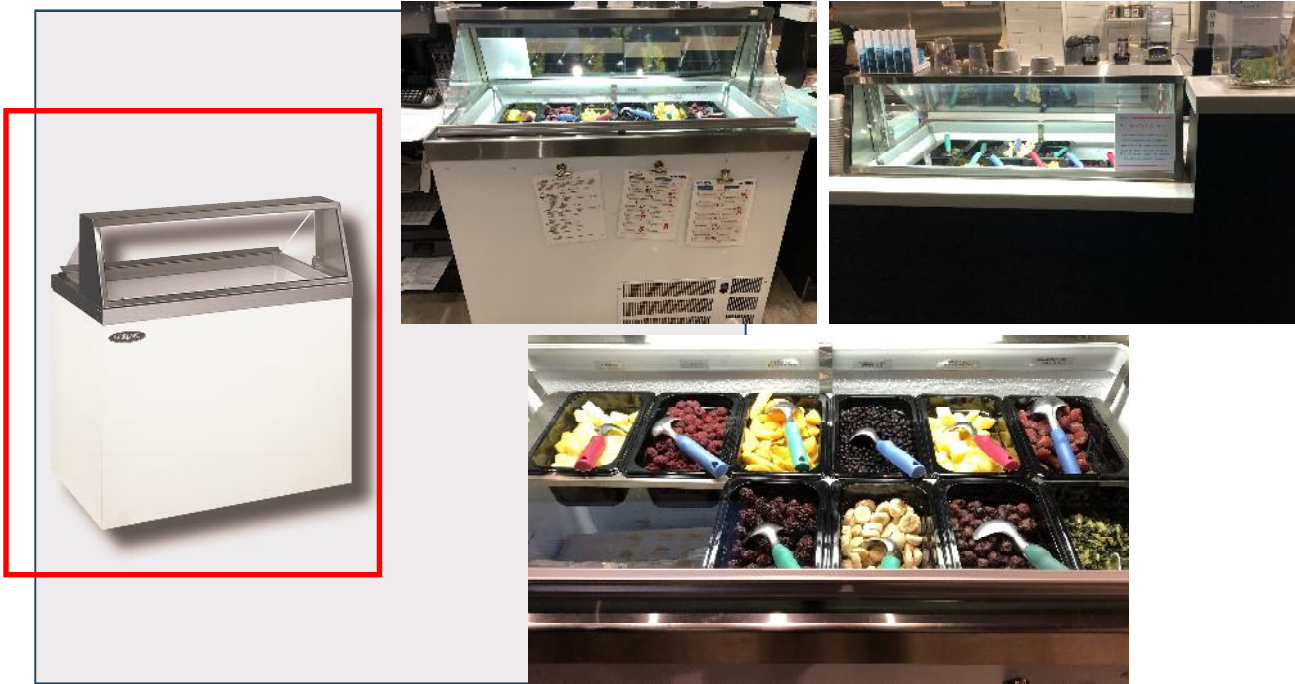
NOR-LAKE, INCORPORATED  
727 Second Street  
P.O. Box 248  
Hudson, Wisconsin 54016

800-955-5253  
715-386-2323  
800-388-5253 Service  
866-961-5253 Parts  
715-386-4291 FAX  
www.norlake.com

NORLAKE

# FRUIT FREEZER

## ICE CREAM DIPPING Cabinet



### SPECIFICATIONS FOR: HF040, HF100,

Available in: standard profile/angled glass; standard profile/curved glass; low profile/angled glass

- **Finish:** 24 gauge white painted galvanized steel interior and exterior
- **Insulation:** 2-1/4" foamed-in-place "zero ODP" urethane insulation
- **Hardware:** Stainless steel top and attached superstructure with tempered plate glass viewing window, stainless steel serving deck. Heavy-duty epoxy-coated wire can support racks, transparent acrylic dipping compartment lids are hinged with a full length handle.
- **Electrical:** 115 volt, 60 HZ, 1 phase with cord and plug
- **Refrigeration:** Cold wall evaporator. Temperature range: 5°F to -5°F (-15°C to -21°C)
- **Approvals:** UL, C-UL, NSF listed \*\*

### STANDARD FEATURES

- Equipped with levelling legs to correct unlevel flooring situations
- Rear air intake and discharge
- Drain with hose connection
- Brilliant, interior fluorescent lighting
- Independent on/off compressor and light switch
- Warranties: 2 year parts and labor, 5 year compressor

### OPTIONAL FEATURES\*

- Rear service door for HF100, HF160 and HF230 models
- Removable can holders with white overnight can covers
- Dipper well
- Removable frost shields
- Legs, casters
- Lid locking kit (less lock)
- Flavor identification tabs



Nor-Lake, Inc.  
Registered to ISO 9001:2008  
File No. 10001816

\*Most options are available one week from receipt of order. Please contact us for specific questions.

\*\*C-UL is Underwriters Laboratories Safety Certification Mark which indicates that UL has tested the equipment to applicable CSA Standards.

\*\*UL Sanitation is Underwriters Laboratories Sanitation Mark which indicates that UL has tested the equipment to applicable NSF Standards.

ICE CREAM DIPPING/DISPLAY MERCHANDISERS

SPECIFICATION  
GUIDE

POSSIBLE UNIT FOR SMALL SPACES

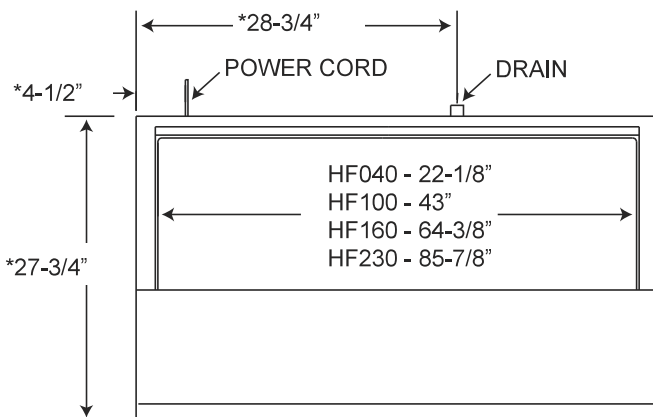
STANDARD UNIT

STANDARD MODEL SPECIFICATIONS

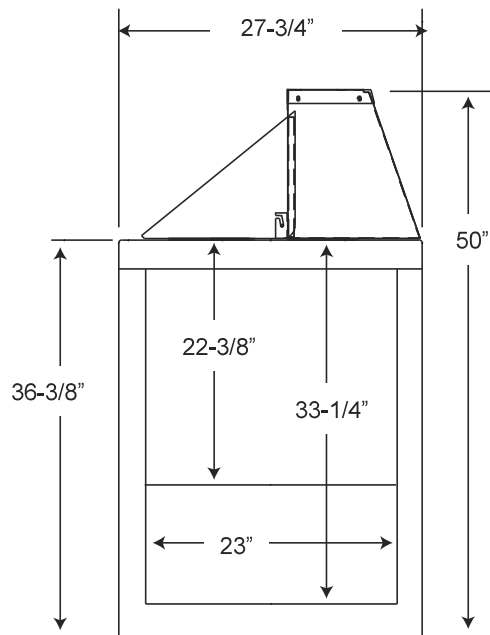
Model	HF040-WWG/0	HF100-WWG/0	HF160-WWG/0	HF230-WWG/0
Crated Height	60"	60"	60"	60"
Crated Width	45"	57"	80-1/2"	104"
Crated Depth	40"	40"	40"	40"
Crated Weight (lbs.)	240	370	495	600
Interior Display Height	22-3/8"	22-3/8"	22-3/8"	22-3/8"
Interior Storage Height	*	10-7/8"	10-7/8"	10-7/8"
Interior Display Width	22-1/8"	43"	64-3/8"	85-7/8"
Interior Storage Width	*	19-1/2"	40-7/8"	62-3/8"
Interior Depth	23"	23"	23"	23"
Can Capacity display **	4	8	12	16
Can Capacity storage **	0	4	8	12
Overall Height	50"	50"	50"	50"
Overall Width	26-1/2"	47-3/4"	69-1/4"	90-3/4"
Overall Depth	27-3/4"	27-3/4"	27-3/4"	27-3/4"
Gross Cubage (ft. <sup>3</sup> )	3.5	9.6	16	22.5
Number of Legs or Casters (optional)	4	4	4	4
Condensing Unit Size	1/3	1/2	1/2	3/4
Refrigerant	R-134a	R-134a	R-404A	R-404A
Electrical Characteristics	115/60/1	115/60/1	115/60/1	115/60/1
Cord and Plug Furnished	Yes	Yes	Yes	Yes
Maximum Fuse Size	15	15	15	15
Nema Plug Configuration	5-15P	5-15P	5-15P	5-15P
Total Amp Draw	7.4	7.5	9.7	11.5

\* Storage compartment not available on this model.

\*\* Capacities in 9-1/2" diameter, 3 gallon cans.



\*DISTANCES ARE STANDARD ON ALL MODELS





Yogurt-Matic 920



**EXAMPLES OF 1/4" WATERLINE CONNECTIONS REQUIRED FOR UNIT.**



Versión española en preparación  
Technical Data  
Yogurt-Matic YM-920

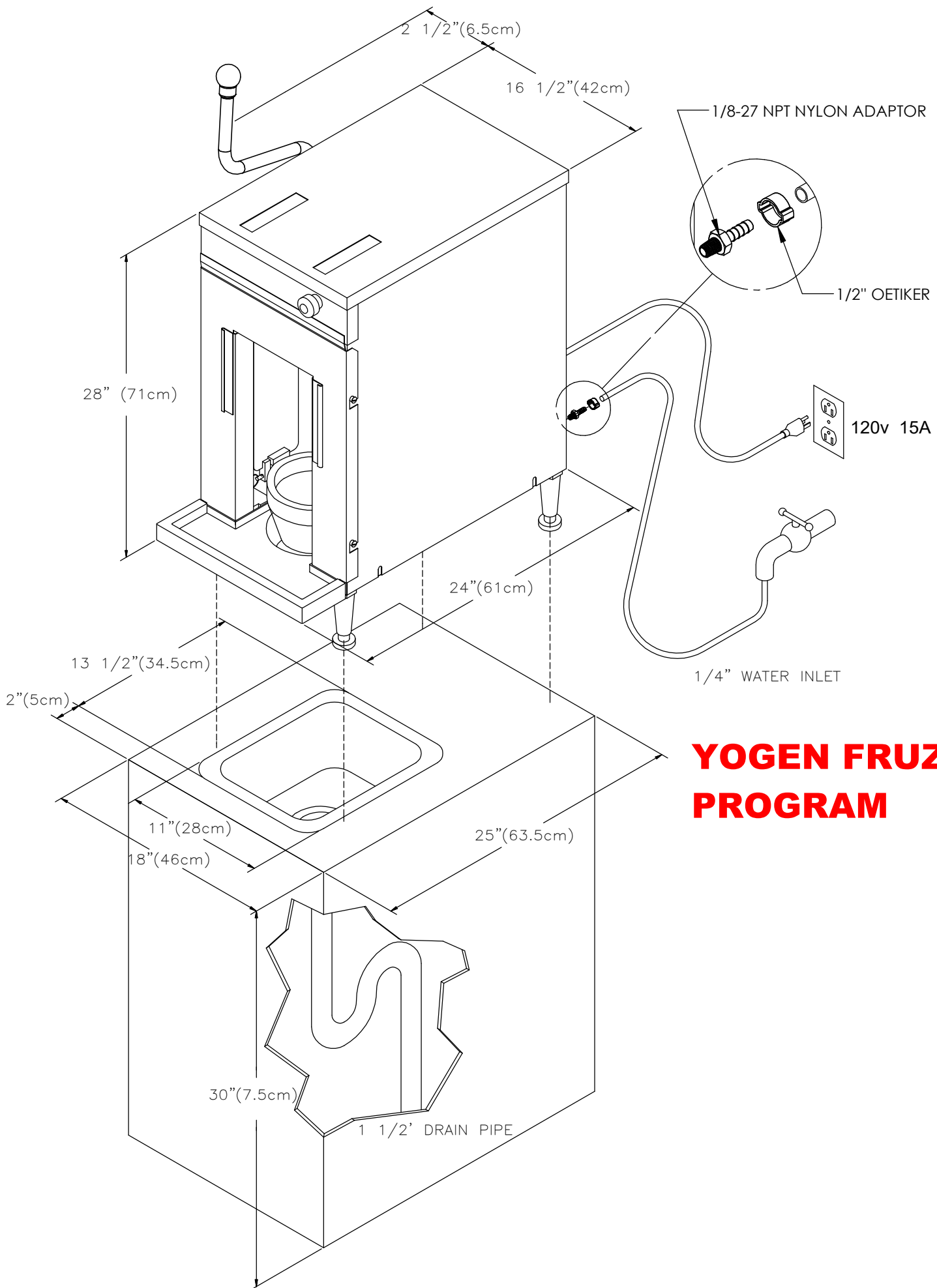
## YOGEN FRUZ PROGRAM

### Specifications

Exterior Finish:	Durable Stainless Steel
Vertically Guided Mixing System:	Linear Teflon bearing (industrial grade)
Mixing cone:	Commercial Grade Sanitary Plastic
Rinsing System: (built-in)	Twin Spray
Electrical*:	15a; 115v/60Hz; single phase; 1hp
Quality Control:	All parts are factory tested prior to shipping
Shipping weight:	165 lbs (74.8 kg)
Height:	28 in. (71.2 cm)
Width:	16.5 in. (44.9 cm)
Depth:	24 in. (61 cm)

Specifications are subject to change without notice





**YOGEN FRUZ PROGRAM**

RECOMMENDED INSTALLATION



**TRUE FOOD SERVICE  
EQUIPMENT, INC.**

2001 East Terra Lane • O'Fallon, Missouri 63366  
(636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl Fax# (001)636-272-7546  
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

**# 1**

Model:

**TSSU-72-30M-B-ST**

**Food Prep Table:**

*Mega-Top Solid Door Sandwich/Salad Unit*



**TSSU-72-30M-B-ST**

- ▶ True's salad/sandwich units are designed with enduring quality that protects your long term investment.
- ▶ Oversized, environmentally friendly (134A), patented forced-air refrigeration system holds 33°F to 41°F (.5°C to 5°C).
- ▶ Complies with and listed under ANSI/NSF-7-1997-6.3.
- ▶ All stainless steel front, top and ends. Matching aluminum finished back.
- ▶ Stainless steel, patented, foam insulated lids and hoods keep pan temperatures colder, lock in freshness and minimize condensation. Removable for easy cleaning.
- ▶ 87/8" (226 mm) deep, 1/2" (13 mm) thick, full length removable cutting board included. Sanitary, high density, NSF approved white polyethylene provides tough preparation surface.
- ▶ Heavy duty PVC coated wire shelves.
- ▶ Foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).



Scan code for video

**ROUGH-IN DATA**

Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number). Specifications subject to change without notice.

Model	Doors	Shelves	Pans (top)	Cabinet Dimensions (inches) (mm)			HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
				L	D†	H*						
TSSU-72-30M-B-ST	3	6	30	723/8 1839	341/8 867	403/8 1026	1/2 1/2	115/60/1 230-240/50/1	10.3 6.7	5-15P ▲	7 2.13	470 214

† Depth does not include 1" (26 mm) for rear bumpers.

\* Height does not include 6 1/4" (159 mm) for castors or 6" (153 mm) for optional legs.

▲ Plug type varies by country.

	<b>APPROVALS:</b>	<b>AVAILABLE AT:</b>
3/13	Printed in U.S.A.	

Model:  
TSSU-72-30M-B-ST

# Food Prep Table: Mega-Top Solid Door Sandwich/Salad Unit



## STANDARD FEATURES

### DESIGN

- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

### REFRIGERATION SYSTEM

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Oversized, factory balanced refrigeration system with guided airflow to provide uniform temperature in food pans and cabinet interior.
- Patented forced-air design holds 33°F to 41°F (5°C to 5°C) product temperature in food pans and cabinet interior. Complies with and listed under ANSI/NSF-7-1997-6.3.
- Sealed, cast iron, self-lubricating evaporator fan motor(s) and larger fan blades give True sandwich/salad units a more efficient, low velocity, high volume airflow design.
- Condensing unit access in back of cabinet, slides out for easy maintenance.

### CABINET CONSTRUCTION

- Exterior - stainless steel front, top and ends. Matching aluminum finished back.
- Interior - attractive, NSF approved, white aluminum liner. Stainless steel floor with coved corners.
- Insulation - entire cabinet structure and solid doors are foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- 5" (127 mm) diameter stem castors - locks provided on front set. 36" (915 mm) work surface height.

### DOORS

- Stainless steel exterior with white aluminum liner to match cabinet interior.

- Each door fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Positive seal self-closing door(s) with 90° stay open feature. Door(s) swing within cabinet dimensions.
- Magnetic door gasket(s) of one piece construction, removable without tools for ease of cleaning.

### SHELVING

- Six (6) adjustable, heavy duty PVC coated wire shelves. Two (2) right and two (2) left door shelf dimensions are 219/16"L x 16"D (548 mm x 407 mm). Two (2) center door shelf dimensions are 23 1/2"L x 16"D (597 mm x 407 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on 1/2" (13 mm) increments.

### MODEL FEATURES

- Evaporator is epoxy coated to eliminate the potential of corrosion.
- 87/8" (226 mm) deep, 1/2" (13 mm) thick, full length removable cutting board. Sanitary, high-density, NSF approved white polyethylene provides tough preparation surface.
- Stainless steel, patented, foam insulated lids and hood keep pan temperatures colder, lock in freshness and minimize condensation. Removable for easy cleaning.
- Comes standard with 30 (1/6size) 67/8"L x 6 1/4"W x 4"D (175 mm x 159 mm x 102 mm) clear polycarbonate, NSF approved, food pans in countertop prep area. Also accommodates 6" (153 mm) and 8" (204 mm) deep food pans (supplied by others).
- Countertop pan opening designed to fit varying size pan configurations with available pan divider bars. Varying size pans supplied by others.
- NSF-7 compliant for open food product.

### ELECTRICAL

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.



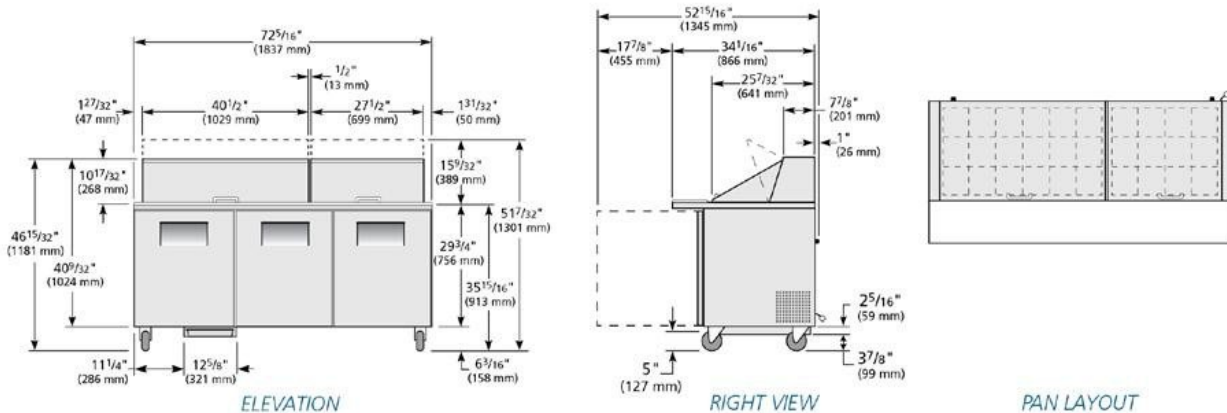
115/60/1  
NEMA-5-15R

### OPTIONAL FEATURES/ACCESSORIES

Upcharge and lead times may apply.

- 230 - 240V / 50 Hz.
- 6" (153 mm) standard legs.
- 6" (153 mm) seismic/flanged legs.
- 2 1/2" (64 mm) diameter castors.
- Barrel locks (factory installed). Requires one per door.
- Additional shelves.
- Single overshelf.
- Double overshelf.
- Flat lid.
- Sneezeguard.
- 87/8" (226 mm) deep, 1/2" (13 mm) thick, composite cutting board.
- Crumb catcher. Requires crumb catcher cutting board for proper installation.
- Pan dividers.
- Exterior rectangular digital temperature display (factory installed).
- ADA compliant model with 34" (864 mm) work surface height.
- Remote cabinets (condensing unit supplied by others; system comes standard with 404A expansion valve and requires R404A refrigerant). Consult factory technical service department for BTU information. All remote units must be hard wired during installation.

## PLAN VIEW



**WARRANTY**  
Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER  
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
TSSU-72-30M-B-ST	TFN056E	TFN048S	TFN056P	TFN0563	

## TRUE FOOD SERVICE EQUIPMENT

2001 East Terra Lane • O'Fallon, Missouri 63366 • (636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl. Fax# (001)636-272-7546 • www.truemfg.com

## Model ND-2 Specification **# 2**

The model ND-2 is an exhaust only canopy hood rated for all types of cooking equipment. The hood shall have the size, shape and performance specified on drawings.

Construction shall be type 430 stainless steel, with a #3 or #4 polish where exposed. The manufacturer, ETL and NSF shall determine the individual component construction. Construction shall be dependent on the structural application to minimize distortion and other defects. All seams, joints and penetrations of the hood enclosure to the lower outermost perimeter that directs and captures grease-laden vapor and exhaust gases shall have a liquid-tight continuous external weld in accordance with NFPA 96. The hood shall be wall type with a minimum of four connections for hanger rods. Corner hanging angles have a 5/8" x 1-1/2" slot pre-punched at the factory, allowing hanging rods to be used for quick and safe installation..

The hood shall be furnished with U.L. classified filters, supplied in size and quantity as required by ventilator. The filters shall extend the full length of the hood and the filler panels shall not be more than 6" in width.

The hood manufacturer shall supply complete computer generated submittal drawings including hood sections view(s) and hood plan view(s). These drawings must be available to the engineer, architect and owner for their use in construction, operation and maintenance.

Exhaust duct collar to be 4" high with 1" flange. Duct sizes, CFM and static pressure requirements shall be as shown on drawings. Static pressure requirements shall be precise and accurate; air velocity and volume information shall be accurate within 1-ft increments along the length of the ventilator.

U.L. incandescent light fixtures and globes shall be installed and pre-wired to a junction box. The light fixtures shall be installed with a maximum of 4'0" spacing on center and allow up to a 100 watt standard light bulb.

The hood shall have:

- A double wall insulated front to eliminate condensation and increase rigidity. The insulation shall have a flexural modulus of 475 EI, meet UL 181 requirements and be in accordance with NFPA 90A and 90B.
- An integral front baffle to direct grease laden vapors toward the exhaust filter bank.
- A built-in wiring chase provided for outlets and electrical controls on the hood face and shall not penetrate the capture area or require an external chase way.
- Removable grease cup for easy cleaning.

The hood shall be ETL Listed as "Exhaust Hood Without Exhaust Damper", NSF Listed and built in accordance with NFPA 96. The hood shall be listed for 450°F cooking surfaces at 150 CFM/ft, 600°F cooking surfaces at 200 CFM/ft, and 700°F cooking surfaces at 250 CFM/ft. The hood shall be ETL Listed as "Exhaust Hood Without Exhaust Damper".

### Optional Features

- Utility Cabinet
- ETL Listed Exhaust Fire Damper
- End Panels
- Enclosure Panels
- Fully Integrated Self Cleaning Options



## Suggested Specifications

### Integrated Suggested Specifications:

#### ***Aerodynamic Grease Trough***

Fully welded grease sub-assembly and a deep grease trough allows for easy cleaning. Grease trough shall be integrated into the hood to ensure smooth effluent transition from appliance to filter.

#### ***Clearance Reduction System***

Hood shall be provided with an integral front and rear clearance to combustibles reduction system.

#### ***Insulated Hood Front***

Hood shall be fabricated with a double-wall, insulated front for increased rigidity and reduced condensation.

#### ***Riser***

Hood shall accommodate up to a 16" riser.

#### ***Filter Options***

The filters shall be constructed of stainless steel and shall be NSF and UL or ETL classified. Various types of filters are available based on cooking application. For lower grease applications, filters should extract up to 85% of grease particles over 8 microns. For heavy grease applications, filters should extract up to 90% of grease particles at 2 microns.

#### ***Wiring Chase***

A built-in wiring chase shall be provided for optimal positioning of electrical controls and outlets on the front face of the hood without penetrating the capture area or requiring an external chase way.

#### ***Exhaust Rates***

ETL Listed for 450°F, 600°F and 700°F cooking surfaces (File 3054804-001 without exhaust damper; File 3054804-002 with exhaust damper), NSF Listed and built in accordance with NFPA Standard 96.

### Optional Suggested Specifications:

#### ***Compact Fluorescent Lights***

Fitted with UL Listed, pre-wired, incandescent light fixtures and tempered glass to hold up to a standard 100-watt bulb. Factory pre-wired lighting shall be accessible from the bottom of the hood. Factory installed energy efficient fluorescent bulbs to illuminate cooking surface.

#### ***CORE Protection***

Hood to ship with UL-300 integral plenum and duct fire system.

#### ***Factory Installed Energy Management System***

Factory will install the energy management system (EMS) in the hood's integral end utility cabinet. Includes factory wiring of duct temperature sensor, and pre-set timers. EMS shall be capable of reducing exhaust and supply airflow quantities by 20% using variable frequency drives.

#### ***Integral Automatic Self-Cleaning System***

Factory will install the self-cleaning system, which automatically washes down the exhaust plenum and up to 6 feet of grease duct upon fan deactivation. Cleaning cycle frequency and duration are fully adjustable.

#### ***End Panels***

Factory supplied end panels will reduce dynamic effects from cross drafts and enhance the capture and containment of the hood. Exhaust CFM can be reduced by up to 30 percent of the normal exhaust rate.

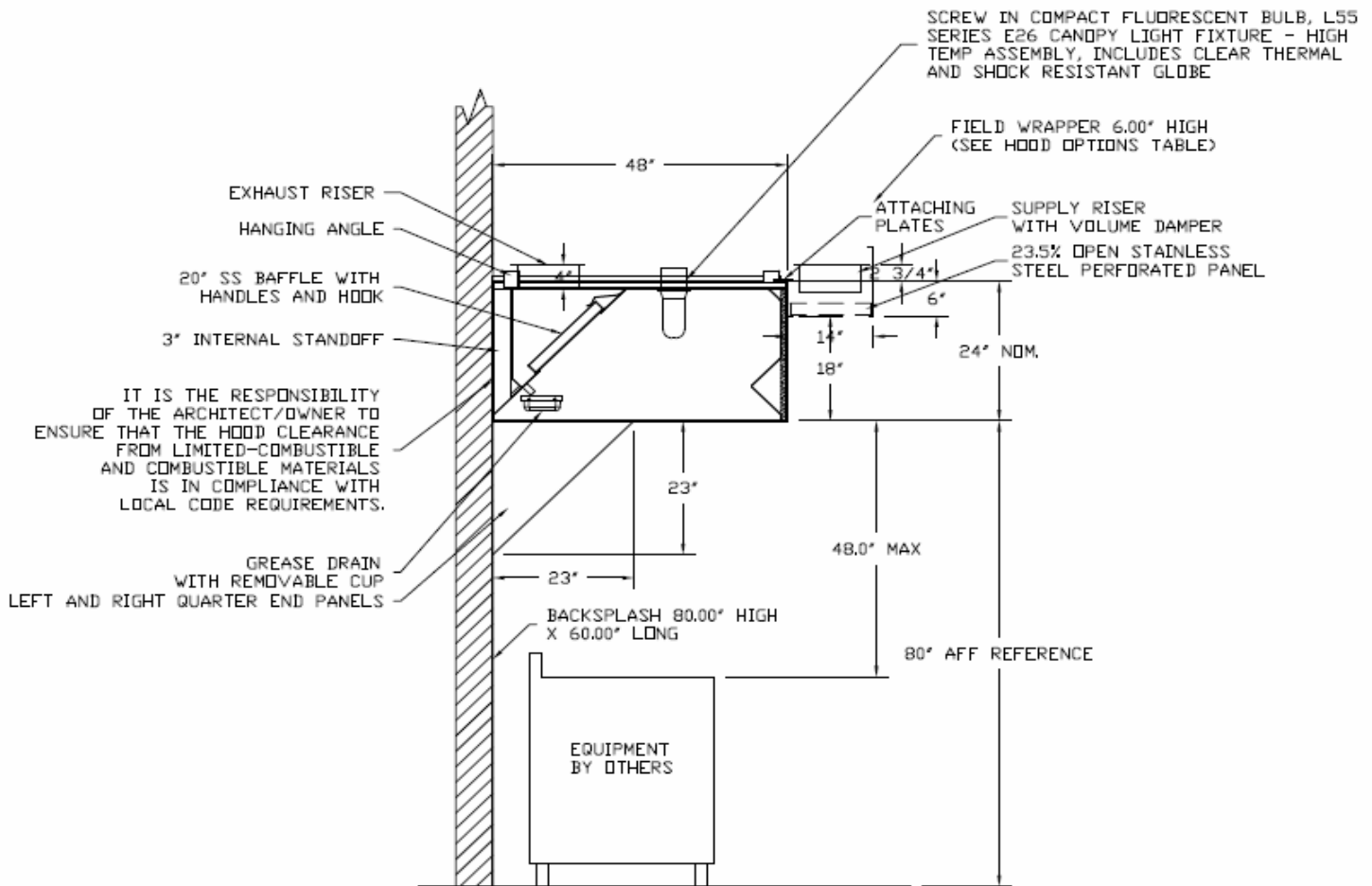
#### ***AC-PSP***

Factory will install the AC-PSP accessory which will deliver up to 80% make-up air while providing a termination point for AC air in a separate insulated plenum. Make-up air plenum shall be located closest to hood. Both the make-up air plenum and AC plenum shall contain two layers of perforated stainless steel diffuser plates to provide even air distribution.

## ND-2 Performance Values

Max Cooking Surface Temp (°F)	Minimum Exhaust CFM/Ft
<b>450</b> Ovens, Steamers, Kettles, Ranges, Griddles, and Fryers	150
<b>600</b> Gas Char-broilers, Electric Char-broilers, and Woks	200
<b>700</b> Mesquite Grills, Charcoal Char-broilers, Wood Burning Appliances	250

## Section View of Model ND-2



SECTION VIEW - MODEL 4824ND-2-PSP-F  
HOOD - #1

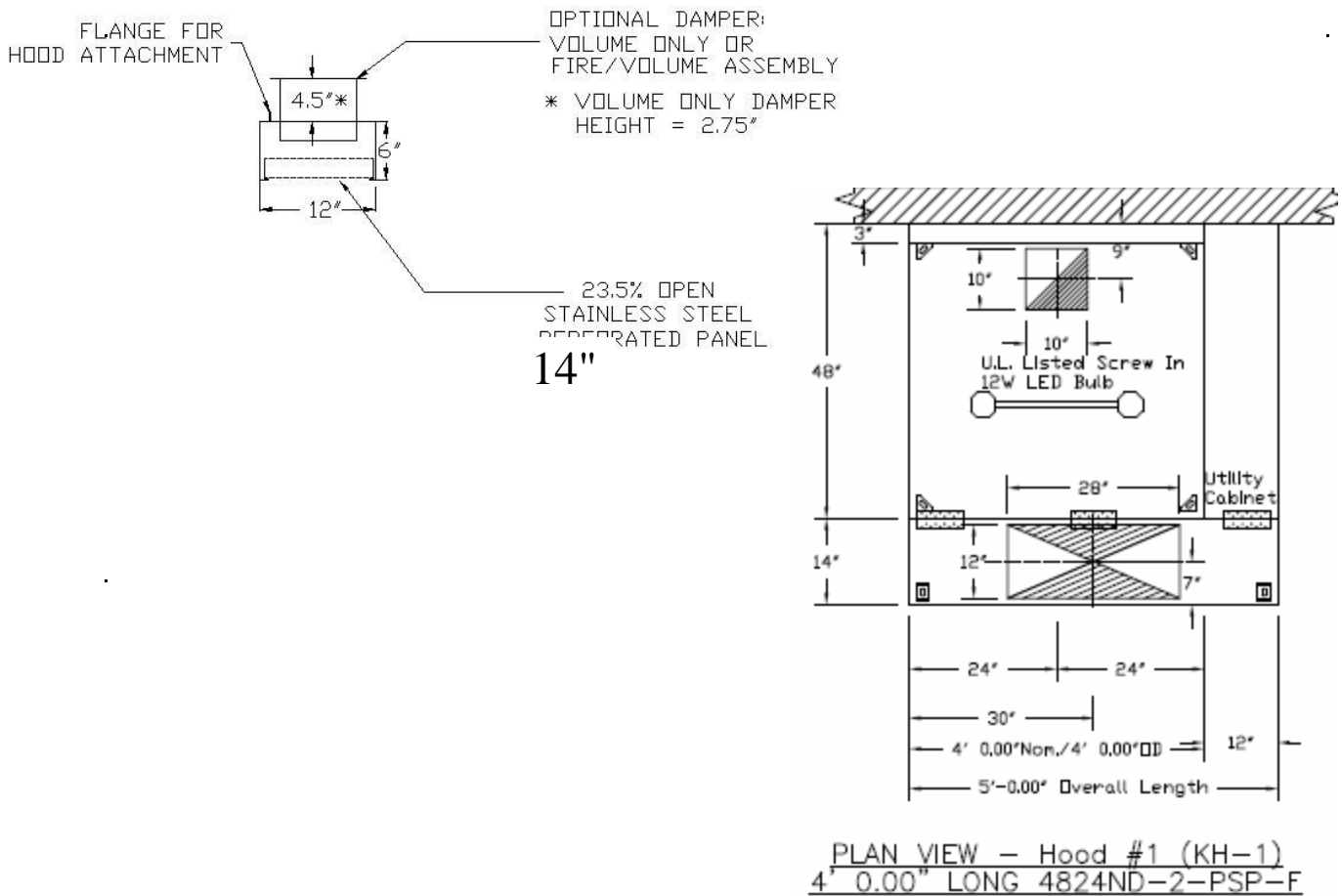
**OPTIONAL  
Perforated Supply Plenum Specification**

The Perforated Supply Plenum (PSP) shall provide make-up air through perforated stainless steel panels. All seams shall be welded and have stainless steel on exposed surfaces. Unexposed surfaces shall be constructed of aluminized steel. Perforated diffuser plates shall be included in the design and to provide even air distribution and the plenum shall be insulated to prevent condensation (optional).

**Features and Benefits:**

- Provides up to 80% make-up air
- Stainless steel construction to match the ventilation hood
- Delivers make-up air where it is needed most while minimizing the amount of air that diffuses to space
- Decreases HVAC load, thus lowering operating costs
- Directs make-up air into the hood's capture area
- Evenly distributes make-up air along the length of the hood
- Low make-up air discharge velocities, typical velocity is 140 to 160 ft. / min.
- Assists in exceptional capture and containment of cooking vapors
- Easy installation

**Section View Drawing f 12" PSP**



**HOOD INFORMATION - Job#3587540**

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM RISER(S)								HOOD CONSTRUCTION	HOOD CONFIG.	
					TOTAL EXH. CFM	WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.	S.P.		END TO END	ROW
1	KH-1	4824 ND-2	4' 0"	450 Deg.	800	9'	8'	4'		800	1600	-0.461'	430 SS Where Exposed	ALONE	ALONE

**PATENT NUMBERS**

Exhaust Hoods ND-2/BD-2/SND-2 (Canada) - CA Patent 2520435 C

**HOOD INFORMATION**

HOOD NO.	TAG	FILTER(S)					LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WGHT			
		TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM		ELECTRICAL			SWITCHES		
1	KH-1	Captrate Solo Filter	2	20"	20"	85% See Filter Spec.	2	Screw In 12W LED	NO	Right	12"x48"x24"					SC-11011028	1 Light 1 Fan	NO	338 LBS

**HOOD OPTIONS**

HOOD NO.	TAG	OPTION
1	KH-1	FIELD WRAPPER 12.00' High Front, Left, Right
		BACKSPLASH 80.00' High X 48.00' Long 430 SS Vertical
		LEFT QUARTER END PANEL 23' Top Width, 0' Bottom Width, 23' High 430 SS
		RIGHT QUARTER END PANEL 23' Top Width, 0' Bottom Width, 23' High 430 SS

**SPECIFICATION: CAPTRATE® GREASE-STOP® SOLID FILTER**

THE CAPTRATE GREASE-STOP SOLID FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

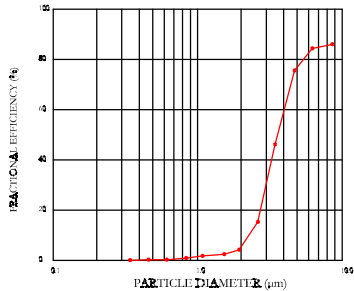
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

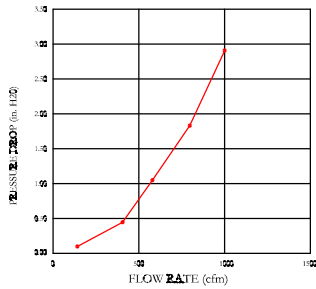
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLID WAS TESTED TO ASTM STANDARD ASTM F2519-05.

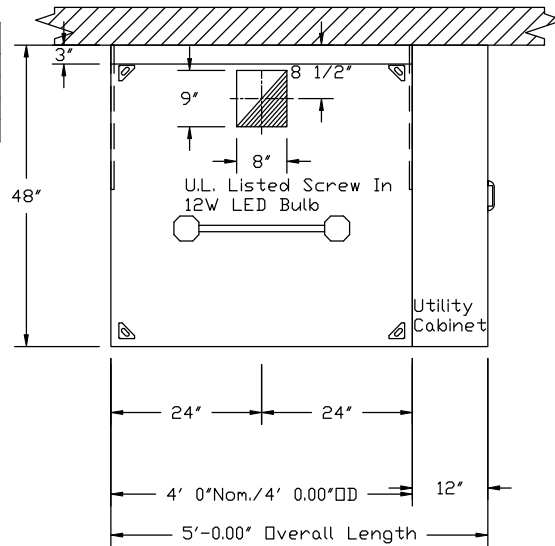
**EFFICIENCY VS. PARTICLE DIAMETER**



**PRESSURE DROP VS. FLOW RATE**



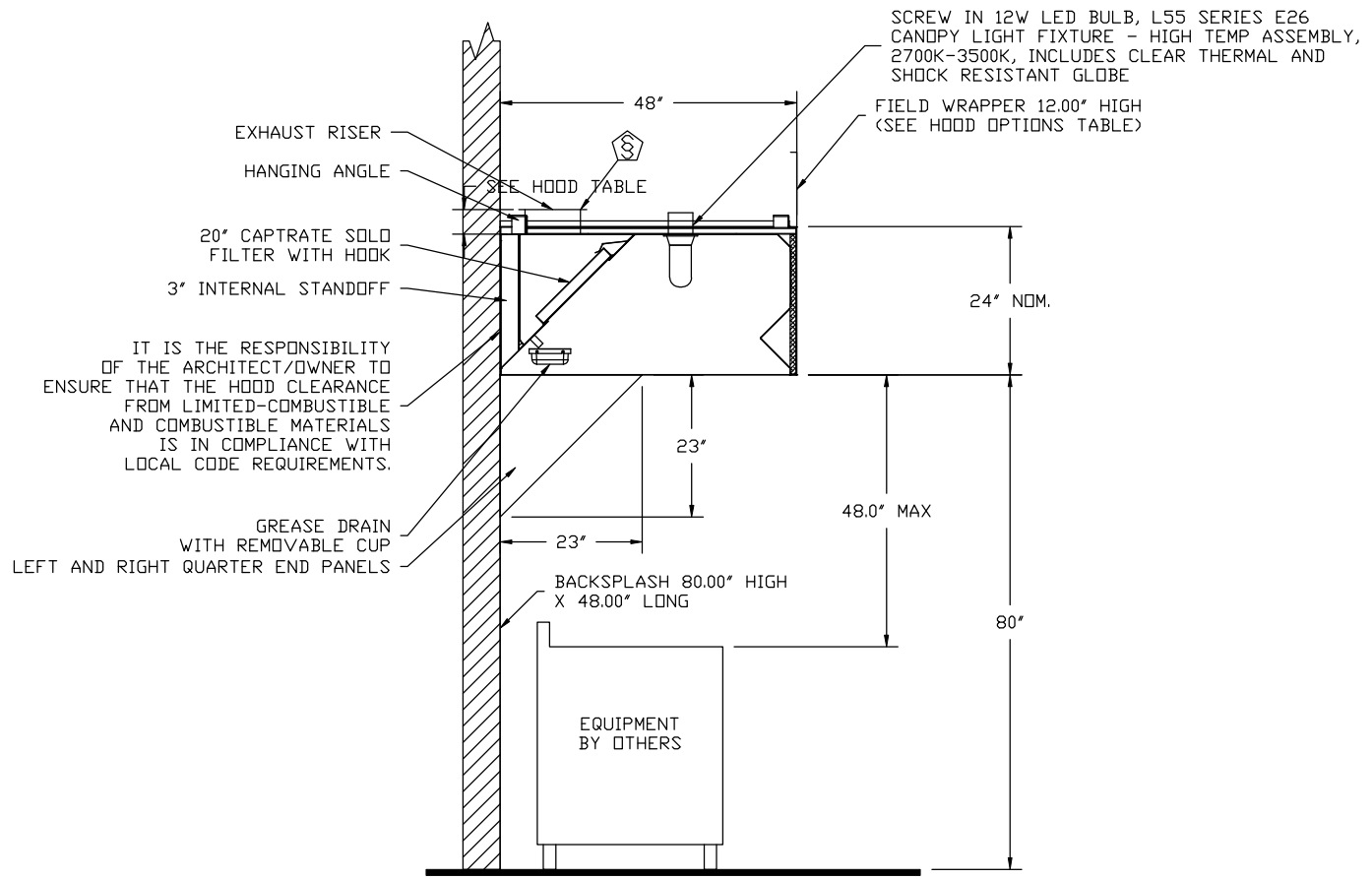
CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:  
 NFPA #96  
 NSF STANDARD #2  
 UL STANDARD #1046  
 INT. MECH. CODE (IMC)  
 ULC-S649



**PLAN VIEW - Hood #1 (KH-1)**  
 4' 0.00" LONG 4824ND-2



JOB Pita Pit - Fonthill - no mua	
LOCATION FONTHILL, ON, L0S 1E5	
DATE 10/18/2018	JOB # 3587540
DWG # 1	DRAWN BY
REV.	SCALE 3/8" = 1'-0"



*SECTION VIEW - MODEL 4824ND-2  
HOOD - #1 (KH-1)*



**CAPTIVEAIR**

<i>JOB</i> Pita Pit - Fonthill - no mua	
<i>LOCATION</i> FONTHILL, ON, L0S 1E5	
<i>DATE</i> 10/18/2018	<i>JOB #</i> 3587540
<i>DWG #</i> 2	<i>DRAWN BY</i>
<i>REV.</i>	<i>SCALE</i> 3/8" = 1'-0"

**EXHAUST FAN INFORMATION - Job#3587540**

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SDNES
1	EF-1	DU50HFA	800	1.050	1434	0.500	0.3230	1	115	8.4	304 FPM	84	14.6

**FAN OPTIONS**

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	EF-1	1 - Grease Box 1 - 3 Year Extended Motor Warranty

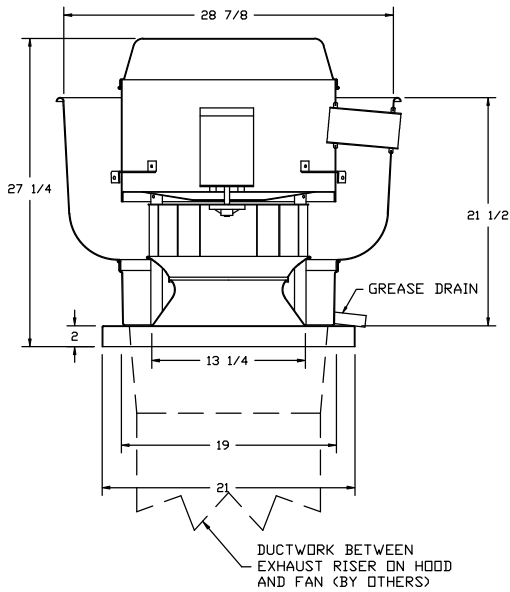
**FAN ACCESSORIES**

FAN UNIT NO.	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	EF-1	YES						

**CURB ASSEMBLIES**

NO.	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-1	34 LBS	Curb	19.500"W x 19.500"L x 24.000"H Vented Hinged

FAN #1 DU50HFA - EXHAUST FAN (EF-1)



**FEATURES:**

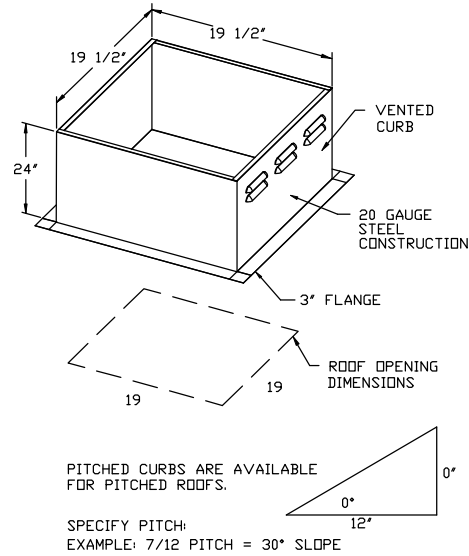
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

**NORMAL TEMPERATURE TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**ABNORMAL FLARE-UP TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

**OPTIONS**

- GREASE BOX.
- 3 YEAR EXTENDED MOTOR WARRANTY.



JOB Pita Pit - Fonthill - no mua	
LOCATION FONTHILL, ON, L0S 1E5	
DATE 10/18/2018	JOB # 3587540
DWG # 3	DRAWN BY
REV.	SCALE 3/8" = 1'-0"



**GREASE DUCT & CHIMNEY SPECIFICATIONS:**

PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW" DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURES INSTALLATION GUIDE.

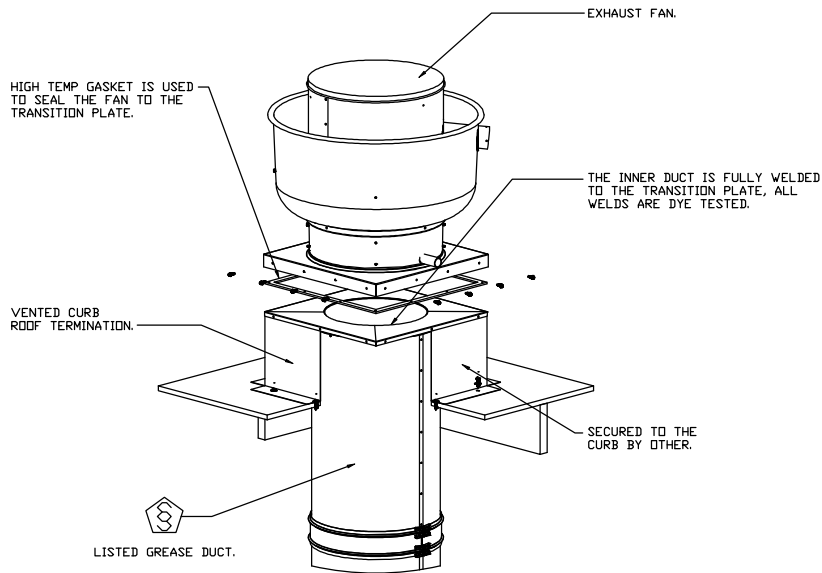
PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURES LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12". DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

**CUSTOMER APPROVAL TO MANUFACTURE:**

- Approved as Noted
- Approved with NO Exception Taken
- Revise and Resubmit

SIGNATURE \_\_\_\_\_  
Your Title \_\_\_\_\_ Date \_\_\_\_\_



JOB Pita Pit - Fonthill - no mua	
LOCATION FONTHILL, ON, L0S 1E5	
DATE 10/18/2018	JOB # 3587540
DWG # 4	DRAWN BY
REV.	SCALE 3/8" = 1'-0"

# Exhaust Fan Wiring

JOB 3587540 - Pita Pit - Fonthill - no mua

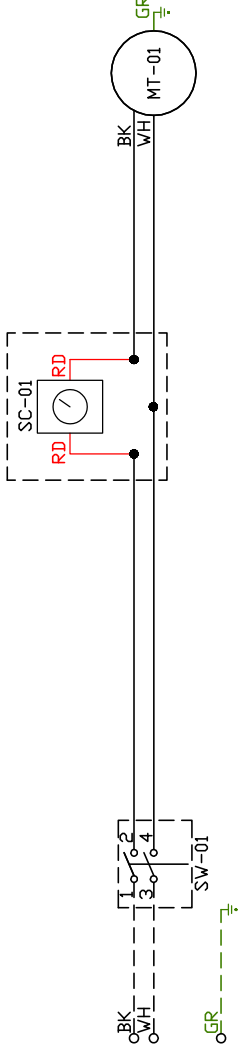
DRAWING NUMBER EXH3587540-1

SHIP DATE 10/18/2018

MODEL DU50HFA

## Installed Options

Speed Control



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

## Component Identification

Label	Description	Location
MT-01	Fan Motor	[2]
QD-01	Quick Disconnect	[2]
SC-01	Speed Control	[1]
SW-01	Main disconnect switch	[2]

EXHAUST

MOTOR\_INFO  
0.5HP-115V-IP-8-FLA

ELECTRICAL INFORMATION  
MOTOR/CTRL MCA: 10.5A  
MOTOR/CTRL MOP: 15A

NOTES  
--- DENOTES FIELD WIRING  
\_\_\_ DENOTES INTERNAL WIRING

## WIRE COLOR

BK	-	BLACK	YW	-	YELLOW
BL	-	BLUE	GR	-	GREEN
BR	-	BROWN	GY	-	GRAY
OR	-	ORANGE	PR	-	PURPLE
RD	-	RED	PK	-	PINK
WH	-	WHITE			

**ELECTRICAL PACKAGE - Job#3587540**

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	Ø	H.P.	VOLT	FLA
1	SC-1	SC-11011028	Utility Cabinet Right	04 - Utility Cabinet Right Hood # 1	1 Light 1 Fan	Smart Controls Basic w/ Relay On/Off with Supply	EF-1	Exhaust	1	0.500	115	8.4



**CAPTIVEAIR**

<i>JOB</i> Pita Pit - Fonthill - no mua	
<i>LOCATION</i> FONTHILL, ON, L0S 1E5	
<i>DATE</i> 10/18/2018	<i>JOB #</i> 3587540
<i>DWG #</i> 6	<i>DRAWN BY</i>
<i>REV.</i>	<i>SCALE</i> 3/8" = 1'-0"

JOB NO  
3587540

MODEL NUMBER  
SC-11011028

DRAWN BY  
INSTALL

DESCRIPTION OF OPERATION:  
120V 1 Phase w/ control for 1 Exhaust Fan, Exhaust on in Fire, Lights out in Fire, Relay On/Off with Supply Fan.

JOB NAME  
Pita Pit - Fonthill - no mua

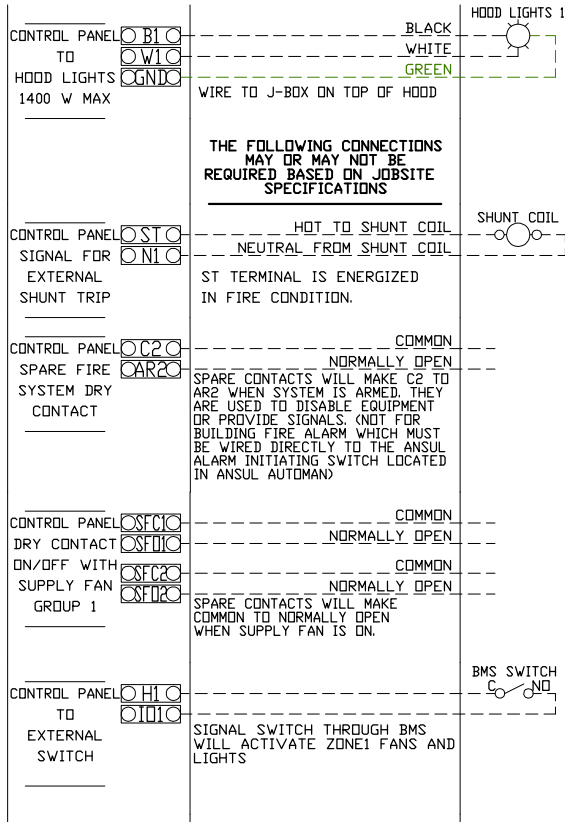
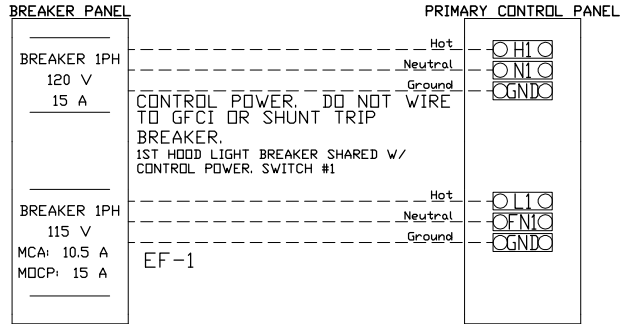
DATE  
10/18/2018

DWG NO  
ECP #1-1

**BREAKER PANEL TO PRIMARY CONTROL PANEL**

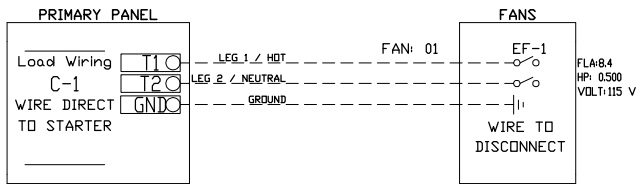
Responsibility: Electrician

BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED



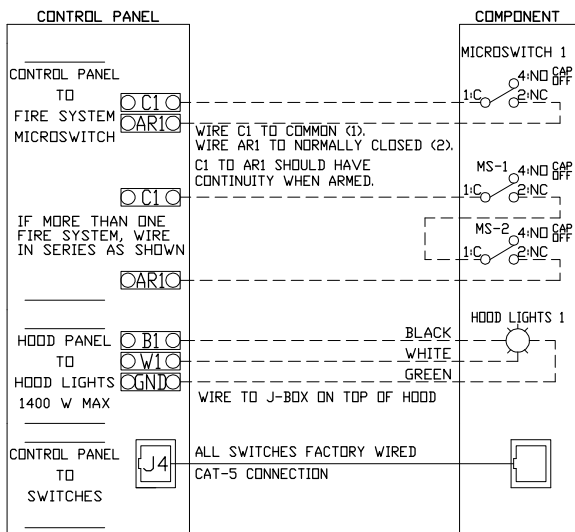
**CONTROL PANEL TO FANS**

Responsibility: Electrician

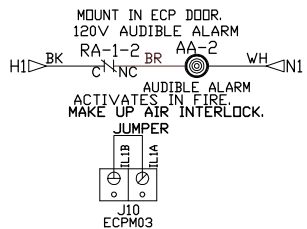
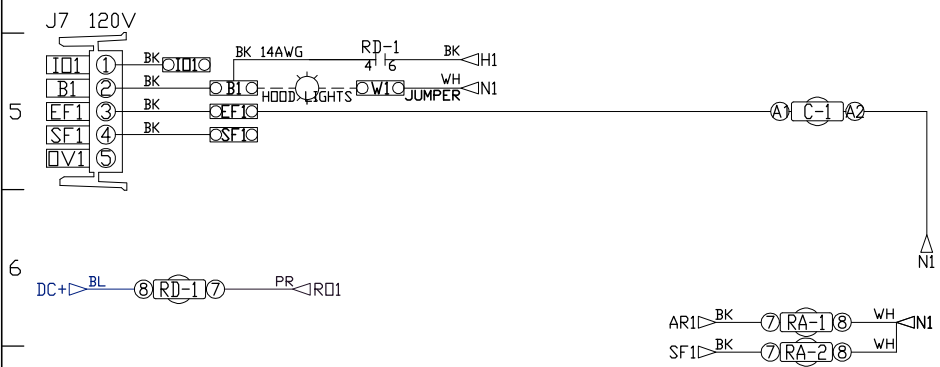
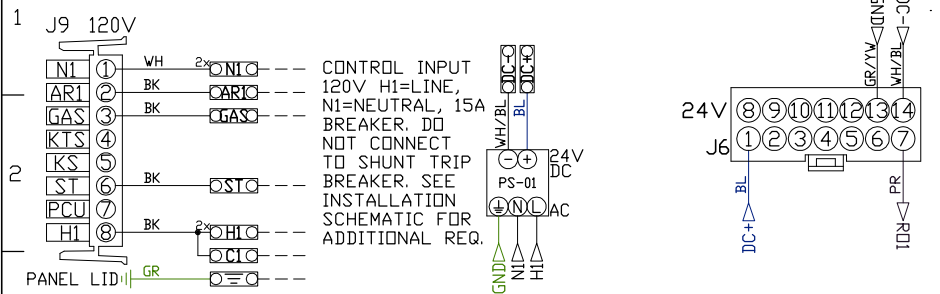


**CONTROL PANEL TO ACCESSORY ITEMS**

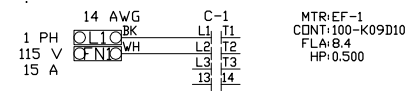
Responsibility: Electrician



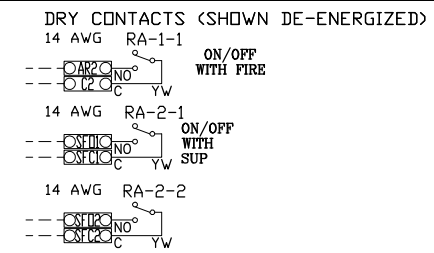
UNLESS SPECIFIED OTHERWISE, ALL FACTORY AC WIRING 16 AWG. ALL FACTORY DC WIRING 18 AWG.



MOTOR POWER CIRCUIT



MTR:EF-1  
CONT:100-K09D10  
FLA:8.4  
HP:0.500



FACTORY WIRING SCHEMATIC CIRCUIT BOARDS

DCV Rev. 2.09.00  
HMI Rev. 2.09.00

RA-x 120 VAC RELAY	RD-x 24 VDC RELAY
NO 4 3 NC 2 1 COIL 8 7 COM 6 5	NO 4 3 NC 2 1 COIL 8 7 COM 6 5

COMPONENT LIST

LABEL	DESCRIPTION
ST-X	Starter PN-varies
OL-X	Overload PN-varies
C-X	Contactors PN-varies
PS-1	Power Sup. 24VDC PN-MDP18-24A-1C
RA-x	120V Relay DPDT PN-34.110.0184.0
RD-x	24VDC Light Relay PN-34.110.0188.0
AA-2	Audible Alarm PN-SCE120LA3FP1B

LEGEND

---	FIELD WIRING
---	FACTORY WIRING
BK-	BLACK
BL-	BLUE
BR-	BROWN
DR-	ORANGE
WH-	WHITE
DR/BL-	DR/BL STRIPE
BL/RD-	BL/RD STRIPE
RD/GN-	RD/GN STRIPE
WH/BL-	WH/BL STRIPE
YW-	YELLOW
GY-	GREY
PR-	PURPLE
RD-	RED
GR-	GREEN

JOB NAME

Pita Pit - Fonth...

DRAWING TITLE  
SC-11011028

DESCRIPTION OF OPERATION  
120V 1 Phase w/ control  
for 1 Exhaust Fan,  
Exhaust on in Fire,  
Lights out in Fire, Relay  
On/Off with Supply Fan.

JOB NO 3587540	DRAWN BY
TYPE FACTORY	DATE 10/18/2018
DWG NO ECP #1-2	



**TRUE FOOD SERVICE  
EQUIPMENT, INC.**

2001 East Terra Lane • O'Fallon, Missouri 63366  
(636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl Fax# (001)636-272-7546  
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

**# 3**

Model:  
**TRCB-52**

**Chef Base:**  
*Drawered Refrigerator*



Scan code  
for video

## TRCB-52

- ▶ True's refrigerated chef bases are designed with enduring quality that protects your long term investment.
- ▶ Designed using the highest quality materials and components to provide the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.
- ▶ Oversized, environmentally friendly (134A) forced-air refrigeration system holds 33°F to 38°F (.5°C to 3.3°C).
- ▶ Cabinet top is one piece, heavy duty reinforced stainless steel. Drip resistant "V" edge protects against spills. Supports up to 717 lbs. (326 kg).
- ▶ All stainless steel front, top and sides. Matching aluminum finished back.
- ▶ Each drawer accommodates three (3) full size 12"L x 20"W x 4"D (305 mm x 508 mm x 102 mm) food pans (sold separately).
- ▶ Heavy-duty stainless steel drawer slides and rollers. Removable without tools for easy cleaning.
- ▶ Foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

## ROUGH-IN DATA

Specifications subject to change without notice.  
Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number).

Model	Drawers	Cabinet Dimensions (inches) (mm)			HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
		L	D†	H*						
TRCB-52	2	51 7/8	32 1/8	20 3/8	1/3	115/60/1	8.1	5-15P	7	340
		1318	816	518	1/3	230-240/50/1	3.8	▲	2.13	155

† Depth does not include 1" (26 mm) for rear bumpers.

\* Height does not include 5" (127 mm) for castors or 6" (153 mm) for optional legs.

▲ Plug type varies by country.



APPROVALS:

AVAILABLE AT:

3/13

Printed in U.S.A.

Model:  
**TRCB-52**

**Chef Base:**  
*Drawered Refrigerator*



**STANDARD FEATURES**

**DESIGN**

- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

**REFRIGERATION SYSTEM**

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Oversized, factory balanced refrigeration system with guided airflow to provide uniform product temperatures.
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser; maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C) for the best in food preservation.
- Sealed, cast iron, self-lubricating evaporator fan motors and larger fan blades give True chef base units a more efficient, low velocity, high volume airflow design. This unique design ensures faster temperature recovery and shorter run times in the busiest of food service environments.
- Condensing unit accessed from behind side grill; slides out for easy maintenance.

**CABINET CONSTRUCTION**

- Exterior - stainless steel front, top and sides. Matching aluminum finished back.
- Interior - attractive, NSF approved, white aluminum liner. Stainless steel floor with coved corners.

- Insulation - entire cabinet structure and drawer facings are foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- 4" (102 mm) diameter plate castors - locks provided on front set.
- Cabinet top is one piece, heavy duty reinforced 300 series stainless steel. Drip resistant "V" edge protects against spills. Supports up to 717 lbs. (326 kg).

**DRAWERS**

- Stainless steel exterior drawer facings and liners. Stainless steel drawer frames.
- Each drawer fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Heavy-duty stainless steel drawer slides and rollers. Removable without tools for easy cleaning.
- Magnetic drawer gaskets of one piece construction, removable without tools for ease of cleaning.
- Each drawer accommodates three (3) full size 12"L x 20"W x 4"D (305 mm x 508 mm x 102 mm) food pans (sold separately).
- Drawers support a wide variety of incremental pan size configurations; each drawer standard with two (2) full length removable divider bars.

**MODEL FEATURES**

- Evaporator is epoxy coated to eliminate the potential of corrosion.
- Exterior digital temperature display.
- NSF-7 compliant for open food product.

**ELECTRICAL**

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.



115/60/1  
NEMA-5-15R

**RECOMMENDED OPERATING CONDITIONS**

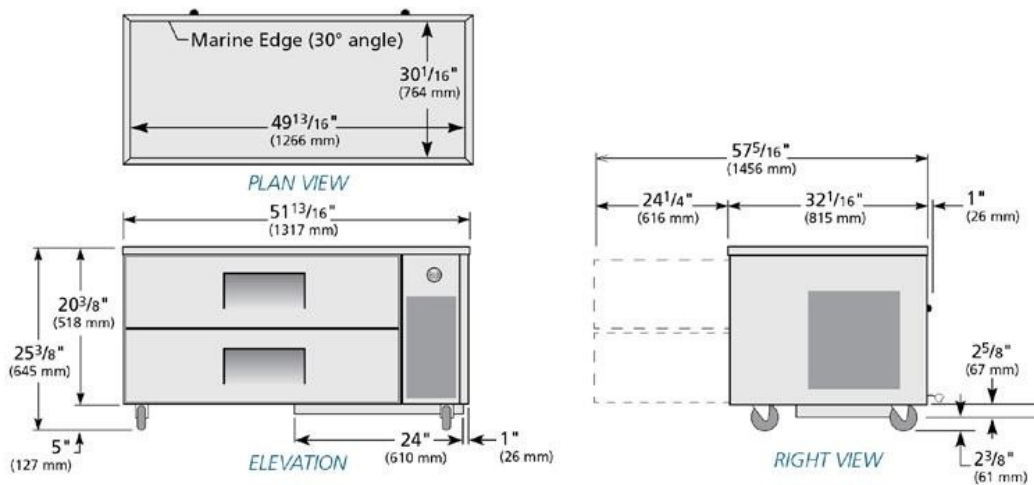
- Counter-top cooking equipment should be used in conjunction with the manufacturer supplied legs. Minimum clearance of 4" (102 mm) is required between bottom of cooking equipment heating element and the TRCB top. Failure to provide clearance voids manufacturer warranty.
- Installation of a heat shield is recommended for optimum performance (supplied by others).

**OPTIONAL FEATURES/ACCESSORIES**

Upcharge and lead times may apply.

- 230 - 240V / 50 Hz.
- 6" (153 mm) standard legs (1 set of 4 leg mounting plates required).
- 6" (153 mm) seismic/flanged legs (1 set of 4 leg mounting plates required).
- Heavy duty, 16 gauge top.
- Flat top (no marine edge).
- Additional size drawer divider bars.
- Remote cabinets (condensing unit supplied by others; system comes standard with 404A expansion valve and requires R404A refrigerant). Consult factory technical service department for BTU information. All remote units must be hard wired during installation.

**PLAN VIEW**



**WARRANTY**  
Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER  
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
TRCB-52	TFQY135E	TFQY135S	TFQY135P	TFQY1353	

**TRUE FOOD SERVICE EQUIPMENT**



# *New* **STAR-MAX<sup>®</sup> GAS GRIDDLES WITH THERMOSTATIC CONTROLS**

**Models 615TF, 624TF, 636TF & 648TF**

### Features/Benefits:

- ★ *NEW* highly polished 1" thick polished steel plate for superior heat distribution, fast recovery and energy efficient operation.
- ★ *NEW* Throttling thermostat inserted into the griddle plate 5/16" from the cooking surface, adjusts from 150° to 450°F providing quick response to surface temperature change.
- ★ Available in 15", 24", 36" and 48" widths to meet your space and volume requirements.
- ★ All stainless steel construction and front panel for long lasting attractive appearance and ease of cleaning.
- ★ *NEW* longer lasting, heavy-duty metal knobs.
- ★ *NEW* custom designed 28,300 BTU aluminized U-shaped steel burner every 12" of cooking surface provide even heat distribution.
- ★ Double wall construction and enclosed bottom helps reduce heat loss.
- ★ Heavy-duty all-welded body construction with stainless steel front, bull nose and 4-1/2" high tapered splash guard.
- ★ Cool-to-the-touch stainless steel bull nose front provides knob protection and comfortable work zone.
- ★ Spatula wide 3-1/4" front grease trough and grease chute for easy cleaning.
- ★ Large 4-1/2 quart stainless steel grease drawer.
- ★ Gas convertible in the field conversion kit supplied. Units are shipped Natural Gas.
- ★ Heavy-duty 4" adjustable legs to fit your countertop line-up requirements.



**Model 636TF**

### Applications:

Star-Max<sup>®</sup> thermostatically controlled griddles provide maximum cooking performance and reliability. Breakfast, lunch or dinner, Star has a griddle to fit your menu needs.

### Quality Construction:

Star-Max<sup>®</sup> griddles feature 1" thick polished steel griddle plate with 4-1/2" high wrap-around stainless steel splash guard and 3-1/4" wide front access grease trough with 4-1/2 quart grease drawer capacity. Includes a 28,300 BTU aluminized burner every 12" of width controlled by a throttling thermostat, 3/4" N.P.T. male gas connection with convertible pressure regulator, and 4" adjustable legs. These units are approved for installation within 6" of non-combustible surfaces. Griddles operate on Natural or Propane gas.

### *New* Warranty:

Star-Max<sup>®</sup> gas griddles are covered by Star's **TWO YEAR** parts and labor warranty.

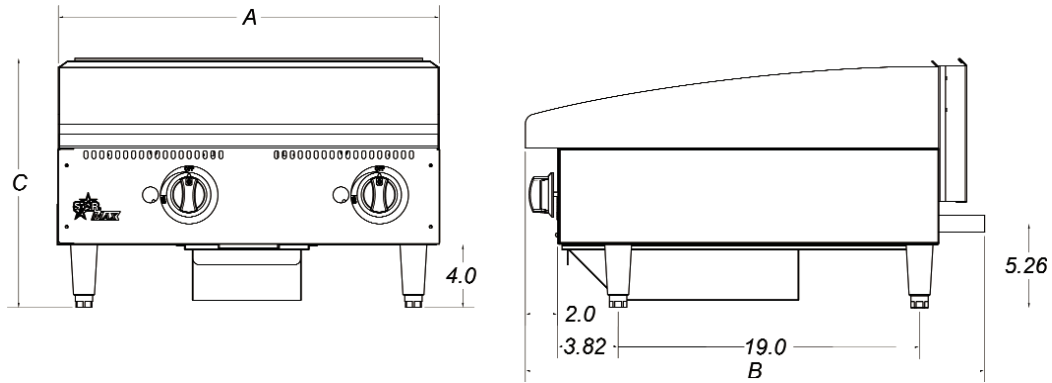




Star Manufacturing

Star-Max® Gas Griddle with Thermostatic Controls

*New* **STAR-MAX® GAS GRIDDLES WITH THERMOSTATIC CONTROLS**  
**Models 615TF, 624TF, 636TF & 648TF**



**Specifications**

Model No.	Dimensions			Number of Thermostats	BTU	Grid Area	Plate Thickness Inches (cm)	Weight	
	(A) Width Inches (cm)	(B) Depth Inches (cm)	(C) Height Inches (cm)					Installed lbs. (kg)	Shipping lbs. (kg)
615TF	15 (38.1)	29 (73.7)	15-1/2 (39.4)	1	28,300	304 sq. in. 1961.4 sq cm	1 (2.5)	83 (37.7)	90 (40.8)
624TF	24 (61.0)	29 (73.7)	15-1/2 (39.4)	2	56,600	498 sq. in. 3213.1 sq cm	1 (2.5)	165 (74.8)	175 (79.4)
636TF	36 (91.4)	29 (73.7)	15-1/2 (39.4)	3	84,900	747 sq. in. 4819.6 sq cm	1 (2.5)	247 (112.0)	262 (118.8)
648TF	48 (121.9)	29 (73.7)	15-1/2 (39.4)	4	113,200	996 sq. in. 6426.2 sq cm	1 (2.5)	330 (149.7)	350 (159.0)

**Typical Specifications**

Gas griddles are constructed with stainless steel front panel and double wall aluminized steel side panels. Griddle plate is 1" thick highly polished steel plate with 4-1/2" high tapered wrap-around stainless steel splash guard. Unit has a 3-1/4" (8.3 cm) wide front grease trough with grease chute and a 4-1/2 qt. (4.26 L) stainless steel grease drawer. Unit has a 28,300 BTU aluminized steel burner for every 12" (30.5 cm) of width and is controlled by a throttling type thermostat inserted into the griddle plate 5/16" from the cooking surface. Thermostat knobs are protected by stainless steel bull nose front. A standing pilot is provided. Griddles are supplied with 4" (10.2 cm) high die cast nickel plated steel legs that have a 1-3/8" (3.5 cm) adjustment. Gas connection is 3/4" N.P.T. male and a convertible pressure regulator is provided. Units are approved for installation within 6" (15.2 cm) of combustible and non-combustible surfaces and are UL Gas Certified and UL Sanitation listed to NSF Standard 4 Listed. Printed in the U.S.A.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Star Manufacturing exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

Star Manufacturing - 10 Sunnen Drive - P.O. Box 430129 - St. Louis, MO 63143-3800  
 Phone: (314) 678-6303 - FAX: (314) 781-5445 - www.star-mfg.com



**TRUE FOOD SERVICE  
EQUIPMENT, INC.**

2001 East Terra Lane • O'Fallon, Missouri 63366  
(636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl Fax# (001)636-272-7546  
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

**# 5**

Model:  
**TUC-27**

**Undercounter:**  
*Solid Door Refrigerator*

**UNIT MUST BE PLACED TO THE RIGHT SIDE OF TUC-27F**



Scan code  
for video

## TUC-27

- ▶ True's undercounter units are designed with enduring quality that protects your long term investment.
- ▶ Designed using the highest quality materials and components to provide the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.
- ▶ Oversized, environmentally friendly (134A) forced-air refrigeration system holds 33°F to 38°F (.5°C to 3.3°C).
- ▶ All stainless steel front, top and ends. Matching aluminum finished back.
- ▶ Front breathing.
- ▶ Heavy duty PVC coated wire shelves.
- ▶ Foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

## ROUGH-IN DATA

Specifications subject to change without notice.  
Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number).

Model	Doors	Shelves	Cabinet Dimensions (inches) (mm)			HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
			L	D†	H*						
TUC-27	1	2	27 <sup>5</sup> / <sub>8</sub> 702	30 <sup>1</sup> / <sub>8</sub> 766	29 <sup>3</sup> / <sub>4</sub> 756	1/6 1/4	115/60/1 230-240/50/1	3.9 2.9	5-15P ▲	7 2.13	195 89

† Depth does not include 1" (26 mm) for rear bumpers.

\* Height does not include 6 1/4" (159 mm) for castors or 6" (153 mm) for optional legs.

▲ Plug type varies by country.



APPROVALS:

AVAILABLE AT:

Model:  
**TUC-27**

## Undercounter: Solid Door Refrigerator



### STANDARD FEATURES

#### DESIGN

- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, lower utility costs, exceptional food safety and the best value in today's food service marketplace.

#### REFRIGERATION SYSTEM

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Oversized, factory balanced refrigeration system with guided airflow to provide uniform product temperatures.
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser; maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C) for the best in food preservation.
- Sealed, cast iron, self-lubricating evaporator fan motor(s) and larger fan blades give True undercounter units a more efficient, low velocity, high volume airflow design. This unique design ensures faster temperature recovery and shorter run times in the busiest of food service environments.
- Condensing unit access in back of cabinet, slides out for easy maintenance.

#### CABINET CONSTRUCTION

- Exterior - stainless steel front, top and ends. Matching aluminum finished back.
- Interior - attractive, NSF approved, white aluminum liner. Stainless steel floor with coved corners.

- Insulation - entire cabinet structure and solid door are foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).
- 5" (127 mm) diameter stem castors - locks provided on front set. 36" (915 mm) work surface height.

#### DOOR

- Stainless steel exterior with white aluminum liner to match cabinet interior.
- Door fitted with 12" (305 mm) long recessed handle that is foamed-in-place with a sheet metal interlock to ensure permanent attachment.
- Positive seal self-closing door with 90° stay open feature. Door swing within cabinet dimensions.
- Magnetic door gasket of one piece construction, removable without tools for ease of cleaning.

#### SHELVING

- Two (2) adjustable, heavy duty PVC coated wire shelves 23 1/4" L x 16" D (591 mm x 407 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on 1/2" (13 mm) increments.

#### MODEL FEATURES

- Evaporator is epoxy coated to eliminate the potential of corrosion.
- NSF-7 compliant for open food product.

#### ELECTRICAL

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.



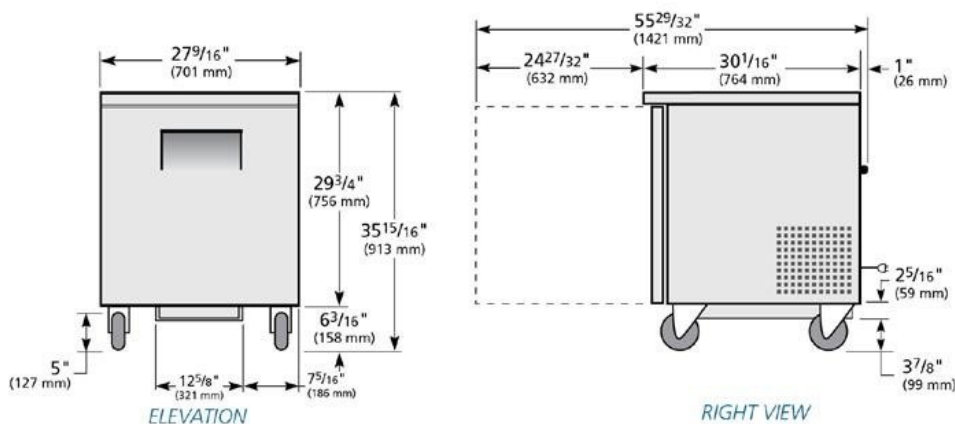
115/60/1  
NEMA-5-15R

#### OPTIONAL FEATURES/ACCESSORIES

Upcharge and lead times may apply.

- 230 - 240V / 50 Hz.
- 6" (153 mm) standard legs.
- 6" (153 mm) seismic/flanged legs.
- 2 1/2" (64 mm) diameter castors.
- Barrel lock (factory installed).
- Single overshelf.
- Double overshelf.
- TUC-27 Stacking collar.
- 30" (762 mm) deep, 1/2" (13 mm) thick, white polyethylene cutting board. Requires "L" brackets.
- 30" (762 mm) deep, 1/2" (13 mm) thick, composite cutting board. Requires "L" brackets.
- Heavy duty, 16 gauge tops.
- Exterior rectangular digital temperature display (factory installed).
- ADA compliant models with 34" (864 mm) work surface height.
- Low profile models with 31 7/8" (810 mm) work surface height.
- Remote cabinets (condensing unit supplied by others; system comes standard with 404A expansion valve and requires R404A refrigerant). Consult factory technical service department for BTU information. All remote units must be hard wired during installation.

### PLAN VIEW



**WARRANTY**  
Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER  
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
TUC-27	TFQY01E	TFQY01S	TFQY01P	TFQY013	

### TRUE FOOD SERVICE EQUIPMENT

2001 East Terra Lane • O'Fallon, Missouri 63366 • (636)240-2400 • Fax (636)272-2408 • (800)325-6152 • Intl. Fax# (001)636-272-7546 • www.truemfg.com

# NE-1064

# 1000 Watt\* Commercial Microwave Oven

# #8

**SAMPLE MICROWAVE NOT SUPPLIED IN PACKAGE.  
OWER TO PURCHASE LOCALLY.**



## Technical Specifications

**Power source:** 120V, 60Hz, Single phase

**Receptacle required:** NEMA 5-15 R or NEMA 5-20 R



**Frequency:** 2,450MHz

**Required power:** 13.4A

**Output:** 1000 watts\*

**Outer dimensions:** 20 1/8" w x 16 1/8" d x 12" h

**Cavity dimensions:** 13" w x 13" d x 8 7/8" h

**Net weight:** 34 lbs.

**Shipping weight:** 39 lbs.

**Shipping box size:** 24" w x 18 3/4" d x 14 1/4" h, 3.8 cu. ft.

**Timer:** 99 Minutes, 99 Seconds

**Memory Capability:** 20 Programs

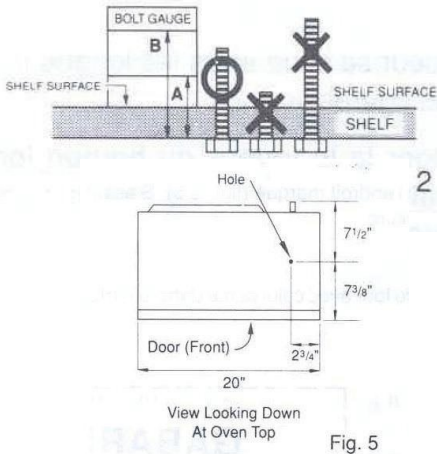
## To specify a Panasonic Commercial Microwave Oven

The NE-1064 Commercial Microwave Oven meets or exceeds all safety performance and sanitation standards set for commercial food service microwave ovens by UL, DHHS, FCC and NSF.

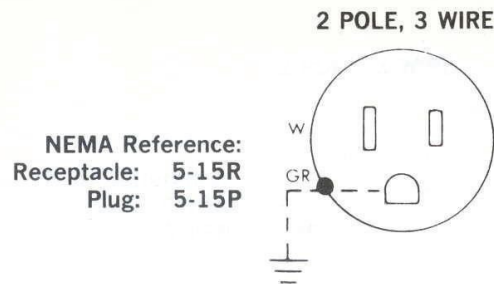
Plus, oven shall have output power 1000 Watts\*, stainless steel cabinet and cavity, bottom energy feed, 10 programmable memory pads, Braille keypad, 20-memory capability, double quantity key, 6 power levels, 2- and 3-stage cooking, programmable lock, unique "quick pick" preset times and self-diagnostics, Chef/Test Kitchen technical support and 3 year limited warranty.

*\*I.E.C. 60705 Test Procedure. Specifications subject to change without notice.*

## Security/Anti-Theft Option



## Receptacle Required

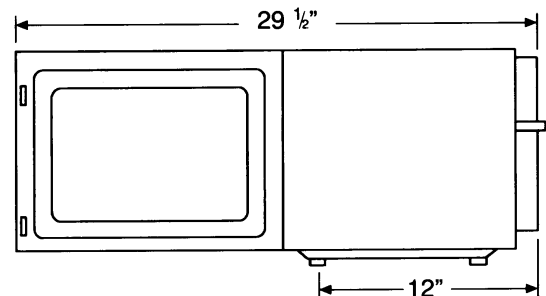
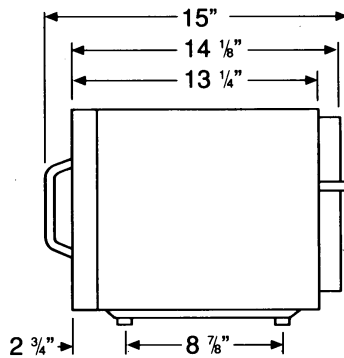
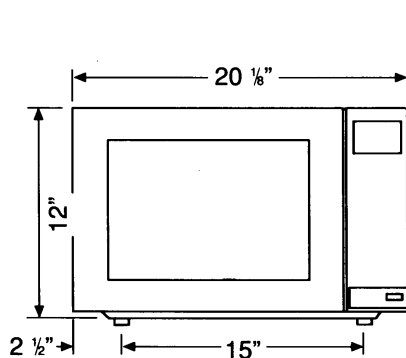


## ADA Compliance

§4.28.2 ((CFR) – 28CFR Part 36) "For Alarms".

§4.27 "For controls and operating mechanisms".

Braille controls.



# Panasonic

ideas for life

**Panasonic Appliance & Commercial Group**  
Division of Matsushita Electric Corporation of America  
Executive Offices:  
One Panasonic Way, Panazip 4A-1, Secaucus, NJ 07094  
Toll Free: 1-888-350-9590  
www.panasonic.com/cmo



# TRUE FOOD SERVICE EQUIPMENT, INC.

2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400  
Fax (636)272-2408 • Toll Free (800)325-6152 • Intl Fax# (001)636-272-7546  
Parts Dept. (800)424-TRUE • Parts Dept. Fax# (636)272-9471 • www.truemfg.com

Project Name: \_\_\_\_\_ #9

Location: \_\_\_\_\_

Item #: \_\_\_\_\_ Qty: \_\_\_\_\_ SIS #

Model #: \_\_\_\_\_

Model:  
**GDM-23-LD**

## Glass Door Merchandiser: Swing Door Refrigerator with LED Lighting

THIS MODEL ALSO AVAILABLE IN R290 HYDROCARBON REFRIGERANT



### GDM-23-LD

- ▶ The world's #1 manufacturer of glass door merchandisers.
- ▶ Oversized, factory balanced, refrigeration system holds 33°F to 38°F (.5°C to 3.3°C).
- ▶ Exterior - non-peel or chip black laminated vinyl; durable and permanent.
- ▶ Interior - attractive, NSF approved, white aluminum interior liner with stainless steel floor.
- ▶ Self closing door. Positive seal, torsion type closure system.
- ▶ "Low-E", double pane thermal insulated glass door assembly with extruded aluminum frame. The latest in energy efficient technology.
- ▶ LED interior lighting provides more even lighting throughout the cabinet. Safety shielded.
- ▶ Entire cabinet structure is foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

#### Bottom mounted units feature

- ▶ "No stoop" lower shelf to maximize product visibility.
- ▶ Storage on top of cabinet.
- ▶ Easily accessible condenser coil for cleaning.



Scan code for video

### ROUGH-IN DATA

Specifications subject to change without notice.  
Chart dimensions rounded up to the nearest 1/8" (millimeters rounded up to next whole number).

Model	Doors	Shelves	Cabinet Dimensions (inches) (mm)			HP	Voltage	Amps	NEMA Config.	Cord Length (total ft.) (total m)	Crated Weight (lbs.) (kg)
			L	D†	H						
GDM-23-LD	1	4	27	29 7/8	78 5/8	1/3	115/60/1	5.2	5-15P	9	355
			686	759	1998	1/3	230-240/50/1	3.0	▲	2.74	162

▲ Plug type varies by country.



APPROVALS:

AVAILABLE AT:

Model:  
**GDM-23-LD**

## Glass Door Merchandiser: Swing Door Refrigerator with LED Lighting



### STANDARD FEATURES

#### DESIGN

- True's commitment to using the highest quality materials and oversized refrigeration systems provides the user with colder product temperatures, and lower utility costs in an attractive merchandiser that brilliantly displays packaged food and beverages.

#### REFRIGERATION SYSTEM

- Factory engineered, self-contained, capillary tube system using environmentally friendly (CFC free) 134A refrigerant.
- Extra large evaporator coil balanced with higher horsepower compressor and large condenser; maintains cabinet temperatures of 33°F to 38°F (.5°C to 3.3°C).
- Sealed, cast iron, self-lubricating evaporator fan motors and larger fan blades give True merchandisers a more efficient low velocity, high volume airflow design. This unique design ensures faster temperature pull down of warm product, colder holding temperatures and faster recovery in high use situations.
- Bottom mounted condensing unit positioned for easy maintenance. "No stoop" lower shelf maximizes visibility by raising merchandised product to higher level.

#### CABINET CONSTRUCTION

- Exterior - non-peel or chip black laminated vinyl; durable and permanent.
- Interior - attractive, NSF approved, white aluminum liner with stainless steel floor.
- Insulation - entire cabinet structure is foamed-in-place using Ecomate. A high density, polyurethane insulation that has zero ozone depletion potential (ODP) and zero global warming potential (GWP).

- Welded, heavy duty steel frame rail, black powder coated for corrosion protection.
- Frame rail fitted with leg levelers.
- Illuminated exterior sign panel. Variety of sign options available.

#### DOOR

- "Low-E", double pane thermal insulated glass door assembly with extruded aluminum frame. The latest in energy efficient technology.
- Door fitted with 12" (305 mm) long integrated handle.
- Self closing door. Positive seal, torsion type closure system.
- Magnetic door gasket of one piece construction, removable without tools for ease of cleaning.

#### SHELVING

- Four (4) adjustable, heavy duty PVC coated wire shelves 22 5/16" L x 23 1/4" D (574 mm x 591 mm). Four (4) chrome plated shelf clips included per shelf.
- Shelf support pilasters made of same material as cabinet interior; shelves are adjustable on 1/2" (13 mm) increments.

#### LIGHTING

- LED interior lighting provides more even lighting throughout the cabinet. Safety shielded.

#### MODEL FEATURES

- Evaporator is epoxy coated to eliminate the potential of corrosion.
- See our website [www.truemfg.com](http://www.truemfg.com) for latest color and sign offerings.
- Convenient clean-out drain built in cabinet floor.

- Listed under NSF-7 for the storage and/or display of packaged or bottled product.

#### ELECTRICAL

- Unit completely pre-wired at factory and ready for final connection to a 115/60/1 phase, 15 amp dedicated outlet. Cord and plug set included.



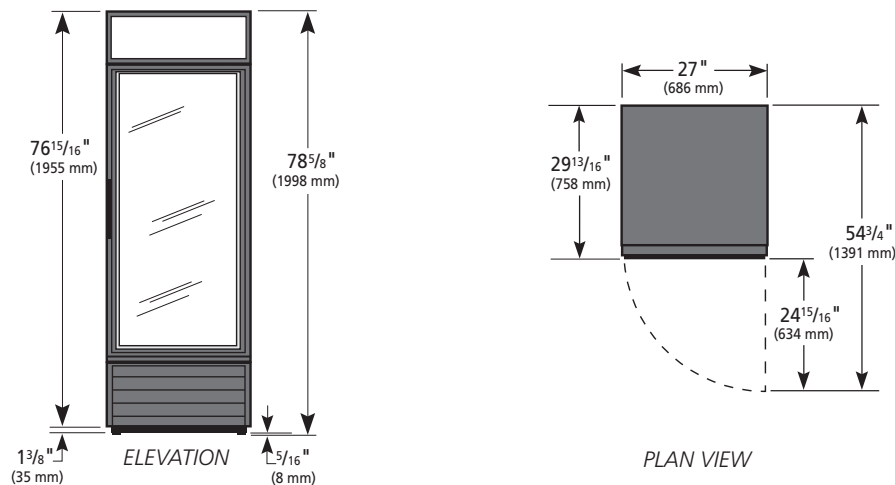
115/60/1  
NEMA-5-15R

#### OPTIONAL FEATURES/ACCESSORIES

Upcharge and lead times may apply.

- 230 - 240V / 50 Hz.
- White exterior.
- Stainless steel exterior.
- Black aluminum interior liner with black shelving.
- Stainless steel interior liner.
- 6" (153 mm) standard legs.
- 6" (153 mm) seismic/flanged legs.
- 2 1/2" (64 mm) diameter castors.
- 4" (102 mm) diameter castors.
- Red wine thermostat.
- White wine thermostat.
- Chocolate thermostat.
- Barrel lock (factory installed).
- Wine racks.
- Sliding wine racks.
- Additional shelves.
- TrueFlex gravity feed organizers.
- Pricing strips.
- Available in R290 hydrocarbon refrigerant

### PLAN VIEW



#### WARRANTY\*

Three year warranty on all parts and labor and an additional 2 year warranty on compressor. (U.S.A. only)

METRIC DIMENSIONS ROUNDED UP TO THE NEAREST WHOLE MILLIMETER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



Model	Elevation	Right	Plan	3D	Back
GDM-23-LD	TFAZ03E	TFAY03S	TFAZ03P	TFAZ033	

\*RESIDENTIAL APPLICATIONS: TRUE assumes no liability for parts or labor coverage for component failure or other damages resulting from installation in non-commercial or residential applications.

### TRUE FOOD SERVICE EQUIPMENT

2001 East Terra Lane • O'Fallon, Missouri 63366-4434 • (636)240-2400 • Fax (636)272-2408 • Toll Free (800)325-6152 • Intl. Fax# (001)636-272-7546 • [www.truemfg.com](http://www.truemfg.com)



### PT-5700 Point of Sale solution Highlights:

- \* Proven 2nd generation fanless design
- \* Small Footprint
- \* Integrated biometrics scanner, card reader and key pad
- \* Enhanced touch screen technology, capacitive or resistive touch
- \* Ultra fast integrated 10/100/1000 network Interface
- \* Open OS architecture for the latest POS software
- \* Multiple accessory design options to fit your needs



Model : PT-5700

CPU VIA Eden (V4 Bus) 1GHz @ 400MHz FSB

System RAM 512 MB DDR2 (supports up to 1GB - 1 SO SIMM Socket)

HDD Storage 3.5" HDD (80GB Min)

Touch Screen ELO 5-wire Resistive or Capacitive (optional)

LCD Display 15" TFT Color Display 1024 x 768

Magnetic Reader Track 1 & 2

Power Supply 110/120VAC, 19VDC (90W)

I/O Ports

- \* 4 RS232 ports (supports 5V/12V)
- \* 1 Parallel Port
- \* 1 Ethernet 10/100/1000 Base-T
- \* 1 PS/2 Keyboard Port
- \* 1 PS/2 Mouse Port
- \* 1 VGA Port (XGA/SVGA)
- \* 4 USB 2.0 Ports (2 in front)
- \* 2 Audio (1-IN / 1-OUT)
- \* 1 RJ-11 (2 x Cashdrawers support)

Operating Systems 98/2000/XP/XPe/CE.net/WEPOS/Linux

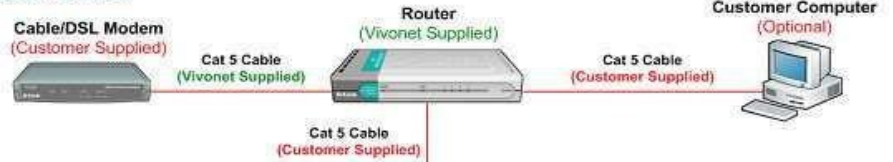
Safety and EMI FCC, CE Class A, UL, cUL, VCCI, BSI, ROHS

Dimensions WxDxH: 10.1" x 8.5" x 14.1"

Packaged: 16.1" x 18.5" x 15.8"

Gross Weight 20.9 Lb

### Back Office



### Cashier



## Blending Station® Advance On-Counter

# #22

### The Right Blend of Timing and Speed

The Blending Station Advance has been engineered for perfection along with a noise reducing cover for an improved customer experience.

### Smart Product Design

- The Advance™ container creates faster, smoother pouring without the mess, saving you time and money
- Powerful ≈ 3 peak motor HP for unmatched performance on the toughest blends in coffee, smoothie and ice cream shops
- 93 speeds, variable speed control, and automatic shut-off provide the ultimate in blending flexibility creating an endless number of recipes to expand your menu offering
- 34 optimized programs engineered to provide consistent results quickly and easily

### La mezcla perfecta de tiempo y velocidad

La Blending Station Advance ha sido diseñada para lograr la perfección junto con una cubierta para reducir el ruido y brindar una experiencia de cliente mejorada.

### Diseño inteligente de producto

- El recipiente Advance crea una forma de servir más suave sin ensuciar ahorrándole tiempo y dinero
- Potente motor con ≈ 3 de caballos de potencia máxima para lograr un desempeño inigualable en las mezclas más difíciles en las tiendas de café, helados y licuados
- Sus 93 velocidades, el control de velocidad variable y el apagado automático proporcionan lo último en flexibilidad de mezcla, creando una cantidad infinita de recetas para ampliar la oferta de su menú
- 34 programas optimizados diseñados para proporcionar resultados consistentes de manera rápida y fácil



## Specifications / Especificaciones

### Blending Station® Advance On-Counter: #36021

Motor: ≈ 3 peak motor horsepower  
 Electrical: 120 V, 50/60 Hz, 15 amps  
 Pack: Includes 1 Blending Station Advance On-Counter with 48 oz. high-impact, clear/stackable Advance™ container, complete with blade assembly and lid, and removeable compact cover\*.  
 Net Weight: 19.5 lbs.  
 Dimensions: 19.38 x 9.25 x 10.5 in. (H x W x D)

Assembled in the U.S.A. of U.S.A. and Swedish components.  
**FOR COMMERCIAL USE ONLY.**

**Warranty:** In the U.S.A. and Canada, the Blending Station Advance is backed by a three-year limited warranty on motor base parts and a one-year limited warranty on parts and labor on the full unit. For more information regarding this warranty, please call +1.440.235.0214 for customer service.

\* Standard 64 oz. container cannot be used with the compact cover.

### Blending Station® Advance On-Counter - No. 36021

Motor: Motor con ≈ 3 CV de pico  
 Electricidad: 120 V, 50/60 Hz, 15 A  
 Embalaje: Incluye 1 Blending Station Advance para mostrador or con recipiente Advance™ de 1,4 L transparente y apilable, altamente resistente a impactos, completo con juego de láminas y tapa y cubierta compacta removible\*.  
 Peso neto: 8,84 kg  
 Dimensiones: 49,23 x 23,50 x 26,67 cm (H x A x P)

Montado en EE.UU. con componentes norteamericanos y suecos. **SOLAMENTE PARA USO COMERCIAL.**

**Garantía:** En EE. UU. y Canadá, la Blending Station Advance está respaldada por una garantía limitada de tres años sobre las piezas básicas del motor y por una garantía limitada de un año sobre las piezas y mano de obra de toda la unidad. Para obtener más información con respecto a esta garantía, por favor contáctese con el servicio de atención al cliente llamando al +1.440.235.0214.

\* No puede usarse el recipiente estándar de 2,0 L con la cubierta compacta.

## Also Available / También disponible

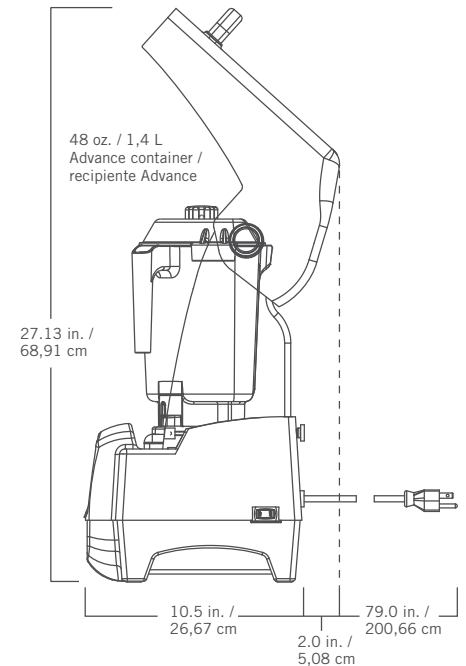
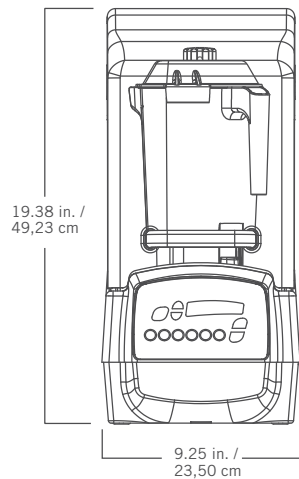
Unit is available in international voltages, please contact Vita-Mix international customer service for information.

La unidad está disponible en voltajes internacionales, por favor, entre en contacto con el servicio de atención al cliente de Vita-Mix para obtener informaciones.

Blending Station Advance with XP container  
 Blending Station Advance para mostrador con recipiente XP 36006: 120 V, 50/60 Hz, 15 amps

Additional containers / recipientes adicionales  
 Complete with blade assembly and lid.  
 Completo con juego de láminas y tapa.  
 15978: 48 oz. Advance container / 1,4 L recipiente Advance  
 15566: 48 oz. XP container / 1,4 L recipiente XP

Where Applicable / Cuando fuera aplicable



## Contact Information / Informaciones para contacto

### U.S.A. and Canada / EE.UU. y Canadá

Tel: 800.4DRINK4, 440.235.0214  
 Fax: 440.235.9670  
 E-mail: commercial@vitamix.com

### All Other Countries / Demás países

Tel: +1.440.782.2450  
 Fax: +1.440.782.2220  
 E-mail: international@vitamix.com

### www.vitamix.com/foodservice

Vita-Mix Corporation  
 8615 Usher Road  
 Cleveland, OH 44138-2103 U.S.A.

For more information, contact your local foodservice distributor.

Por más informaciones, entre en contacto con su distribuidor local de servicios alimenticios.



# SNEEZEGUARDS

TEL: 800-690-0002

FAX: 925-680-7252

EP-21 - Pass-Over

#34

V  R  R     A  A

## Specifications:

### Construction:

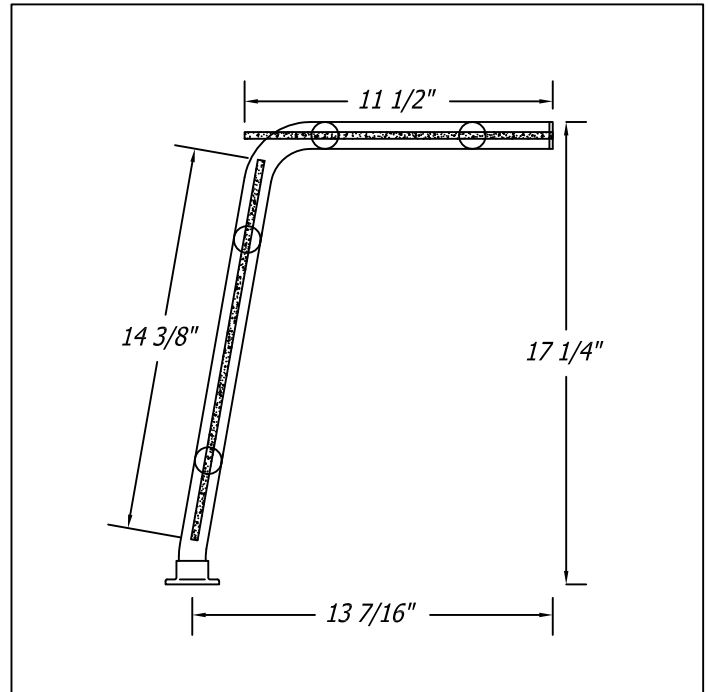
- 1" Round Tubing
- 2" Heavy Duty Flanges
- Glass Brackets accept 1/4" or 3/8"

### Available Finishes:

- #4 Brushed Stainless Steel
- #4 Brushed Aluminum
- Powder Coated Black

### Glass:

- 1/4" or 3/8" Clear Tempered Glass with Polished Edges
  - 3/4" Radiused Corners Available
  - Maximum Spacing Between Posts:
    - 42" Center to Center with 1/4" Glass\*
    - 54" Center to Center with 3/8" Glass\*
- \*Tempered Glass Required



## Options:

### End Panels:

- Left Closed End Panel
- Right Closed End Panel

### Finish:

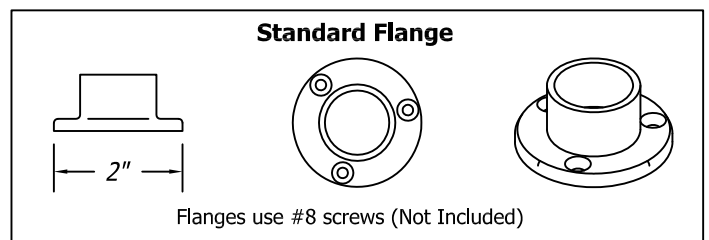
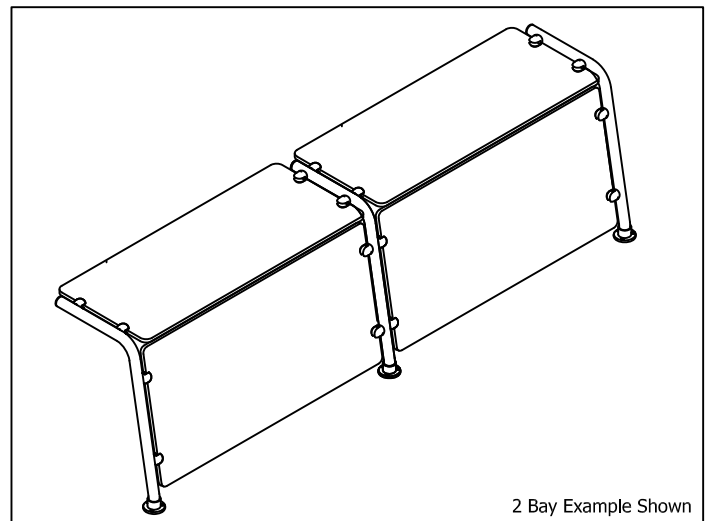
- #4 Brushed Stainless Steel
- #4 Brushed Aluminum
- Powder Coated Black

### Glass Options:

- 3/4" Radiused Corners
- Standard Square Corners

### Glass Thickness:

- 1/4" Glass (Maximum span 42")
- 3/8" Glass (Maximum span 54")



Direct LED  
Commercial Lite  
Integrated HDTV

42" class (42.16" diagonal)  
49" class (48.5" diagonal)

42LX330C

42" class (42.16" diagonal)

49LX341C

49" class (48.5" diagonal)



LG provides the ability to facilitate communications between businesses and their target audience. With our expanded line of affordable commercial display solutions, LG is aggressively meeting clients' demands for digital out-of-home technologies.

The LX330C is a great solution for many different application settings ranging from hospitality, restaurants, education, and beyond. You will discover new features and benefits that includes new welcome screen and welcome video options, self diagnostics via USB device, enhanced low power management and more!

FOR EFFICIENT MANAGEMENT

**PUBLIC DISPLAY MODE**  
From channel selection to energy-saving features, Public Display Mode allows you to control the TV settings in your business area, prevent misuse by customers, set volume limits, or restore factory defaults on any TV. You are in control of it all.



**USB CLONING**  
The USB Cloning feature allows you to simply copy the TV settings onto all TVs using a USB stick, a process that is fully automated to save time without having to set each TV one by one.



**WELCOME SCREEN**  
Welcome visitors with a warm greeting message that includes your business name/logo and now with a video or both.



**MULTI IR**  
Multi IR function eliminates the remote control signal interference between TVs in multiple dwelling rooms. This system will work using the same LG TV model. (Optional 124-213-10 required)



**RS232C CONTROL**  
Via the TV's RS-232C port, you can remotely control multiple TVs' power and volume settings simultaneously.

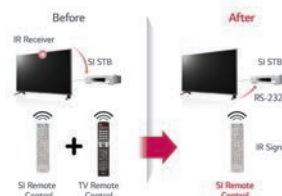


FOR CONVENIENCE & ENTERTAINMENT

**EXTERNAL SPEAKER OUT**  
Enhance the entertainment experience by adding an additional speaker, visitors to listen to and control the TV audio from anywhere in your business area, including restrooms.



**IR OUT**  
IR OUT enables customized set-top boxes to receive IR signals via LG TV Signage. This added convenience requires only simple connections and allows easy management using a single remote control.



**USB 2.0**  
You can play images and videos from and record TV programs to external storage devices. Immediate recording & reserved recording options are available.

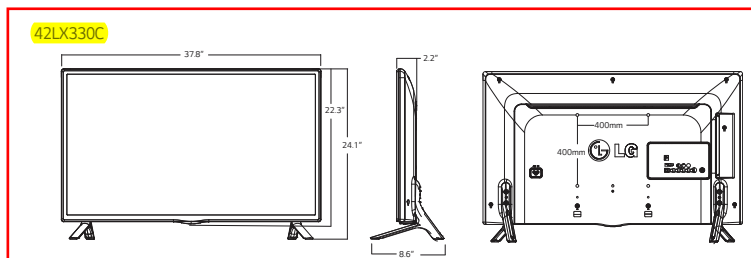


# Direct LED Commercial Lite Integrated HDTV

**42LX330C**

42" class (42.16" diagonal)

**ONLY USED IN VERY LOW CEILING LOCATIONS**



FEATURES	MODEL	42LX330C	32LX330C
Remote Diagnosis		Yes (Self Diagnosis (USB))	
HDMI-CEC		Yes (ARC Not Supported)	
HTNG-CEC		Yes	
Menu		PDM only	
Lock Mode		Yes	
External Speaker Out		1 (Variable/Fixed/Line Out, 3.5mm, Stereo, Single Ended Type (GND,L+,R+), 1W with 8Ω	
RJP Interface		Yes (RS232C,HDMI)	
RJP Compatibility		Teleadapt (RS232C), Teleadapt/Guestlink (HDMI CEC)	
USB		Yes (USB 2.0)	
USB Auto Play back		Yes	
Moving Picture Playback (SD/HD/Plus HD)		Divx HD	
Picture		JPEG	
Audio Codec		MP3, AC3, MPEG, AAC,HEAAC, CDDA, LPCM	
USB Cloning		Yes	
Multi IR Code		Yes	
Welcome Screen (Splash Image)		Yes	
Auto Off / Auto Sleep		Yes	
Motion Eye Eare		Yes	
Kensington Lock		Yes (back cover)	
INTERFACE			
HDMI In		2 (1 Rear, 1 Side)	
USB (2.0)		1	
RF In		1	
AV In		1 (Sharing w/Component in)	
Component in (Y,Pb,Pr) + Audio		1	
Digital Audio Out (Coaxial / Optical)		1 (Optical)	
HDMI/HDCP Input		1	
RGB In (D-sub 15pin) - PC		1	
PC Audio Input		1 (Sharing with Component Audio)	
RS-232C (D-Sub 9pin)		1	
External Speaker Out (3.5mm phone jack)		1 Variable/Fixed/Line Out, 3.5mm, Stereo, Single ended Type (GRD,L+,R+), 1W with 8Ω	
ACCESSORIES			
Cable		Power cord (1.55m, Angle Type)	
Manual / ESG		Simple Manual	
POWER			
Voltage		100 ~ 240V, 50/60Hz	
Typical (Based on Energy Star 7.0)		39W	28W
Stand-by		0.5W ↓	
CABINET			
Bezel Colour		Lucido Titan	
Stand Colour		Black	
Bezel Width - ON (Left/Right, Upper, Bottom)		11.0mm, 11.0mm, 16.5mm	11.6mm, 11.3mm, 16.3mm
Bezel Width - OFF (Left/Right, Upper, Bottom)		8.5mm, 8.5mm, 14.0mm	10.5mm, 10.0mm, 14.0mm
Flame Retardant		Yes	
VESA Compatible		400mm x 400mm	200mm x 200mm
WxHxD (with stand)		37.8" x 24.1" x 8.6"	28.8" x 18.9" x 8.1"
Weight		20.9lbs	13.7 lbs
WxHxD (w/o stand)		37.8" x 22.3" x 2.2"	28.8" x 17.2" x 2.2"
Weight		20.3 lbs	13.2 lbs
WxHxD (carton)		41.7" x 26.0" x 6.0"	32.1" x 20.1" x 6.0"
Weight		25.6 lbs	16.3 lbs
REQUIRED LISTING (CERTIFICATION)			
Safety		UL	
EMC		FCC	
ETC		RoHS, cUL, NOM, Energy Star 7.0	
OTHER			
UPC		719192 198111	719192 198128
WARRANTY		2-Year Limited Warranty Parts/Labour/Backlight   Extended warranty options are also available	

PANEL	MODEL	42LX330C	32LX330C
	Panel Size	42" class (42.16" diagonal)	32" class (31.65" diagonal)
	Backlight Type	Direct LED	
	Resolution	1920 x 1080 (FHD)	1366 x 768 (HD)
	Brightness	300cd/m <sup>2</sup>	
	Dynamic Contrast Ratio	1,000,000:1	
	Contrast Ratio	1200 :1	
	Viewing Angle	178°x178°	
	Response Time(G to G)	8ms	9ms
	Frame Rate	60Hz	
BROADCAST SYSTEM	Analog	Yes (NTSC)	
	Digital	ATSC/QAM/VSB	
VIDEO	Triple XD Engine	Yes	
	Dynamic Colour Enhancer	Yes	
	Real Cinema 24p (3.3 pull down)	Yes	
	Aspect Ratio	6 modes (16:9, Just scan, Set by program, 4:3, Zoom, Cinema zoom1)	
AUDIO	Audio Output	10W + 10W	
	Speaker System	2.0 ch	
	Sound Mode	6 modes (Standard, News, Music, Cinema, Sport, Game)	
	Optical Sound Sync	Yes	
	Sound Optimizer	3 modes (Normal, Wall-Mount Type, Stand Type)	
	Clear Voice	Yes	



LG Electronics Canada, Inc.  
20 Norelco Drive  
North York, ON M9L 2X6

Customer Service: 1 866 542 2623  
B2B Sales: 1 888 824 6211

All screen images are simulated. Dimensions and weights are approximate. Design, features and specifications subject to change without notice.

© Copyright 2015 LG Electronics Canada, Inc. All Rights Reserved. "LG Life's Good" is a registered trademark of LG Corp. XD Engine is a registered trademark of LG Electronics, Inc. HealthView and EcoSmart are trademarks of LG Corp. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. SRS and the SRS symbol, TruSurround XT and WOWare trademarks or registered trademarks of SRS Labs, Inc. VESA is a trademark of Video Electronics Standards Association. All other product and brand names are trademarks or registered trademarks of their respective companies.

# Edge LED Commercial Lite Integrated HDTV



**49LX341C**  
49" class (48.5" diagonal)

LG provides the ability to facilitate communications between businesses and their target audience. With our expanded line of affordable commercial display solutions, LG is aggressively meeting clients' demands for digital out-of-home technologies.



The LX341C is a great solution for many different application settings ranging from hospitality, restaurants, education, and beyond... You will discover new features and benefits that includes new welcome screen and welcome video options, self diagnostics via USB device, 90 degree straight edge corners, new screen sizes and more!

## FOR EFFICIENT MANAGEMENT

**USB CLONING**  
The USB Cloning feature allows you to simply copy the TV settings onto all TVs using a USB stick, a process that is fully automated to save time without having to set each TV one by one.



**WELCOME SCREEN**  
Welcome visitors with a warm greeting message that includes your business name/logo and now with a video or both.



**MULTI IR**  
Multi IR function eliminates the remote control signal interference between TVs in multiple dwelling rooms. This system will work using the same LG TV model. (Optional 124-213-10 required)



**RS232C CONTROL**  
Via the TV's RS-232C port, you can remotely control multiple TVs' power and volume settings simultaneously.



## FOR CONVENIENCE & ENTERTAINMENT

**EXTERNAL SPEAKER OUT**  
Enhance the entertainment experience by adding an additional speaker, visitors to listen to and control the TV audio from anywhere in your business area, including restrooms.



**USB 2.0**  
You can play images and videos from and record TV programs to external storage devices. Immediate recording & reserved recording options are available.

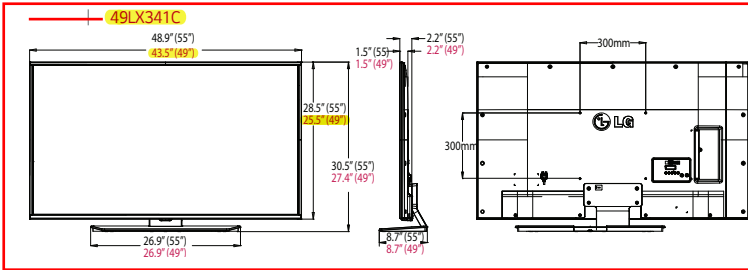
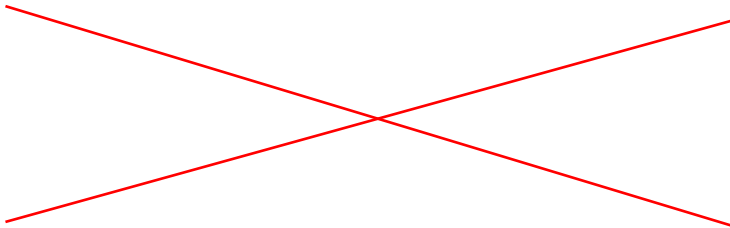


# Edge LED Commercial Lite Integrated HDTV

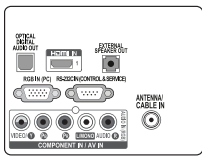


## 49LX341C

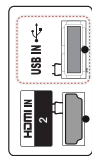
49" class (48.5" diagonal)



Rear Jack Panel



Side Jack Panel



PANEL	MODEL	65" class (64.53" diagonal)	60" class (60.10" diagonal)	55" class (54.64" diagonal)	49" class (48.5" diagonal)
PANEL	Panel Size	65" class (64.53" diagonal)	60" class (60.10" diagonal)	55" class (54.64" diagonal)	49" class (48.5" diagonal)
	Backlight Type	Edge			
	Resolution	1920 x 1080 (FHD)			
	Brightness	350cd/m <sup>2</sup>		330cd/m <sup>2</sup>	300cd/m <sup>2</sup>
	Dynamic Contrast Ratio	1,000,000:1			
	Contrast Ratio	1400 : 1	5000:1	1200:1	
	Viewing Angle	178°/178°	176° /176°	178°/178°	178°/178°
	Response Time (G to G)	8ms		9ms	
	Frame Rate	T240Hz		60 Hz	
	BROAD-CASTING SYSTEM	Analog	Yes (NTSC)		
Digital		ATSC/QAM/VSB			
VIDEO	Triple XD Engine	Yes			
	Dynamic Colour Enhancer	Yes			
	Real Cinema 24p (3.3 pull down)	Yes			
	Aspect Ratio	6 modes ( 16:9, Just scan,Set by program, 4:3,Zoom,Cinema zoom1)			
	Audio Output	10W + 10W			
AUDIO	Speaker System	2.0 ch			
	Sound Mode	6 modes (Standard, News, Music, Cinema, Sport, Game)			
	Optical Sound Sync	Yes			
	Sound Optimizer	3 modes (Normal, Wall-Mount Type, Stand Type)			
	Clear Voice	Yes			

FEATURES	MODEL	65" class (64.53" diagonal)	60" class (60.10" diagonal)	55" class (54.64" diagonal)	49LX341C
FEATURES	Remote Diagnosis	Yes (Self Diagnosis (USB))			
	HDMI-CEC	Yes (ARC not supported)			
	HTNG-CEC	Yes			
	Menu	PDM only			
	Lock mode	Yes			
	External Speaker Out	Yes			
	RJP Interface	(Variable/Fixed, 3.5mm, Stereo, Single ended Type(GND,L+,R+), 1W w/8Ω)			
	RJP Compatibility	Yes (RS232C,HDMI)			
	RJP Compatibility	Teleadapt (RS232C), Teleadapt/Guestlink (HDMI CEC)			
	USB	Yes (USB 2.0)			
	USB Auto Play back	Yes			
	Moving Picture Playback (SD/HD/Plus HD)	Divx HD			
	Picture	JPEG			
	Audio Codec	MP3, AC3, MPEG, AAC,HEAAC, CDDA, LPCM			
	USB Cloning	Yes			
	Multi IR Code	Yes			
	Welcome Screen (Splash Image)	Yes			
	Auto Off/Auto Sleep	Yes			
	Motion Eye Care	Yes			
	Kensington Lock	Yes (Stand)			
INTERFACE	HDMI In	2 (1 Rear, 1 Side)			
	USB (2.0)	1			
	RF In	1			
	AV In	1 (Sharing with Component in)			
	Component in (Y,Pb,Pr) + Audio	1			
	Digital Audio Out (Coaxial / Optical)	1 (Optical)			
	HDMI/HDCP Input	1			
	RGB In (D-sub 15pin) - PC	1			
	PC Audio Input	1 (Sharing with Component Audio)			
	RS-232C	1 (D-Sub 9pin)			
ACCESSORIES	External Speaker Out (phone jack)	1 (Variable/Fixed/Line Out, 3.5mm, Stereo, Single ended Type (GND,L+,R+), 1W with 8Ω)			
	Cable	Power cord (1.55m, Angle Type)			
POWER	Manual / ESG	Manual			
	Voltage, Hz	100 - 240V, 50/60Hz			
	Typical (Based on Energy Star 7.0)	66W	63W	54W	46W
CABINET	Stand-by	0.5W ↓			
	Bezel Colour	Black			
	Bezel Width (Left/Right, Upper, Bottom)	16.1mm, 15.1mm, 21.8mm	15.1mm, 12.7mm, 17.8mm		14.9mm, 12.5mm, 17.6mm
	Bezel Width-OFF (Left/Right, Upper, Bottom)	13.6mm, 12.6mm, 19.3mm	14.1mm, 10.9mm, 15.3mm		12.6mm, 10.2mm, 15.3mm
	VESA Compatible	300mm x 300mm			
	WxHxD (with stand)	57.5"x35.4"x11.6"	53.7"x33.2"x11.6"	48.9"x 30.5" x 8.7"	43.5"x 27.4" x 8.7"
	Weight	75.0 lbs	64.6 lbs	46.1 lbs	38.8 lbs
	WxHxD (w/o stand)	57.5"x33.4"x2.3"	53.7"x31.2"x2.2"	48.9"x 28.5" x 2.2"	43.5"x 25.5" x 2.2"
	Weight	63.5 lbs	53.1 lbs	31.7 lbs	31.7 lbs
	WxHxD (carton)	60.9"x38.2"x6.3"	58.4"x 35.7" x 6.3"	52.4"x 31.9" x 6.0"	47.1"x 29.9" x 5.6"
Weight	90.4 lbs	76.9 lbs	54.9 lbs	46.3 lbs	
REQUIRED LISTING (CERTIFICATION)	Safety	UL			
	EMC	FCC			
	ETC.	RoHS, cUL, NOM, Energy Star 7.0			
OTHER	UPC	719192 198074	719192 198081	719192 198098	719192 198104
WARRANTY	2-Year Limited Warranty Parts/Labour/Backlight   Extended warranty options are also available				



LG Electronics Canada, Inc.  
20 Noreloc Drive  
North York, ON M9L 2X6

Customer Service: 1 866 542 2623  
B2B Sales: 1 888 824 6211

All screen images are simulated. Dimensions and weights are approximate. Design, features and specifications subject to change without notice.

© Copyright 2015 LG Electronics Canada, Inc. All Rights Reserved. "LG Life's Good" is a registered trademark of LG Corp. XD Engine is a registered trademark of LG Electronics, Inc. HealthView and EcoSmart are trademarks of LG Corp. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. SRS and the SRS symbol, TruSurround XT and WOWare trademarks or registered trademarks of SRS Labs, Inc. VESA is a trademark of Video Electronics Standards Association All other product and brand names are trademarks or registered trademarks of their respective companies.



**Steam Food Cookers**  
**Models: DFW-150, DFW-250,**  
**DFWT-150, DFWT-250,**  
**DFWF-250**

## PITA PIT WARMER



**DFW-150**



The Deluxe Food Cooker produces steam using plain tap water for quick heating and reconstituting of food items.

Simple push-button action delivers a fully adjustable impulse of steam. Because the amount of steam is consistent, it removes the guesswork and produces a uniform finished product from one operator to the next.

The Deluxe Food Cooker is manufactured from the finest materials available and assembled to Roundup's strict quality standards. All units are tested at the factory to ensure dependable trouble-free operation.

*NOTE: Units with a direct water hookup require a water pressure regulator. The psi should be between 20 and 30.*

### Features:

- 0-99 minute timed steam cooking with instant warming button.
- Non-clogging.
- Uses plain tap water.
- Models available with either a self-contained water reservoir or direct water hookup.
- Safety steam release valve.



**Steam Food Cookers**  
**Models: DFW-150, DFW-250,**  
**DFWT-150, DFWT-250,**  
**DFWF-250**

Dimensions			
Model & Mfg. No.	Width (A)	Depth (B)	Height (C)
With Self-Contained Water Tank			
DFW-150 9100104	16 5/8" (422 mm)	17 1/4" (438 mm)	8 3/4" (222 mm)
DFW-150 9100105			
DFW-150 9100106			
DFWT-150 9100124	20" (508 mm)	17 1/4" (438 mm)	8 3/4" (222 mm)
DFWT-150 9100126			
With Direct Water Hookup			
DFW-250 9100114	16 5/8" (422 mm)	17 1/4" (438 mm)	8 1/4" (210 mm)
DFW-250 9100116			
DFWT-250 9100134	20" (508 mm)	17 1/4" (438 mm)	8 3/4" (222 mm)
DFWT-250 9100136			
DFWF-250 9100146	26 7/8" (683 mm)	17 1/4" (438 mm)	9 3/8" (238 mm)
DFWF-250 9100156			

Electrical Ratings & Plug Configurations						
Model & Mfg. No.	Volts	Watts	Amp.	Hz.	Plug Description	Plug Configuration
With Self-Contained Water Tank						
DFW-150 9100104	120	1800	15	50/60	NEMA 5-15P 15 Amp., 120 Volt	
DFW-150 9100105	120	1500	12.5	50/60		
DFW-150 9100106	230	2800	12.2	50/60		
DFWT-150 9100124	120	1800	15	50/60	NEMA 5-15P 15 Amp., 120 Volt	
DFWT-150 9100126	230	2800	12.2	50/60	CEE 7/7 16 Amp., 250 Volt	
With Direct Water Hookup						
DFW-250 9100114	120	1800	15	50/60	NEMA 5-15P, 15 Amp., 120 Volt	
DFW-250 9100116	230	2800	12.2	50/60	CEE 7/7 16 Amp., 250 Volt	
DFWT-250 9100134	120	1800	15	50/60	NEMA 5-15P, 15 Amp., 120 Volt	
DFWT-250 9100136	230	2800	12.2	50/60	CEE 7/7 16 Amp., 250 Volt	
DFWF-250 9100146	208	3300	15.9	50/60	NEMA 6-20P, 20 Amp., 250 Volt	
DFWF-250 9100156	230	3300	14.4	50/60	CEE 7/7 16 Amp., 250 Volt	
Capacities						
<b>DFW Series</b>	2 7/8" (73 mm) deep 1/2-size steam table pan					
<b>DFWT Series</b>	2 7/8" (73 mm) deep 2/3-size steam table pan					
<b>DFWF Series</b>	4" (102 mm) deep full-size steam table pan					



A.J. Antunes & Co.  
 Headquarters/Manufacturing  
 180 Kehoe Boulevard  
 Carol Stream, Illinois 60188 USA  
 Phone (630) 784-1000  
 Toll Free (800) 253-2991  
 Fax: (630) 784-1650

Antunes Equipment  
 Manufacturing (Suzhou) Ltd.,  
 9 Hou Ju Road, Building #24,  
 S&T Park, SND  
 Suzhou, Jiangsu, China 215011  
 Phone: 86-512-6841-3637  
 Fax: 86-512-6841-3907



STAR MODEL PST14DPP WILL REPLACE  
STAR MODEL GR14STEPP IN FALL 2015

**STAR** Star Manufacturing



## PRO-MAX® 2.0 SMOOTH PITA TOASTER Model PST14DPP

### Features/Benefits:

- ★ Expand your menu with Star's Pro-Max specialty two sided pita toaster. Free floating tops with no cumbersome linkage allows the preparation pita bread and other menu items quickly and easily. Top platens lift parallel to bottom platen and will self-adjust to the product thickness the first three inches of platen lift.
- ★ Split top design provides left and right capability to prepare menu items at different order times.
- ★ Electronically controlled temperature provides:
  - Even top and bottom surface temperature distribution.
  - Fast recovery.
  - Even toasting of menu items on top and bottom.
  - Low energy usage.
- ★ Left and right, easy to read digital time and temperature displays. Four (4) selection buttons on each side are independently programmable to provide multiple menu item and operational flexibility. Temperature is programmable from 250°F (79°C) to 550°F (302°C).
- ★ Easy to clean.
  - Polished platen surface finish is easy to clean and reduce menu items sticking.
  - Stainless steel burn guard system allows access to easily clean top and bottom surfaces.
  - Front grease trough and grease drawer provides easy and safe access.
- ★ Durable, reliable, and long lasting design.
  - Heavy duty aluminum platens provide superior heat performance and long life.
  - Counter balance hinge system that has been a proven design for over 10 years.
  - Heavy duty stainless steel construction.
  - Minimal fasteners.
  - Water resistant electronic wire enclosure.
  - No cumbersome linkage to maintain.



Model PST14DPP



### Applications:

Star's two-sided pita toaster can prepare pita bread and many other menu items quickly and easily. Split-top design provides maximum menu flexibility and cooking production.

### Quality Construction:

The rugged body is constructed of 18 gauge stainless steel. The toaster is supplied with grease trough and stainless steel grease drawer. The counter balance mechanism is constructed from hardened aluminum. The 6 foot lead-in cord has a special covering that is resistant to water and oil and the wires are protected by metallic braiding. Cord comes complete with plug (see typical specifications).

### Warranty:

Two-sided grill is covered by Star's one year parts and labor warranty.



Star Manufacturing - 10 Sunnen Drive - P.O. Box 430129 - St. Louis, MO 63143-3800  
Phone: (314) 678-6303 - FAX: (314) 781-5445 - www.star-mfg.com

S275/09-15

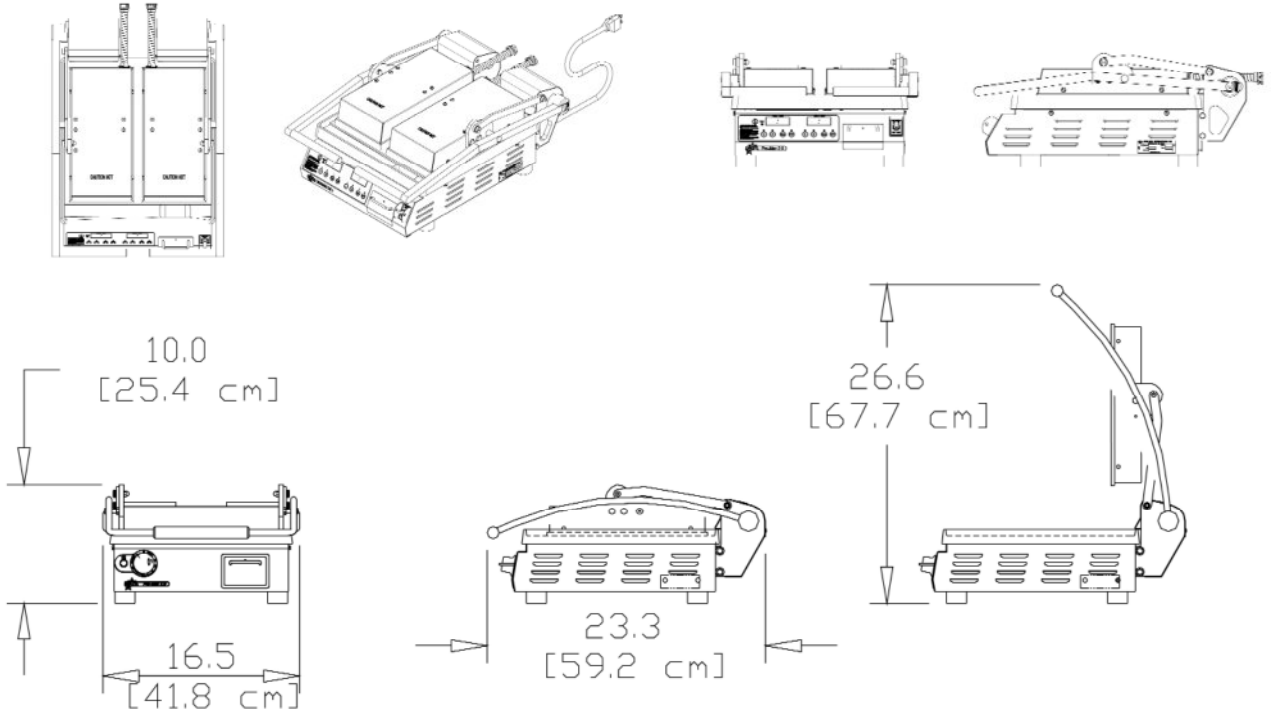
Pro-Max® Smooth Specialty Pita Toaster



**STAR** Star Manufacturing

Pro-Max® Smooth Specialty Pita Toaster

## PRO-MAX® 2.0 SMOOTH PITA TOASTER Model PST14DPP



EXTERIOR DIMENSIONS - ALL MODELS

### Model and Specifications

Model No.	Grid Surface	Width Inches (cm)	Depth Inches (cm)	Closed Inches (cm)	Open Inches (cm)	Voltage	Wattage	Amps	NEMA Plug	Approximate Weight	
										Shipping lbs. (kg)	Installed lbs. (kg)
PST14DPP	Alum.	16.8 (42.6)	23.125 (58.7)	12.9 (32.8)	29.7 (75.4)	240			6-15P	81	68

### Typical Specifications

Pita toaster is constructed with a stainless steel body and aluminum smooth platens. Designed with electric controls for precise temperature control and digital timer for select menu items. Toasting height between platens is up to 3" with hinge system providing 3-4 pounds of pressure to the cooking product placed on bottom platen. Metal sheathed tubular elements and non-skid feet are standard. Unit has pilot light, six foot power cord with NEMA plug. Printed in the U.S.A.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Star Manufacturing exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

Star Manufacturing - 10 Sunnen Drive - P.O. Box 430129 - St. Louis, MO  
Phone: (314) 678-6303 - FAX: (314) 781-5445 - www.star-mfg.com



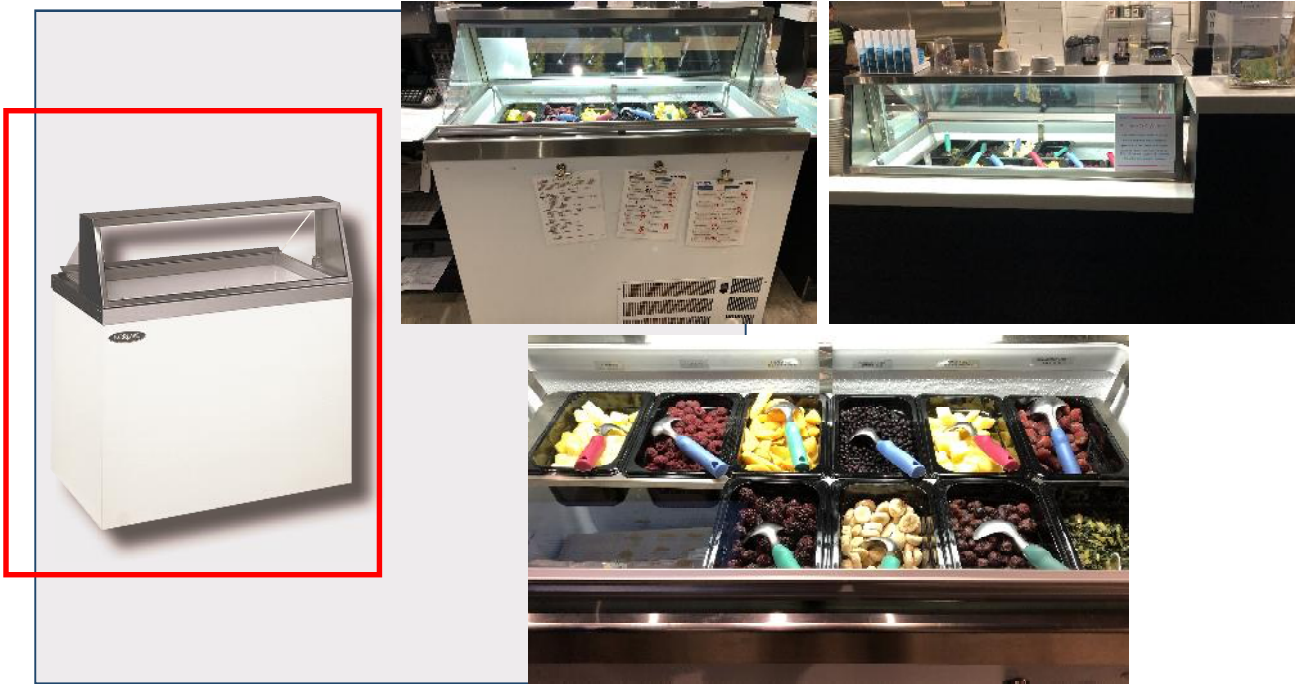
NOR-LAKE, INCORPORATED  
727 Second Street  
P.O. Box 248  
Hudson, Wisconsin 54016

800-955-5253  
715-386-2323  
800-388-5253 Service  
866-961-5253 Parts  
715-386-4291 FAX  
www.norlake.com

NORLAKE

# FRUIT FREEZER

## ICE CREAM DIPPING Cabinet



### SPECIFICATIONS FOR: HF040, HF100,

Available in: standard profile/angled glass; standard profile/curved glass; low profile/angled glass

- **Finish:** 24 gauge white painted galvanized steel interior and exterior
- **Insulation:** 2-1/4" foamed-in-place "zero ODP" urethane insulation
- **Hardware:** Stainless steel top and attached superstructure with tempered plate glass viewing window, stainless steel serving deck. Heavy-duty epoxy-coated wire can support racks, transparent acrylic dipping compartment lids are hinged with a full length handle.
- **Electrical:** 115 volt, 60 HZ, 1 phase with cord and plug
- **Refrigeration:** Cold wall evaporator. Temperature range: 5°F to -5°F (-15°C to -21°C)
- **Approvals:** UL, C-UL, NSF listed \*\*

### STANDARD FEATURES

- Equipped with levelling legs to correct unlevel flooring situations
- Rear air intake and discharge
- Drain with hose connection
- Brilliant, interior fluorescent lighting
- Independent on/off compressor and light switch
- Warranties: 2 year parts and labor, 5 year compressor

### OPTIONAL FEATURES\*

- Rear service door for HF100, HF160 and HF230 models
- Removable can holders with white overnight can covers
- Dipper well
- Removable frost shields
- Legs, casters
- Lid locking kit (less lock)
- Flavor identification tabs



Nor-Lake, Inc.  
Registered to ISO 9001:2008  
File No. 10001816

\*Most options are available one week from receipt of order. Please contact us for specific questions.

\*\*C-UL is Underwriters Laboratories Safety Certification Mark which indicates that UL has tested the equipment to applicable CSA Standards.

\*\*UL Sanitation is Underwriters Laboratories Sanitation Mark which indicates that UL has tested the equipment to applicable NSF Standards.

ICE CREAM DIPPING/DISPLAY MERCHANDISERS

SPECIFICATION  
GUIDE

POSSIBLE UNIT FOR SMALL SPACES

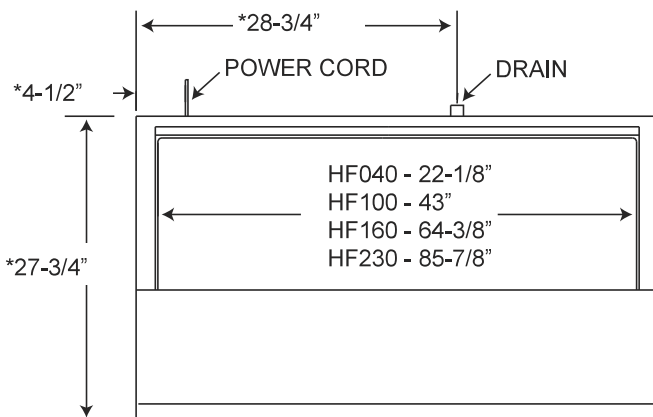
STANDARD UNIT

STANDARD MODEL SPECIFICATIONS

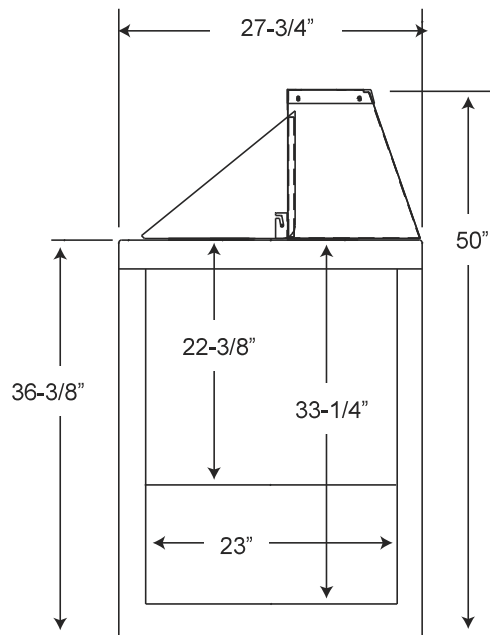
Model	HF040-WWG/0	HF100-WWG/0	HF160-WWG/0	HF230-WWG/0
Crated Height	60"	60"	60"	60"
Crated Width	45"	57"	80-1/2"	104"
Crated Depth	40"	40"	40"	40"
Crated Weight (lbs.)	240	370	495	600
Interior Display Height	22-3/8"	22-3/8"	22-3/8"	22-3/8"
Interior Storage Height	*	10-7/8"	10-7/8"	10-7/8"
Interior Display Width	22-1/8"	43"	64-3/8"	85-7/8"
Interior Storage Width	*	19-1/2"	40-7/8"	62-3/8"
Interior Depth	23"	23"	23"	23"
Can Capacity display **	4	8	12	16
Can Capacity storage **	0	4	8	12
Overall Height	50"	50"	50"	50"
Overall Width	26-1/2"	47-3/4"	69-1/4"	90-3/4"
Overall Depth	27-3/4"	27-3/4"	27-3/4"	27-3/4"
Gross Cubage (ft. <sup>3</sup> )	3.5	9.6	16	22.5
Number of Legs or Casters (optional)	4	4	4	4
Condensing Unit Size	1/3	1/2	1/2	3/4
Refrigerant	R-134a	R-134a	R-404A	R-404A
Electrical Characteristics	115/60/1	115/60/1	115/60/1	115/60/1
Cord and Plug Furnished	Yes	Yes	Yes	Yes
Maximum Fuse Size	15	15	15	15
Nema Plug Configuration	5-15P	5-15P	5-15P	5-15P
Total Amp Draw	7.4	7.5	9.7	11.5

\* Storage compartment not available on this model.

\*\* Capacities in 9-1/2" diameter, 3 gallon cans.



\*DISTANCES ARE STANDARD ON ALL MODELS





Yogurt-Matic 920




CR-4001

**Versión española en preparación**  
**Technical Data**  
**Yogurt-Matic YM-920**

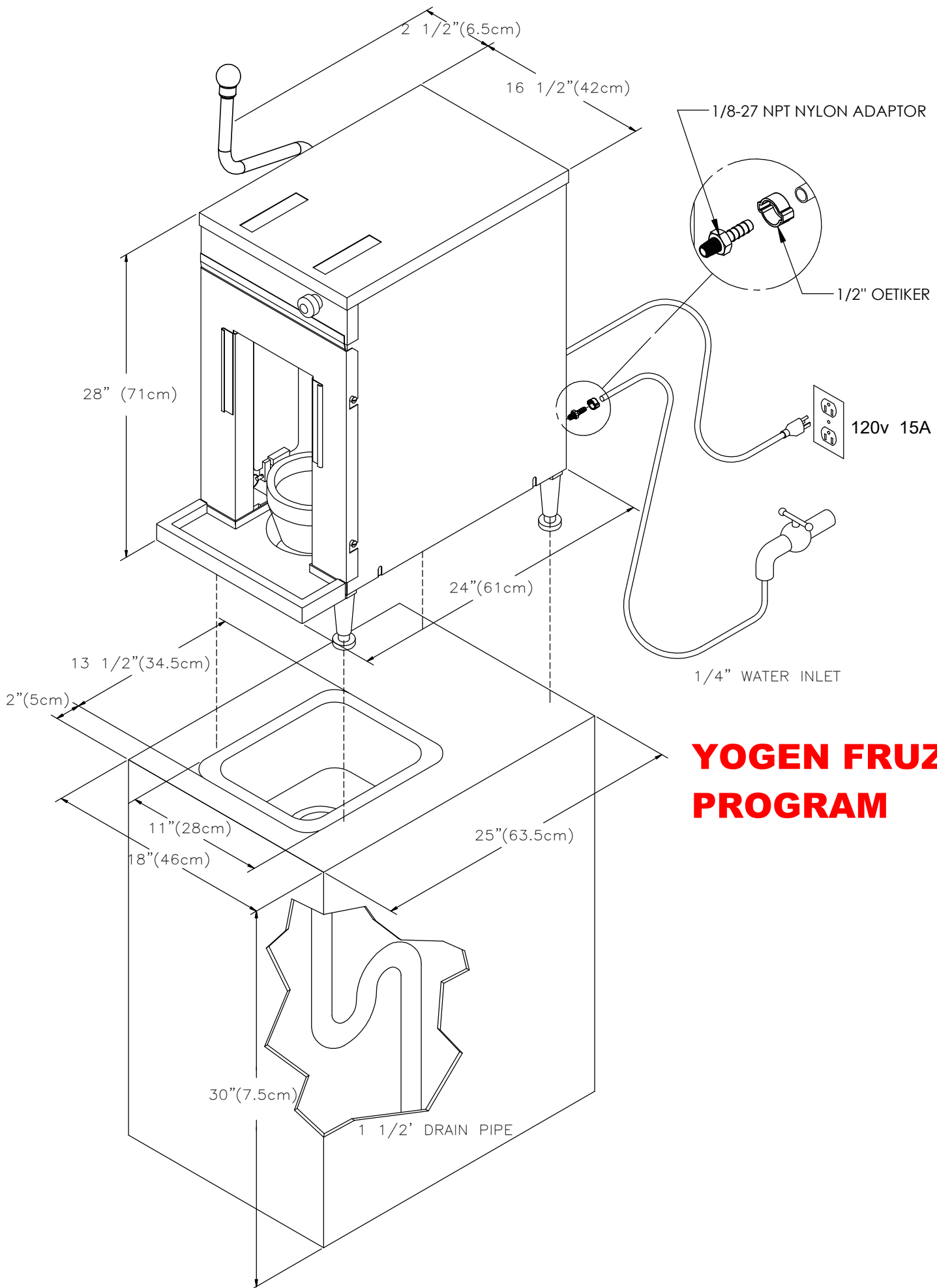
## YOGEN FRUZ PROGRAM

Specifications	
Exterior Finish:	Durable Stainless Steel
Vertically Guided Mixing System:	Linear Teflon bearing (industrial grade)
Mixing cone:	Commercial Grade Sanitary Plastic
Rinsing System: (built-in)	Twin Spray
Electrical*:	15a; 115v/60Hz; single phase; 1hp
Quality Control:	All parts are factory tested prior to shipping
Shipping weight:	165 lbs (74.8 kg)
Height:	28 in. (71.2 cm)
Width:	16.5 in. (44.9 cm)
Depth:	24 in. (61 cm)
Specifications are subject to change without notice	



EXAMPLES OF 1/4" WATERLINE CONNECTIONS REQUIRED FOR UNIT.





# YOGEN FRUZ PROGRAM

RECOMMENDED INSTALLATION



