


Ventilation
 (SG1, SD1/SD2, RG1, Fire Dampers, RH1, Wall Boxes (WB),
 EF1 & EF2)

 GOODKEY, WEEDMARK & ASSOCIATES LIMITED Consulting Engineers 1688 Woodward Dr., Ottawa, ON Canada K2C 3R8 Tel.: 613-727-5111, Fax: 613-727-5115, info@gwal.com	
REVIEWED <input type="checkbox"/> REVIEWED AS NOTED <input checked="" type="checkbox"/> For general conformance only. Contractor remains responsible for equipment & system details, performance, accuracy, dimensions and coordination.	REVISE & RESUBMIT <input type="checkbox"/> REJECTED <input type="checkbox"/> Date: <u>JULY 16 2019</u> GWA #: <u>2019-148</u> SD #: <u>SM02</u> By: <u>Edna / A. Mitchell</u>

eker: AM

- SIZE & QUANTITY TO BE CONFIRMED BY CONTRACTOR
- WHITE ENAMEL FINISH - GRILLES/DIFFUSERS
- WALL BOX FINISH ARCHITECT TO CONFIRM.

SHOP DRAWING REVIEW

REVIEWED
 REVIEWED AS NOTED
 REVISE AND RESUBMIT



WALL BOXES IN BRICK TO MATCH DULUX
 ANCIENT COPPER DLX1063-7

"This review is for the sole purpose of ascertaining conformance with the general design concept for architectural features only, and does not in any way constitute review of the design of engineering elements which form part of the Contract Documents prepared by others. This review shall not mean that the Architect approves the detail design inherent in the shop drawings. This responsibility shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes, or to techniques of construction and installation and for co-ordination for the work of all trades."

By: Bryan Bonell Date: July 18, 2019
 HOBIN ARCHITECTURE INCORPORATED

SUBMITTAL

Job: Meridian Community Centre Rebuild

Spec Section No: 0

Submittal No: 0

Revision No: 0

Sent Date: July 2, 2019

Spec Section Title: Ventilation

Submittal Title: Ventilation

Contractor:

Optimum Mechanical
Supplier: Walmar

General Contractor:
TAL-CO Building Innovations Ltd.
Reviewed as Noted by Farah Bano on July 09, 2019.
Refer to next page for comments.

Contractor's Stamp

Project Name
Meridian Community Centre Rel



APPROVED

REJECTED

REVISE

REVIEWED

BY NDewar

DATE 7/2/2019

SUBMITTAL# 0

SPEC 0

Architect:

Architect's Stamp

Engineer:

Engineer's Stamp

Notes by Farah Bano (TAL-CO):

- Goodkey to review technical specifications.
- Double-check fan speeds.
- Return Air Grille: RG1 ID#1, Revise quantity from 1 to 4 for pedways.
- Optimum to confirm 3 Fire Damper sizes. Transfer duct sizes are as follows: 450x300 (qty:2) & 250x250.
- Optimum to confirm BV1 Depth. ~~Wall type 1 for both BV1's is 220mm.~~
- Optimum to provide Shop drawings for Thermostat and Speed Controller.

Project: Meridian Retirement Community Fire Restoration

Location: Ottawa, Ontario

Engineer: Goodkey Weedmark and Associates

Contractor: Optimum Mechanical

Date: June 20, 2019

Submitted By: Caleb Cox, C.E.T

Product:

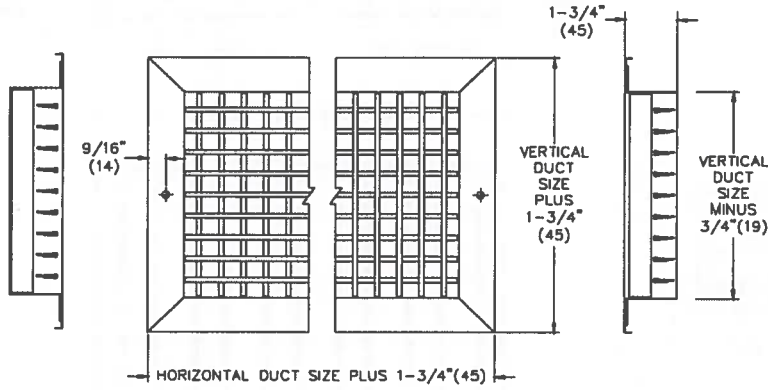
- Krueger Grilles and Diffusers REV.0
- Alumavent Dynamic Fire Dampers REV.0
- Broan Range Hood REV.0
- Reversomatic Wall Boxes REV.0
- PennBarry Cabinet Fans REV.0

5880

Double Deflection Supply Grille, 3/4" Blade Spacing, Aluminum

Main Product

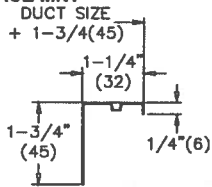
5880



- Construction is aluminum.
- Each blade is individually adjustable.

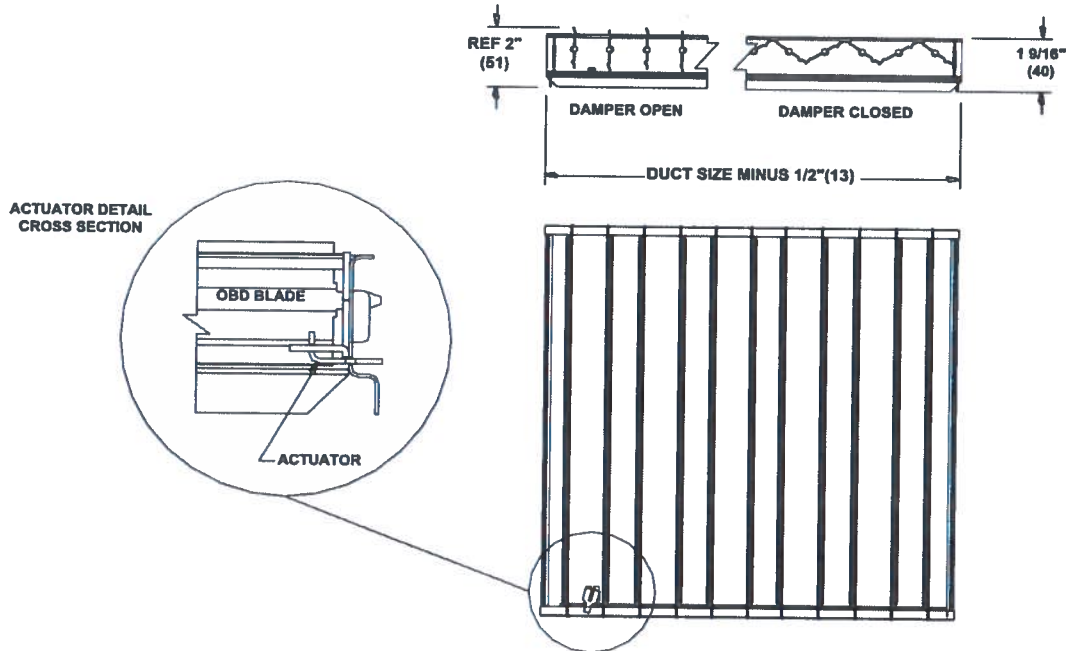
Feature Benefits

F22 - SURFACE MNT



Feature Benefits (continued)

01 - OBD - STEEL



- Construction is steel.
- Damper is adjusted through the face.
- Damper mounting hardware (not shown) can add an additional 1/4" to overall damper size.

Option Schedule

Deflection Pattern V - VERTICAL
 Frame F22 - SURFACE MNT
 Panel 00 - NONE
 Fastening 01 - STANDARD SCREW HOLES
 Damper 01 - OBD - STEEL
 Accy 1 00 - NONE
 Accy 2 00 - NONE
 Accy 3 00 - NONE
 Finish 44 - BRITISH WHITE

ID	Quantity	Tag	Width	Height
1	16	SG1	10	6

Project Meridian Retirement Community Fire Res!
Architect
Engineer
Contractor
Version 2014.0.444

Date 06/20/2019
Office Walmar Ventilation Products
Preparer Caleb Cox



Designation SG1

Dimension Table

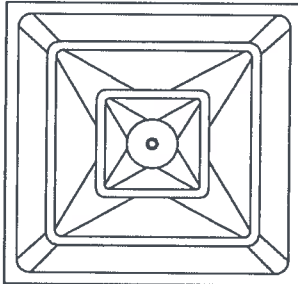
Width	Height	Frame	Panel	Face (W)	Face (H)	Stack (W)	Stack (H)
10	6	F22 - SURFACE MNT	00 - NONE	11.75	7.75	9.5	5.5

1450

3 Cone, Drop Face, Steel

Main Product

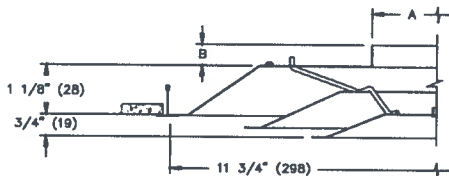
1450



- Construction is steel.
- Damper to be ordered separately.
- Comes with two earthquake tabs.

Feature Benefits

F23 - LAY-IN T-BAR



Round Neck Size	Panel	A	B
06 - 6 IN ROUND	12X12	5.875	1.5

Option Schedule

Frame F23 - LAY-IN T-BAR
 Panel 12X12
 Accy 1 00 - NONE
 Finish 44 - BRITISH WHITE

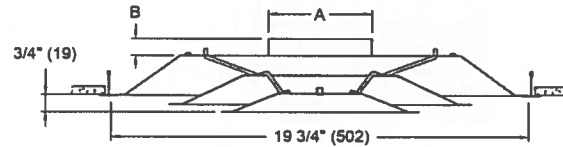
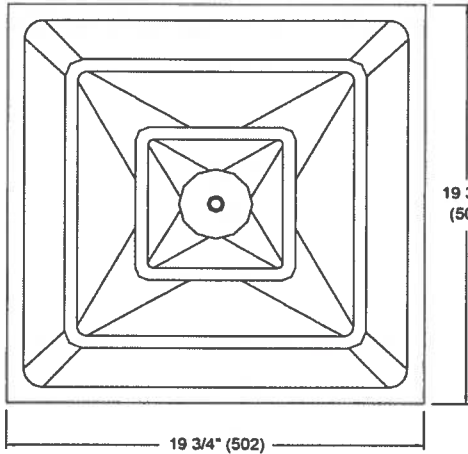
ID	Quantity	Tag	Round Neck Size
1	8	SD1	06 - 6 IN ROUND

1450

3 Cone, Drop Face, Steel

Main Product

1450



- Construction is steel.
- Damper to be ordered separately.
- Comes with two earthquake tabs.

Feature Benefits

F23 - LAY-IN T-BAR

Round Neck Size	Panel	A	B
08 - 8 IN ROUND	20X20	7.875	1

Option Schedule

Frame F23 - LAY-IN T-BAR
 Panel 20X20
 Accy 1 00 - NONE
 Finish 44 - BRITISH WHITE

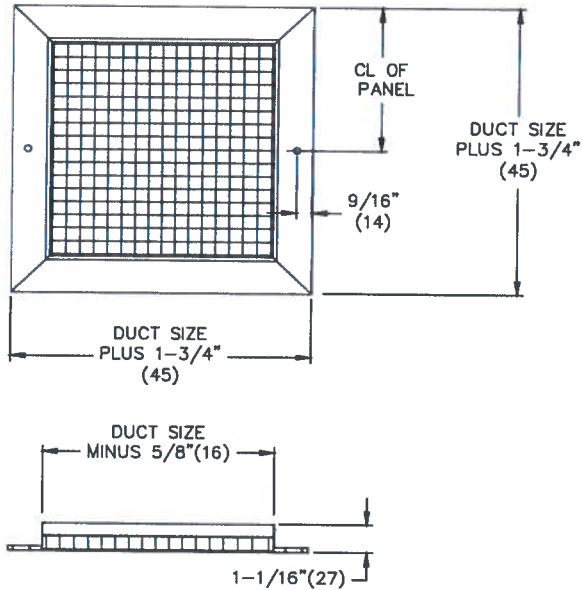
ID	Quantity	Tag	Round Neck Size
2	2	SD2	08 - 8 IN ROUND

EGC5 - AL

1/2"x1/2"x1/2" Eggcrate Grid with Aluminum Frame and Aluminum Core

Main Product

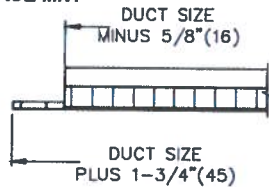
EGC5 - AL



• Construction is aluminum eggcrate core and aluminum frame.

Feature Benefits

F22 - SURFACE MNT



Option Schedule

Frame F22 - SURFACE MNT
Panel 00 - NONE
Fastening 01 - STANDARD SCREW HOLES
Damper 00 - NONE
Accy 1 00 - NONE
Accy 2 00 - NONE
Accy 3 00 - NONE
Finish 44 - BRITISH WHITE

Project Meridian Retirement Community Fire Res
 Architect
 Engineer
 Contractor

Date 06/20/2019
 Office Walmar Ventilation Products
 Preparer Caleb Cox



Version 2014.0.444

Designation RG1

Option Schedule (continued)

ID	Quantity	Tag	Width	Height
1	1	RG1	14	8
2	5	RG1	10	10
3	3	RG1	24	10

Dimension Table

Width	Height	Frame	Panel	Face (W)	Face (H)	Stack (W)	Stack (H)
14	8	F22 - SURFACE MNT	00 - NONE	15.75	9.75	13.375	7.375
10	10	F22 - SURFACE MNT	00 - NONE	11.75	11.75	9.375	9.375
24	10	F22 - SURFACE MNT	00 - NONE	25.75	11.75	23.375	9.375

- UL 555 & CAN/ULC-S112 Classified Dynamic Fire Damper, 1 ½ Hr. Label (File # R25565).
- NFPA 80, 90A & 101 compliant.
- NBC and IBC building codes compliant.



STANDARD CONSTRUCTION

DEPTH: 4 ¼" (108).

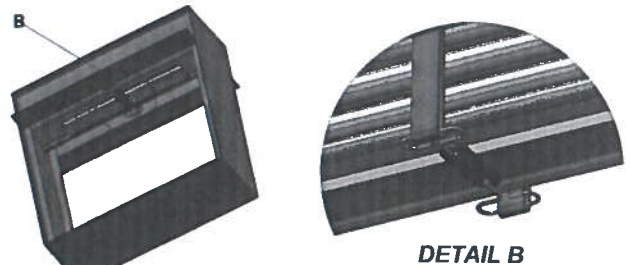
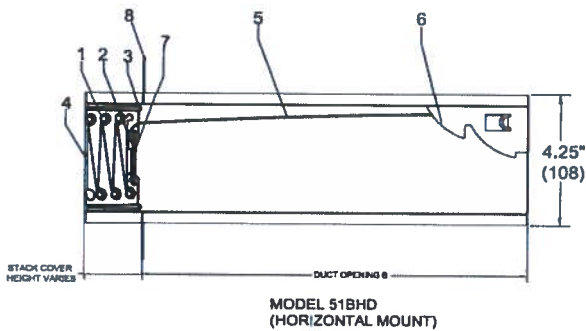
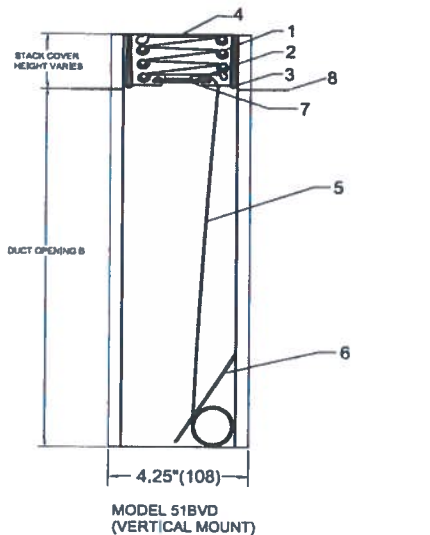
FRAME: Roll formed 20 Ga. galvanized steel with hemmed edge.

BLADE: Roll formed 22 Ga. galvanized steel. Interlocking curtain type blades.

FUSIBLE LINK: 165°F (74 C).

OPTIONAL CONSTRUCTION

- Factory supplied Sleeve – 22, 20, 18 or 16 GA. *Sleeve length required
- Access Door factory mounted in a common sleeve to ensure compliance with UL installation requirements
- 212°F (100 C) Fusible Link [max. size 48 x 44 (1219 x 1118).
- 1 ½" x 1 ½" mounting angles



DYNAMIC CLOSURE RATINGS:

- 2000 fpm (10.2 m/s) on all sizes, vertical or horizontal mount.
- 5000 fpm (25.4 m/s) vertical mount only, up to 24" x 20" (610 x 508) duct size.
- 4" w.g. (1kPa) maximum pressure on all sizes.

MAINTENANCE RECOMMENDATIONS:

NFPA 80 advises that fire dampers be inspected and tested 1 year after installation, then every 4 years minimum. More frequent inspections may be required due to system use and air conditions, or applicable local codes.

NOTES:

Dampers are furnished approximately ¼" (6) smaller than the given duct dimensions. These dynamic dampers are UL//ULC approved for use in HVAC systems where the fans remain on in the event of fire. 1½ hr. labeled fire dampers are suitable for use in fire separations with a fire resistance rating of 2 hours or less. Fire dampers must be installed in accordance with manufacturer's instructions. Refer to Alumavent installation instructions for details.

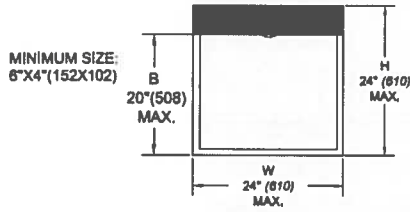
FIRE DAMPER COMPONENTS

1. Blade	5. Constant Force Spring
2. Fusible Link Assembly	6. Lock Ramp
3. Link Strap	7. Blade Stiffener
4. Frame	8. Blade Stack Cover

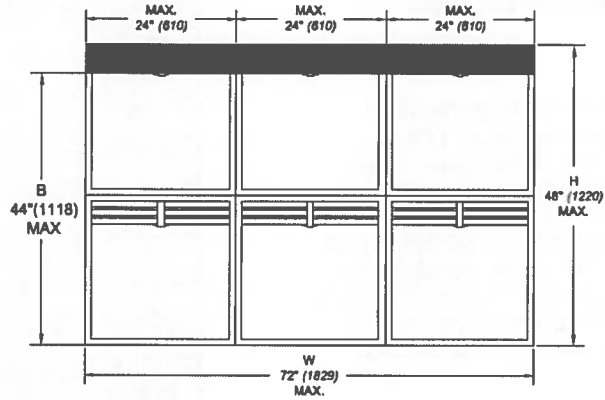
Dimensions are shown in inches (mm).

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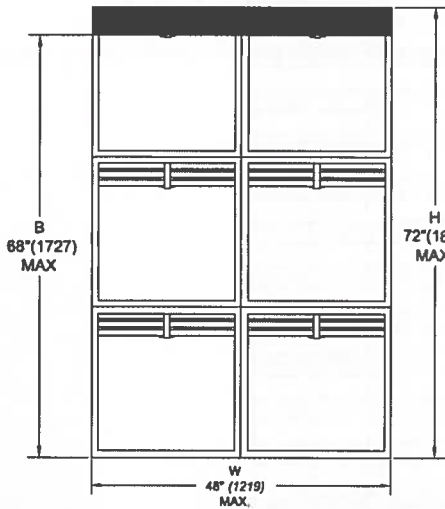
SINGLE SECTION DAMPER
 -VERTICAL OR HORIZONTAL MOUNT



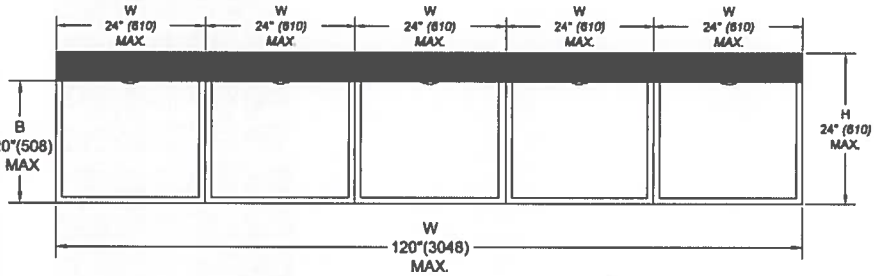
MULTIPLE SECTION DAMPER
 -VERTICAL MOUNT ONLY



MULTIPLE SECTION DAMPER
 -VERTICAL MOUNT ONLY



MULTIPLE SECTION DAMPER
 -VERTICAL MOUNT ONLY



Contractor to confirm sizes prior to ordering

NOTE: SEE TYPE B DYNAMIC SIZING CHART SC51BD FOR OVERALL DAMPER DIMENSIONS.

REF. #	QTY.	DUCT WIDTH (W)	DUCT HEIGHT (H)	MOUNT (V/H)	ACCESSORIES

*DAMPER WILL BE MANUFACTURED APPROXIMATELY ¼" (6) SMALLER THAN GIVEN DUCT DIMENSIONS.

PROJECT NAME:	ENGINEER:
CONTRACTOR:	SUBMITTAL DATE:

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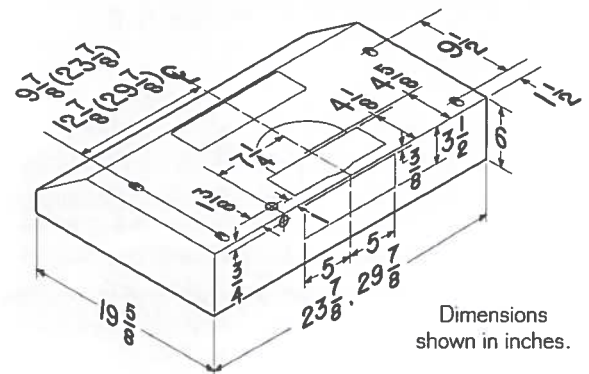
QTY:1
Tag: RH1

The clean, contemporary shape complements any kitchen design. Impressive lighting and superior smoke and odor removal are a mere introduction to everything this hood has to offer.

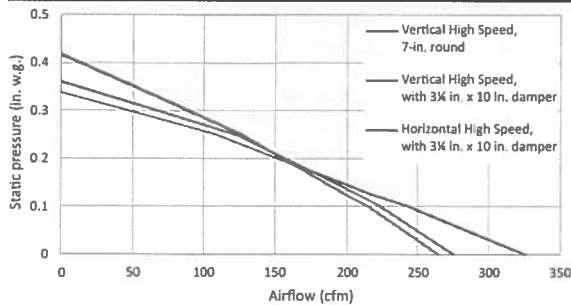
SIZE	BLACK	WHITE	STAINLESS	GREASE FILTERS (replacement)	NON-DUCTED FILTERS
24 in.	---	BCS324WWC	BCS324SSC	HPFAMM24 (Type B1)	HPF24 (Type Xb)
30 in.	BCS330BLC	BCS330WWC	BCS330SSC	HPFAMM30 (Type C1)	HPF30 (Type Xc)

PERFORMANCE						
Duct Orientation	Size	Damper	Sones		CFM	
			Normal	High	Normal	High
Vertical - Rectangular	3¼ in. x 10 in.	Included	1.5	5.0	140	230
Horizontal - Rectangular	3¼ in. x 10 in.	Included	1.5	5.0	110	210
Round - Vertical	7 in.	Sold Separately	1.5	5.0	150	250

FEATURES	
Control type	2-speed Rocker
Delay off	no
Filter Clean Reminder	no
Heat Sentry™	no
ADA Capable	yes
Lighting	2-level 50 W Halogen (bulbs not included)
Grease Filters	Micro Mesh (Qty. 2)
Installation Hardware	Standard
ENERGY STAR®	no
Recirculation	Non-ducted filters sold separately
AC INPUT	
120 V, 60 Hz - 1.4 AMPS	
OPTIONAL ACCESSORIES	
7-in. Round Damper	BP87Q
7-in. Round Adapter Plate	SR680508
Make-up Air Dampers	MD6TU, MD8TU and MD10TU
MOUNTING HEIGHT	
18 in. to 24 in. from cooktop to bottom of hood	
LIMITED WARRANTY	
1-year	
FOR INDOOR USE ONLY	



Dimensions shown in inches.



SPECIFICATION SHEET
GLACIER - BCS3 SERIES



HVI 2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.1 in. static pressure, based on tests conducted in AMCA's state-of-the-art test laboratory. Sones are a measure of humanly-perceived loudness, based on laboratory measurements.

99045738D

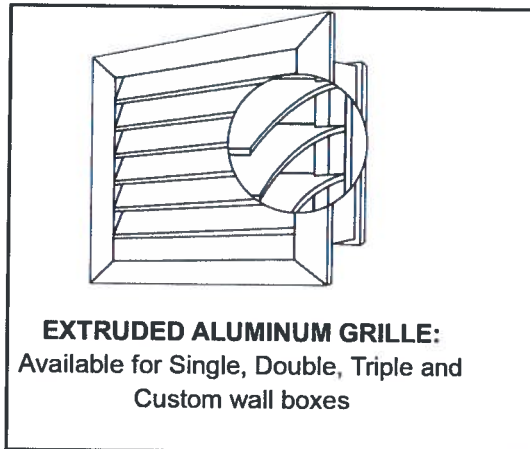
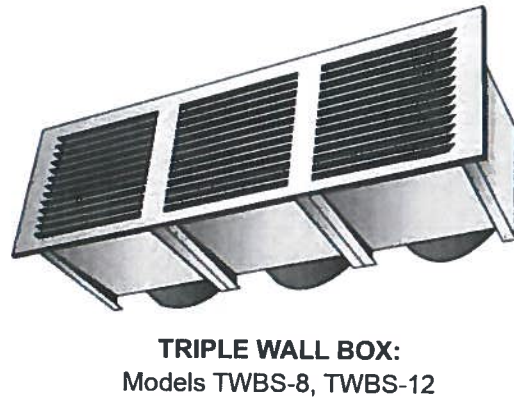
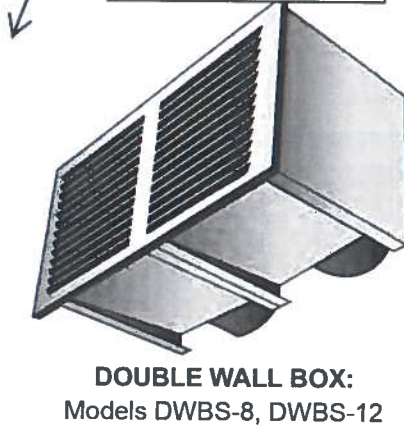
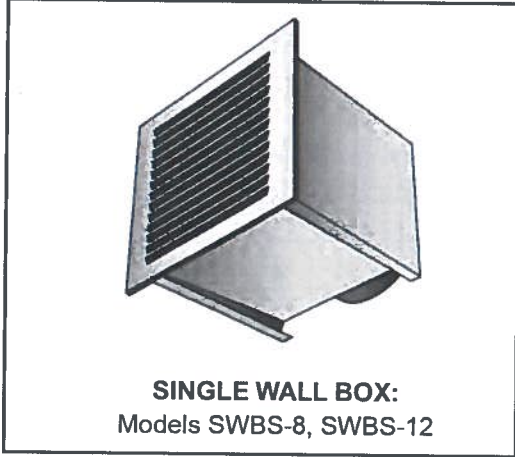


ACCESSORIES: STANDARD WALL BOXES

June 2008

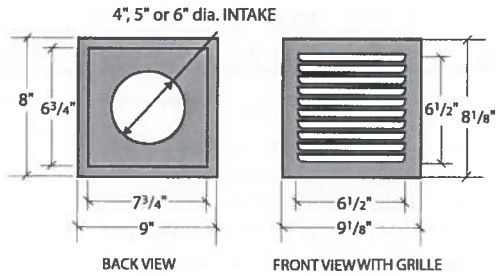
Test Standard:
Cyclic Static Test ASTM E547-00
Tested @ 200 Pa

QTY: 2
c/w 6" Diameter
Neck and E.A
Grille

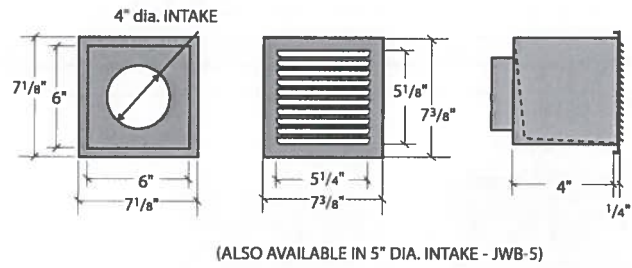


ACCESSORIES: Standard Wall Boxes

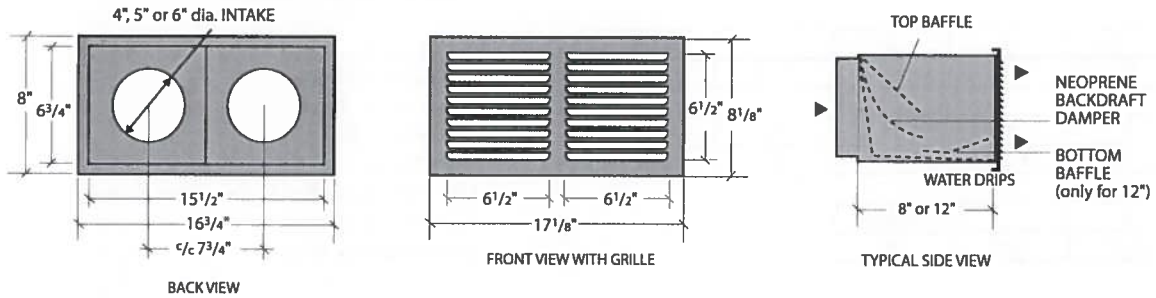
SINGLE WALL BOX: Models SWBS-8, SWBS-12



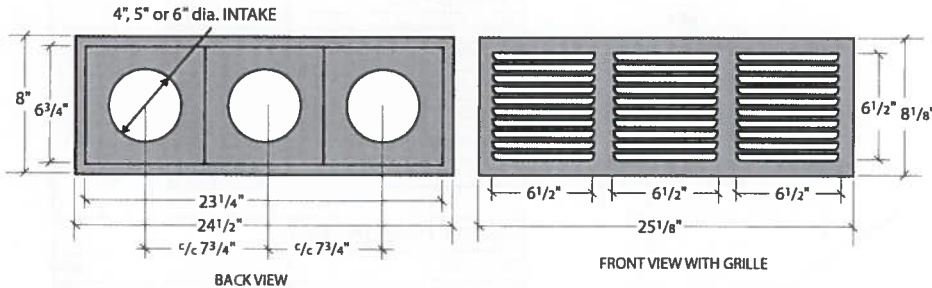
JUNIOR WALL BOX: Model JWB-4



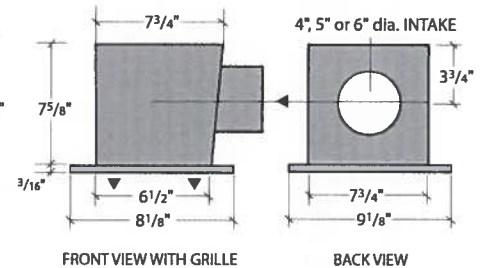
DOUBLE WALL BOX: Models DWBS-8, DWBS-12



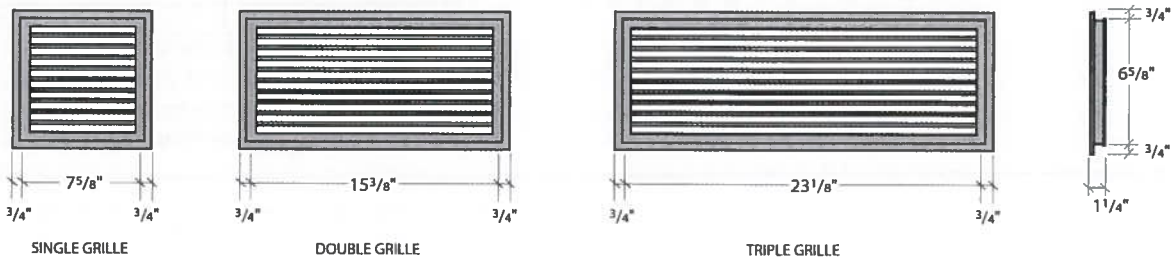
TRIPLE WALL BOX: Models TWBS-8, TWBS-12



SOFFIT WALL BOX: Model SFWB



EXTRUDED ALUMINUM GRILLES



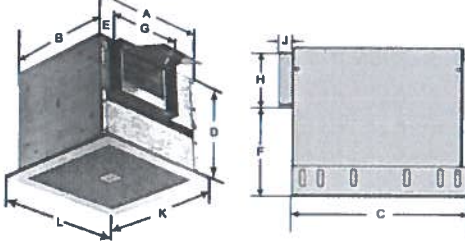
Contractor:		STANDARD WALL BOXES		
Architect:	Job:	Data	Supersedes	Drawing No.
Engineer:	Date Submitted:			

Z81S

Ceiling/Inline Duct Mounted Cabinet Exhaust Fan

Quantity: 1
 Special: None

Dimensions



Unit Size	A	B	C	D
81	13.88	11.38	17.38	11.38

E	F	G	H	J
1.88	5.25	8	6	0.75

K	L	Weight
13.25	14.88	20

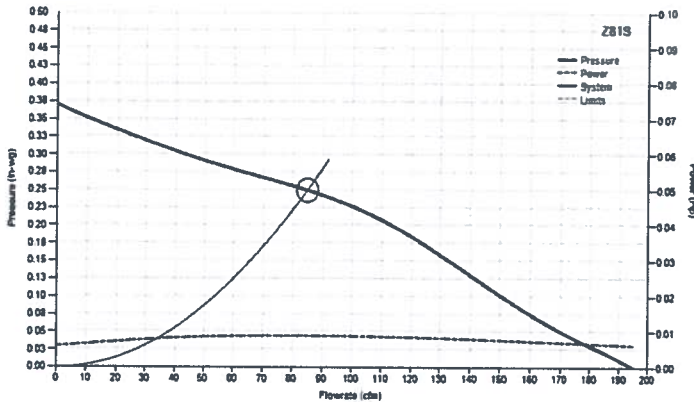
Standard Construction Features

- Galvanized housing lined with acoustical insulation
- Forward curved centrifugal blower
- Integral chatter proof backdraft damper
- Motor continuous duty, with thermal overload protection, positively cooled, & mounted on vibration isolators
- Includes electrical disconnect "plug" to pre-wired junction box
- Fan/motor/wheel "power pack" is removable
- Corrosion resistant fasteners

Accessories

Application: E - Exhaust
 Drive Type: D - Direct
 Efficiency: S - Standard
 Motor Tap: S
 Controllers: 2 - LekTrol SS Speed Ctrir (Loose)
 Guard/Screen: 0 - None
 Vibration Isolator: 0 - None

Performance



Operating Point

Volume (CFM)	85
Static Pressure (in. wg)	0.25
Fan RPM	660
Horse Power (BHP)	0.009
Elevation (ft)	0
Temperature (°F)	70
Drive Loss (%)	N/A

Motor Information

Motor HP	N/A
Volt/Ph/Hz	115V/1PH/60HZ
Enclosure	3 - ODP w/Overload
NEC FLA*	0
Weight+ (lbs)	N/A


* NEC FLA - based on tables 430.248 or 430.250 of National Electrical Code 2014. Actual motor FLA may vary depending on motor manufacturer.
 + Motor weight may vary depending on supplier

(continued)

SOUND POWER							
OCTAVE POWER CENTER FREQUENCY (hz)							
63	125	250	500	1000	2000	4000	8000
56	52	45	44	39	31	27	23

LWA	DbA	Sones
45	33.7	1.3

LwA - Weighted sound power, based on ANSI S1.4, dBA - Weighted sound pressure, based on 11.5 dB attenuation per Octave band at 5 ft. Sones - calculated using AMCA 301 at 5 ft.

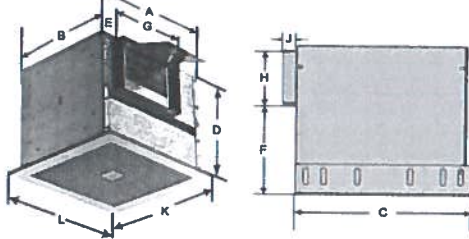


Z81S

Ceiling/Inline Duct Mounted Cabinet Exhaust Fan

Quantity: 1
 Special: None

Dimensions



Unit Size	A	B	C	D
81	13.88	11.38	17.38	11.38

E	F	G	H	J
1.88	5.25	8	6	0.75

K	L	Weight
13.25	14.88	20

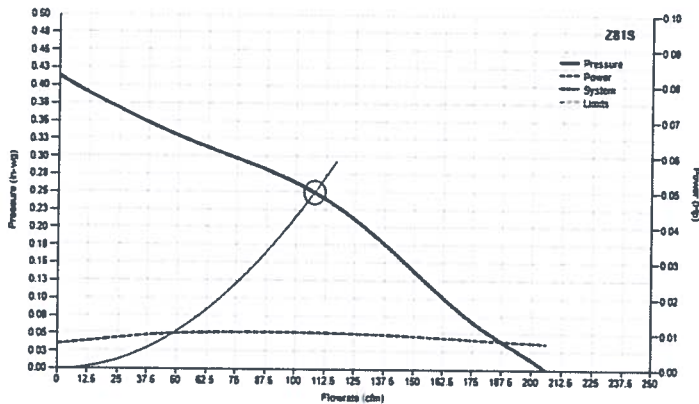
Standard Construction Features

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- Fan/motor/wheel "power pack" is removable
- Corrosion resistant fasteners

Accessories

Application: E - Exhaust
 Drive Type: D - Direct
 Efficiency: S - Standard
 Motor Tap: S
 Controllers: 2 - LekTrol SS Speed Ctrlr (Loose)
 Guard/Screen: 0 - None
 Vibration Isolator: 0 - None

Performance



Operating Point

Volume (CFM)	108
Static Pressure (in. wg)	0.25
Fan RPM	698
Horse Power (BHP)	0.01
Elevation (ft)	0
Temperature (°F)	70
Drive Loss (%)	N/A

Motor Information

Motor HP	N/A
Volt/Ph/Hz	115V/1PH/60HZ
Enclosure	3 - ODP w/Overload
NEC FLA*	0
Weight+ (lbs)	N/A

* NEC FLA - based on tables 430.248 or 430.250 of National Electrical Code 2014. Actual motor FLA may vary depending on motor manufacturer.
 + Motor weight may vary depending on supplier

(continued)

SOUND POWER							
OCTAVE POWER CENTER FREQUENCY (hz)							
63	125	250	500	1000	2000	4000	8000
55	52	45	44	39	32	27	23



LWA	DbA	Sones
46	34	1.4

LwA - Weighted sound power, based on ANSI S1.4. dBA - Weighted sound pressure, based on
 11.5 dB attenuation per Octave band at 5 ft. Sones - calculated using AMCA 301 at 5 ft.