REVIEWED
By Pat Newton at 9:47 am, Apr 22, 2020

SIMLUC CONTRACTORS LTD.

TRANSMITTAL

DATE: April 8, 2020 **PROJECT:** Enterprise Rent-A-Car

TO: Tal-Co Building Innovations **LOCATION:** 225 Huntmar Drive

ATT: Annie Griffiths **Courier** ☐ **Email** ■ **Fax** ☐ **Hand** ☐ **Mail** ☐

We are forwarding the following documents:

COPIES	DRAWING #	REV.	DESCRIPTION
1			Roof Assembly
1			Roofing Material List and Technical Data Sheets
1			Sheet Metal Flashing & Trim Material Data Sheets

Reviewed ( )
Reviewed as noted ( )

Revise and resubmit ( )
Not reviewed ( )

Date: 2020 Apr. 22

Reviewed by: MH

This review by J.C.F.A.Inc. 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 J.C.F.A.Inc. approves the detailed design inherent in the shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of the responsibility for errors or omissions in the shop drawings or of the 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 coordination of the work of all trades.

Jason C. Flynn Arcitect Inc. (J.C.F.A.Inc.)

For your: Comments & R ted ☐ **For Quotation** ☐ **Reference Only** ☐

REMARKS:

RECEIVED BY: **ER:** Josephine Ildefonso

DATE:

2550 Black **Tel.: (613) 748-0066 • Fax: (613) 748-1122**

Date: March 07, 2020

Project: Enterprise Rent-A-Car – 225 Huntmar Drive Ottawa, ON K2S 1B9

TYPICAL ROOF ASSEMBLIES

R1	2-Ply Modified Bituminous Roof Assembly
Roof	Sopralene Flam 250 GR - Cap Sheet
	Sopralene Flam 180 – Base sheet
	3mm Sopraboard
	Duotack Adhesive
	Tapered to suit as per shop drawings
	Duotack Adhesive
	200mm Dekfast Pre-assembled Fasteners
	88.9mm Sopra-ISO Polyisocyanurate Insulation (R20.5)
	88.9mm Sopra-ISO Polyisocyanurate Insulation (R20.5)
	Sopravap'R Vapour Barrier
	Roof Sheathing on Trusses by others

P1	Parapet Flashings & Tie-ins
Parapet/upstand	Sopralene Flam 250GR - Cap Sheet
	Sopraflash Flam Stick - Base Sheet
	Elastocol Stick Primer

SIMLUC
CONTRACTORS LTD.

MATERIAL DATA SHEETS

Project **Enterprise Rent-A-Car**
Section **Modified Bituminous Membrane Roofing**

Manufacturer	Product
SFS Intec	Dekfast Pre-Assembled Plates & Fasteners
Soprema	Sopralene Flam 250 GR
	Sopralene Flam 180
	Sopraboard Protection Board
	Sopra-ISO Polyisocyanurate Insulation
	Sopravap'R Vapour Barrier
	Sopraflash Flam Stick
	Duotack Adhesive
	Elastocol Stick Primer

Insulation Assemblies

#12 assembled to metal & plastic insulation plates
#14 &15 assembled to plastic insulation plates

For insulation attachment using pre-assembled #12 & #14 fasteners and plates

- **Insulation assemblies, when installed with Stealth tools, increase productivity up to 30% and allow the contractor to install the roof assembly in a more ergonomically correct position versus standard installation methods.**
- **Screw and plate relationship is perpendicular every time, allowing for proper and quicker installations.**
- **Preassembled fasteners can be placed on the deck or loaded into the Stealth installation tools, giving the contractor the ability to use crew members in other areas of the roof project.**

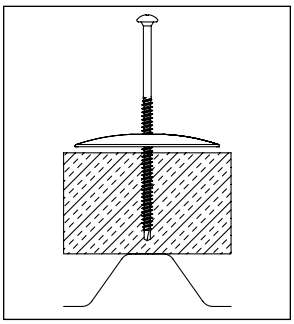
Application

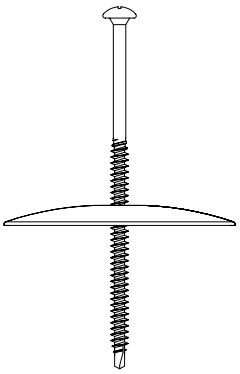
#12 Phillips w/ Dekflat™ Plate

Mechanical attachment of insulation per manufacturers' requirements

Materials:
- Steel thickness from 22 ga (.028 in.) through 18 ga (.045 in.): Min penetration: 3/4"
- Wood 2x (1-1/2" thick): Min penetration: 1"

Use with:
- Stealth Shorty, Stealth 10, or Stealth 20 plastic installation tools
- Steel roof decks include all FM approved 18-20-22 ga





Head Drive: #3 Phillips
Head Height: Max .118"
Head Dia: Max .448"
Thread Major Dia: .222"
Shank Dia: .167"

Plate: 3" round Dekflat
Material: Polypropylene

Strength (lbs ult.):
Tensile: 2410
Torsional: 76 in-lbs min
Shear: 1815

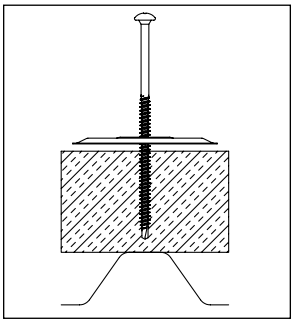
Pull-out (lbs avg.):
Steel 22 ga: 513
Steel 20 ga: 695
Steel 18 ga: 787
2x dimensional lumber (1" penetration): 462
3/4" FR Plywood: 575

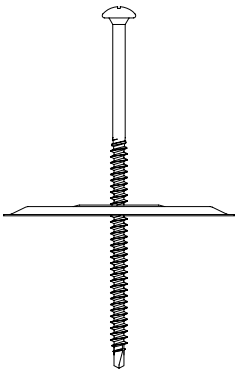
#12 Phillips w/ Round Galvalume Plate

Mechanical attachment of insulation per manufacturers' requirements

Materials:
- Steel thickness from 22 ga (.028 in.) through 18 ga (.045 in.): Min penetration: 3/4"
- Wood 2x (1-1/2" thick): Min penetration: 1"

Use with:
- Stealth Shorty, Stealth 10, or Stealth 20 ELF installation tools
- Steel roof decks include all FM approved 18-20-22 ga





Head Drive: #3 Phillips
Head Height: Max .118"
Head Dia: Max .448"
Thread Major Dia: .222"
Shank Dia: .167"

Plate: 3" round Galvalume
Material: AZ50 Galvalume

Strength (lbs ult.):
Tensile: 2410
Torsional: 76 in-lbs min
Shear: 1815

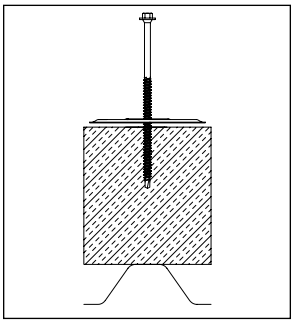
Pull-out (lbs avg.):
Steel 22 ga: 513
Steel 20 ga: 695
Steel 18 ga: 787
2x dimensional lumber (1" penetration): 462
3/4" FR Plywood: 575

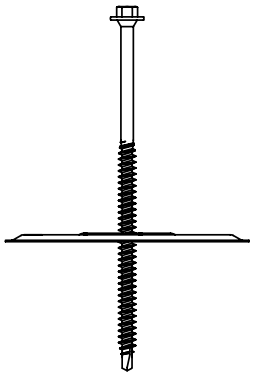
#12 Hex w/ Round Galvalume Plate

Mechanical attachment of insulation per manufacturers' requirements

Materials:
- Steel thickness from 22 ga (.028 in.) through 18 ga (.045 in.): Min penetration: 3/4"
- Wood 2x (1-1/2" thick): Min penetration: 1"

Use with:
- Stealth Shorty, Stealth 10, or Stealth 20 metal installation tools
- Steel roof decks include all FM approved 18-20-22 ga





Head Drive: 1/4" hex
Head Height: Max .140"
Head Major Dia.: Max .448"
Thread Major Dia: .226"
Shank Major Dia: .167"

Plate: 3" Round Galvalume
Material: AZ50 Galvalume

Strength (lbs ult.):
Tensile: 2410
Torsional: 76 in-lbs min
Shear: 1815

Pull-out (lbs avg.):
Steel 22 ga: 513
Steel 20 ga: 695
Steel 18 ga: 787
2x dimensional lumber (1" penetration): 462
3/4" FR Plywood: 575

Continued on following page

Application (continued)

#14 Phillips w/ Dekflat Plate

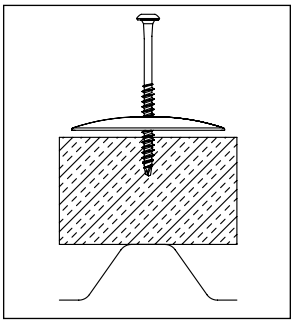
Mechanical attachment of insulation per manufacturers' requirements

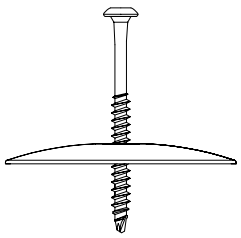
Materials:

- Steel thickness from 22 ga (.028 in.) through 18 ga (.045 in.): Min penetration: 3/4"
- Wood 2x (1-1/2" thick): Min penetration: 1"
- Structural Concrete: Min penetration: 1"

Use with:

- Stealth Shorty, Stealth 10, or Stealth 20 plastic installation tools





Head Drive: #3 Phillips
Head Height: Max .118"
Head Dia: Max .448"
Thread Major Dia: .238"
Shank Dia: .180"

Plate: 3" round Dekflat
Material: Polypropylene

Stength (lbs ult.):
Tensile: 3600
Min Torsional: 110 in-lbs min
Shear: 2630

Pull-out (lbs avg.):
Steel 22 ga: 540
Steel 20 ga: 630
Steel 18 ga: 900
Concrete (4000 psi): 850
Plywood (3/4" thick): 590
Wood 2x (1" penetration): 605

#15 Phillips w/ Dekflat Plate

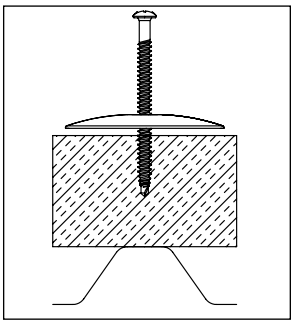
Mechanical attachment of insulation per manufacturers' requirements

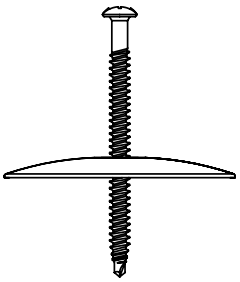
Materials:

- Steel thickness from 22 ga (.028 in.) through 18 ga (.045 in.): Min penetration: 3/4"
- Wood 2x (1-1/2" thick): Min penetration: 1"

Use with:

- Stealth Shorty, Stealth 10, or Stealth 20 plastic installation tools





Head Drive: Nom #3 Phillips
Head Height: .130" max
Head Dia.: .448" max
Thread Major Dia: .263"
Shank Dia: .204"

Plate: 3" round Dekflat
Material: Polypropylene

Strength (lbs ult.):
Tensile: 4350
Torsional: 130 in-lbs min
Shear: 3700

Pull-out (lbs avg.):
Steel 26 ga: 301
Steel 24 ga: 453
Steel 22 ga: 706
Steel 20 ga: 898
Steel 18 ga: 1140
Plywood (3/4" thick): 703
Wood 2x (1-1/2" penetration): 692

Notes

Dimensions are nominal inches unless noted. Steel roof decks include all FM-approved 18-20-22 ga. FM-approved wood decks include 3/4" F.R. plywood and 2x dimensional lumber. Structural concrete to be predrilled with standard 3/16" carbide drill bit to minimum 1/2" deeper than fastener penetration.

Selection

Length	Part No.	Steel	Wood	Concrete	Carton Wt. (lbs)	Carton Qty.	Skid Qty.
#12 Phillips Plastic							
1-5/8"	A8513-995U	Up to 7/8"	Up to 5/8"	N/A	20	500	13,500
2-1/4"	A8518-995U	Up to 1-1/2"	Up to 1-1/4"	N/A	22	500	13,500
2-7/8"	A8523-995U	Up to 2-1/8"	Up to 1-7/8"	N/A	12	250	9,000
3-1/4"	A8526-995U	1/2" to 2-1/2"	1/4" to 2-1/4"	N/A	13	250	9,000
3-3/4"	A8530-995U	1" to 3"	3/4" to 2-3/4"	N/A	14	250	9,000
4-1/2"	A8536-995U	1-3/4" to 3-3/4"	1-1/2" to 3-1/2"	N/A	15	250	6,750
5"	A8540-995U	2-1/4" to 4-1/4"	2" to 4"	N/A	16	250	6,750
6"	A8548-995U	3-1/4" to 5-1/4"	3" to 5"	N/A	17	250	6,750
7"	A8556-995U	4-1/4" to 6-1/4"	4" to 6"	N/A	15	200	5,400
8"	A8564-995U	5-1/4" to 7-1/4"	5" to 7"	N/A	17	200	5,400

Continued on following page

Insulation Assemblies

#12 assembled to metal & plastic insulation plates
#14 &15 assembled to plastic insulation plates

For insulation attachment using pre-assembled #12 & #14 fasteners and plates

Length	Part No.	Steel	Wood	Concrete	Carton Wt. (lbs)	Carton Qty.	Skid Qty.
#12 Phillips Metal							
1-5/8"	A8513-995V	Up to 7/8"	Up to 5/8"	N/A	37	500	13,500
2-1/4"	A8518-995V	Up to 1-1/2"	Up to 1-1/4"	N/A	19	250	9,000
2-7/8"	A8523-995V	Up to 2-1/8"	Up to 1-7/8"	N/A	20	250	9,000
3-1/4"	A8526-995V	1/2" to 2-1/2"	1/4" to 2-1/4"	N/A	21	250	9,000
3-3/4"	A8530-995V	1" to 3"	3/4" to 2-3/4"	N/A	22	250	6,750
4-1/2"	A8536-995V	1-3/4" to 3-3/4"	1-1/2" to 3-1/2"	N/A	23	250	6,750
5"	A8540-995V	2-1/4" to 4-1/4"	2" to 4"	N/A	24	250	6,750
6"	A8548-995V	3-1/4" to 5-1/4"	3" to 5"	N/A	25	250	6,750
7"	A8556-995V	4-1/4" to 6-1/4"	4" to 6"	N/A	17	200	5,400
8"	A8564-995V	5-1/4" to 7-1/4"	5" to 7"	N/A	18	200	5,400
#12 Hex Metal							
1-5/8"	C7400-995V	Up to 7/8"	Up to 5/8"	N/A	37	500	13,500
2-1/4"	C7410-995V	Up to 1-1/2"	Up to 1-1/4"	N/A	19	250	9,000
2-7/8"	C7420-995V	Up to 2-1/8"	Up to 1-7/8"	N/A	20	250	9,000
3-1/4"	C7430-995V	1/2" to 2-1/2"	1/4" to 2-1/4"	N/A	21	250	9,000
3-3/4"	C7440-995V	1" to 3"	3/4" to 2-3/4"	N/A	22	250	6,750
4-1/2"	C7450-995V	1-3/4" to 3-3/4"	1-1/2" to 3-1/2"	N/A	23	250	6,750
5"	C7460-995V	2-1/4" to 4-1/4"	2" to 4"	N/A	24	250	6,750
6"	C7470-995V	3-1/4" to 5-1/4"	3" to 5"	N/A	25	250	6,750
7"	C7480-995V	4-1/4" to 6-1/4"	4" to 6"	N/A	17	200	5,400
8"	C7490-995V	5-1/4" to 7-1/4"	5" to 7"	N/A	18	200	5,400
#14 Phillips Plastic							
2"	A7216-999U	Up to 1-1/4"	Up to 1"	Up to 1"	23	500	13,500
3"	A7224-999U	Up to 2-1/4"	Up to 2"	1" to 2"	13	250	6,750
4"	A7232-999U	1-1/4" to 3-1/4"	1-1/4" to 3"	2" to 3"	15	250	6,750
5"	A7240-999U	1-1/4" to 4-1/4"	1-1/4" to 4"	3" to 4"	18	250	6,750
6"	A7248-999U	1-1/4" to 5-1/4"	1-1/4" to 5"	4" to 5"	21	250	6,750
7"	A7256-999U	3-1/4" to 6-1/4"	3-1/4" to 6"	5" to 6"	18	200	5,400
8"	A7264-999U	4-1/4" to 7-1/4"	4-1/4" to 7"	6" to 7"	20	200	5,400
9"	A7272-999U	5-1/4" to 8-1/4"	5-1/4" to 8"	7" to 8"	22	100	3,600
10"	A7280-999U	6-1/4" to 9-1/4"	6-1/4" to 9"	8" to 9"	24	100	3,600
11"	A7288-999U	7-1/4" to 10-1/4"	7-1/4" to 10"	9" to 10"	26	100	3,600
12"	A7296-999U	8-1/4" to 11-1/4"	8-1/4" to 11"	10" to 11"	28	100	3,600
#15 Phillips Plastic							
2"	C2010-932U	Up to 1-1/4"	Up to 1"	Up to 1"	24	500	13,500
3"	C2020-932U	Up to 2-1/4"	Up to 2"	1" to 2"	14	250	6,750
4"	C2030-932U	1-1/4" to 3-1/4"	1-1/4" to 3"	2" to 3"	16	250	6,750
5"	C2040-932U	1-1/4" to 4-1/4"	1-1/4" to 4"	3" to 4"	19	250	6,750
6"	C2050-932U	1-1/4" to 5-1/4"	1-1/4" to 5"	4" to 5"	22	250	6,750
7"	C2060-932U	3-1/4" to 6-1/4"	3-1/4" to 6"	5" to 6"	19	200	5,400
8"	C2070-932U	4-1/4" to 7-1/4"	4-1/4" to 7"	6" to 7"	21	200	5,400

Approvals

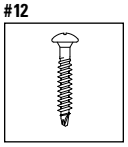
Dekfast fasteners and plates are Factory Mutual approved for attachment of insulation board to roof deck. Refer to FM Approval Guide and Supplements for current FM approved insulation fastening patterns. Dekfast fasteners exceed Factory Mutual corrosion-resistance Standard 4470.

Installation

For optimum results, all Dekfast preassembled fasteners must be installed with Stealth installation tools.

Options

#12



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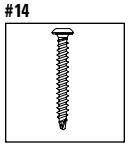

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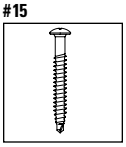
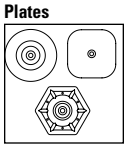
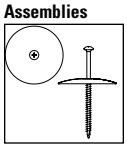


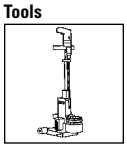
Insulation Plates



Assemblies



Installation Tools



Coatings

1.877.MAMMOUTH
www.soprema.ca

SOPRALENE 250 SANDED
SOPRALENE 250 GR
SOPRALENE FLAM 250
SOPRALENE FLAM 250 GR
SOPRALENE MAMMOUTH GR
SOPRALENE MAMMOUTH 5 mm GR

TECHNICAL DATA SHEET
100316SCAN1E
(supersedes 040206CAN1E)

DESCRIPTION

SOPRALENE 250 membranes are composed of a non-woven polyester reinforcement and SBS modified bitumen. Fire rated **SOPRALENE** cap sheets are also available for increased fire resistance.

FOR COMPLETE INFORMATION ON APPLICATION AND SYSTEMS, PLEASE CONSULT OUR SPECIFICATION MANUAL.

PROPERTIES

(As per CAN/CGSB-37.56-M, 9th draft).

Properties	SOPRALENE					
	250 SANDED	250 GR	FLAM 250	FLAM 250 GR	MAMMOUTH GR	MAMMOUTH 5 mm GR
Thickness	4.0 mm				4.5 mm	5 mm
Dimension	8 x 1 m					
Weight	41 kg	38 kg			45 kg	49 kg
Top face	Sand	Granules	Film	Granules		
Underface	Sanded		Thermofusible plastic film			
Reinforcement	Non-woven polyester					
Storage	Upright on pallet					
Application method	Bonded with hot asphalt		Torch applied			
Strain energy, (MD/XD)	10 / 10 kN/m					
Breaking strength, MD/XD	18 / 16 kN/m					
Ultimate elongation, MD/XD	60 / 65 %					
Tear resistance	75 N					
Static puncture	420 N					
Dimensional stability, MD/XD	-0.8 / -0.2 %					
Plastic flow	105 °C		110 °C			
Cold bending*	-30 °C					
Lap adhesion - initial - 5 days at 50 °C - 14 days at 70 °C	 27,0 kN/m 27,0 kN/m 27,0 kN/m					

* Initial and after 90 days ageing at 70 °C.
(All values are nominal)

E-PROD31A.indd

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

SOPRALENE

SOPRALENE 180 SANDED
SOPRALENE 180 GR
SOPRALENE 180 SP 3.5
SOPRALENE FLAM 180
SOPRALENE FLAM 180 GR

1.877.MAMMOUTH
www.soprema.ca

TECHNICAL DATA SHEET
121031SCAN1E
(supersedes 110309SCAN1E)

DESCRIPTION

SOPRALENE 180 membranes are composed of a non-woven polyester reinforcement and SBS modified bitumen. **SOPRALENE** cap sheets are also available with fire retardant additives (FR) for better fire resistance.

SOPRALENE FLAM 180 can be used as a waterproofing membrane on foundation walls and others horizontal or vertical below grade concrete surfaces.

FOR COMPLETE INFORMATION ON APPLICATION AND SYSTEMS, PLEASE CONSULT OUR SPECIFICATION MANUAL.

PROPERTIES

(As per CAN/CGSB-37.56-M, 9th draft).

Properties	SOPRALENE				
	180 SANDED	180 GR	180 SP	FLAM 180 GR	FLAM 180
Thickness	3.0 mm	4.0 mm	3.5 mm	4.0 mm	3.0 mm
Dimension	10 x 1 m		10.2 x 1 m	8 x 1 m	10 x 1 m
Weight	35 kg	50 kg	43 kg	39 kg	36 kg
Top face	Sand	Granules	Sand	Granules	Film
Underface	Sanded		Thermofusible plastic film		
Reinforcement	Non-woven polyester				
Storage	Upright on pallet				
Application method	Bonded with hot asphalt		Torch applied		
Strain energy, (MD/XD)	9.0 / 7.0 kN/m				
Breaking strength, MD/XD	17 / 12.5 kN/m				
Ultimate elongation, MD/XD	60 / 65 %				
Tear resistance	60 N				
Static puncture	400 N				
Dimensional stability, MD/XD	-0.3 / 0.3 %				
Water Vapour Transmission (ASTM E96 method B)	0.21 ng / Pa.s.m²				
Plastic flow	105 °C				
Cold bending*	-30 °C				
Lap adhesion - initial - 5 days at 50 °C - 14 days at 70 °C	 23,5 kN/m 24,0 kN/m 24,0 kN/m				

* Initial and after 90 days ageing at 70 °C.
(All values are nominal)

E-PROD30A.indd

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

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TECHNICAL DATA SHEET
140106SCAN1E
(supersedes 120511SCAN1E)

SOPRABOARD

DESCRIPTION

SOPRABOARD is a support panel composed of two asphalt-saturated glass mat reinforcement covering a mineral-fortified asphaltic core.

SOPRABOARD is designed to be used as a support panel on low-slope roofing. It can be installed over plywood or rigid insulation boards. **SOPRABOARD** can also be used as protection board for waterproofing membranes of below grade surfaces. Membranes must be installed over the darker side (surface) of the protection board.

SOPRABOARD is compatible with modified bitumen and B.U.R. roofing systems. Modified bitumen roofing systems can be welded directly to the board surface or adhered with hot bitumen or adhesive. **SOPRABOARD**, using an appropriate primer, may also be used with self-adhesive membranes.

INSTALLATION

BITUMEN

SOPRABOARD panel is intalled in a bed of SEBS hot bitumen applied with a mop (minimum application temperature of 220 °C [425 °F]).

ADHESIVE

SOPRABOARD panel is adhered with **DUOTACK** or **COLTACK** adhesives.

MECHANICALLY FASTENED

SOPRABOARD panel is mechanically fastened to steel deck with screws and stress plates for insulation.

For more details about the required number of adhesive or mechanical fasteners, consult the Wind Uplift Resistance Testing reports according to Canadian standard CSA A123.21-10 or publications according to FM 4470 (RoofNav Database) including recommendations for corners and perimeters listed in the PLPDS 1-29 from Factory Mutual.

FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.

LIMITATION

SOPRABOARD must be quickly covered after its installation and not left exposed.

PACKAGING

Specifications	SOPRABOARD		
Thickness	3.2 mm (1/8 in)	4.8 mm (3/16 in)	6.4 mm (1/4 in)
Board size	1.22 x 1.52 m (4 x 5 ft)	1.22 x 2.44 m (4 x 8 ft)	1.22 x 1.52 m (4 x 5 ft)
Weight	4.4 kg/m² (0.90 lb/ft²)	6.9 kg/m² (1.41 lb/ft²)	9.3 kg/m² (1.90 lb/ft²)

(All values are nominal)

PROPERTIES

Properties	Standards	SOPRABOARD		
		SOPRABOARD 1/8	SOPRABOARD 3/16	SOPRABOARD 1/4
Puncture resistance	ASTM E154	500 N		
Water absorption	ASTM D994	0.25 %		
Compressive Strength	ASTM C472	≥ 1641 kPa (238 psi)		≥ 3565 kPa (517 psi)
Shore hardness	ASTM C1278	Pass		

(Valeurs nominales)

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

soprailso

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(Formerly known as COLGRIP B)

SOPRA-ISO Insulation

TECHNICAL DATA SHEET
141006SCAN2E
(supersedes 140501SCAN2E)

DESCRIPTION

SOPRA-ISO is a closed-cell polyisocyanurate foam insulation board laminated on both sides with fibre reinforced felt. It is mainly use as thermal insulation in Soprema's roofing systems.

SOPRA-ISO is also available in tapered insulation.

APPLICATION

Mechanically fastened with screws and stress plates for insulation.
Adhered with hot bitumen (the temperature of the bitumen must be 10 °C (50 °F) below the Equiviscous Temperature (EVT[1]).
Adhered with **DUOTACK** or **COLTACK** adhesives.

For most projects, the required number of mechanical fasteners and amount of adhesive varies from zone to zone. For more details about these requirements, consult the Wind Uplift Resistance Testing reports according to Canadian standard CSA A123.21-10 or Factory Mutual (FM 4470).

LIMITATIONS

Waterproofing membrane must never be adhered directly over **SOPRA-ISO** insulation boards. A recovery board for roofing must be installed before membrane installation.

1.2 m x 2.4 m (4 ft x 8 ft) boards must not be adhered with hot bitumen or adhesive.

PROPERTIES

SOPRA-ISO meets the physical property requirements of ASTM C 1289, Type II, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi) and CAN/ULC S704 Type II (20 psi) and Type III (25 psi).

Properties	Standards	SOPRA-ISO
Thermal Resistance (LTTR) (RSI-Value (R Value) / 25.4 mm @ 24 °C) (RSI-Value (R Value) / 1 in @ 75 °F) 25.40 mm (1.00 in) 38.10 mm (1.50 in) 50.80 mm (2.00 in)	CAN/ULC S704-11	 1.00 (R – 5.7) 1.50 (R – 8.6) 2.01 (R – 11.4)
Metal Desk Maximum Flute Spanability ≥ 25.40 mm (1.0 in) < 35.56 mm (1.4 in) > 38.10 mm (1.5 in) ≤ 101.60 mm (4.0 in)	-	 66.70 mm (2 5/8 in) 111.10 mm (4 3/8 in)
Compressive Strength	ASTM D 1621	138 kPa (20 psi) 172 kPa (25 psi)*

*Available upon request.

(All values are nominals)

1.Equiviscous Temperature (EVT): The temperature at which bitumen reaches an ideal viscosity threshold of 125 cP (0.125 Pa.s), which guarantees the quantity of mop-applied inter-ply asphalt used in laminated roofing systems. (www.roofingcanada.com)

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

E-PROD59A.indd

(Formerly known as COLGRIP B)

SOPRA-ISO Insulation

TECHNICAL DATA SHEET
141006SCAN2E
(supersedes 140501SCAN2E)

PROPERTIES (CONTINUED)

SOPRA-ISO meets the physical property requirements of ASTM C 1289, Type II, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi) and CAN/ULC S704 Type II (20 psi) and Type III (25 psi).

Properties	Standards	SOPRA-ISO
Density	ASTM D 1622	32.04 kg/m³ (2.0 lb/ft³)
Dimensional Stability Linear	ASTM D 2126	< 2.0 %
Water Absorption	ASTM C 209 ASTM D 2842	< 1.0 % < 3.5 %
Flame Spread **	ASTM E 84	40 - 60
Tensile Strength	ASTM D 1623	35 kPa (> 730 lb/ft²)
Service Temperature	-	-73 to 122 °C (-100 to 250 °F)

(All values are nominals)
** The numerical ratings as determinated by ASTM Test Method E 84 are not intended to reflect hazards presented by this or any other material under actual fire conditions.

PACKAGING

Dimensions

SOPRA-ISO is available in 1.2 m x 1.2 m (4 ft x 4 ft) and 1.2 m x 2.4 m (4 ft x 8 ft) panels.

Thicknesses

25.40 mm (1 in), 38.10 mm (1.5 in) or 50.80 mm (2 in).

* Other thicknesses from 25.40 mm to 101.60 mm (1 to 4 inches) available upon special request.

STORAGE & HANDLING

SOPREMA applied packaging is intended only for protection during transit. When stored outdoors or on the job site, the insulation should be stacked on pallets at least three inches above ground level and completely covered with a waterproof covering such as a tarpaulin. The temporary **SOPREMA** applied packaging should be slit or removed to prevent accumulation of condensation.

E-PROD59A.indd

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SOPRAVAP'R

TECHNICAL DATA SHEET
150914SCAN1E
(supersedes 140211SCAN1E)

DESCRIPTION

SOPRAVAP'R is a self-adhesive membrane composed of SBS modified bitumen and a tri-laminated woven polyethylene facer. The underface is covered with a silicone release film.

SOPRAVAP'R is used as a vapour barrier on insulated roof systems.

The width of the membrane has been specifically determined to allow the membrane to fit with most structural steel decks.

RECOMMENDED SUBSTRATES

SOPRAVAP'R can be installed on most substrates, such as steel, concrete, plywood, gypsum or cement boards, and asphaltic panels.

SURFACE PREPARATION

Except for the steel deck, all substrates must be primed with **ELASTOCOL STICK** or **ELASTOCOL STICK ZERO**. The substrate should be clean and sound, free of loose materials or contaminants, such as water and grease which may compromise the performance of the product.

APPLICATION

SELF-ADHESIVE

SOPRAVAP'R is adhered to substrate by peeling off the silicone release film.

Side laps must be a minimum of 75 mm (3 in) and end laps must be a minimum of 150 mm (6 in).

All end laps on steel deck shall be supported by a metal plate 15 cm x 106 cm (6 in x 42 in).

Once installed, pressure must be applied over the whole surface using a roller to ensure a perfect adhesion.

Minimum application temperature: - 10 °C (14 °F)

FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.

PROPERTIES

Properties	SOPRAVAP'R
Thickness	0.8 mm (31 mil)
Dimensions	40.8 x 1.14 m (134 x 3.7 ft)
Gross / Net coverage per roll	46.5 / 43.5 m^2 (500 / 468 ft^2)
Weight	0.77 kg/m^2 (0.16 lb/ft^2)
Selvedge width	75 mm (3 in)
Top face	Tri-laminate woven polyethylene
Underface	Silicone release film
Rolls per skid	25

(All values are nominal)

TDS_SOPRAVAP'R.indd

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

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SOPRAVAP'R

TECHNICAL DATA SHEET
150914SCAN1E
(supersedes 140211SCAN1E)

PRECAUTIONS

If **SOPRAVAP'R** is not immediately covered, particular attention should be paid to implementation of details to ensure a perfect temporary seal. All «T» joints and transitions (90 °) should be covered with **SOPRAMASTIC** sealant. If fishmouths or other openings are created to overlap, they must be sealed with **SOPRAMASTIC** sealant.

PROPERTIES

Properties	Standards	SOPRAVAP'R
Tensile strength, MD/XD	ASTM D5147	9.5 / 13 kN/m (54 / 74 lbf/in)
Ultimate elongation, MD/XD	ASTM D5147	33 / 25 %
Cold bending	ASTM D5147	- 50 °C (- 58 °F)
Static puncture	ASTM D5602	400 N (90 lbf)
Tear resistance, MD/XD	ASTM D1970	423 / 458 N (95 / 103 lbf)
Lap adhesion	ASTM D1876	1000 N/m (68 lbf/ft)
Water absorption	ASTM D5147	0.1 % max.
Peel resistance on steel	ASTM D903	950 N/m (5.4 lbf/in)
Water vapour permeance	ASTM E96 (Procedure B)	1.7 ng/Pa.s.m² (0.03 perm)
Air permeability	ASTM E2178	< 0.001 L/s•m²

SOPRAVAP'R membrane is evaluated in accordance with the requirements contained in CAN/ULC-S126, *Standard Method of Test for Fire Spread Under Roof Deck Assemblies.*

(All values are nominal)

STORAGE & HANDLING

Rolls must be stored upright. If the product is stored outdoors, cover them with an opaque protective cover after removal of the delivery packaging.

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

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SOPRAFLASH FLAM STICK

TECHNICAL DATA SHEET
140616SCAN1E
(supersedes 101220SCAN3E)

DESCRIPTION

SOPRAFLASH FLAM STICK is a base sheet membrane composed of SBS modified bitumen with a glass mat reinforcement. The surface is covered with a thermofusible plastic film. The underface is covered with a release protection film.

SURFACE PREPARATION

Using one of the **ELASTOCOL STICK** primer is required before the installation of **SOPRAFLASH FLAM STICK** membrane. Surfaces must be clean, dry and free of loose particles.

INSTALLATION

SELF-ADHESIVE

SOPRAFLASH FLAM STICK must be adhered to support after removing the release protection film. Once installed, a pressure must be applied over the whole surface using a membrane roller to ensure good contact.

Application temperatures: **SOPRAFLASH FLAM STICK** - Summer grade (applied ≥ 10 °C [50 °F])
SOPRAFLASH FLAM STICK - Winter grade (applied between -10 to 10 °C [14 à 50 °F])

FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.

PACKAGING

Specifications	SOPRAFLASH FLAM STICK
Thickness	2.5 mm (98 mil)
Reinforcement	Glass mat
Dimensions	15 m x 1 m (49 x 3.3 ft)
Weight	3.0 kg/m² (0.6 lb/pi²)
Selvedge width	75 mm (3 in)
Surface	Thermofusible plastic film
Underface	Self-adhesive, covered with a release protection film
Rolls per skid	25

PROPERTIES

SOPRAFLASH FLAM STICK as per CAN/CGSB-37.56-M, 9th draft.

Properties	SOPRAFLASH FLAM STICK
Strain energy	8.4 / 8.3 kN/m
Breaking strength	18 / 16 kN/m
Ultimate elongation	55 / 56 %
Tear resistance	120 N
Static puncture resistance	380 N
Cold bending - Initial -90 days at 70 °C (158 °F)	-30 °C (-22 °F) -30 °C (-22 °F)

(All values are nominal)

STORAGE & HANDLING

Rolls must be stored upright, with the selvedge side on top. If the product is stored outdoors, cover them with an opaque protective cover after the removal of the delivery packaging.

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

DUOTACK

COMPLEMENTARY PRODUCTS

APPLICATIONS

ROOFS

TECHNICAL DATA SHEET 160620SCANF (supersedes 150716SCANF)

DESCRIPTION

DUOTACK is a low-rise, two-component, polyurethane adhesive.

DUOTACK is used to adhere layers of insulation boards of polystyrene, of polyisocyanurate, of approved mineral fibre (stone wool) and for cover boards such as asphaltic, wood fibre, perlite, gypsum or cement boards.

It is also used for the attachment of these same boards together or on wood, concrete, sanded surface of bituminous vapour-barrier and SOPRAVAP'R membranes. DUOTACK can be used to adhere thermal barriers on steel decks. DUOTACK is also compatible with Coal Tar Pitch.

SURFACE PREPARATION

Surfaces must be dry, clean and free of oil, grease, debris or dirt.

APPLICATION

** Please read the restrictions before the application of the products.

GENERAL

During application, it is important to immediately place the boards over the applied adhesive. Try to avoid uneven surfaces, to ensure proper adhesion to the substrate.

For most projects, the required amount of adhesive varies from zone to zone.

For more details about the required amount adhesive, consult the Wind Uplift Resistance Testing reports according to Canadian standard CSA A123.21-14 or publications according to FM 4470 (RoofNav Database) including recommendations for corners and perimeters listed in the PLPDS 1-29 from Factory Mutual.

Curing time was determined under ideal application conditions: 25 °C (77 °F) and 50% relative humidity. Curing time will be longer at lower temperatures and shorter at higher temperatures.

FOR COMPLETE INFORMATION ON PRODUCT APPLICATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.

RESTRICTIONS

CARTRIDGES: 12 hours before application and during application, the adhesive must be maintained at a minimum temperature of 20 °C (68 °F). Non-compliance with these instructions can cause product degradation and equipment failure.

Using the battery-operated applicator for DUOTACK, apply DUOTACK in continuous strips of 13 to 19 mm (½ to ¾ in) wide at the time of application.

CUBITAINERS: 24 hours before application and during application, the adhesive must be maintained at a minimum temperature of 20 °C (68 °F). Non-compliance with these instructions can cause product degradation and equipment failure.

* They have to be dispended through an approved low-pressure pump cart which equally mixes Part A and Part B of the adhesive (1:1 ratio by volume).

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

SOPREMA®

DUOTACK

COMPLEMENTARY PRODUCTS

APPLICATIONS

ROOFS

TECHNICAL DATA SHEET 160620SCANF (supersedes 150716SCANF)

PACKAGING

Specifications	DUOTACK Cartridges
Colour, part A and B	Amber
Size, cartridge A and B	750 mL*
Coverage	Four (4) dual cartridges covers from 37 to 55 m2 (400 to 600 sq ft)

* **DUOTACK** is packaged in four (4) 1.5 L component caulk gun cartridges (dual set) per case.
(All values are nominal)

Specifications	DUOTACK Cubitainers
Colour, part A and B	Amber
Size, Cubitainer - Part A and B Drum - Part A and B	18.9 L (5 US gal) 189.0 L (50 US gal)
Coverage, Cubitainers Drums	From 230 and 350 m^2 (2,500 to 3,800 ft^2) for a kit. From 2 300 and 3 500 m^2 (25,000 to 38,000 ft^2) for a kit.

(All values are nominal)

PROPERTIES

Properties	Standards	DUOTACK
Viscosity, Brookfield @ 25 °C (77 °F) Part A Part B	ASTM D 2556	 1,800 cP 2,800 cP
Cream time	-	15 sec
Rise time	-	Approximately 2 minutes
Curing time	-	15 minutes

(All values are nominal)

CLEANING

Tools and uncured adhesive can be cleaned with solvents, such as mineral spirits, Varsol, Xylene, etc.

STORAGE AND HANDLING

Storage: Up to 12 months in original sealed container, protected from moisture. **DUOTACK** adhesive in cartridge can be applied or stored at any temperature. **DUOTACK** adhesive in cubitainers **MUST NEVER BE STORED AT TEMPERATURES BELOW 0 °C (32 °F)**. Store in a ventilated place, away from heat and direct sunlight.

For more information, refer to instructions on the container label and relevant safety data sheet (SDS).

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ELASTOCOL STICK

TECHNICAL DATA SHEET
131007SCAN9E
(supersedes 130318SCAN1E)

DESCRIPTION

ELASTOCOL STICK is a primer designed to enhance the adhesion of self-adhesive membranes on porous surfaces such as "**DENS GLASS GOLD**" and "**DENS DECK**" at temperatures above –10 °C (14 °F). It is composed of SBS synthetic rubbers, adhesive enhancing resins and volatile solvents. It is also suitable to prime non-porous surfaces such as concrete, fibre cement, metal, and wood.

APPLICATION

ELASTOCOL STICK can be applied with a brush, a roll or a spray can. It must be thoroughly dry before applying the waterproofing membrane. **ELASTOCOL STICK** must be shaken well before use.

WARNING: DO NOT ACCELERATE DRYING OF ELASTOCOL STICK BY HEATING IT WITH A TORCH.
FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.

COVERAGE

Average coverage: porous surfaces: 0.3 to 0.5 L/m^2,

non-porous surfaces: 0.1 to 0.25 L/m^2.

PROPERTIES

Properties	ELASTOCOL STICK
Specific Gravity at 20 °C (68 °F)	0.79 kg/L
Colour	Red
Solids by Weight	24 %
Viscosity, Brookfield at 25 °C (77 °F)	200 cP
Drying time	15 to 60 minutes, depending on temperature and quantity applied.

(All values are nominal)

PACKAGING

3.78 L, 19 L pails and 350 g spray cans.

STORAGE & HANDLING

Shelf life: Up to 60 months in original sealed containers, in cool and ventilated area.

Tools can be cleaned with petroleum solvents such as mineral spirits, varsol, xylene, etc.

Store in a well ventilated area. Keep away from any source of heat, dampness, humidity, oxidizing agents or direct sunlight. Flammable before curing. Keep away from sources of ignition.

For more information, refer to instruction on the label of the can and to relevant Material Safety Data Sheet (MSDS).

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

TDS_ELASTOCOL_STICK.indd

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MATERIAL DATA SHEETS

Project **Enterprise Rent-A-Car**
Section **Sheet Metal Flashing**

Manufacturer	Product
Ideal Roofing	Weather XL Colour Chart
	Perspectra Fact Sheet
Tremco	Dymonic 100

2550 Blackwell Street ● Ottawa ● Ontario ● K1B 5R1 ● Tel.: (613) 748-0066 ● Fax: (613) 748-1122

ideal roofing
Company Limited, Manufacturers
idéal revêtement
Compagnie Limitée, Manufacturiers

PERSPECTRA *PLUS* SERIES™

WeatherXL™
valspar

COLOURS: PRE-PAINTED STEEL
COULEURS: ACIER PRÉ-PEINT

Cap flashings are 6258 Tricorn Black as noted on elevations. Other flashing at siding to match Antique Linen Per Site Instruction 10

Polar White Blanc Polaire ID 8783 **(30, 29, 26, 24, 22)**	Cambridge White Blanc Cambridge ID 8695 **(26, 24, 22)**	White Blanc ID 8317 **(30, 29, 28, 26, 24, 22)**	Bone White Blanc Os ID 8273 **(30, 29, 28, 26, 24, 22)**	Antique Linen Lin Antique ID 8696 **(30, 29, 26, 24, 22)**	Stone Grey Gris Pierre ID 8305 **(30, 29, 28, 26, 24, 22)**
Regent Grey Gris Régent ID 8730 **(30, 29, 26, 24, 22)**	Charcoal Fusain ID 8306 **(29, 28, 26, 24, 22)**	Metro Brown Brun Métro ID 8228 **(26, 24)**	Coffee Café ID 8326 **(30, 29, 28, 26)**	Dark Brown Brun Foncé ID 8229 **(30, 29, 28, 26, 24, 22)**	Black Noir ID 8262 **(30, 29, 28, 26, 24, 22)**
International Orange Orange International ID 8234 **(30)**	Bright Red Rouge Vif ID 8386 **(30, 29, 26, 24)**	Red Rouge ID 8250 **(30, 29, 28)**	Tile Red Rouge Tuile ID 8259 **(30, 29, 26)**	Burgundy Bourgogne ID 8011 **(29)**	Mahogany Acajou ID 8719 **(30)**
Tan Beige ID 8315 **(30, 29, 26, 24, 22)**	Slate Blue Bleu Ardoise ID 8260 **(30, 29, 28, 26, 24)**	Royal Blue Bleu Royal ID 8790 **(30, 29, 26)**	Heron Blue Bleu Héron ID 8330 **(30, 29, 26, 24)**		
Mist Green Vert Tilleul ID 8256 **(26)**	Pacific Turquoise Turquoise Pacifique ID 8258 **(30, 26)**	Medium Green Vert Moyen ID 8329 **(30, 29, 28, 26)**	Forest Green Vert Forêt ID 8307 **(30, 29, 28, 26, 24)**		

** Available in the "Ameri-Cana" and "Canadiana" Panel Only*
** Disponible dans le profilé "Améri-Cana et Canadiana" Seulement*

Add prefix "2" to ID number to obtain Perspectra *Plus* Series™ number.
Ajoutez préfix "2" au numéro ID pour obtenir le numéro de la Série Perspectra *Plus*MC.

FOR OTHER COLOURS OR THICKNESSES CALL OUR OFFICE.
POUR D'AUTRES COULEURS OU ÉPAISSEURS CONTACTEZ NOTRE BUREAU.

For thickness availability see reverse side.

Pour la disponibilité des épaisseurs voir au verso.

( ) : Available Gauges
( ) : Jauges disponibles

Gauge/Jauge		Thickness/Épaisseur
30	=	.015"
*29	=	.016"
28	=	.018"
26	=	.021"
24	=	.026"
22	=	.032"

ArcelorMittal Dofasco *Solutions in Steel*™ For Construction

PERSPECTRA SERIES™ fact sheet

PERSPECTRA SERIES™ – the new standard for Prepainted Steel

PERSPECTRA SERIES

Perspectra Series is the new standard for quality prefinished sheet steel. It uses state of the art technology for the pretreatment, primer and Silicone Modified Polyester (SMP) topcoat and comes with the quality, service and technical support you have come to expect from ArcelorMittal Dofasco Inc. The Quality and Performance specification offers 40 years of film integrity and 30 years of stringent colour fade and chalk values for building industry applications like roofing and cladding, across Canada and the continental United States. Perspectra Series is available on hot dip galvanized or on enhanced corrosion resistant Galvalume™ (55% aluminum-zinc alloy coating) substrate.

UPGRADED QUALITY AND PERFORMANCE SPECIFICATION:

Perspectra Series was developed to deliver enhanced 40 year paint film integrity and outstanding weathering performance in building applications. It is ideal for a wide range of prepainted roofing, cladding and siding applications for steel building systems (pre-engineered buildings), architectural panels, commercial, institutional, industrial projects and agricultural buildings. The manufacture of Perspectra Series begins with high quality hot dip galvanized or Galvalume – our highly corrosion resistant 55% aluminum-zinc alloy coated steel, made to rigid specifications and quality tested to meet the requirements of ASTM A653/A653M or A792/A792M. The coated steel is then painted on our modern continuous coil coating lines that carefully apply and factory-bake the paint system to the paint manufacturers' specifications. The final product is tested in accordance with stringent standards established by the National Coil Coating Association (NCCA) and American Society for Testing and Materials (ASTM).

A Quality & Performance specification has been developed for Perspectra Series standard colours and covers the metallic coated steel substrate and the paint system performance against a variety of industry technical standards, applicable to anywhere in Canada or the continental United States. For other geographic locations or non-standard colours, individual Quality and Performance Specifications are available. Contact your ArcelorMittal Dofasco Representative for further information.

BENEFITS OF PREPAINTED GALVALUME:

When superior atmospheric corrosion resistance is required, particularly at tension bends and drip edges, specify Galvalume as the substrate for Perspectra Series. Projects constructed around coastal areas, light or moderate industrial areas have all benefited from the superior performance that the Galvalume substrate delivers. Contact your ArcelorMittal Dofasco Representative for guidance on substrate material selection.

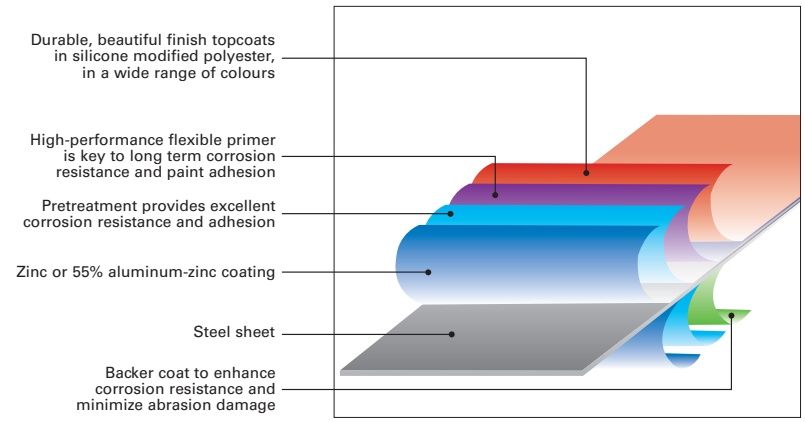
PERSPECTRA SERIES PAINT SYSTEM:

A schematic of the Perspectra Series paint system, shown in Figure 1, pictorially demonstrates the following product features: Galvalume sheet, with its highly corrosion resistant 55% aluminum-zinc alloy coating, or hot dip galvanized, not only serves as the foundation for the paint system, but also provides long-term corrosion protection at edges, damaged sites, and tension bends.

A chemical pretreatment is then applied to promote adhesion between the primer and the metallic coating. A high-performance flexible primer is then applied to the pretreated surface to enhance corrosion resistance, particularly at cut edges, scratches, and bends. The paint system is finished by applying a colourful, durable silicone modified polyester top-coat selected from one of four colour groupings (whites, earthtones, colours, and exotics) specifically for the application.

The unexposed side is typically pretreated and coated with a wash coat or backer coat to enhance the corrosion resistance and minimize abrasion damage.

Figure 1



FORTY STANDARD COLOURS :

Perspectra Series offers 40 standard colours that cater to the creativity and imagination of architects and building designers. These proven colours all meet the upgraded Quality & Performance Specification and are broken out in four colour groups, each group having its own price. The four colour groups are:

Whites –
9 shades of white

Earthtones –
16 pastel and earthtone colours

Colours –
13 unique and beautiful colours

Exotics –
2 bright and exotic colours

Additional colours, gloss and textures can be developed to meet unique project requirements. With the colours being offered in groups, new colour pricing can be established quickly, while the paint formulation is confirmed later by laboratory colour matching. For new developments of Exotic colours, individual pricing will be quoted.

Creativity, versatility, durability, and economy – these are the proven reasons to choose Perspectra Series on galvanized or Galvalume substrates.

"COOL ROOFING" PROPERTIES:

Cool roofing is gaining more attention particularly in areas of the United States where cooling climates prevail and air conditioning is used to control interior temperature. Several jurisdictions have adopted "Cool Roofing" requirements for minimum total solar reflectance and emissivity of the roofing membrane. Perspectra Series has been designed to deliver "Cool Roofing" properties on all the "Whites" and many of the colours in the "Earthtones" and "Colours" groupings. This is achieved through the judicious selection of solar reflective inorganic pigments within the topcoat. A listing of the total solar reflectance (TSR) and emissivity (E) for the cool colours is available from your ArcelorMittal Dofasco Representative.

INVENTORY CONTROL CONSIDERATIONS:

To minimize the risk of mixing Perspectra Series with other prepaint systems in your inventory, the following are recommended practices to keep master coils and fabricated products made from Perspectra Series separate:

- Use your current inventory of prepainted steel coils before processing Perspectra Series coils of the same colour
- Ensure that the coil tags stay on the remainder of the coil to identify it as Perspectra Series and to reference its colour QC number
- Keep inventory of the two paint systems in coil or fabricated sheet form physically separate in your plant
- Communicate the importance of not mixing inventory of the two paint systems to all personnel involved in purchasing, operations, packaging, shipping, material handling and installation, including your distributors

During the transition, each coil of Perspectra Series will be labelled on the outside wrap and the eye of the coil with brightly coloured stickers saying "NEW PAINT SYSTEM – DO NOT MIX"

JOB SITE STORAGE AND MAINTENANCE:

Building products made from Perspectra Series should be kept dry in transit and covered during storage at the job site. Bundles should be stored above ground at a slight angle, to prevent water or condensation build up between adjacent sheets. For advice on other job site considerations such as transit abrasion, removing installation debris, field cutting sheets, compatibility with other building accessories, insulation, joining, and sealing, refer to "Guide To Good Practices" obtainable from your ArcelorMittal Dofasco Representative.

With a little care and attention, roofing and cladding made from Perspectra Series will provide extended service life. Although factory applied, these durable paint finishes for building panels should be cleaned thoroughly on a routine basis at least once a year. Applications where the paint finish is washed by rain do not normally require this maintenance.

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ArcelorMittal

Issued December/07

Dymonic 100

Table of Contents

Dymonic® 100

High-Performance, High-Movement, Single-Component, Polyurethane Sealant

Product Description

Dymonic® 100 is a high-performance, high-movement, single-component, medium-modulus, low-VOC, UV-stable, non-sag polyurethane sealant.

Basic Uses

Dymonic 100 is a durable, flexible sealant that offers excellent performance in moving joints and exhibits tenacious adhesion once fully cured. Typical applications for Dymonic 100 include expansion and control joints, precast concrete panel joints, perimeter caulking (windows, doors, and panels), aluminum, masonry and vinyl siding. Dymonic 100 is also an excellent choice as a fluid applied flashing material in rough opening perimeters for fenestration/window, door and curtain wall applications.

Features and Benefits

- Can adhere to damp or green concrete and has a skin time of 2 hr with a tack-free time of 6 to 8 hr to significantly reduce dirt attraction.
- Movement capability of +100/-50% in typical field conditions, is low VOC, paintable, jet fuel-resistant, and will not crack, craze or yellow under extreme UV exposure.
- Suitable for water immersion and will not out gas.
- Formulated with an innovative polymer technology, similar to TREMproof® 250GC and Vulkem® 45SSL, Dymonic 100 is highly versatile and has a unique capability to adhere to damp or green concrete and will not out gas.
- Compatible and can be coated over with Tremco's Vulkem Deck Coatings, ExoAir® Air Barrier products and the cold, fluid-applied TREMproof® line of below-grade waterproofing products.

Availability

Dymonic 100 is immediately available from your local Tremco Sales Representative, distributor, or warehouse.

Coverage Rates

308' of joint per gallon for a 1/4" x 1/4" (6 mm x 6 mm) joint. For specific coverage rates that include joint size, and usage efficiencies, visit our website usage calculator at www.tremcosealants.com

Packaging

- 10.1-oz (300-mL) cartridges
- 20-oz (600-mL) sausages

Colors

Almond, Aluminum Stone, Anodized Aluminum, Beige, Black, Bronze, Buff, Dark Bronze, Gray, Gray Stone, Hartford Green, Ivory, Light Bronze, Limestone, Natural Clay, Off White, Precast White, Redwood Tan, Sandalwood, Stone, and White.

Shelf Life

1 year when stored at 40 to 110 °F (5 to 43 °C)

Storage

Store Dymonic 100 in original, undamaged packaging in a clean, dry, protected location with temperatures between 40 to 110 ˚F (5 to 43 ˚C).

Applicable Standards

Dymonic 100 meets or exceeds the requirements of the following specifications:

- ASTM C920 Type S, Grade NS, Class 50, Use NT, T, M, A, O, I
- U.S. Federal Specification TT-S-00230C, Class A, Type II
- CAN/CGSB-19,13-M87
- International Code Council (ICC) Section R703.8 Flashing
- AAMA 714-15 Specification for Liquid-Applied Flashing
- NFPA 285 Listed Component

Fire Rated Systems

FF-D-1186, FW-D-1117, HW-D-1122, WW-D-1200, and BW-S-0006

Limitations

- Use with adequate ventilation.

- Always utilize the accompanying MSDS for information on Personal Protective Equipment (PPE) and Health Hazards.
- Not recommended for use in chlorinated, potable, heavy or waste water.
- Although Dymonic 100 is paintable, this does not imply adhesion to and compatibility with all paints. Consult Tremco Technical Bulletin No. S-09-05 for more information.

Substrate Preparation

Surfaces must be sound and clean. All release agents, existing waterproofing, dust, loose mortar, paints, other finishes or field applied coating must be removed. This can be accomplished with a thorough wire brushing, grinding, sandblasting, or solvent washing, depending on the contamination.

Tremco recommends that surface temperatures be 40 ˚F (5 ˚C) or above at the time the sealant is applied. If sealant must be applied in temperatures below 40 ˚F, please refer to the Tremco Technical Bulletin for Applying Sealants in Cold Conditions (No. S-08-44 rev 1) that can be found on our website at www.tremcosealants.com

Priming

Dymonic 100 typically adheres to common construction substrates without primers. However, Tremco always recommends that a mock-up or field adhesion test be performed on the actual materials being used on the job to verify the need for a primer, proper cleaning and prep requirements. A description of the field adhesion test can be found in appendix X1 of ASTM C1193, Standard Guide for Use of Joint Sealants.

Where deemed necessary, use Vulkem® Primer #191 Low-VOC on porous substrates and TREMprime® Non-Porous Primer for metals or plastics.

Application

Dymonic 100 is easy to apply with conventional caulking equipment. Ensure that the backer rod is fitted properly for friction and that any necessary primers have been applied.

Fill the joint completely with a proper width-to-depth ratio, and then tool to ensure intimate contact of sealant with joint substrates.

Dry tooling is always preferred, although compatible wetting agents can be used in limited amounts to slick the spatula if needed after an initial pass.

For a cleaner finish, mask the sides of the joint with tape prior to filling.

Joint Design

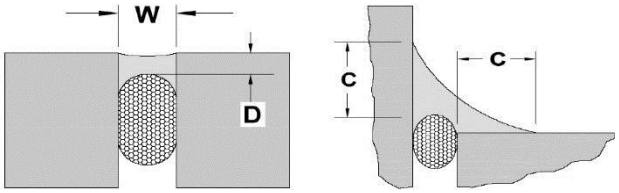
Dymonic 100 may be used in vertical or horizontal joints designed in accordance with accepted architectural/engineering practices. Joint width should be 4 times anticipated movement but not less than 1/4" (6 mm).

Joint Backing

Polyethylene backer rod is recommended as joint backing to control sealant depth and ensure intimate contact of sealant with joint substrate when tooling. Where depth of joint will prevent the use of backer rod, an adhesive backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at the time of sealant application.

Sealant Dimensions

W = Sealant width, D = Sealant depth, C = Contact area.



Expansion Joints- The minimum width and depth of any sealant application should be 1/4" x 1/4" (6 mm x 6 mm). The depth (D) of sealant may be equal to width (W) of joints less than 1/2" wide. For joints from 1/2" to 1" (13 mm to 25 mm) wide, the sealant depth should be approximately one-half of the joint width. The maximum depth (D) of any sealant application should be 1/2" (13 mm). For Joints that are wider than 1" (25 mm) contact Tremco Technical Services or your local Tremco Sales Representative.

Window Perimeter- For fillet beads, or angle beads around windows and doors, the sealant should exhibit a minimum surface contact area [C] of 1/4" (6 mm) onto each substrate, with provisions for release at the heel of the angle using backer rod or bond breaker tape.

Cure Time

Dymonic 100 generally cures at a rate of 3/32" per day at 75 °F (24 °C) and 50% RH. It will skin in 2 hr and be tack free in 6 to 8 hr. The cure time will increase as temperatures and/or humidity decrease. A typical rule of thumb is one additional day for every 10 °F decrease in temperature.

Clean Up

Excess sealant and smears adjacent to the joint interface can be carefully removed with xylene or mineral spirits before the sealant cures. Any utensils used for tooling can also be cleaned with xylene or mineral spirits.

Warranty

Tremco warrants its Products to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or refund the purchase price of the quantity of Tremco Products proven to be defective, and Tremco shall not be liable for any loss or damage.

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUES
Type		Single component polyurethane sealant
Color		21 Standard Colors
Solids		98%
Specific Gravity		1.3302
Application		gun-grade sealant, applied with typical caulking equipment
Rheological Properties	ASTM C639	non-sag (NS), 0" of sag in channel
Hardness Properties	ASTM C661	40 +/-5
Weight Loss	ASTM C1246	Pass
Skin Time	ASTM C679	2 to 3 hr
Tack Free Time	73.4°F (23°C) 50% RH	6 to 8 hr
Stain and Color Change	ASTM C510	Pass
Adhesion to Concrete	ASTM C794	35 pli
Adhesion to Concrete After Immersion	ASTM C794	30 pli
Adhesion to Green Concrete	ASTM C794	>25 pli
Adhesion to Damp Concrete	ASTM C794	>20 pli
Effects of Accelerated Aging	ASTM C793	Pass
Movement Capability	ASTM C719	+/-50%
Movement Capability	ASTM C719* Modified	+100/-50%
Tensile Strength	ASTM D412	350 to 450 psi
% Elongation	ASTM D412	800 to 900%
Modulus at 100%	ASTM D412	75 to 85 psi
Tear Strength	ASTM D412	65 to 75 psi
Service Temperature		-40 to 180 °F (-40 to 82 °C)
Application Temperature		40 to 100 °F (4 to 37 °C) *
Smoke Development	ASTM E84	5
Fire Spread	ASTM E84	5
Fire Resistance of Assembly	NFPA 285	PASS
Crack Bridging	ASTM C1305	PASS
Nail Sealability	ASTM D1970 Section 7.9	PASS

*For temperatures below 40 °F, please refer to the Technical Bulletin, Cold Temperature Sealant Application Recommendations.

0417/D100DS-ST

Tremco Commercial Sealants & Waterproofing

3735 Green Rd
Beachwood OH 44122
216.292.5000 / 800.321.7906

1451 Jacobson Ave
Ashland OH 44805
419.289.2050 / 800.321.6357

220 Wicksteed Ave
Toronto ON M4H1G7
416.421.3300 / 800.363.3213

1445 Rue de Coulomb
Boucherville QC J4B 7L8
514.521.9555

www.tremcosealants.com

Dymonic® 100 Standard Colors

MTO/custom colors & alternate packaging available

This guide only offers a general representation of our color offering. Colors viewed on a computer screen and then printed will vary and will never be an exact representation of the actual pigment. When matching is critical, please refer to our color card or sample color strips.

ALMOND

IVORY

ALUMINUM STONE

LIGHT BRONZE

ANODIZED ALUMINUM

LIMESTONE

BEIGE

NATURAL CLAY

BLACK

OFF WHITE

BRONZE

PRECAST WHITE

BUFF

REDWOOD TAN

DARK BRONZE

SANDALWOOD

GRAY

STONE

GRAY STONE

WHITE

HARTFORD GREEN

To Match Antique Linen Per Site Instruction 10
Colour not reviewed here via electronic submission

SIMLUC
CONTRACTORS LTD.

TRANSMITTAL

DATE: April 22, 2020 **PROJECT:** Enterprise Rent-A-Car

TO: Tal-Co Building Innovations **LOCATION:** 225 Huntmar Drive

ATT: Annie Griffiths **Courier** ☐ **Email** ■ **Fax** ☐ **Hand** ☐ **Mail** ☐

We are forwarding the following documents:

COPIES	DRAWING #	REV.	DESCRIPTION
1			Tapered Insulation Shop Drawing

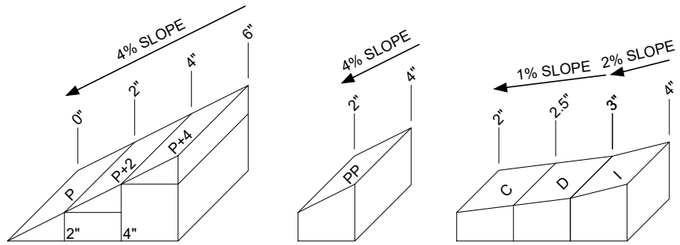
For your: Comments & Return ☐ **Approval & Return** ■ **As Requested** ☐ **For Quotation** ☐ **Reference Only** ☐

REMARKS:

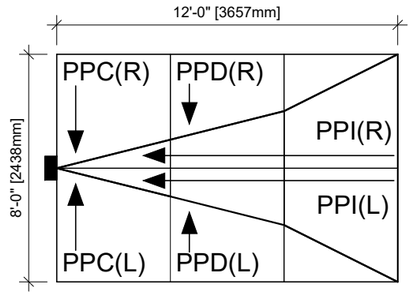
RECEIVED BY: **PER:** Josephine Ildefonso

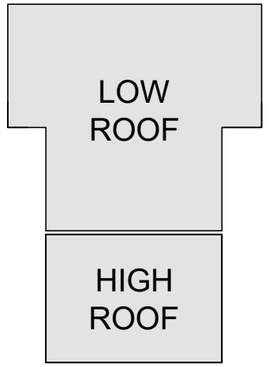
DATE:

2550 Blackwell Street ● Ottawa ● Ontario ● K1B 5R1 ● Tel.: (613) 748-0066 ● Fax: (613) 748-1122



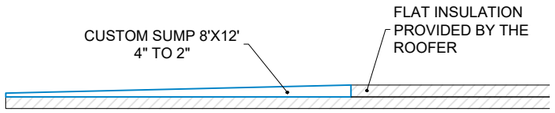
CROSS SECTION





ROOF KEY PLAN

Verify with GC that Site Instruction 6 change in roof truss top chord pitch is accounted for.



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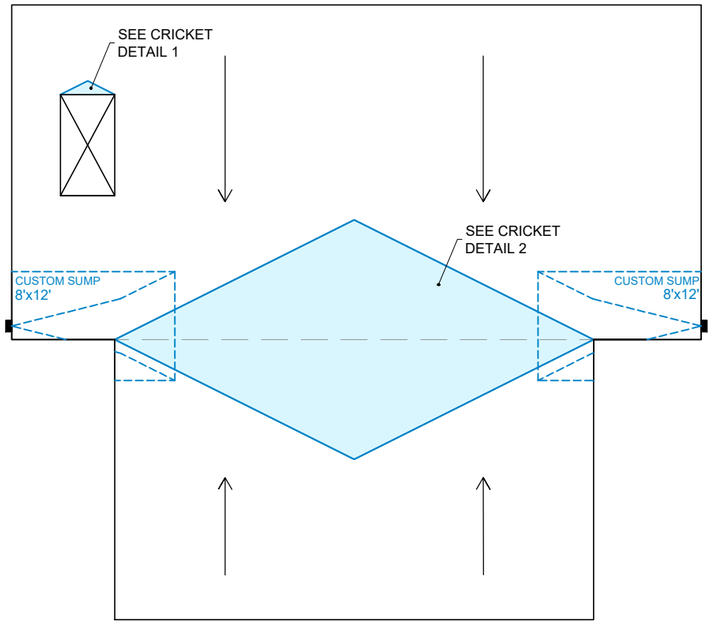
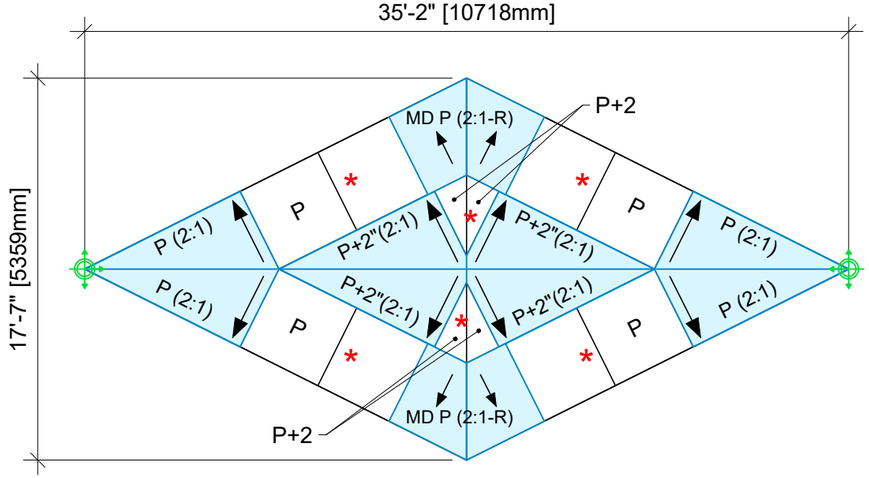


LOW ROOF



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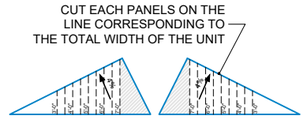

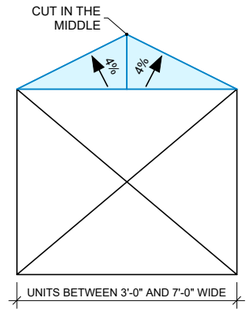

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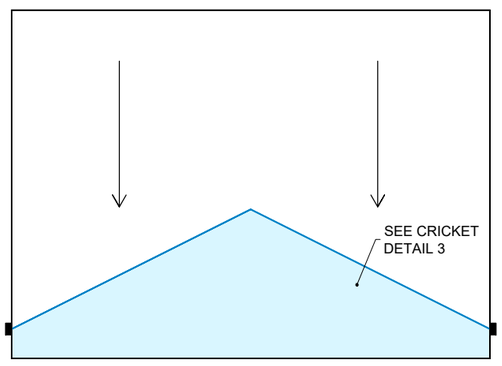
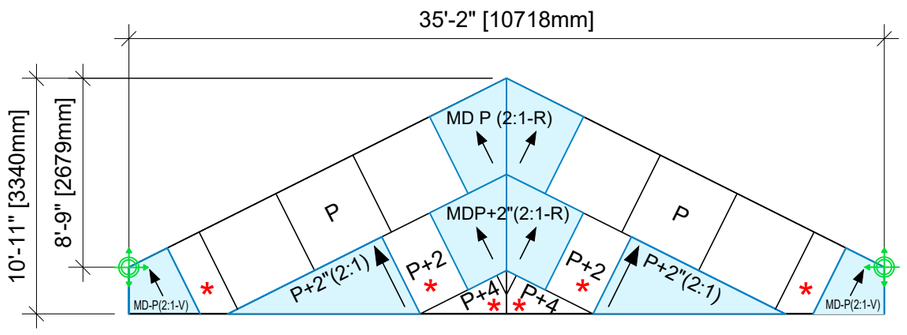


HIGH ROOF



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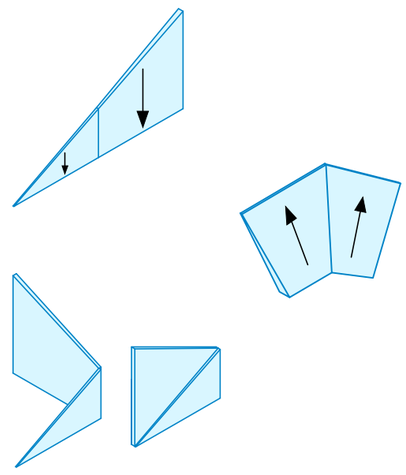

PRECUT PANELS

SOPREMA

3100, RUE KUNZ, DRUMMONDVILLE (QUÉBEC) J2C 6Y4

PRODUIT / PRODUCT **SOPRA-ISO**

NOTES

LE COUVREUR EST RESPONSABLE DE VISITER LE CHANTIER AVANT DE COMMENCER LE PROJET. IL DOIT VÉRIFIER ET VALIDER QUE LES DIMENSIONS ET GRANDEURS SONT CORRECTES. IL DOIT RAPPORTER TOUT PROBLÈME À SOPREMA AVANT DE COMMENCER.

CONTRACTOR IS RESPONSIBLE TO VISIT THE SITE PRIOR TO BEGIN. HE MUST CHECK AND VERIFY IF ALL DIMENSIONS AND SIZES ARE CORRECT. THE CONTRACTOR MUST REPORT ANY PROBLEM TO SOPREMA BEFORE PROCEEDING.

LÉGENDE / LEGEND

- DRAIN DE TOIT / ROOF DRAIN
- SENS DE LA PENTE / DIRECTION OF SLOPE
- SENS DE LA PENTE STRUCTURALE / DIRECTION OF STRUCTURAL SLOPE
- POINT DE DÉPART À RESPECTER/ MANDATORY STARTING POINT
- IDENTIFIE LA PENTE ET L'ÉPAISSEUR DU PANNEAU/ IDENTIFIES THE PANEL SLOPE AND THICKNESS
- IDENTIFIE LE TYPE DE PANNEAU / IDENDIFIES THE TYPE OF PANEL : V = VALLÉE / VALLEY R = FAÎTE / RIDGE

NOTES

TOUTES LES DÉCOUPES DE PANNEAUX ADJACENTS AU PARAPET, DEVRONT ÊTRE EFFECTUÉES EN CHANTIER.
/ ALL PARTIAL PANELS ADJACENT TO THE PARAPET, HAVE TO BE CUT ON SITE

* NOTE

TOUTES LES DÉCOUPES DE PANNEAUX DEVRONT ÊTRE EFFECTUÉES EN CHANTIER.

TITRE DU PROJET / PROJECT TITLE
ENTREPRISE RENT-A-CAR
PALLADIUM DRIVE
OTTAWA, ON

ARCHITECTE / ARCHITECT
JASON C. FLYNN

ENTREPRENEUR / CONTRACTOR
SIMLUC CONTRACTORS LTD

ÉCHELLE / SCALE	DESSINÉ PAR / DRAWN BY	# PROJET / PROJECT #
NTS	AMF	19-2694

RÉVISION / REVISION

CHARGÉ DE PROJET / PROJECT MANAGER
ANTHONY MERCIER FORTIN
1 (819) 817-0971

DATE	PAGE
20/04/2020	01 DE/OF 01