

This addendum forms a part of the Contract Documents and modifies the original Documents dated **February 14, 2024**, as noted below. Acknowledge receipt of this addendum in the space provided on the Official Bid Form. Failure to do so may subject the Bidder to disgualification.

REVISION TO SECTION 00 2113 INSTRUCTIONS TO BIDDERS 1.9A, 1.9B, 1.9D, 1.9E

Note: Revised Additions are in bold.

- 1.9 SUBMISSION OF BID
 - A. The bid proposal shall be sealed in an opaque envelope, addressed as follows: BID PROPOSAL
 DISTRICT WIDE ROOFING PROJECT
 CENTRAL CURRY SCHOOL DISTRICT
 29805 Mary Street
 Gold Beach, Oregon 97444

Attn: Mike Freeman, Program Manager

The bid proposal may also be submitted electronically to Mike Freeman, Program Manager at <u>mike.freeman@hmkco.org</u>. The subject line should be as follows: CENTRAL CURRY SCHOOL DISTRICT – DISTRICT WIDE ROOFING PROJECT BID DOCUMENTS

- B. Bids will be received up to 2:00 pm, local time, March 13, 2024, at the address listed above. For electronic bid submissions, bids will be received up to 2:00 pm, local time, March 13, 2024, at the email address listed above.
- D. Bids shall be considered late if received any time after 2:00 PM Local time on March 13, 2024. Bids received after the specified time shall be rejected. <u>It is the responsibility of the Contractor to ensure that bids have been received by contacting Mike Freeman, Program Manager, at 541-499-7996.</u>
- E. The First Tier Subcontractors list MUST be received by 4:00 PM on March 13, 2024. For electronic bid submissions, the First Tier Subcontractors List MUST be submitted to Mike Freeman, Program Manager at <u>mike.freeman@hmkco.org</u>. by 4:00 PM on March 13, 2024.

ENCLOSED SECTION 00 4110 BID FORM CHECK LIST

Disregard <u>original</u> Section 00 4110 Bid Form Check List and replace with enclosed Section 00 4110 Bid Form Check List *in its entirety*.

ENCLOSED SECTION 00 4339 FIRST TIER SUBCONTRACTOR DISCLOSURE FORM

Disregard <u>original</u> Section 00 4339 First Tier Subcontractor Disclosure Form and replace with enclosed Section 00 4339 First Tier Subcontractor Disclosure Form *in its entirety*.

SUBSTITUTION REQUEST

NOT APPROVED

1. Section: 07 54 00 Product: Tremco TPA PVC Paragraph: 2.02.A.1

Proposed Substitution:

Manufacturer: Soprema P150HFB



Description: 60 mil PVC fleece back single ply membrane

This substitution request is not approved for the following reasons:

• Proposed substitution compliance with specification is not fully documented, specifically warranty information.

END OF ADDENDUM 3



Company Name: _____

The following attachments are the only items to be included with your Bid Package for the Central Curry School District - District Wide Roofing Project. All items need to be submitted individually. There are to be **NO** additional items included with your Bid. This checklist **MUST** be signed and dated to make your bid complete. All Bids are to be submitted in sealed envelope to Mike Freeman, Program Manager, at 29805 Mary Street, Gold Beach, Oregon 97444 by 2:00PM on March 13, 2024. Bids may also be submitted electronically to Mike Freeman, Program Manager, at <u>mike.freeman@hmkco.org</u> by 2:00 PM on March 13, 2024.

Attachment 1: Bid Form	
Attachment 2: Bid Bond	
Attachment 3: First Tier Sub Contractors List	
Attachment 4: References	
Attachment 5: Checklist	

Signature:

Date:_____



Bids which are submitted by Bid Closing, but for which a required disclosure submittal has not been made by the specified Disclosure Deadline, are not responsive and shall not be considered for Contract award.

AGENCY SUPPLIED INFORMATION:

PROJECT NAME: District Wide Roofing Project

BID #:N/ABID CLOSING: Date: March 13, 2024 Time: 2:00 PMREQUIRED DISCLOSURE DEADLINE:Date: March 13, 2024 Time: 4:00 PMDeliver Form To (Agency):Central Curry School DistrictDesignated Recipient (Person):Mike Freeman, Program Manager, HMK CompanyAgency's Address:29805 Mary StreetGold Beach, Oregon 97444mike.freeman@hmkco.org

INSTRUCTIONS:

The contracting agency will insert "N/A" below if the contract value is not anticipated to exceed \$100,000. Otherwise, this form must be submitted either with the bid or within **TWO (2)** working hours after the advertised bid closing date and time;

FAILURE TO SUBMIT THIS FORM BY THE DISCLOSURE DEADLINE WILL RESULT IN A NON-RESPONSIVE BID. A NON-RESPONSIVE BID WILL NOT BE CONSIDERED FOR AWARD.

It is the responsibility of bidders to submit this disclosure form and any additional sheets, with the bid number and project name clearly marked, and must be submitted at the location specified in the Invitation to Bid on the advertised bid closing date and within two (2) working hours after the advertised bid closing time at the location indicated by the specified disclosure deadline. See "Instructions to Bidders".

List below the name of each subcontractor that will be furnishing labor or materials and that is required to be disclosed, the category of work that the subcontractor will be performing and the dollar value of the subcontract. Enter" NONE" if there are no subcontractors that need to be disclosed. (ATTACH ADDITIONAL SHEETS IF NEEDED).

BIDDER DISCLOSURE:

SUBCONTRACTOR NAME	DOLLAR VALUE	CATEGORY OF WORK
1)		
2)		
3)		
4)		
5)		
6)		
7)		
8)		



CENTRAL CURRY SCHOOL DISTRICT DISTRICT WIDE ROOFING PROJECT FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM SECTION 00 4339 - ADDENDUM 3

9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	

The above listed first-tier subcontractor(s) are providing labor, or labor and material, with a Dollar Value equal to or greater than:

a) Five percent (5%) of the total Contract Price, but at least \$15,000. (If the Dollar Value is less than \$15,000, do not list the subcontractor above);

or

b) \$350,000 regardless of the percentage of the total Contract Price.

Form Submitted By (Bidder Name): _	
Contact Name:	

Phone #: _____

Email: _____

END OF SECTION

Manufacturer's Substitution Package for District Wide Roofing Projects March 06, 2024



Prepared for HMK

By: Jeff Forell Architectural Sales Rep SOPREMA 503-476-6425



SUBSTITUTION REQUEST: DATE SUBMITTED March 06, 2024

- 1.01 SUBMIT TO: Mike Freeman, Program Manager, HMK Company, mike.freeman@hmkco.org
- **1.02 PROJECT:** District Wide Roofing Project

1.03 SPECIFIED ITEM:

- A. SECTION NAME AND NUMBER: 07 54 00
- B. PRODUCT TYPE AND NAME AND MODEL: Tremco TPA PVC
- C. PARAGRAPH AND PRODUCT DESCRIPTION: 2.02.A.1 Page 4

1.04 PROPOSED SUBSTITUTION:

- A. MANUFACTURER AND MODEL NUMBER(S): <u>Soprema P150HFB</u>
- B. PRODUCT DESCRIPTION: 60 mil PVC fleece back single ply membrane
- C. Attached data includes product description, specifications, drawings, photographs, performance, test data and **point by point comparative matrix** adequate for evaluation of request including identification of applicable data portions. Attached data also includes description of changes to Contract Documents the proposed substitution requires for proper installation.
- D. It is the responsibility of the requestee to assemble a comparative matrix outlining key elements of proposed substitution.

1.05 UNDERSIGNED CERTIFIES FOLLOWING ITEMS, UNLESS MODIFIED BY ATTACHMENTS, ARE CORRECT:

- A. Proposed substitution does not affect dimensions shown on the drawings.
- B. Undersigned pays for changes to building design, including engineering design, detailing, and construction costs caused by proposed substitution.
- C. Proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements.
- D. Maintenance and service parts are available locally or readily obtainable for proposed substitution.

1.06 UNDERSIGNED FURTHER CERTIFIES FUNCTION, APPEARANCE, AND QUALITY OF PROPOSED SUBSTITUTION ARE EQUIVALENT OR SUPERIOR TO SPECIFIED ITEM.

- 1.07 UNDERSIGNED FURTHER CERTIFIES THAT THE MANUFACTURER OF THE PROPOSED SUBSTITUTION IS AWARE OF THIS SUBSTITUTION REQUEST AND AGREES TO THE STATEMENTS NOTED ABOVE.
- 1.08 UNDERSIGNED AGREES THAT THE TERMS AND CONDITIONS FOR SUBSTITUTIONS FOUND IN BIDDING DOCUMENTS APPLY TO THIS PROPOSED SUBSTITUTION.



1.09 SUBMITTED BY:

	A.	PRINT NAME: Jeff Forell	
		SIGNATURE: Jeff Forell	
	В.	FIRM NAME: Soprema	
	C.	FULL MAILING ADDRESS: 310 Quadrail Drive	
		City: <u>Wadsworth</u> State: <u>Ohio</u> Zip: <u>44281</u>	
	D.	PHONE: <u>503-476-6425</u> E-MAIL: jforell@soprema.us	
1.10	FOR U	SE BY ARCHITECT OR ENGINEER	
	A.	APPROVED OR APPROVED AS NOTED BY:	
	В.	NOT APPROVED BY: Meagan Baker-Wilmes, Soderstrom Architects	
	C.	RECEIVED TOO LATE:	
	D.	REMARKS: Compliance with specification not fully documented, specifically warranty information	on
	E.	DATE OF RESPONSE: March 8, 2024	

END OF SECTION

Based on publicly available data as	ASTM D4434	SOPREMA	Tremco
February 9, 2024	Requirement		Tremico
		SENTINEL [®] P150 HFB	TPA FB
Physical Property		60-mil Minimum	60-mil Nominal
Scrim		Dolnester	
Back surfacing		5.5 oz/yd ²	
Thickness over scrim , mm (in.) ASTM D4434 optical method average of 3 areas	0.016 min	0.76 30 mil	-
Breaking strength (MD x XMD), lbf/in ASTM D751 grab method	275 min	475x 325	350
Elongation break of reinforcement (MD x XMD), % ASTM D751 grab method	25 min	30 x 30	35 x 33
Tearing strength (MD x XMD), lbf (N) ASTM D751 proc. B, 8 in. x 8 in.	90 min (400)	145 x85	100 (440)
Low temperature bend , ASTM D2136, no cracks 5x at -40°C	PASS	PASS	PASS
Linear dimensional change , % (MD x XMD) ASTM D1204, 6 hours at 176°F	±0.5 max	<0.1 x <0.1	0.3
Water absorption resistance , mass % ASTM D570, 166 hours at 158°F water	±3.0 max	<3	-
Seam strength, lbf (75% of Breaking Strength) ASTM D751 Grab Method \geq 415 lbf	No requirement	PASS	-
Puncture resistance - Dynamic, J (ft-lbf) ASTM D5635	20 (14.7)	PASS	-
Puncture resistance - Static, lbf (N) ASTM D5602	33(145)	PASS	-
Xenon-Arc resistance , no cracks/crazing 10x, ASTM G155 0.35 W/m ² at 340-nm, 63°C B.P.T. 12,600 kJ/m ² total radiant exposure 10,000 hours	PASS	PASS	-
Properties after heat aging ASTM D3045, 56 days at 176°F Breaking strength. % retained Elongation reinf., % retained	90 min 90 min	PASS	-
Solar reflectance White Initial 3 year		0.85 0.73	0.86 0.70
Thermal emittance White Initial 3 year		0.89 0.88	0.86 0.82
JSRI White Initial 3 vear		108 90	108 84



PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SENTINEL P150 HFB is a high performance, polyester reinforced, thermoplastic polyvinyl chloride (PVC) roof membrane, specially designed to provide unmatched flexibility and long-term performance. SENTINEL membranes provide the proven fire and chemical resistance of PVC along with superior weldability, making it easy to conform to complex geometries. SENTINEL P150 HFB incorporates a heavy fleecebacked underside and is available in an ENERGY STAR® approved white as well as a variety of colors, including gray and tan.

STORAGE

Store rolls in a clean, dry location and cover as necessary to protect rolls from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SENTINEL P150 HFB.

APPLICATION

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FASTENED

SENTINEL P150 HFB can be installed in mechanically attached or fully adhered systems. For fully adhered systems, SENTINEL H2O Bonding Adhesive or DUOTACK SPF are approved. Please refer to the specific adhesive data sheet for application guidelines. For mechanically attached systems, please consult your SOPREMA representative for specific fastening patterns. All laps must be heat-welded to ensure a water tight seal.

QUICK FACTS



MECHANICALLY FULLY ADHERED

COOL ROOF RATING						
PRODUCT	SOLA REFLECT	R ANCE	THEF Emiti	RMAL FANCE	S	RI
SENTINEL P150 HFB	0.85	0.73	0.89	0.88	108	90
White	initial	3 year	initial	3 year	initial	3 year
SENTINEL P150 HFB	0.46	pending	0.89	pending	53	pending
Light Grey	initial	3 year	initial	3 year	initial	3 year
SENTINEL P150 HFB	0.72	pending	0.85	pending	88	pending
Light Tan	initial	3 year	initial	3 yaer	initial	3 year

ROLL WIDTH	ROLL LENGTH	COVERAGE	THICKNESS	ROLL WEIGHT	ROLLS/PALLET
(ft)	(ft)	(ft ²)	(mils)	(lb)	(pallet weight)
10 (3.0 m)	80 (24.4 m)	800 (74.3 m ²)	60 (1.5 mm)	303 (137.4 kg)	10 (3,180 lb/ 1,442 kg)

* Coverage rate as reported assumes installation using side and end lap recommendations.



www.soprema.us

310 Quadral Drive, Wadsworth, Ohio 44281 Toll Free: (800) 356-3521 | Tel: (330) 334-0066 SENTINEL® P150 HFB **PRODUCT #** P304 (White) P304-T (Tan) P304-G (Grey)



TECHNICAL INFORMATION & TESTING

SHEET PROPERTIES		
Reinforcement	Polyester (18X9, weft inserted)	
Back surfacing	Heavy fleece-backed (5.5 oz/yd2)	
ASTM standard	ASTM 4434, Type III	

DIMENSIONS & MASS			
PROF	TEST METHOD		
Thickness, mils (mm) (without fleece backing)	60 (1.5)	ASTM D4434	
Thickness over scrim, mils (mm)	30 (0.76)	ASTMD4434	
Net mass per unit area, lb/100ft ² (g/m ²)	39 (1,905)	ASTM D4434	

PHYSICAL PROPERTIES				
PROPERTY	MD	XMD	TEST METHOD	
Breaking strength, Ibf/in (kN/m)	475 (83)	325 (57)	ASTM D751	
Elongation at break, minimum, %	30	30	ASTM D751	
Seam strength (min 75% of breaking strength)	Pass	Pass	ASTM D751	
Low temperature bend, @ -40°F (-40°C)	Pass	Pass	ASTM D2136	
Tear strength, lbf (N)	145 (645)	85 (378)	ASTM D751, Proc. B	
Trapezodial tear, lbf (N)	160 (172)	130 (578)	ASTM D751	
Linear dimensional change, %	< 0.1	< 0.1	ASTM D1204	
Change in weight after immersion in water, %	< 3	< 3	ASTM D570	
Static puncture resistance, $@ \ge 33$ lbf (15 kg), minimum	Pass	Pass	ASTM D5602	
Dynamic puncture resistance, @ 10 J, minimum	Pass	Pass	ASTM D5635	

* Data is represented by average values, unless noted otherwise.

TESTING & APPROVALS





SENTINEL® H20 BONDING ADHESIVE

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SENTINEL H2O Bonding Adhesive is a water-based polymeric adhesive specially designed for adhering SENTINEL PVC membranes to a variety of substrates for horizontal or vertical applications. SENTINEL H2O is expressly formulated to provide superior bonding strength while containing zero VOC's.

STORAGE

Product should be stored at temperatures between 60°F (15.6°C) and 80°F (26.7°C), out of direct sunlight. Do not allow material to freeze. Containers should be stored upright in a dry, protected storage area to comply with site requirements, away from excessive heat and open flames. Take necessary precautions when handling containers to prevent rupturing the containers, or breaking the sealed lids prior to use.

APPLICATION

SENTINEL H2O Bonding Adhesive is designed for use with SENTINEL membranes over approved substrates. Prior to application, stir by hand to ensure a homogenous mixture. Ensure that the substrate is clean, dry and free of any debris, grease or oil. Apply the adhesive to the substrate using a 3/8" nap roller, apply SENTINEL membrane while substrate is still wet and broom into place. Coverage rates vary for fleece backed and non-fleece backed applications. SENTINEL H2O Bonding Adhesive should only be applied when temperature is 50°F (10°C) and rising.

CONTAINER (gal)	COVERAGE RATE smooth backed (sq ft/gal)	COVERAGE RATE fleece backed (sq ft/gal)	MIN APPLICATION TEMPERATURE (°F)
5.0	140-180	100-120	50
(18.9 L)	(3.4 - 4.4 sqm/L)	(2.5 - 2.9 sqm/L)	(10°C)



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310 Quadral Drive, Wadsworth, Ohio 44281 Toll Free: (800) 356-3521 | Tel: (330) 334-0066

SENTINEL® H2O BONDING ADHESIVE PRODUCT # A102



SENTINEL® H20 BONDING ADHESIVE

TECHNICAL INFORMATION & TESTING

PHYSICAL PROPERTIES			
Weight/gallon (lb)	8.97		
Viscosity (cps) (75°F, 20RPM, #5)	10,000-16,000		
VOC Content (g/L)	179.0		
Total solids (%)	52 ± 3		
Color	White		
Shelf life	1 year, unopened		
Dry time (hours)	Up to 3		

TESTING & APPROVALS





SOPRAVAP'R®

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SOPRAVAP'R is an SBS-modified bitumen air barrier/vapor retarder. SOPRAVAP'R is composed of a proprietary formulation of elastomeric styrenebutadiene-styrene (SBS) polymer modified bitumen in combination with a high tack self-adhesive specifically designed for use with steel decks. The topside is surfaced with high strength tri-laminate polyethylene film and the underside is covered with a silicone release film that is removed during application.

STORAGE

Store rolls on end and maintain in an upright position to prevent damage. Store rolls in a clean dry location and cover as necessary to protect rolls from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRAVAP'R.

APPLICATION

Prior to installation, unroll SOPRAVAP'R onto the roof surface and allow to relax. SOPRAVAP'R may be applied to most substrates including steel, plywood, gypsum, concrete, or asphalt panels. Place SOPRAVAP'R in desired position. Remove the protective release film from the underside of the sheet and roll SOPRAVAP'R into place with a weighted roller. Refer to the SOPREMA Vapor Retarder Technical Manual, low slop roofing for addition guidelines.



QUICK FACTS



SELF-ADHERED

LENGTH	WIDTH	COVERAGE*	THICKNESS	ROLL WEIGHT	ROLLS/PALLET
(ft)	(in)	(ft ²)	(mils)	(lb)	(pallet weight)
134 (40.8 m)	45 (1.1 m)	468 (43.5 m ²)	31 (0.8 mm)	75 (33.5 kg)	

* Coverage rate as reported assumes installation using side and end lap recommendations.



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SOPRAVAP'R® PRODUCT # 14201



SOPRAVAP'R®

TECHNICAL INFORMATION & TESTING

SHEET PROPERTIES		
Reinforcement	Reinforcement None	
Elastomeric bitumen	Proprietary blend of bitumen and SBS polymers	
Top surfacing	Tri-laminate woven polyethylene	
Back surfacing Self adhesive with release film		
Selvage surface	Tri-laminate polyethylene	
Selvage width, in (mm)	3 (75)	
End lap, in (mm)	6 (152)	

PHYSICAL PROPERTIES			
PROPERTY	MD	XMD	TEST METHOD
Thickness, mils (mm)	31	(0.8)	ASTM D5147
Tensile strength @ 73.4°F (23°C), lbf/in (kN/m)	50.6 (8.9)	70.6 (12.4)	ASTM D5147
Ultimate elongation @ 73.4°F (23°C), %	33	25	ASTM D5147
Tear resistance, lbf (N)	94.6 (420.8)	102.6 (456.3)	ASTM D5147
Dynamic Puncture Resistance, lbf (N)	152 (675)	152 (675)	ASTM E154
Lap adhesion with Primer, lbf/ft (N/m)	60.3 (880)		ASTM D1876
Lap adhesion without Primer, lbf/ft (N/m)	41 (600)		ASTM D1876
Water absorption, %	0.1		ASTM D5147
Peel resistance on steel, lbf/in (N/m)	5.3 (928)		ASTM D903
Low Temperature Flexibility, °F (°C)	-58 (-50)		ASTM D5147
Water vapor permeance, perm (ng/Pa.s.m ²)	< 0.03 (< 1.7)		ASTM E96 (Proc. B)
Air permeability, L/s•m ²	< 0	.002	ASTM E2178

* Data is represented by average values, unless noted otherwise.

TESTING & APPROVALS



FLORIDA BUILDING CODE





SOPRA-ISO®

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SOPRA-ISO is a rigid polyisocyanurate thermal insulation panel for use in approved multi-ply membrane and flashing assemblies. SOPRA-ISO is composed of closed cell polyisocyanurate foam bonded to fiber reinforced/organic mat facers on the top and underside.

STORAGE

Store panels flat and maintain in a horizontal position to prevent damage. Store panels in a clean dry location and cover as necessary to protect from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRA-ISO.

APPLICATION

Prior to installation, ensure all SOPRA-ISO panels have not been subject to moisture. Place SOPRA-ISO in an offset or staggered pattern to ensure board joints are not overlapping in multilayer assemblies. Apply to approved substrate via DUOTACK adhesive or hot asphalt following manufacturer specifications. SOPRA-ISO may also be mechanically fastened to approved substrates. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.

BOARD DIMENSIONS (ft)	BOARD THICKNESS (in)	AVAILABLE PSI
4x4, 4x8 (1.2x1.2m, 1.2x2.4m)	1-4 (25-102 mm)	20, 25

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310 Quadral Drive, Wadsworth, Ohio 44281 Toll Free: (800) 356-3521 | Tel: (330) 334-0066 SOPRA-ISO[®] PRODUCT # Contact Customer Service

SOPRA-ISO®

TECHNICAL INFORMATION & TESTING

SOPRA-ISO THERMAL VALUES				
THICKNESS, in	WEIGHT BY 100ft ² , Ib	LTTR (R VALUE)	FLUTE SPANABILITY	
1.0	17	5.7	2 5/8"	
1.5	25	8.6	4 5/8"	
2.0	34	11.4	4 5/8"	
2.2	37	12.6	4 5/8"	
2.5	40	14.4	4 5/8"	
2.6	42	15.0	4 5/8"	
3.0	48	17.4	4 5/8"	
3.5	59	20.5	4 5/8"	
4.0	67	23.6	4 5/8"	

* Data is represented by average values, unless noted otherwise.

PHYSICAL PROPERTIES			
PROF	PERTY	ASTM TEST	
Compressive Strength, psi	20 (Grade 2)*	ASTM D 1621	
Dimensional Stability, %	<2	ASTM D 2126	
Vapor Transmission, perm	<1.5	ASTM E 96	
Water Absorption, %	<1.5	ASTM C 209	
Flame Spread	<75	ASTM E 84	
Smoke Developed	<450	ASTM E 84	
Service Temp, °F	-40 - 250	-	

* ASTM C 1289 Type II, Class 1 Grade 2 (20 psi) or Grade 3 (25 psi)

TESTING & APPROVALS



FLORIDA BUILDING CODE





SOPRA-ISO® TAPERED

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SOPRA-ISO Tapered is a rigid polyisocyanurate thermal insulation panel for use in approved multi-ply membrane and flashing assemblies. SOPRA-ISO Tapered is composed of closed cell polyisocyanurate foam bonded to fiber reinforcrced glass/ organic mat facers on the top and underside and is tapered to provide slope.

STORAGE

Store panel flat and maintain in a horizontal position to prevent damage. Store panels in a clean dry location and cover as necessary to protect from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRA-ISO Tapered.

APPLICATION

Prior to installation, ensure all SOPRA-ISO Tapered panels have not been subject to moisture. Place SOPRA-ISO Tapered in an offset or staggered pattern to ensure board joints are not overlapping in multilayer assemblies. Apply to approved substrate via DUOTACK adhesive or hot asphalt following manufacturer specifications. SOPRA-ISO Tapered may also be mechanically fastened to approved substrates. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.

AVAILABLE PSI	TAPERED STOCK (in)
20, 25	1/8, 1/4, 1/2



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TECHNICAL INFORMATION & TESTING

SOPRA-ISO TAPERED THERMAL VALUES				
PANEL	LTTR (R VALUE)	THICKNESS		
AA	4.3	0.5-1		
A	7.1	1-1.5		
В	10	1.5-2		
С	12.9	2-2.5		
Х	5.7	0.5-1.5		
Y	11.4	1.5-2.5		
Q	8.6	0.5-2.5		

* Data is represented by average values, unless noted otherwise.

PHYSICAL PROPERTIES			
PROF	PERTY	ASTM TEST	
Compressive Strength, psi	20 (Grade 2)*	ASTM D 1621	
Dimensional Stability, %	<2	ASTM D 2126	
Vapor Transmission, perm	<1.5	ASTM E 96	
Water Absorption, %	<1.5	ASTM C 209	
Flame Spread	<75	ASTM E 84	
Smoke Developed	<450	ASTM E 84	
Service Temp, °F	-40 - 250	-	

*ASTM C 1289 Type II, Class 1 Grade 2 (20 psi) or Grade 3 (25 psi)

TESTING & APPROVALS



FLORIDA BUILDING CODE







PRODUCT DATA SHEET

DESCRIPTION & FEATURES

DUOTACK SPF Adhesive is a low pressure, two-component spray polyurethane foam adhesive specially formulated by SOPREMA for adhering SENTINEL HFB membranes to approved substrates in a spatter pattern as well as a ribbon applied adhesive for adhering insulation and coverboards to approved substrates or together. Backed by the proven DUOTACK formulation as it base, DUTOTACK SPF was developed to provide application benefits for rooftop projects. DUOTACK SPF comes in a kit, containing both the A & B side components and a hose and nozzle kit, containing a 25' hose and application gun with replacement nozzles.



STORAGE & HANDLING

DUOTACK SPF should be stored at 50°F-80°F (10°C-27°C) in a dry environment and in its original packaging. Do not store in direct sunlight or near heat source. Prior to use, condition tanks so that they reach a temperature between 70°F-90°F (21°C-32°C). Conditioning may take up to 24 hours to ensure chemical has reached optimal application temperature.

APPLICATION

DUOTACK SPF should be applied to approved substrates free of oil, grease and other contaminants. For spatter applications to adhere SENTINEL HFB membranes, DUOTACK SPF should be applied to cover 55%-65% of the substrate covering approximately 30 squares per kit. Membrane is then rolled and broomed into place prior to cure. Product open time can range from 1-8 minutes pending ambient air and substrate temperatures.

DUTOACK SPF can be applied in ribbon applications at 2.5 inch beads for adhering insulation and coverboard. Maximum spacing for ribbons is 12 inches on-center, which yields approximately 30 squares per kit, although 6 inches or 4 inches on-center may be used in perimeter and corners. Decreased spacing of the ribbons will result in less coverage.

KIT CONTAINS	TOTAL KIT WEIGHT (lb)	A-SIDE WEIGHT (lb)	B-SIDE WEIGHT (lb)	COVERAGE (ft²)	TACK FREE (minutes)
A-SIDE	101	55	46	3,000	1-8
B-SIDE	(45.8 kg)	(24.9 kg)	(20.7 kg)	(278.7 m²)	@ 70°F (21°C)



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TECHNICAL INFORMATION & TESTING

PROPERTIES			
PROPERTY	A COMPONENT	B-COMPONENT	
Base	Polymeric isocyanate	Proprietary polyol blend	
Blowing agent	134a	134a	
Color	Brown Clear		
VOC when used as intended with both parts (g/L) <		g/L	

PROPERTIES - MIXED COMPONENTS			
Open time @ 2.5" bead, minutes 1-8			
Set up time, minutes	10-20		
Coverage, ft² (m²)	3,000 (278)		

TESTING & APPROVALS

FM

APPROVED



FLORIDA BUILDING CODE



SOPRA-ISO HD®

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SOPRA-ISO HD is a high density rigid polyisocyanurate panel designed for use as a cover board in approved multi-ply membrane and flashing assemblies. SOPRA-ISO HD is composed of closed cell polyisocyanurate foam bonded to inorganic coated glass mat facers on the top and underside.

STORAGE

Store panel flat and maintain in a horizontal position to prevent damage. Store panels in a clean dry location and cover as necessary to protect from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRA-ISO HD.

APPLICATION

Prior to installation, ensure all SOPRA-ISO HD panels have not been subject to moisture. Place SOPRA-ISO HD in an offset or staggered pattern to ensure board joints are not overlapping in multilayer assemblies. Apply to approved substrate via DUOTACK 365 adhesive following manufacturer specifications. SOPRA-ISO HD may also be mechanically fastened to approved substrates. Refer to the SOPREMA SBS Roofing Guide for additional application guidelines.

BOARD DIMENSIONS (in)	BOARD THICKNESS (in)	PSI (max)
4x4, 4x8 (1.2x1.2m, 1.2x2.4m)	0.5 (13 mm)	109



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SOPRA-ISO[®] HD PRODUCT # Contact Customer Service

SOPRA-ISO HD®

TECHNICAL INFORMATION & TESTING

SOPRA-ISO HD THERMAL VALUES			
THICKNESS, in	WEIGHT BY 100ft ² , Ib	R VALUE	FLUTE SPANABILITY
0.5	34.3	2.5	2 5/8"

* Data is represented by average values, unless noted otherwise.

PHYSICAL PROPERTIES			
PROI	PERTY	ASTM TEST	
Compressive Strength, psi	109	ASTM D 1621	
Dimensional Stability, %	< 0.5	ASTM D 2126	
Water Absorption, %	<1	ASTM C 209	
Flame Spread	<75	ASTM E 84	
Smoke Developed	<450	ASTM E 84	
Service Temp, °F	-40 - 260	-	

* ASTM C 1289 Type II, Class 4 Grade 1 (109 psi max)

TESTING & APPROVALS



FLORIDA BUILDING CODE





SENTINEL® PVC MOLDED UNIVERSAL CORNER

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SENTINEL PVC Universal Corners are injection molded, unreinforced flashings that are used to flash a variety of irregular details or where standard corners may have been installed. SENTINEL PVC Universal Corners are white in color.

STORAGE

All materials must be stored in a dry clean location and cover as necessary to protect from environmental damage such as extreme cold, heat or moisture. Monitor varying environmental conditions during storage, handling and application.

APPLICATION

SENTINEL PVC Universal Corners are installed by heat welding. Heat weld each seam to the roof membrane using a hot air welder. Refer to SOPREMA's specifications and installation instructions for additional application guidelines.

DIAMETER (in)	THICKNESS (mils)	PIECES/CARTON
7	70	20
(17.78 cm)	(1.7 mm)	pieces

PACKAGING			
SKU #	PRODUCT	DESCRIPTION	PACKAGING
P503	Molded universal corner	For use with white membranes	20 per carton



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PRODUCT # P503





PD10323 - REV. 028620

SENTINEL® PVC BOOT FLASHINGS PRODUCT # SEE BELOW

APPLICATION

STORAGE

SENTINEL PVC Boot Flashings are hot-air welded to the field membrane. Seal the top of the pipe flashing watertight with mastic and a pipe clamp (included). Refer to SOPREMA's specifications and installation instructions for additional application guidelines.

PACKAGING				
SKU #	COLOR	FITS PIPE DIAMETER	STYLE	PACKAGING
P610, P610-G, P610-T	White, Grey, Tan	1"-6"	Split	10
P611, P611-G, P611-T	White, Grey, Tan	1"-6"	Closed	10
P612, P612-G, P612-T	White, Grey, Tan	6"-12"	Split	10
P613, P613-G, P613-T	White, Grey, Tan	6"-12"	Closed	10





PRODUCT DATA SHEET

DESCRIPTION & FEATURES

The SENTINEL Boot Flashing is a factory fabricated pipe flashing utilizing fiberglass reinforced pvc membrane. The SENTINEL Boot Flashing is available in two sizes and fits either a 1"-6" pipe or a 6"-12" pipe. The 'closed' style flashing is used for penetrations where the flashing can be slipped over the top of the penetration and moved down into position. The split style flashings are great where the pipe is not accessible due to equipment or other obstruction at the top of the pipe and require field welding of the vertical seam. Each pipe flashing is shipped with a stainless steel clamping ring. SENTINEL Pipe Boots are available in white, grey or tan.





HEIGHT

(in)

8

SENTINEL® PVC PIPE FLASHINGS PRODUCT # P601 P602, P603, P604,

PD10176 - REV. 030315

P605,P606



APPLICATION

DIAMETER

(in)

1 to 6

diameter.

SENTINEL®

PVC PIPE FLASHINGS

DESCRIPTION & FEATURES

PRODUCT DATA SHEET

SENTINEL PVC Pipe Flashings are hot-air welded to the field membrane. Seal the top of the pipe flashing watertight with mastic and a pipe clamp (included). Refer to SOPREMA's specifications and installation instructions for additional application guidelines.

THICKNESS

(mils)

60

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SENTINEL PVC Pipe Flashings are manufactured from fiberglass reinforced PVC membrane and feature a split design to fit around protrusions up to 6 inches (15.2 cm) in

PACKAGING			
SKU #	PRODUCT	DESCRIPTION	PACKAGING
P601	SENTINEL PVC Pipe Flashing - 1 in (2.5 cm)	Fits pipes up to 1 in diameter	8 per carton
P602	SENTINEL PVC Pipe Flashing - 2 in (5.1 cm)	Fits pipes 1 in to 2 in diameter	8 per carton
P603	SENTINEL PVC Pipe Flashing - 3 in (7.6 cm)	Fits pipes 2 in to 3 in diameter	8 per carton
P604	SENTINEL PVC Pipe Flashing - 4 in (10.2 cm)	Fits pipes 3 in to 4 in diameter	8 per carton
P605	SENTINEL PVC Pipe Flashing - 5 in (12.7 cm)	Fits pipes 4 in to 5 in diameter	8 per carton
P606	SENTINEL PVC Pipe Flashing - 6 in (15.2 cm)	Fits pipes 5 in to 6 in diameter	8 per carton

PIECES/ CARTON

8

pieces



QUICK FACTS





ROOFING & /ATERPROOFIN

SOPRA-EDGE® SENTINEL FASCIA ROOFING



RELATED PRODUCTS

SENTINEL SILVER ART P150

SENTINEL Silver Art P150 is a high performance, polyester reinforced, thermoplastic polyvinyl chloride (PVC) roof membrane, specially designed to provide unmatched flexibility and long-term performance. SENTINEL Silver Art P150 utilizes a specialized process that allows aluminum metallic powder to incorporate into the PVC blend, producing a non-pigmented aluminum PVC membrane. SOPRA-EDGE SENTINEL Fascia is manufactured in 12 foot lengths with pre-punched fastening holes in the galvanized water dam to ensure correct fastener placement and spacing. It has prefabricated miters and accessories to ensure a proper fit and prevent the need for any field fabrication. SOPRA-EDGE SENTINEL Fascia features dual attachment points on both the face and roof deck for added flexibility when accommodating roof irregularities. It is available as an easy snap-on version or a crimp-on version. The SOPRA-EDGE SENTINEL Fascia offers a finish with no exposed fasteners, ideal for a project focused on aesthetics.

- ANSI/SPRI/ES-1 tested to comply with the International Building Code
- Decreased labor costs due to easy installation
- Available in standard and custom finishes





PRODUCT DATA SHEET

DESCRIPTION & FEATURES

SENTINEL Walkway Pad protects roof membranes from damage caused by necessary foot traffic or accidental tool drops. This product is compatible with SENTINEL PVC roof membranes and can be applied to new or existing roofs using standard hot air welding equipment.

STORAGE

Store rolls on end and maintain in an upright position to prevent damage. Store rolls in a clean, dry location and cover as necessary to protect rolls from environmental damage such as extreme cold, heat or moisture. Monitor varying environmental conditions during storage, handling and application.

APPLICATION

Remove any loose debris and clean PVC roof membrane, then allow to dry prior to application of walkway. Roll out and cut desired length up to 10' (3 m) and allow to relax while placing into the desired position. Install SENTINEL Walkway Pad with a continuous weld around the perimeter. Refer to SOPREMA's specifications and installation instructions for additional application guidelines.

WIDTH (in)	LENGTH (ft)	ROLL WEIGHT (lbs)	COLOR
30 (76.2 cm)	50 (15.2 m)	80 (36 kg)	Light gray

PHYSICAL PROPERTIES			
PROPERTY	MD	TEST METHOD	
Thickness, in (mm)	0.156 (4)	ASTM D412	
Tear resistance, lbf/in (kN/m)	200 (35)	ASTM D624	
Elongation, %	100	ASTM D412	
Dimensional stability, %	0.25 (max change)	ASTM D1204	
Accelerated weathering	Pass @ 5.000 hours	ASTM G155	

* Data is represented by average values, unless noted otherwise.



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