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## CARLISLE SPRAY FOAM INSULATION 100 Enterprise Drive Cartersville, GA 30120

Phone: (770) 607-0755 www.CarlisleSFI.com

# SEALTITE™ PRO HIGH YIELD SPRAY-APPLIED POLYURETHANE FOAM PLASTIC INSULATION

**CSI Section:** 

07 21 00 Thermal Insulation

### 1.0 RECOGNITION

SealTite<sup>TM</sup> PRO High Yield spray-applied polyurethane foam plastic insulation described in this report has been evaluated for use as thermal insulation. The surface burning characteristics, physical properties, thermal resistance, air permeability, water vapor transmission, fire-resistance-rating, attic and crawl space installations, and uses in Types I through V construction were evaluated for compliance with the following codes and regulations:

- 2018 and 2015 International Building Code® (IBC)
- 2021, 2018, and 2015 International Residential Code® (IRC)
- 2021, 2018, and 2015 International Energy Conservation Code® (IECC)
- 2020 Florida Building Code, Building (FBC, Building)
   Supplement attached
- 2020 Florida Building Code Residential (FBC, Residential) Supplement attached
- 2020 Florida Building Code Energy (FBC, Energy) Supplement attached

### 2.0 LIMITATIONS

Use of SealTite PRO High Yield spray-applied polyurethane foam plastic insulation recognized in this report is subject to the following limitations:

- **2.1** The insulation shall be installed in accordance with the manufacturer's published installation instructions, this evaluation report, and the applicable code. If there are any conflicts between the manufacturer's published installation instructions and this report, the more restrictive shall govern.
- **2.2** In accordance with Sections 4.6.1 and 4.6.2 of this report, the insulation shall be separated from the interior of the building by a code-complying thermal barrier.
- **2.3** The insulation shall not exceed the nominal density and thickness for the installation conditions described in this report.

- **2.4** During application, the insulation shall be protected from exposure to weather.
- **2.5** The insulation shall be installed by professional spray polyurethane foam installers approved by Carlisle Spray Foam Insulation, or by the Spray Polyurethane Foam Alliance (SPFA).
- **2.6** Use of the insulation in areas of "very heavy" termite infestation probability shall be in accordance with IBC Section 2603.8 or IRC Section R318.4, as applicable.
- **2.7** When required by the applicable code, a vapor retarder shall be installed.
- **2.8** Labeling and jobsite certification of the insulation and coatings shall comply with the following code sections, as applicable:
  - IBC Section 2603.2
  - IRC Section R316.2
  - IRC Section N1101.10.1.1
  - IECC Sections C303.1.1.1 or R303.1.1.1
- **2.9** Foam plastic used in plenums as interior finish or interior trim shall comply with Section 2603.7 of the IBC.
- **2.10** The insulation recognized in this report is produced by Carlisle Spray Foam Insulation in Cartersville, Georgia.

### 3.0 PRODUCT USE

SealTite PRO High Yield spray-applied polyurethane foam plastic insulation complies with IBC Section 2603, IRC Section R316, and IECC Sections C303, C402, R303, and R402. When installed in accordance with Section 4.0 of this report, the foam plastic insulation may be used in wall cavities, floor assemblies or ceiling assemblies, and/or in attics and crawl spaces as nonstructural thermal insulation material. SealTite PRO High Yield spray-applied polyurethane foam plastic insulation can be used in Types I, II, III, IV, and V construction under the IBC and in one- and two-family dwellings under the IRC.

SealTite PRO High Yield spray-applied polyurethane foam plastic insulation may be used as air-impermeable insulation when installed in accordance with Section 4.4 of this report.

### 4.0 PRODUCT DESCRIPTION

**4.1 Properties:** SealTite PRO High Yield is a low-density, open-cell, spray-applied polyurethane foam plastic insulation in accordance with Section 3.1.1. and Table 1 of AC377. The insulation has a nominal in-place density of 0.5 pcf (8 kg/m³).



The two-component spray foam plastic is produced in the field by combining a polymeric isocyanate (A component) and a polymeric resin (B component). The liquid components shall be stored in 55-gallon (208 L) drums at temperatures between 50°F and 80°F (10°C and 27°C). When Component A and Component B are stored in factory-sealed containers at the recommended temperatures, the maximum shelf life is six months.

**4.2 Thermal Resistance (R-Values):** SealTite PRO High Yield spray-applied polyurethane foam plastic insulation has thermal resistance (R-Value) at a mean temperature of 75°F  $\pm$  5°F (23.8°C  $\pm$  2.8°C) as shown in Table 1 of this report.

TABLE 1 – Thermal Resistance (R-Values) <sup>1</sup>		
Thickness	SealTite PRO High Yield	
(inch)	R-Value (°F•ft²•h/Btu)	
1	3.6	
2	7.2	
3	11	
3.5	13	
4	14	
5	18	
5.5	20	
6	21	
7	25	
7.5	27	
8	29	
9	32	
9.5	33	
10	36	
11.5	41	
12	43	
16	57	

For SI: 1 inch = 25.4 mm,  $1^{\circ}F \cdot ft^2 \cdot h/Btu = 0.176 \cdot 110 \cdot K \cdot m^2/W$ .

**4.3 Surface Burning Characteristics:** At a maximum thickness of 4 inches (102 mm) and a nominal density of 0.5 pcf (8.0 kg/m<sup>3</sup>), SealTite PRO High Yield spray-applied polyurethane foam plastic insulation yields a flame spread index of 25 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E84.

Foam insulation thicknesses are not limited when covered by a code-complying thermal barrier and installed in accordance with Section 4.6.1.1 of this report.

- **4.4 Air Permeability:** SealTite PRO High Yield sprayapplied polyurethane foam plastic insulation is classified as an air-impermeable insulation when tested in accordance with ASTM E283 at a minimum thickness of 3<sup>1</sup>/<sub>2</sub> inches (89 mm), in accordance with 2018 IBC Section 1202.3, 2015 IBC Section 1203.3, and IRC Section R806.5.
- **4.5 Fire-Protective Coatings and Coverings:** Fire-protective coatings, for use as part of alternative thermal barrier assemblies or alternative ignition barrier assemblies, shall be in accordance with Tables 2 or 3 of this report, as

applicable, and installed in accordance with Section 4.6 of this report.

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**4.6 Installation:** SealTite PRO High Yield spray-applied polyurethane foam plastic insulation shall comply with IECC Section C402.1 or R402.1, as applicable.

The manufacturer's published installation instructions for SealTite PRO High Yield spray-applied polyurethane foam plastic insulation and this report shall be available on the jobsite during installation. Where conflicts occur, the most restrictive governs.

SealTite PRO High Yield insulation shall be spray-applied on the jobsite using equipment specified in the manufacturer's published installation instructions. The maximum in-service temperature for all areas shall not exceed the maximum temperature stated in the manufacturer's published installation instructions. The insulation shall be sprayed onto a substrate that is protected and clean from any debris or weather-related conditions during and after application and shall not be used in electrical outlets or junction boxes or in contact with rain or water.

#### 4.6.1 Thermal Barrier

**4.6.1.1 Application with a Prescriptive Thermal Barrier:** SealTite PRO High Yield spray-applied polyurethane foam plastic insulation, at any thickness, in ceiling cavities, and in wall cavities shall be separated from the interior by a prescriptive thermal barrier. The thermal barrier shall comply with, and be installed in accordance with IBC Section 2603.4, or IRC Section R316.4, as applicable.

**Exception:** The thermal barrier is not required when the insulation is installed in attics or crawlspaces as described in Section 4.6.2 but shall be installed between the insulation and the interior of the building.

- **4.6.1.2 Alternative Thermal Barrier Assemblies:** SealTite PRO High Yield spray-applied polyurethane foam plastic insulation may be installed without a prescriptive thermal barrier as defined in Section 4.6.1.1 of this report when installed with a fire protective coating as described in Table 2 of this report.
- **4.6.2 Installation in Attics or Crawl Spaces:** SealTite PRO High Yield spray-applied polyurethane foam plastic insulation may be installed in attics or crawl spaces when installed in accordance with this section. The insulation may be installed in unvented attics and unvented enclosed rafter spaces for use as air-impermeable insulation described in Section 4.4 of this report.

When installed in attics or crawl spaces where entry is made only for the service of utilities, SealTite<sup>TM</sup> PRO High Yield spray-applied polyurethane foam plastic insulation need not be surfaced with a thermal barrier. However, such attic and crawl space areas shall be separated from the interior of the

building by a thermal barrier in accordance with Section 4.6.1 of this report.

**4.6.2.1 Installation Using a Prescriptive Ignition Barrier:** When installed within attics or crawl spaces where entry is made only for the service of utilities, SealTite<sup>™</sup> PRO High Yield spray-applied polyurethane foam plastic insulation, shall be covered with a prescriptive ignition barrier in accordance with IBC Section 2603.4.1.6 or IRC Sections R316.5.3 and R316.5.4, as applicable.

**Exception:** The prescriptive ignition barrier may be omitted when installed with an alternative ignition barrier assembly in accordance with Section 4.6.2.2 and Section 4.6.2.3 of this report.

- **4.6.2.2 Installation Using an Alternative Ignition Barrier Assembly:** SealTite PRO High Yield spray-applied polyurethane foam plastic insulation may be installed in attics and crawl spaces using an alternative ignition barrier assembly provided:
  - a. Entry is only to service utilities in the attic or crawl space and no storage is permitted.
  - b. Attic or crawl space areas cannot be interconnected.
  - Air from the attic or crawl space cannot be circulated to other parts of the building.
  - d. Attic ventilation is provided as required by 2018 IBC Section 1202.2, 2015 IBC Section 1203.2, or IRC Section R806 except where air-impermeable insulation is permitted in unvented attics and shall comply with the following code sections as applicable:

For Unvented Attics:

- 2018 IBC Section 1202.3
- 2015 IBC Section 1203.3
- IRC Section R806.5

Crawl space ventilation is provided as required by the following code sections as applicable:

- 2018 IBC Section 1202.4
- 2015 IBC Section 1203.4
- IRC Section R408.1
- e. The foam plastic insulation is limited to the maximum thickness and density tested.
- f. In accordance with Uniform Mechanical Code Section 701.1 or International Mechanical Code® Section 701, combustion air is provided.
- g. For SealTite PRO High Yield, the installed coverage rate or thickness of coatings shall be as described in Section 4.6.2.3 of this report.
- **4.6.2.3 Installation Using an Alternative Ignition Barrier Assembly with Application of Fire-Protective Coatings:**SealTite PRO High Yield may be spray-applied in attics to the underside of roof sheathing or roof rafters, and vertical surfaces; and may be spray-applied in crawl spaces to the underside of floors and vertical surfaces as described in this

section. The SealTite PRO High Yield insulation shall be covered with a fire-retardant intumescent coating described in Table 3 of this report.

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The coating shall be applied over the insulation using airless spray equipment, roller, or a brush in accordance with the coating manufacturer's published installation instructions and this report. The ambient and substrate temperatures shall be within a range of 50°F (10°C) to 90°F (32°C), and the surface shall be dry, clean, free of dirt and loose debris, and any other substance that could interfere with the adhesion of the coating.

- 4.7 Use in Exterior Walls of Types I, II, III, or IV Construction (IBC)
- **4.7.1 General:** When SealTite PRO High Yield sprayapplied polyurethane foam plastic insulation is used in exterior walls of Types I, II, III, or IV construction of any height, the insulation shall comply with IBC Section 2603.5 and Section 4.7 of this report.
- **4.7.2 Complying Exterior Wall Assemblies:** Wall assemblies that comply with Section 2603.5.5 of the IBC and this report that may be used in exterior walls of buildings of Type I, II, III, or IV construction of any height are described in Table 4 and Table 5 of this report.
- **4.8 One-hour, Non-Loadbearing Fire-resistance-rated Wall Assembly:** SealTite PRO High Yield spray-applied polyurethane foam plastic insulation may be used as part of non-loadbearing one-hour fire-resistance-rated wall assemblies in accordance with this section.
- **4.8.1 Framing:** Steel studs shall be nominally 5½ inch (140 mm) deep, minimum No. 20 gauge, spaced a maximum of 24 inches (610 mm) on-center.
- **4.8.2 Wallboard:** The interior of the wall assembly shall be covered with minimum <sup>5</sup>/<sub>8</sub>-inch (15.9 mm) thick Type X gypsum wallboard complying with ASTM C1396 fastened with No. 6, 1½ inch (32 mm) long self-drilling drywall screws spaced 8 inches (203 mm) on-center around the perimeter and 12 inches (305 mm) on-center in the field.
- **4.8.3 Insulation:** The foam plastic insulation shall be sprayapplied into the stud cavities to a maximum nominal thickness of 4-inches (102 mm).
- **4.8.4 Exterior:** The exterior of the wall assembly shall be covered with minimum  $^{5}/_{8}$ -inch (15.9 mm) thick Type X exterior gypsum sheathing complying with ASTM C1396 fastened with No. 6,  $1^{1}/_{4}$  inch (32 mm) long self-drilling drywall screws spaced 8 inches (203 mm) on-center around the perimeter and 12 inches (305 mm) on-center in the field. A layer of DuPont Tyvek HomeWrap water-resistive barrier shall be attached over the Type X exterior gypsum sheathing. The water-resistive barrier shall be covered with  $^{5}/_{16}$ -inch (7.9 mm) thick HardiPanel<sup>®</sup> cement board fastened with

screws spaced 6 inches (152 mm) on-center around the perimeter and 12 inches (305 mm) on-center in the field.

# 4.9 Water Vapor Transmission Using SealTite PRO VRC-2:

- **4.9.1 SealTite PRO VRC-2:** SealTite PRO VRC-2 is an interior latex waterborne, vapor retarder paint coating formulated for use on SealTite PRO High Yield sprayapplied polyurethane foam plastic insulation. The coating has a shelf life of 12 months.
- **4.9.2 Application:** When tested to the requirements of ASTM E96, desiccant method, SealTite PRO High Yield spray-applied polyurethane foam plastic insulation at a minimum thickness of 1-inch, with SealTite PRO VRC-2 coating applied at a minimum coating thickness of 32 wet mils (17 dry mils), achieves a Class II vapor retarder rating.

### 5.0 IDENTIFICATION

The spray foam insulation is identified with the following:

- a. Manufacturer's name (Carlisle Spray Foam Insulation)
- b. address and telephone number,
- c. the product trade name (SealTite PRO High Yield)
- d. use instructions
- e. density, flame-spread, and smoke-development indices
- f. date of manufacture or batch/run number
- g. thermal resistance values
- h. the evaluation report number (ER-623)
- i. the name or logo of the inspection agency

Either IAPMO UES Mark of Conformity may be also used as shown below:



### 6.0 SUBSTANTIATING DATA

**6.1** Data in accordance with the ICC-ES Acceptance Criteria for Spray-applied Foam Plastic Insulation, AC377, dated April 2020, including Appendix X (Editorially Revised in July 2020).

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- **6.2** Reports of room corner fire testing in accordance with NFPA 286.
- **6.3** Reports of Fire Tests of Building Construction in accordance with ASTM E119.
- **6.4** Reports of air permeance testing in accordance with ASTM E283.
- **6.5** Report of room corner fire testing in accordance with UL 1715.
- **6.6** Reports on fire propagation characteristics tests in accordance with NFPA 285.
- **6.7** Report of testing for water vapor transmission with ASTM E96, desiccant method.
- **6.8** Test reports are from Laboratories in conformance with ISO/IEC 17025.

### 7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on SealTite PRO High Yield to assess its conformance to the codes and standards shown in Section 1.0 of this report and documents the product's certification. The product is manufactured at a location noted in Section 2.10 of this report under a quality control program with periodic inspections under the supervision of IAPMO UES.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org UES

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TAB	TABLE 2 - ALTERNATIVE THERMAL BARRIER ASSEMBLIES 1			
FIRE-PROTECTIVE COATING/COVERING <sup>1</sup>		MAXIMUM SPF THICKNESS (inch)		
ТҮРЕ	MINIMUM THICKNESS (mils)	THEORETICAL APPLICATION RATE (COATINGS ONLY)	WALLS AND VERTICAL SURFACES	CEILING AND OVERHEAD SURFACES
DC315 <sup>2</sup>	14 WFT (9 DFT)	115 ft²/gal.	8.5	14
Plus ThB <sup>3</sup>	14 WFT (9 DFT)	115 ft²/gal.	8.5	14
Flame Control 60-60A <sup>4</sup>	14 WFT (9 DFT)	115 ft²/gal.	6	10

For SI: 1 inch = 25.4 mm, 1 gallon = 3.785 L, 1 ft<sup>2</sup> =  $0.0929 m^2$ 

<sup>&</sup>lt;sup>4</sup> Flame Control Coatings, recognized in IAPMO ER-596 and tested to NFPA 286.

TABLE 3 ALTERNATIVE IGNITION BARRIER ASSEMBLIES				
FIRE-PROTECTIVE COATING/COVERAGE <sup>1</sup>		MAXIMUM SPF THICKNESS (inch)		
ТҮРЕ	MINIMUM THICKNESS (mils)	THEORETICAL APPLICATION RATE (COATINGS ONLY)	WALLS AND VERTICAL SURFACES	CEILINGS AND OVERHEAD SURFACES
No Burn Plus XD <sup>2</sup>	6 WFT (4 DFT)	267 ft²/gal.	11.25	16
Flame Seal FS-IB <sup>TM 3</sup>	4 WFT (3 DFT)	400 ft²/gal	6	10
Flame Seal FS-IB <sup>3</sup>	7.5 WFT (4 DFT)	200 ft²/gal.	12	16
Fireshell IB4 <sup>4</sup>	5 WFT (3.5 DFT)	325 ft²/gal.	7.5	9.5
Fireshell BMS IC <sup>4</sup>	7 WFT (4 DFT)	$230 \text{ ft}^2/\text{gal}.$	7.0	9.5
DC 315 <sup>5</sup>	4 WFT (3 DFT)	400 ft²/gal	7.5	11.5

For SI: 1 inch = 25.4 mm, 1 gallon = 3.785 L, 1 ft<sup>2</sup> =  $0.0929 \text{ m}^2$ 

<sup>&</sup>lt;sup>1</sup> Fire-protective coatings and coverings shall be applied over all exposed SPF surfaces in accordance with the coating/covering manufacturer's instructions and this report.

<sup>&</sup>lt;sup>2</sup> International Fireproof Technology, Inc, recognized in <u>IAPMO UES ER-499</u> and tested to NFPA 286.

<sup>&</sup>lt;sup>3</sup> No-Burn®, Inc., recognized in IAPMO UES ER-305 and tested to UL 1715.

<sup>&</sup>lt;sup>1</sup> Fire-protective coatings and coverings must be applied over all exposed SPF surfaces in accordance with the coating/covering manufacturer's instructions and this report.

<sup>&</sup>lt;sup>2</sup> No-Burn, Inc., recognized in <u>IAPMO UES ER-305</u>.

<sup>&</sup>lt;sup>3</sup> Flame Seal Products, Inc. recognized in IAPMO UES ER-600.

<sup>&</sup>lt;sup>4</sup> TPR<sup>2</sup> Corporation.

<sup>&</sup>lt;sup>5</sup> International Fireproof Technology, Inc, recognized in <u>IAPMO UES ER-499</u>.

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# TABLE 4 – NFPA 285 COMPLYING EXTERIOR WALL ASSEMBLIES WITH SEALTITE PRO HIGH YIELD APPLIED IN WALL STUD CAVITY

WITH SEALTITE PRO HIGH YIELD APPLIED IN WALL STUD CAVITY		
Wall Component	Material Description	
Base Wall (BWS) Use either 1, 2, 3 or 4  Fire-Stopping in Stud	<ol> <li>Concrete Walls</li> <li>Concrete Masonry Unit Walls</li> <li>Steel Stud Wall - 1 layer of 5%-inch Type X gypsum wallboard installed on the interior side of minimum 35%-inch deep No. 20 gauge steel studs spaced a maximum of 24 inches on center.</li> <li>Fire-retardant-treated wood (FRTW) Stud Wall - 1 layer of 5/8-inch thick Type X gypsum wallboard on the interior, installed on 2x4 (min.) FRTW studs spaced a maximum of 24 inches on center.</li> <li>4-inch 4 pcf mineral wool (friction fit or installed with Z-Clips)</li> </ol>	
Cavity at Floor Lines	2) FRTW lumber -1.5 inches thick (minimum) (FRTW firestop shall only be used with FRTW framing)	
Cavity Insulation Use Item 1, 2 or 3 when steel framing is used.  Use Item 1 or 3 when	<ol> <li>None</li> <li>Full stud cavity depth or less of SealTite PRO High Yield</li> <li>Any noncombustible fiberglass insulation (faced or unfaced).</li> </ol>	
FRTW framing is used.	Minimum I/ in all thirds autorion armayum shoothing	
Exterior Sheathing WRB over Base Wall	Minimum ½-inch thick exterior gypsum sheathing.  1) None	
Use Item 1 or 2	<ol> <li>Any water-resistive barrier or air vapor barrier approved to be used in an NFPA 285 compliant assembly paired with mineral wool, polyisocyanurate, EPS, or XPS insulation or no exterior insulation for claddings approved for that WRB.</li> </ol>	
	Approvals shall be from an evaluation report by an approved evaluation entity.	
Exterior Insulation Use Item 1, 2 or 3	<ol> <li>None – only where the cladding is listed to be approved with specific water-resistive barriers. (Note 1)</li> <li>Minimum 2-inch-thick. 4 pcf mineral fiber insulation allowed for use with any water-resistive barrier on the base wall surface. (Note 1)</li> <li>Any polyisocyanurate, EPS, or XPS insulation approved (see note) to be used in an NFPA 285 compliant assembly paired with the water-resistive barriers in Item 2 above and claddings in Item 2 below. (Note 2)</li> </ol>	
Exterior Cladding Use Item 1 or 2	<ol> <li>Claddings below may only be used with noncombustible exterior insulation Item 2 above (mineral fiber).         <ul> <li>Any noncombustible cladding, such as brick, stone, terra cotta, fiber cement, concrete, sheet metal, etc.</li> <li>Combustible cladding. Use any cladding that has been successfully tested by the panel manufacturer (or fabricator) via the NFPA 285 test method. (Note 2)</li> </ul> </li> <li>Claddings below may be used with any approved (see note) combustible exterior insulation Item 3 above.         <ul> <li>Any cladding (combustible or noncombustible) approved to be used in an NFPA 285 compliant assembly paired with approved polyisocyanurate, EPS, XPS, or SPF insulation. Each insulation must be specifically approved for the exact cladding types listed in the approval. (See Note 2)</li> </ul> </li> <li>It is important to note the following item (Window/Door perimeter details) for specific insulation types that require unique detailing.</li> </ol>	
Window/Door Perimeters	Note: Approvals shall be by evaluation reports from approved evaluation entities.  The approved design for the specific system being considered shall be used.  Note: EPS and XPS required specific door/window header and jamb details to be compliant with NFPA 285. Polyisocyanurate and SPF may or may not require specific header/jamb details. Approvals from approved evaluation reports by approved evaluation entities for the header/jamb detail are required for each insulation type.	
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### **Notes for Table 4:**

**Note 1**: Examples for use with no exterior insulation or mineral wool insulation per the table above. Cladding Lists 1 and 2 below are for use with no exterior insulation. However, this will expose the substrate to moisture, in which case a water-resistive barrier shall be added to the system. For these applications, water-resistive barriers approved for use with each cladding shall be used.

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- 1) Any combustible cladding that has passed NFPA 285 testing (examples below)
  - a. Approved MCM/ACM Metal/Aluminum Composite building panels
  - b. Approved stone/aluminum honeycomb composite
  - c. Approved HPL High-pressure Laminate Panels.
- 2) Any noncombustible cladding such as (but not limited to):
  - a. Brick nominal 4-inch clay brick or veneer

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- b. Stucco <sup>7</sup>/<sub>8</sub> -inch exterior cement plaster and lath. A secondary water-resistive barrier can be installed between the insulation and the lath. The secondary WRB may not be full-coverage asphalt or butyl-based self-adhering membranes.
- c. Natural Stone (granite, limestone, marble, sandstone) 2 inches thick
- d. Architectural Cast Stone  $-2^{1/2}$  inches thick
- e. Terra Cotta Cladding 1<sup>1</sup>/<sub>4</sub> inches thick
- f. 1/4 -inch-thick glass-fiber-reinforced concrete panels (installed per manufacturer instructions)
- g. Concrete 2 inches thick
- h. CMU blocks 4 inches thick
- i. Sheet metals such as aluminum, copper, or zinc any thickness

### Note 2: Combustible WRB/Insulation/Cladding

If the base wall is covered with a combustible WRB/Insulation and various claddings (combustible or noncombustible), each insulation/WRB/cladding combination for approval shall have explicitly been tested or approved to be used with each other. Evaluation reports from approved evaluation entities may be used.

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# TABLE 5. NFPA 285 COMPLYING EXTERIOR WALL ASSEMBLIES WITH SEALTITE PRO HIGH YIELD APPLIED IN WALL STUD CAVITY WITH SPRAY FOAM INSULATION APPLIED ON THE EXTERIOR OF WALL ASSEMBLY

Wall Component	Well Component Metarial Description		
	Material Description		
Base Wall System (BWS) – Use Item 1, 2, 3	<ol> <li>Concrete Walls</li> <li>Concrete Masonry Unit Walls</li> </ol>		
or 4	3) Steel Stud Wall - 1 layer of %-inch Type X gypsum wallboard installed on the interior side of minimum		
or 4	35%-inch No. 20 gauge steel studs spaced a maximum of 24 inches on center.		
	4) Fire-retardant-treated wood (FRTW) stud wall – 1 layer of <sup>5</sup> / <sub>8</sub> -inch thick Type X gypsum wallboard or		
	the interior, installed on 2x4 (minimum FRTW studs spaced a maximum of 24 inches on center.		
Fire-Stopping at floor	1) 4-inch 4 pcf mineral wool (friction fit or installed with Z-clips)		
lines – Use Item 1 or 2	2) FRT lumber - 1 <sup>1</sup> / <sub>2</sub> -inch thick (min) (FRT firestop shall only be used with FRT framing)		
Cavity Insulation	1) None		
Use Item 1, 2, 3 or 4	2) Full stud cavity or less of SealTite PRO High Yield		
OSC ITCHI 1, 2, 3 01 4	3) Any noncombustible insulation per ASTM E136		
	4) Any fiberglass insulation (faced or unfaced)		
<b>Exterior Sheathing</b>	Minimum ½ - inch thick exterior gypsum sheathing		
Exterior Sheathing			
Exterior Insulation	1) SealTite PRO Closed Cell, SealTite PRO One Zero, and		
Item 1 is limited to	SealTite PRO HFO – 4-inch nominal thickness (max)		
cladding Types 1-7	2) SealTite PRO Closed Cell, SealTite PRO One Zero, and		
	SealTite PRO HFO – 3.5-inch nominal thickness (max)		
Exterior Cladding <sup>2</sup> -	1) Brick – Nominal 4-inch clay or concrete brick or veneer with maximum 2-inch air gap behind the brick		
I4 1 711 1 4-	Brick Ties/Anchors 24 inches on center (maximum)		
Items 1-7 are allowed to	2) Precast Concrete Panels – minimum 1 <sup>1</sup> / <sub>2</sub> -inch-thick using any standard non-open joint installation		
be used without the	technique such as shiplap, with maximum 2-inch airgap behind the cladding.  3) Concrete Masonry Units – Minimum 2-inch-thick with maximum 2-inch air gap between exterior wal		
DC315 coating system.			
Use of any of Itams 1 20	insulation and concrete masonry units.  4) Stucco – minimum <sup>7</sup> / <sub>8</sub> -inch-thick exterior cement plaster and lath. A secondary water-resistive barrie.		
Use of any of Items 1-20 when exterior SPF is	4) Stucco – minimum //s-inch-thick exterior cement plaster and lath. A secondary water-resistive barrier (WRB) may be installed between the exterior insulation and the lath. The secondary WRB shall not be		
coated with IFTI DC315	full-coverage asphalt or butyl-based self-adhered membranes.		
(16 mil WFT) with Top	5) Natural Stone Veneer – minimum 2-inch-thick natural stone (granite, limestone, marble, sandstone)		
Coat Paint (8 mils WFT	Any standard non-open joint installation technique may be used.		
Sherwin Williams Sher-	6) Cast Artificial Stone – minimum 1½-inch thick complying with ICC-ES AC 51 using any standard non-		
Cryl or equivalent)	open joint installation technique.		
Cryr or equivalent)	7) Terra Cotta Cladding – minimum 1½-inch thick (solid or equivalent by weight) using any standard non-		
For Items 8-20, air gap	open joint installation technique such as shiplap.		
cannot exceed $2^{1}/_{2}$	8) Aluminum cladding – 0.030-inch minimum thickness – non-open joint.		
inches. All claddings	9) Steel cladding – 0.0149-inch minimum thickness – non-open joint		
non-open joint. Panel	10) Copper cladding – 0.0216-inch minimum thickness – non-open joint.		
claddings may use	11) Zinc cladding – 0.040-inch minimum thickness – non-open joint.		
vertical or horizontal Z	12) Concrete – 1-inch-thick minimum thickness using any standard non-open joint installation technique.		
girt attachment. Panel	13) One-coat Stucco – 3/8-inch minimum exterior cement plaster and lath – non-open joint		
claddings may be vertical	14) Thin brick adhered with noncombustible mortar to ¾-inch minimum stucco base – non-open joint.		
or horizontal.	15) CMU: Minimum 1-inch-thick concrete masonry unit. Any standard non-open joint installation		
	technique may be used.		
	16) ½-inch fiber cement cladding – non-open joint.		
	17) Stone veneer – minimum 1-inch thick – non-open joint.		
	18) Terreal Zephir Evolution Rainscreen System (or similar Terra Cotta) minimum 9/16-inch thick – non		
	open joint. <sup>1</sup>		
	19) SwissPearl Carat Panels (ER-551)– 0.315-inch minimum thickness – non-open joint		
	20) FunderMax M.Look (minimum ¼-inch) – non-open joint <sup>1</sup>		
Window/Door	The window opening perimeters shall be per UL Design Listings EWS0013, EWS0029, or EWS0054, as		
Perimeters	applicable where approved by the engineer and the local building official. For FRTW stud construction		
	openings are lined with 1½-inch-thick FRTW lumber.		

For **SI**: 1 inch = 25.4 mm

### Notes:

<sup>&</sup>lt;sup>1</sup>Approval of this product is beyond the scope of this review. Documentation of code compliance of this product shall be provided to the building official.

## FLORIDA SUPPLEMENT

CARLISLE SPRAY FOAM INSULATION 100 Enterprise Drive Cartersville, GA 30120 www.CarlisleSFI.com

# SEALTITE PRO HIGH YIELD SPRAY-APPLIED POLYURETHANE FOAM PLASTIC INSULATION

**CSI Section:** 

07 21 00 - Thermal Insulation

### 1.0 SCOPE OF EVALUATION

- 2020 Florida Building Code, Building (FBC, Building)
- 2020 Florida Building Code, Residential (FBC, Residential)
- 2020 Florida Building Code, Energy (FBC, Energy)

#### 2.0 FINDINGS

SealTite PRO High Yield spray-applied polyurethane foam plastic insulation reported in IAPMO UES Evaluation Report ER-623 is a satisfactory building product alternative to those prescribed in the 2020 FBC, Building, 2020 FBC, Residential, and the 2020 FBC, Energy. Installation of the foam plastic insulation shall be in accordance with the 2018 International Building Code, 2018 International Residential Code, and the 2018 International Energy Conservation Code as noted in ER-623. SealTite PRO High Yield spray-applied foam plastic insulation complies with the High-velocity Hurricane Zone provisions of the FBC, Building, and FBC, Residential.

### 3.0 LIMITATIONS

Use of SealTite PRO High Yield spray-applied polyurethane foam plastic insulation recognized in this report supplement is subject to the following limitations:

**3.1** In order to provide for inspection for termite infestation, clearance between exterior wall coverings and final earth grade on the exterior of a building shall not be less than 6 inches (152 mm) in accordance with Section 1403.8 of the FBC, Building or Section R704 of the FRC, Residential.

**3.2** For products falling under Florida Rule 61G20-3.001, verification shall be provided that a quality assurance agency audits the manufacturer's quality assurance program and audits the production quality of products, in accordance with Section (5)(d) of Florida Rule 61G20-3.008. The quality assurance agency shall be approved by the Commission (or the building official when the report holder does not possess an approval by the Commission).

Number: 623

**3.3** This supplement expires concurrently with ER-623.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org