DC315 Intumescent Coating

Description

DC315 intumescent coating for Spray Polyurethane Foam (SPF) provides an alternative 15 or 20 minute thermal barrier. Fully Tested and listed in the **USA by ICC-ES, AND Canada by CCMC,** DC315 is the most tested and approved alternative thermal barrier on the market today!

To be approved as an Alternative Barrier System, DC 315 is applied over a manufacturer's SPF and tested to the criteria of NFPA 286, UL 1715 or ISO-CAN/ULC 9705 for duration of 15-20 minutes by an accredited fire testing facility. DC 315 has also been tested as an ignition barrier under **AC 377 Appendix X**. DC315 is fully **AC456 Compliant** and satisfies the International Building Code (IBC) International Residential Code (IRC) National Building Code of Canada (NBCC) and many other International model building codes.

DC315 Tested Solutions for Spray Polyurethane Foam

- More full scale Thermal and Ignition Barrier tests than any other product in the world
- DC 315 - 3rd. party listed marked and inspected for Quality Control: QAI Laboratories File B1117
- Tested useful life, fire resistant property is not compromised after 50 years
- Top coat for color, weather & moisture protection, tested, via NFPA 286 full scale testing
- ANSI 51 testing for incidental food contact
- Passed CAL 1350 - qualify DC 315 as a low-emitting material in the Collaborative for High Performance Schools rating system (CHPS Designed & CHPS Verified)
- Passed strict EPA – V.O.C. and AQMD air emission requirements (for all 50 states)
- 3rd Party tested "Single Coat Coverage" up to 24 Mils WFT, on ceilings and walls, reducing labor costs equaling higher profits
- Meets Life Safety Code 101
- Meets LEED's point

*End Use Applications: DC315 is for interior use as a thermal or ignition barrier coating to protect SPF. Contact IFTI for instruction for using DC315 in other applications such as, but not limited to, cold storage, parking garages, high humidity, or any unconditioned spaces.

Specifications

Finish:	Flat
Color:	Ice Gray, White, Dark Grey and Charcoal Black
V.O.C.:	18 g/l
Volume Solids:	67 %
Drying Time	@ 77°F & 50% RH To touch 1-2 hours, to re-coat 2 to 4 hours
Type of Cure:	Coalescence
Flash Point:	None
Reducer/Cleaner:	Water
Shelf Life:	1 year (unopened)
Packaging:	5 & 55 gallon containers
Shipping weight:	5 gallon pail - 58 lbs. 55 gallon drum - 640 lbs.
Application:	Brush, roller, conventional and airless spray
Performance:	50+ years HOAC tested
QAI Listed:	File B1117

DC315 Intumescent Coating

Visit us at our website www.painttoprotect.com to obtain a current matrix of all the manufacturer's foams DC 315 has been tested and approved as Thermal or Ignition barriers in compliance with current Building Codes.

International Building Code Fire Performance Requirements for SPF: The International Building Code (IBC) mandates that SPF be separated from the interior of the building by a 15-minute thermal barrier, or other approved covering. DC 315 passed certified NFPA 286 and UL 1715 test over a variety of open and closed cell spray applied urethane foams that were conducted by IAS certified testing facilities. All tests performed comply with the requirements of 2009 IBC Section 803.1.2, and Section 2603.9; 2012 IBC Section 803.1.2 and Section 2603.10

Alternative Ignition Barrier Assemblies DC 315 meets the requirements for ignition barrier per **AC 377, Appendix X.**

National Building Code of Canada Alternative Thermal Barrier Assemblies: DC315 prevents flashover for 10 minutes for Combustible Construction or 20 minutes for Non-Combustible construction when tested to the CAN/ULC 9705 Standard and meets the Intent of NBC Section 3.1.5.12 for the protection of foamed plastics. Ensure application thickness is applied according to building type.

European Union: DC315 has been tested over both medium density and low density spray polyurethane foam and provides an EN13501-1 Fire Classification of B-S2-D0.

Australia and New Zealand: DC315 has been tested to the AUS ISO- 9705 over spray polyurethane foam and meets Group 2 Classification. ISO5660 (part 1 and 2) tests confirm Group number classification as 1 which allows for the addition of the thermal barrier coating to upgrade the fire rating.

Pump:	(Graco) UltraMax 795 or equivalent
PSI:	3000
GPM:	1.1
Tip:	517 - 523 or equivalent.
Filter:	Removal from the machine and gun is required
Hose:	3/8" diameter airless spray line for the first 100' from pump and 1/4" x 3' whip
Pump:	(Graco) TexSpray Mark 5 or equivalent
PSI:	3300
GPM:	1.35
Tip:	517 - 523 or equivalent.
Filter:	Removal from the machine and gun is required
Hose:	3/8" diameter airless spray line for the first 100' from pump and 1/4" x 3' whip
Pump:	(Graco) GMAX 7900 or equivalent
PSI:	3300
GPM:	2.2
Tip:	517 - 529 or equivalent.
Filter:	Removal from the machine and gun is required
Hose:	1/2" diameter airless spray line for the first 100' 300' from pump and 1/4" x 3' whip
Pump:	(Graco) GH 833 or equivalent
PSI:	4000
GPM:	4.0
Tip:	517 - 529 or equivalent.
Filter:	Removal from the machine and gun is required
Hose:	1/2" diameter airless spray line for the first 100'-300' from pump and 1/4" x 3' whip

Testing

USA
- ASTM E84 - Flame Spread 0 Smoke 10
- NFPA 286,
- ASTM E2768- 30 minute Ignition Resistant material

Canada
- CAN/ULC S102 FSR 23 SDC 145 - (tested as a system over SPF)
- CAN/ULC S 101
- CAN/ULC 9705 10 and 20 minute assembly testing
- CAN/ULC S-145

European Union
- BS 476 Part 6 & 7
- BS EN ISO 11925-2
- EN 13823
- EN 13501 Classification B S2 D0

Australia/New Zealand
- AUS ISO 9705
- AS/NZS 1530.3
- AS 5637.1 Group Classification 2, NZBC Group 2-S
- ISO 5660 Parts 1 and 2

ICC EVALUATION SERVICE

ICC-ES Evaluation Report

ESR-3702

Reissued February 2019
Revised August 2020
This report is subject to renewal July 2021.

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DIVISION: 09 00 00—FINISHES
Section: 09 96 43—Fire-Retardant Coatings

REPORT HOLDER:

INTERNATIONAL FIREPROOF TECHNOLOGY INC.

EVALUATION SUBJECT:

DC315 INTUMESCENT COATING

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018, 2015, 2012, 2009 and 2006 *International Building Code®* (IBC)
- 2018, 2015, 2012, 2009 and 2006 *International Residential Code®* (IRC)

Properties evaluated:

- Application without a prescriptive thermal barrier
- Application without a prescriptive ignition barrier
- Physical properties
- Surface burning characteristics
- Water vapor transmission
- Exterior walls in Types I through IV construction

2.0 USES

DC315 is a liquid-applied coating intended for application over the surface of spray-applied foam plastic insulation complying with ICC-ES Acceptance Criteria for Spray-applied Foam Plastic Insulation (AC377). The coated assembly may be left exposed to the interior of the building without the application of a code-prescribed thermal barrier when installed as described in Section 4.2 of this report. The DC315 coating may be used in attic and crawl spaces as described in Section 4.3 of this report. See Section 4.4 for use in exterior walls of Type I, II, III and IV construction.

3.0 DESCRIPTION

3.1 General:

DC315 is a single-component, water-based, liquid-applied intumescent coating and are available in white, ice gray, dark gray and charcoal black. The coating is supplied in 5-gallon (19 L) pails and 55-gallon (208 L) drums, and has a shelf life of one (1) year when stored in factory-sealed containers at temperatures between 50° and 80°F (10 and 27°C).

DC315 Primer is a liquid-applied primer, manufactured by International Fireproof Technology, Inc., and is supplied in 1- and 5-gallon (3.8 and 18.9 L) pails, and has a shelf life of 2 years when stored in factory-sealed containers at temperatures between 50° and 80°F (10 and 27°C).

DTM Bonding Primer is a waterborne, acrylic emulsion, bonding primer manufactured by Sherwin-Williams. The primer is supplied in 1- and 5-gallon (3.8 and 18.9 L) containers, and has a shelf life of three (3) years when stored in factory-sealed containers at temperatures between 50° and 100°F (10 and 38°C).

3.2 Vapor Retarder:

When a minimum thickness of 18 mils WFT [0.018 inch (0.46 mm)] of DC315 is applied to a minimum thickness of 2 inches (50.8 mm) of open-cell spray-applied foam plastic insulation, the assembly has a vapor permeance greater than 1 and less than 10 perms (5.7x10 kg/Pa-s-m2) when tested in accordance with ASTM E96 procedure A (desiccant method), and qualifies as a Class III vapor retarder.

3.3 Surface Burning Characteristics:

When tested in accordance with ASTM E84/UL 723, at a thickness of 13 mils WFT [0.013 inch (0.33 mm)], DC315 has a flame spread index of 25 or less and a smoke-developed index of 450 or less. The DC315 coated foam assemblies listed in Table 1 were tested in accordance with NFPA 286 and comply with the acceptance criteria of 2018 IBC Section 803.1.1.1 (2015, 2012 and 2009 IBC Section 803.1.2.1 and 2006 IBC Section 803.2.1) and 2018, 2015, 2012 and 2009 IRC R302.9.4 (2006 IRC Section R315.4) and is permitted to be used where a Class A classification in accordance with ASTM E 84 or UL 723 is required by 2018 IBC Section 803.13 (2015 IBC Section 803.11, 2012 and 2009 IBC Section 803.9 and 2006 IBC Section 803.5).

4.0 DESIGN AND INSTALLATION

4.1 Installation – General:

DC315 must be applied in accordance with the manufacturer's published application instructions and this report. A copy of the instructions must be available on the job site at all times.

DC315 must be mechanically mixed prior to application. The coating is applied to the required thickness using spray equipment, a brush or a roller having a medium nap. Surfaces to be coated must be inspected in accordance with the manufacturer's published installation instructions and must be dry, clean, and free of dirt, loose debris and other substances that could interfere with the adhesion of the

coating. The coating must not be applied when the ambient or surface temperature is below 50°F (10°C) or above 90°F (32° C) and relative humidity of more than 85%. The manufacturer must be consulted for specific application conditions.

4.2 Application without a Prescriptive Thermal Barrier:

The DC315 coating may be applied over spray-applied foam plastic insulations listed in Table 1 without covering the coated assembly with the thermal barrier prescribed in IBC Section 2603.4 and IRC Section R316.4 (2006 IRC Section R314.4).

The DTM Bonding Primer, when used as part of the assemblies listed in Table 1, must be installed in accordance with the manufacturer's published installation instructions.

4.3 Application without a Prescriptive Ignition Barrier:

4.3.1 General: Where spray-applied foam plastic insulations listed in Table 2 are installed in attics and crawl spaces without the ignition barrier prescribed in IBC Section 2603.4.1.6 and 2018, 2015, 2012 and 2009 IRC Sections R316.5.3 and R316.5.4 (2006 IRC Sections R314.5.3 and R314.5.4) the installation must be in accordance with Sections 4.3.2 and 4.3.3, and the following conditions apply:

a. Entry to the attic or crawl space is only to service utilities, and no storage is permitted.

b. There are no interconnected attic or crawl space areas.

c. Air in the attic or crawl space is not circulated to other parts of the building.

d. Attic ventilation is provided when required by 2018 IBC Section 1202.2 (2015, 2012, 2009 and 2006 IBC Section 1203.2) or IRC Section R806, except when air-impermeable insulation is permitted in unvented attics in accordance with the 2018 IBC Section 1202.3 (2015 IBC Section 1203.3) or 2018, 2015 and 2012 IRC Section R806.5 (2009 IRC Section R806.4).

e. Under-floor (crawl space) ventilation is provided when required by 2018 IBC Section 1202.4 [2015 IBC Section 1203.4 (2012, 2009 and 2006 IBC Section 1203.3) or IRC Section R408.1, as applicable.

f. Combustion air is provided in accordance with IMC (*International Mechanical Code*®) Section 701.

4.3.2 In attics and crawl spaces: In attics, the insulation may be spray-applied to the underside of roof sheathing or roof rafters, and/or vertical surfaces; and in crawl spaces, the insulation may be spray-applied to the underside of floors and/or vertical surfaces provided the assembly conforms to one of the assemblies described in Table 2.

4.3.3 Use on Attic Floors: The insulation may be installed between and over the joists in attic floor at the maximum thickness set forth in Table 2. The insulation must be separated from the interior of the building by an approved thermal barrier. An ignition barrier prescribed in IBC Section 2603.4.1.6 and 2018, 2015, 2012 and 2009 IRC Sections R316.5.3 and R316.5.4 (2006 IRC Sections R314.5.3 and R314.5.4) may be omitted.

4.4 Exterior Walls in Types I, II, III and IV Construction: Carlisle Spray Foam Insulation SealTite™ Pro Closed-Cell spray foam insulation (ESR-2072) may be installed in or on exterior walls of buildings of Type I, II, III and IV construction complying with IBC Section 2603.5 and as described in this section. The maximum thickness of the foam plastic installed on the exterior of the sheathing or installed in stud cavities must be as described in Table 3. The potential heat of Carlisle Spray Foam Insulation SealTite™ Pro Closed Cell spray-applied insulation is 1838 Btu/ft^2 (20.9 MJ/m^2) per inch of thickness. The wall assembly must be as described in Table 3.

5.0 CONDITIONS OF USE

The DC315 coating described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 Application must comply with this report, the manufacturer's published installation instructions, and the applicable code. A copy of the installation instructions must be on the job site during application of the coating. In the event of a conflict between the manufacturer's published installation instructions and this report, this report and the code govern.

5.2 The application of additional interior finishes over the DC315 coating is limited to interior/exterior satin latex paint applied at an average wet film thickness of 8.0 mils (0.20 mm) or interior/exterior coating consisting of 30% silicon alkyd having a VOC (less exempt solvents) of no more than 340 g/L (2.8 lb/gal) and a volume solids content of 62% applied at a maximum average wet film thickness of 8 mils (0.20 mm). The use of either of the two interior finishes in conjunction with a vapor retardant coating is outside the scope of this report.

5.3 Installation in accordance with this report is for the specific assemblies and spray-applied foam plastic insulations described in Tables 1 and 2. The spray-applied foam plastic insulation must be installed in accordance with the requirements set forth in the specific ICC-ES evaluation report noted. For spray-applied foam plastic insulation that is not covered in an ICC-ES evaluation report, the evaluation is limited as noted in Tables 1 and 2, Footnote 3.

5.4 When used in or on the exterior walls of buildings of Type I, II III or IV construction, the wall assembly must conform to those described in Section 4.7, Table 3 and Figures 1 - 4.

5.5 The coating is manufactured in Taoyuan, Taiwan and Irvine, California, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Fire-Protective Coatings Applied to Spray-applied Foam Plastic Insulation Installed without a Code-prescribed Thermal Barrier (AC456), dated October 2015 (Editorially revised July 2018), including room corner fire testing in accordance with NFPA 286.

6.2 Report of testing in accordance with ASTM E84 (UL 723).

6.3 Report of vapor permeance test in accordance with ASTM E96 (Desiccant method).

6.4 Report of testing in accordance with Appendix X of AC377.

6.5 Report of fire propagation characteristics testing in accordance with NFPA 285 and associated fire engineering analysis supporting the NFPA 285 test report.

6.6 Data on accelerated weathering, resistance to humidity and thermal cycling testing in accordance with ASTM D5894, ASTM D4585 and ASTM D3346, respectively.

7.0 IDENTIFICATION

7.1 All containers of DC315 coating must be labeled with the manufacturer's name (International Fireproof Technology Inc.) and address; the product name; the date of manufacture, the shelf life or expiration date; the manufacturer's instructions for application, and the evaluation report number (ESR-3702).

The spray-applied foam plastic insulations must be labeled in accordance with the applicable evaluation report (see Table 1).

7.2 The report holder's contact information is the following:

INTERNATIONAL FIREPROOF TECHNOLOGY INC.
17528 VON KARMAN AVENUE
IRVINE, CALIFORNIA 92614
(949) 975-8588
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ptp@painttoprotect.com

TABLE 1—USE OF INSULATION WITHOUT A PRESCRIPTIVE THERMAL BARRIER (TESTED IN ACCORDANCE WITH NFPA 286)

INSULATION COMPANY NAME	INSULATION PRODUCT NAME	MAXIMUM THICKNESS (in.) (Vertical Surfaces)	MAXIMUM THICKNESS (in.) (Overhead Surfaces)	DC315 COATING MINIMUM THICKNESS[1] (Applied to all Foam Surfaces)	MINIMUM THEORETICAL APPLICATION RATE OF COATING[2]
Acme Urethanes	WC-50 (See Note 3)	8	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
AMD Distribution LLC	Diamond Back (ESR-4438)	7 1/2	11 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Barnhardt Manufacturing Company dba NCFI Polyurethanes	InsulStar® Light 12-008 (See Note 3)	8	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Barnhardt Manufacturing Company dba NCFI Polyurethanes	InsulBloc® (ESR-1615)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Barnhardt Manufacturing Company dba NCFI Polyurethanes	InsulStar® (ESR-1615)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Barnhardt Manufacturing Company dba NCFI Polyurethanes	InsulStar® 1.7 11-033 (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Barnhardt Manufacturing Company dba NCFI Polyurethanes	Sealtite OCX (See Note 3)	10	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
BASF Corporation	ENERTITE® G (ESR-3102)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
BASF Corporation	ENERTITE® NM (ESR-3102)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
BASF Corporation	SPRAYTITE 158 (ESR-2642)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
BASF Corporation	SPRAYTITE 178 (ESR-2642)	5 1/2	11 1/2	14 mils DFT 20 mils WFT	1.25 gal/100 ft^2
BASF Corporation	SPRAYTITE 81205 (ESR-2642)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
BASF Corporation	SPRAYTITE 81206 (ESR-2642)	5 1/2	11 1/2	14 mils DFT 20 mils WFT	1.25 gal/100 ft^2
BASF Corporation	SPRAYTITE SP (ESR-2642)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
BASF Corporation	WALLTITE 200 (ESR-2642)	5 1/2	11 1/2	14 mils DFT 20 mils WFT	1.25 gal/100 ft^2
BASF Corporation	WALLTITE HP+ (ESR-2642)	5 1/2	11 1/2	14 mils DFT 20 mils WFT	1.25 gal/100 ft^2
BASF Corporation	WALLTITE US (ESR-2642)	5 1/2	11 1/2	14 mils DFT 20 mils WFT	1.25 gal/100 ft^2
BASF Corporation	WALLTITE US-N (ESR-2642)	5 1/2	11 1/2	14 mils DFT 20 mils WFT	1.25 gal/100 ft^2
BASF Corporation	SPRAYTITE LWP-L (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft2
BASF Corporation	WALLTITE LWP (See Note 3)	5 1/2	11 1/2	14 mils DFT 20 mils WFT	1.25 gal/100 ft^2
BASF Corporation	WALLTITE HP+S (See Note 3)	5 1/2	11 1/2	14 mils DFT 20 mils WFT	1.25 gal/100 ft^2
Carlisle Spray Foam Insulation	Foamsulate 50 (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	Foamsulate 50 HY (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	Foamsulate 70 (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2

INSULATION COMPANY NAME	INSULATION PRODUCT NAME	MAXIMUM THICKNESS (in.) (Vertical Surfaces)	MAXIMUM THICKNESS (in.) (Overhead Surfaces)	DC315 COATING MINIMUM THICKNESS[1] (Applied to all Foam Surfaces)	MINIMUM THEORETICAL APPLICATION RATE OF COATING[2]
Carlisle Spray Foam Insulation	Foamsulate Closed Cell (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	Foamsulate HFO (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	Foamsulate OCX (See Note 3)	9	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	SealTite PRO Closed Cell (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	SealTite PRO High Yield (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	SealTite PRO No Mix (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	SealTite PRO No Trim 21 (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	SealTite PRO OCX (See Note 3)	9	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	SealTite PRO One Zero Closed Cell (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Carlisle Spray Foam Insulation	SealTite PRO Open Cell (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
CertainTeed	Certaspray X OC (See Note 3)	5 1/4	14	13 mils DFT 20 mils WFT	1.25 gal/100 ft^2
Commercial Thermal Solutions, Inc.	Tiger Foam® E-84 Fire-Rated SPF Class 1 Spray Foam System (ESR-3183)	3 1/2	3 1/2	13 mils DFT 20 mils WFT	1.25 gal/100 ft^2
Creative Polymer Solutions	Accufoam 170 (See Note 3)	5 1/2	9 1/2	13 mils DFT 19 mils WFT	1.19 gal/100 ft^2
Creative Polymer Solutions	Accufoam 45 (See Note 3)	8	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
DAP Foam, Inc.	Touch N' Foam Professional Class I FR Spray Foam System (ESR-3052)	3 1/2	3 1/2	13 mils DFT 20 mils WFT	1.25 gal/100 ft^2
DAP Foam, Inc.	Touch N' Seal Class I FR Spray Foam System (ESR-3052)	3 1/2	3 1/2	13 mils DFT 20 mils WFT	1.25 gal/100 ft^2
DAP Foam, Inc.	TNF/TNS Class I FR HFO Spray Foam System (See Note 3)	3 1/4	3 1/4	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Demilec (USA) Inc.	Agribalance® (ESR-2600)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Demilec (USA) Inc.	Demilec APX® 2.0 (ESR-3703)	5 1/4	14	13 mils DFT 20 mils WFT	1.25 gal/100 ft^2
Demilec (USA) Inc.	Demilec APX™ (ESR-3470)	8	10	13 mils DFT 20 mils WFT	1.25 gal/100 ft^2
Demilec (USA) Inc.	Demilec Heatlok® HFO (ESR-4073)	7 1/2	11 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Demilec (USA) Inc.	Demilec Heatlok® XT-s (ESR-3824)	7 1/2	11 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Demilec (USA) Inc.	Demilec Heatlok® XT-w (ESR-3883)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Demilec (USA) Inc.	Demilec *SEAL*ECTION® 500 (ESR-1172)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Demilec (USA) Inc.	HEATLOK SOY® 200 PLUS (ESR-3210)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Demilec (USA) Inc.	Heatlok® Eco (ESR-3198)	5 1/2	9 1/2	14 mils DFT 22 mils WFT	1.38 gal/100 ft^2
Demilec (USA) Inc.	Sealection NM (ESR-2668)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Elastochem Specialty Chemicals, Inc.	Elastochem® Insulthane® Extreme (ESR-3809)	7 1/4	7 1/4	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Elastochem Specialty Chemicals, Inc.	Insulthane (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2

INSULATION COMPANY NAME	INSULATION PRODUCT NAME	MAXIMUM THICKNESS (in.) (Vertical Surfaces)	MAXIMUM THICKNESS (in.) (Overhead Surfaces)	DC315 COATING MINIMUM THICKNESS[1] (Applied to all Foam Surfaces)	MINIMUM THEORETICAL APPLICATION RATE OF COATING[2]
EnergyOne America	EOA 2000 (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
EnergyOne America	EOA 500 (ESR-3686)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Franklin International, Inc.	Titebond Weathermaster Superfoam (See ESR-4099)	2	2	13 mils DFT 20 mils WFT	1.25 gal/100 ft²
Gaco Western	F1850 (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Gaco Western	Gaco 183M (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Gaco Western	GACO F1880 (See Note 3)	9	12	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Gaco Western	Gaco Firestop2 F5001 (See Note 3)	18	18	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Gaco Western	Gaco Green 052N (See Note 3)	11 1/4	11 1/4	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Gaco Western	GacoEZSpray F4500 (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
General Coatings Manufacturing Corp.	Ultrathane 050 (See Note 3)	8	10	13 mils DFT 20 mils WFT	1.25 gal/100 ft²
General Coatings Manufacturing Corp.	Ultra-Thane 230 (ESR-3033)	5 1/2	7 1/2	DTM Bonding Primer 3 mils DFT/ 4 mils WFT & DC315 12 mils DFT/ 18 mils WFT	0.25 gal/100 ft² & 1.13 gal/100 ft²
General Coatings Manufacturing Corp.	Ultrathane 202 (See Note 3)	8	12	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
General Coatings Manufacturing Corp.	Ultrathane 170 (See Note 3)	8	12	11 mils DFT 18 mils WFT	1.00 gal/100 ft²
General Coatings Manufacturing Corp.	Ultrathane 205 HFO (See Note 3)	8	12	11 mils DFT 18 mils WFT	1.00 gal/100 ft²
Guardian Energy Technologies	Foam It Green (See Note 3)	3 1/2	3 1/2	13 mils DFT 20mils WFT	1.25 gal/100 ft²
Henry Company	Permax 1.8 (See Note 3)	11 1/4	11 1/4	14 mils DFT 21 mils WFT	1.31 gal/100 ft²
Henry Company	Permax 2.0X (ESR-3647)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Henry Company	Permax 2.0X Fast (ESR-3647)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Huntsman International, LLC	CertaSpray CC (ESR-3758)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
ICP Adhesives & Sealants, Inc.	Handi-Foam E-84 Class 1(A) Spray Foam System (ESR-2717)	3 1/2	3 1/2	13 mils DFT 20mils WFT	1.25 gal/100 ft²
Icynene, Inc.	LD C 50 No Mix (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Icynene, Inc.	Classic (ESR-1826)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Icynene, Inc.	Classic Plus (ESR-1826)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Icynene, Inc.	Classic Ultra (ESR-1826)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Icynene, Inc.	Classic Ultra Select (ESR-1826)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Icynene, Inc.	Icynene MD-C-200 (ESR-3199)	6	10	14 mils DFT 22 mils WFT	1.38 gal/100 ft²
Icynene, Inc.	Icynene ProSeal (ESR-3500)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Icynene, Inc.	Icynene ProSeal LE (ESR-3500)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Icynene, Inc.	ProSeal HFO (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Icynene, Inc.	ProSeal Max HFC (See Note 3)	6	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Icynene-LaPolla, Inc.	Foam-Lok FL 450 (ESR-4242)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²

INSULATION COMPANY NAME	INSULATION PRODUCT NAME	MAXIMUM THICKNESS (in.) (Vertical Surfaces)	MAXIMUM THICKNESS (in.) (Overhead Surfaces)	DC315 COATING MINIMUM THICKNESS[1] (Applied to all Foam Surfaces)	MINIMUM THEORETICAL APPLICATION RATE OF COATING[2]
Icynene-LaPolla, Inc.	Prime Gold (ESR-4323)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Johns Manville	JM Corbond III (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Johns Manville	JM Corbond MCS™ (ESR-3159)	7 1/4	9 1/4	14 mils DFT 22 mils WFT	1.38 gal/100 ft²
Johns Manville	JM Corbond oc (See Note 3)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Johns Manville	JM Corbond ocx SPF (See Note 3)	9	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Johns Manville	JM MCS+ (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Johns Manville	JM Gen IV	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
LaPolla Industries, Inc.	Foam-Lok FL2000 (ESR-2629)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
LaPolla Industries, Inc.	Foam-Lok FL500 (ESR-2847)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
LaPolla Industries, Inc.	Lapolla FL 2000 4G (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
LaPolla Industries, Inc.	Lapolla Foam-Lok FL 750 (ESR-4322)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
LaPolla Industries, Inc.	Foam-Lok FL2000-3G (ESR-2847)	8	14	16 mils DFT 24 mils WFT	1.50 gal/100 ft²
Natural Polymers, LLC	Natural-Therm™ 0.5 IB (See Note 3)	9 1/2	14 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Natural Polymers, LLC	Natural-Therm™ 0.50 PCF (See Note 3)	9 1/2	14 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Natural Polymers, LLC	Natural-Therm™ 2.0 IBS (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Natural Polymers, LLC	Natural-Therm™ 2.0 IBW (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Natural Polymers, LLC	Natural-Therm™ Light (See Note 3)	9 1/2	14 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Natural Polymers, LLC	Natural-Therm™ ZERO (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
North American Spray Foam Polymers	EcoPolySeal (ESR-4483)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
North American Spray Foam Polymers	EPS 2000 (ESR-4484)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Nu-Wool Company Incorporated	Nu-Seal 0.5 (See Note 3)	9 1/2	14 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Nu-Wool Company Incorporated	Nu-Seal 2.0 W (See Note 3)	5 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Polygreen Solutions	GreenSeal 44 (See Note 3)	8	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Preferred Solutions, Inc.	Staycell® 302 (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Profoam	ProSeal (ESR-3835)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Profoam	ProSeal Plus (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Profoam	ProFill Plus (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Purinova Sp. z.o.o.	Purinova PURIOS 500 (ESR-4165)	8	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Purinova Sp. z.o.o.	Crossing 450 (ESR-4003)	8	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
RHH Foam Systems	Versi-Foam Class I (See Note 3)	3 1/2	3 1/2	13 mils DFT 20 mils WFT	1.25 gal/100 ft²
Rhino Linings Corporation	ThermalGuard CC2 (ESR-2100)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Rhino Linings Corporation	ThermalGuard OC.5 (ESR-2100)	7 1/2	11 1/2	13 mils DFT 18 mils WFT	1.13 gal/100 ft²
SES Foam	Nexseal 2.0 (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
SES Foam	Nexseal 2.0 LE (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
SES Foam	SES 2.0 (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²

INSULATION COMPANY NAME	INSULATION PRODUCT NAME	MAXIMUM THICKNESS (in.) (Vertical Surfaces)	MAXIMUM THICKNESS (in.) (Overhead Surfaces)	DC315 COATING MINIMUM THICKNESS[1] (Applied to all Foam Surfaces)	MINIMUM THEORETICAL APPLICATION RATE OF COATING[2]
SES Foam	SES 2.0 LE (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
SES Foam	SES Foam Easyseal 0.5 lb (ESR-3375)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
SES Foam	Sucraseal™ 0.5 (ESR-3375)	9	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Soprema	SupraSeal (See Note 3)	7 1/4	7 1/4	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Specialty Products, Inc. (S.P.I)	Envelo-Seal™ 0.5 OC (See Note 3)	9 1/2	14 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Specialty Products, Inc. (S.P.I)	Envelo-Seal™ 2.0 IBW (See Note 3)	5 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Sustainable Polymer Products	0.5 OC (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Sustainable Polymer Products	0.5 OCX (See Note 3)	9	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Sustainable Polymer Products	2.0 CC (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
SWD Urethane	Quik-Shield 100X (See Note 3)	7	11	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
SWD Urethane	Quik-Shield 104 (See Note 3)	8	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
SWD Urethane	Quik-Shield 106 (See Note 3)	11 1/4	11 1/4	15 mils DFT 24 mils WFT	1.50 gal/100 ft²
SWD Urethane	Quik-Shield 108 (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
SWD Urethane	Quik-Shield 112 (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
DuPont de Nemours, Inc.	FROTH-PAK™ (ESR-3228)	3 1/2	3 1/2	14 mils DFT 20 mils WFT	1.25 gal/100 ft²
DuPont de Nemours, Inc.	STYROFOAM™ Spray Polyurethane Foam CM2045 (ESR-2670)	9 1/2	9 1/2	15 mils DFT 22 mils WFT	1.38 gal/100 ft²
The Spray Market	SPM-200 (ESR-4195)	7 1/2	11 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Thermoseal	Thermoseal OCX (See Note 3)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Thermoseal	2000 (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Thermoseal	Thermoseal CCX (ESR-4137)	7 1/2	11 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Thermoseal	TS 5G (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²
Thermoseal	TS One (See Note 3)	5 1/2	9 1/2	13 mils DFT 20 mils WFT	1.25 gal/100 ft²
Thermoseal	TS360 (See Note 3)	8 1/2	14	13 mils DFT 20 mils WFT	1.25 gal/100 ft²
Thermoseal	TS500 (See Note 3)	8	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Thermoseal	TS800 (See Note 3)	8	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Universal Polymers Corporation	UPC 500 (ESR-3803)	8 1/2	14	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Universal Polymers Corporation	UPC 2.0 High Lift (See Note 3)	8	12	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Universal Polymers Corporation	UPC 1.7 (See Note 3)	8	12	11 mils DFT 18 mils WFT	1.00 gal/100 ft²
Universal Polymers Corporation	UPC 2.0 (See Note 3)	8	12	11 mils DFT 18 mils WFT	1.00 gal/100 ft²
Universal Polymers Corporation	UPC 500 Max (See Note 3)	8	14	14 mils DFT 21 mils WFT	1.31 gal/100 ft²
Urethane Technology Company, Inc.	UTC 7040-0.5 (ESR-3244)	5 1/2	14 3/4	14 mils DFT 20 mils WFT	1.25 gal/100 ft²
Urethane Technology Company, Inc.	UTC 7041-0.5 (ESR-3244)	5 1/2	14 3/4	14 mils DFT 20 mils WFT	1.25 gal/100 ft²
Victory Polymers Corp.	VPC-HFO (ESR-4491)	7 1/4	7 1/4	12 mils DFT 18 mils WFT	1.13 gal/100 ft²
Victory Polymers Corp.	VPC-50 OCHY (ESR-4502)	8 1/2	11 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft²

INSULATION COMPANY NAME	INSULATION PRODUCT NAME	MAXIMUM THICKNESS (in.) (Vertical Surfaces)	MAXIMUM THICKNESS (in.) (Overhead Surfaces)	DC315 COATING MINIMUM THICKNESS[1] (Applied to all Foam Surfaces)	MINIMUM THEORETICAL APPLICATION RATE OF COATING[2]
Victory Polymers Inc.	VPC-CC SuperLift and VPC-CC SuperYield (ESR-4334)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Victory Polymers Inc.	VPC-OneStroke (See Note 3)	7 1/2	11 1/2	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Victory Polymers Inc.	VPC-HiR-OC (See Note 3)	8 1/2	11 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Volatile Free, Inc.	VFI-714 (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
Volatile Free, Inc.	VFI-716 (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
XtremeSeal, LLC	XtremeSeal 0.4 LX (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
XtremeSeal, LLC	XtremeSeal 0.5 LX (See Note 3)	8 1/2	14	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2
XtremeSeal, LLC	XtremeSeal 2.0 LE (See Note 3)	5 1/2	9 1/2	9 mils DFT 14 mils WFT	0.88 gal/100 ft^2

For **SI:** 1 inch = 25.4 mm; 1 mil = 0.0254 mm; 1 gallon = 3.38 L; 1 ft^2 = 0.93 m^2.

Notes:

[1]DFT = Dry Film Thickness; WFT = Wet Film Thickness

[2]As reported in the manufacturer's application instructions. Actual application rate, based upon specific project conditions, must be in accordance with the manufacturer's application instructions.

[3]Recognition is limited to the NFPA 286 test data for the coated assembly described. Evaluation for compliance of the spray foam insulation with other applicable requirements of AC377 and the IBC and IRC are outside the scope of the report.

TABLE 2—USE OF INSULATION WITHOUT A PRESCRIPTIVE IGNITION BARRIER (TESTED IN ACCORDANCE WITH APPENDIX X OF AC377)

INSULATION COMPANY NAME	INSULATION PRODUCT NAME	MAXIMUM THICKNESS (in.) (Vertical Surfaces and Attic Floors)	MAXIMUM THICKNESS (in.) (Underside of Roof Sheathing and/or Rafters, Underside of Floors)	DC315 COATING MINIMUM THICKNESS[1] (Applied to all Foam Surfaces)	MINIMUM THEORETICAL APPLICATION RATE OF COATING[2]
Acme Urethanes	WC-50 (See Note 3)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Barnhardt Manufacturing Company dba NCFI Polyurethanes	InsulStar® Light (12-008) (See Note 3)	8	14	4 mils DFT 7 mils WFT	0.44 gal/100 ft^2
BASF Corporation	ENERTITE® G (ESR-3102)	11 1/2	15 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
BASF Corporation	ENERTITE® NM (ESR-3102)	11 1/2	15 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
BASF Corporation	SPRAYTITE 158 (ESR-2642)	5 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
BASF Corporation	SPRAYTITE 178 (ESR-2642)	5 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
BASF Corporation	SPRAYTITE 81205 (ESR-2642)	5 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
BASF Corporation	SPRAYTITE 81206 (ESR-2642)	5 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
BASF Corporation	SPRAYTITE SP (ESR-2642)	5 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
BASF Corporation	WALLTITE HP+ (ESR-2642)	5 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
BASF Corporation	WALLTITE US (ESR-2642)	5 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
BASF Corporation	WALLTITE US-N (ESR-2642)	5 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Carlisle Spray Foam Insulation	Foamsulate 50 (See Note 3)	12	12	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Carlisle Spray Foam Insulation	Foamsulate 70 (See Note 3)	14	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Carlisle Spray Foam Insulation	SealTite PRO No Mix (See Note 3)	12	12	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Carlisle Spray Foam Insulation	SealTite PRO No Trim 21 (See Note 3)	14	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2

INSULATION COMPANY NAME	INSULATION PRODUCT NAME	MAXIMUM THICKNESS (in.) (Vertical Surfaces and Attic Floors)	MAXIMUM THICKNESS (in.) (Underside of Roof Sheathing and/or Rafters, Underside of Floors)	DC315 COATING MINIMUM THICKNESS[1] (Applied to all Foam Surfaces)	MINIMUM THEORETICAL APPLICATION RATE OF COATING[2]
Creative Polymer Solutions	Air Lok 170 (See Note 3)	5 1/2	9 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Creative Polymer Solutions	Airl Lok 45 (See Note 3)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
DAP Foam, Inc.	TNF Class I FR HFO Spray Foam System (See Note 3)	3 1/4	3 1/4	4 mils DFT 6 mils WFT	0.38 gal/100 ft²
Demilec (USA) Inc.	Agribalance® (ESR-2600)	7 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Demilec (USA) Inc.	Demilec *SEAL*ECTION® 500 (ESR-1172)	7 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Demilec (USA) Inc.	Heatlok® Eco (ESR-3198)	11 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Gaco Western	Gaco Green 052N (See Note 3)	11 1/4	11 1/4	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Gaco Western	GacoEZSpray F4500 (See Note 3)	12	16	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
General Coatings Manufacturing Corp.	Ultrathane 050 (See Note 3)	6	8	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
General Coatings Manufacturing Corp.	Ultra-Thane 230 (ESR-3033)	7 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
General Coatings Manufacturing Corp.	Ultra-Thane 202 (See Note 3)	7 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
General Coatings Manufacturing Corp.	Ultra-Thane 205 HFO/UPC 2.0 HFO (See Note 3)	8	12	4 mils DFT 6 mils WFT	0.38 gal/100 ft²
General Coatings Manufacturing Corp.	Ultra-Thane 205 HFO High Lift / UPC 2.0 HFO High Lift (See Note 3)	8	12	4 mils DFT 6 mils WFT	0.38 gal/100 ft²
Icynene, Inc.	Classic (ESR-1826)	5 1/2	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Icynene, Inc.	Classic Plus (ESR-1826)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Icynene, Inc.	Classic Ultra (ESR-1826)	5 1/2	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Icynene, Inc.	Classic Ultra Select (ESR-1826)	5 1/2	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Icynene, Inc.	Icynene MD-C-200 (ESR-3199)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Icynene, Inc.	Icynene ProSeal (ESR-3500)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Icynene, Inc.	Icynene ProSeal LE (ESR-3500)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Icynene-LaPolla, Inc.	Foam-Lok FL 450 (ESR-4242)	5 1/2	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Icynene-LaPolla, Inc.	Prime Gold (ESR-4323)	5 1/2	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Johns Manville	JM Corbond III (See Note 3)	7 1/2	9 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Johns Manville	JM MCS+ (See Note 3)	7 1/2	9 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
LaPolla Industries, Inc.	Foam-Lok FL500 (ESR-2847)	5 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Natural Polymers, LLC	Natural-Therm™ HFO (See Note 3)	7 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Natural Polymers, LLC	Natural-Therm™ ZERO (See Note 3)	7 1/2	11 1/2	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Polygreen Solutions	GreenSeal 44 (See Note 3)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
PCC Prodex S.P z.o.o.	Crossing 450 (ESR-4003)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft2
Profoam	ProFill Plus (See Note 3)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Purinova Sp. z.o.o.	Purinova PURIOS 500 (ESR-4165)	8	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft²
Rhino Linings Corporation	ThermalGuard OC .5 (ESR-2100)	8	12	3 mils DFT 4 mils WFT	0.25 gal/100 ft²

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Rhino Linings Corporation	ThermalGuard 1.0 (See Note 3)	8	12	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
SES Foam	SES Foam 0.5 lb (ESR-3375)	$9^1/_2$	$11^1/_2$	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Sustainable Polymer Products	0.5 OC HY (See Note 3)	$9^1/_2$	$11^1/_2$	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
SWD Urethane	Quik-Shield 108 (See Note 3)	8	12	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
ThermoSeal, LLC	TS 360 (See Note 3)	$8^1/_2$	14	4 mils DFT 6 mils WFT	0.25 gal/100 ft^2
ThermoSeal, LLC	TS 600 (See Note 3)	$^{91}/_2$	14	4 mils DFT 6 mils WFT	0.25 gal/100 ft^2
ThermoSeal, LLC	TS 800 (See Note 3)	$9^1/_2$	14	4 mils DFT 6 mils WFT	0.38 gal/100 ft^2
Universal Polymers Corporation	UPC 500 (ESR-3803)	$8^1/_2$	14	4 mils DFT 6 mils WFT	0.38 gal/100 ft^2
Urethane Technology Company, Inc.	UTC 7040-0.5 (ESR-3244)	$5^1/_2$	$14^3/_4$	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Urethane Technology Company, Inc.	UTC 7041-0.5 (ESR-3244)	$5^1/_2$	$14^3/_4$	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Universal Polymers Corp.	UPC 2.0 High Lift (See Note 3)	8	12	4 mils DFT 6 mils WFT	0.38 gal/100 ft^2
Universal Polymers Corp.	UPC 2.0 (See Note 3)	$7^1/_2$	$11^1/_2$	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Victory Polymers Corp.	VPC-50 OCHY (ESR-4502)	12	12	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
Victory Polymers Inc.	VPC-OneStroke (See Note 3)	$7^1/_2$	$11^1/_2$	12 mils DFT 18 mils WFT	1.13 gal/100 ft^2
Victory Polymers Inc.	VPC-HiR-OC (See Note 3)	14	14	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
XtremeSeal, LLC	XtremeSeal 0.4 LX (See Note 3)	8	12	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2
XtremeSeal, LLC	XtremeSeal 0.5 LX (See Note 3)	$9^1/_2$	$11^1/_2$	3 mils DFT 4 mils WFT	0.25 gal/100 ft^2

For **SI:** 1 inch = 25.4 mm; 1 mil = 0.0254 mm; 1 gallon = 3.38 L; 1 ft^2 = 0.93 m^2.

Notes:

[1]DFT = Dry Film Thickness; WFT = Wet Film Thickness

[2]As reported in the manufacturer's application instructions. Actual application rate, based upon specific project conditions, must be in accordance with the manufacturer's application instructions.

[3]Recognition is limited to the NFPA 286 test data for the coated assembly described. Evaluation for compliance of the spray foam insulation with other applicable requirements of AC377 and the IBC and IRC are outside the scope of the report.

TABLE 3—NFPA 285 COMPLYING EXTERIOR WALL ASSEMBLIES

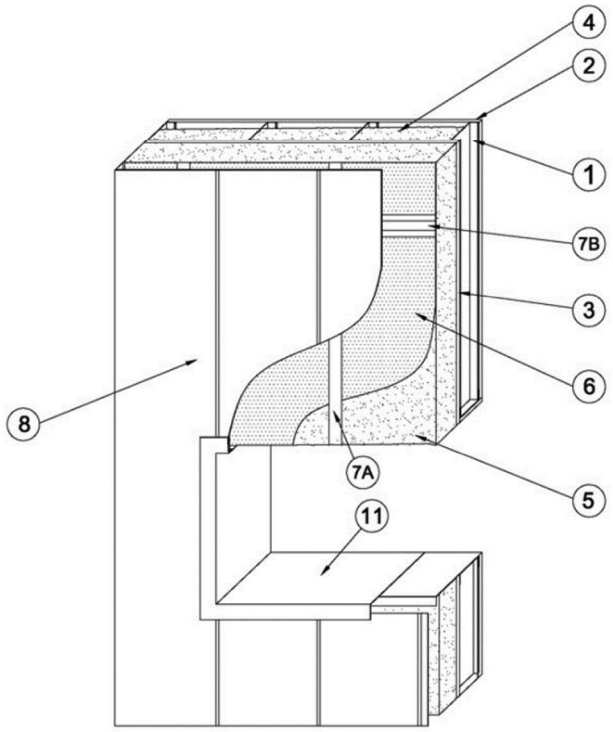
WALL COMPONENTS	MATERIALS
Base wall system— Use either 1, 2 or 3	1 — Concrete wall 2 — Concrete masonry wall 3 — 1 layer of $^5/_8$-inch-thick Type X gypsum wallboard on interior, installed over minimum $3^5/_8$-inch-deep, minimum No. 20-gage steel studs spaced at a maximum of 24 inches on center with lateral bracing every 4 feet as required by the code.
Floorline firestopping	4 pcf mineral-fiber insulation friction-fit in each wall stud cavity at each floor line. Thickness must match stud cavity depth.
Cavity insulation— Use either 1, 2, 3 or 4	1 — None 2 — Spray-applied foam plastic insulation, maximum $3^5/_8$-inch-thick of Carlisle SealTite™ Pro (ESR-2072) applied to Base wall 3, covering the width of the stud cavity and either fully filling the stud cavity depth or partially filling the stud cavity depth leaving a maximum air space of $1^5/_8$ inches. 3 — Fiberglass batt insulation, Class A (faced or unfaced)[1] 4 — Mineral-fiber insulation complying with ASTM E136[1]
Exterior sheathing— Use 1 with Base Wall 1 or 2, Use 2 with Base Wall 3	1 — None 2 — Minimum $^1/_2$-inch-thick ASTM C1177 complying exterior sheathing
Exterior Insulation	1 — Maximum $3^1/_2$-inch-thick of Carlisle SealTite™ Pro Closed Cell (ESR-2072) spray foam insulation, applied directly to the exterior face of the exterior sheathing of Base wall 3 or directly to the exterior face of Base wall 1 or 2, 2 — The exposed surface of the spray foam insulation must be covered with International Fireproof Technology, Inc. DC315 intumescent coating applied at a minimum 16 mils wet film thickness 3 — The DC315 coating must be covered with Sherwin-Williams SHER-CRYL HPA topcoat applied at a minimum 12 mils wet film thickness[2]
Exterior wall covering—Use either 1 through 12	1 — Brick —Standard nominally 4-inch-thick clay brick with brick veneer anchors installed a maximum of 24 inches on center vertically on each stud. Maximum 2-inch air gap between exterior insulation and brick. 2 — Cast concrete – Minimum 1–inch-thick, using any standard non-open-jointed installation. —Maximum 2-inch air gap between exterior insulation and cast concrete. 3 — Concrete masonry units – Minimum $2^1/_2$–inch-thick, using any standard non-open-jointed installation. — Maximum 2-inch air gap between exterior insulation and concrete masonry units. 4 — Natural stone veneer – Minimum 2-inch-thick, using any standard non-open-jointed installation technique 5 — Terracotta cladding – Use any terracotta cladding system in which the terracotta is minimum $1^1/_4$-inch-thick, using any standard non-open-jointed installation technique. 6 — Stucco – Minimum $^3/_4$ –inch-thick, code-complying three-coat exterior cement plaster and lath. 7 — Aluminum cladding panels, vertical interlocking type – Minimum 0.030-inch-thick using the framing system specified in footnote 3. 8 — Corrosion-resistant steel cladding panels, interlocking type – minimum 0.0149-inch-thick using the framing system specified in footnote 3. 9 — Cold-rolled copper cladding panels, interlocking type – minimum 0.0216-inch-thick, minimum 16 ounces per square foot, using the framing system specified in footnote 3. 10 — Fiber-cement siding – Minimum 0.25 inches thick, using any standard non-open-jointed installation. 11— One-coat Stucco – Minimum thickness as stated in a current ICC-ES evaluation report where the one-coat stucco has been qualified for compliance under AC11. 12 — Thin brick veneer – Minimum $^1/_4$-inch thick thin brick complying with ASTM C1088, adhered to minimum $^3/_4$ –inch-thick, code-complying three-coat exterior cement plaster and lath mortar bed.
Opening Flashing	Minimum 0.030-inch-thick aluminum flashing installed at all openings to completely cover the opening header, jambs and sill

For **SI:** 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pcf = 16.01 kg/m^3.

[1]Insulation must comply with the applicable requirements of 2018, 2015 or 2012 IBC Section 720.2 (2009 IBC Section 719.2).

[2]Coating must be applied in accordance with the coating manufacturer's published installation instructions.

[3]Framing for Exterior wall coverings 7, 8, and 9 consists of minimum 22 gage steel C-channel with $1^3/_8$-inch legs (54 mm) installed around the perimeter of any window opening or door opening through the exterior sheathing to the steel studs. 4-inch deep (101 mm), 20-gage steel Z-girts with 2-inch legs (51 mm) secured through exterior sheathing to studs at 24 inches (610 mm) on-center. Hat Channels [1-inch deep (25.4 mm), $3^7/_8$-inch tall (99 mm)] 22-gage steel hat channels fastened at 24 inches (610 mm) on-center to the Z-girts. Z-girts may be installed horizontally or vertically. The cladding edges interlock together such that all edges and fasteners are concealed after installation. The maximum air space between the exterior face of the spray-applied foam plastic insulation and the back of the exterior wall covering cladding panels described in 7, 8 and 9 must not exceed $2^1/_2$ inches (64 mm).



1. Steel Studs — See Table 3, Base Wall System 3 (See Alternate Base Wall in Table 3).
Systems
2. Interior Gypsum Board — See Table 3.

3. Exterior Gypsum Sheathing — See Table 3.

4. Cavity Insulation — See Table 3

5. Exterior Insulation — See Table 3.

6. Exterior Insulation Intumescent Coating — See Table 3, Items 2 and 3.

7. Mounting System — See Table 3.

7A. Z-Girts and Window Channel — See Table 3, Footnote 3.

7B. Hat Channels — See Table 3, Footnote 3.

8. Exterior Cladding — See Table 3 Claddings 7, 8 or 9.(Other Claddings in Table 3 are not shown)

10. Floorline Firestopping — See Table 3.

11. Window Flashing — See Table 3, Footnote 3.

FIGURE 1—TABLE 3 (COMPONENTS)*

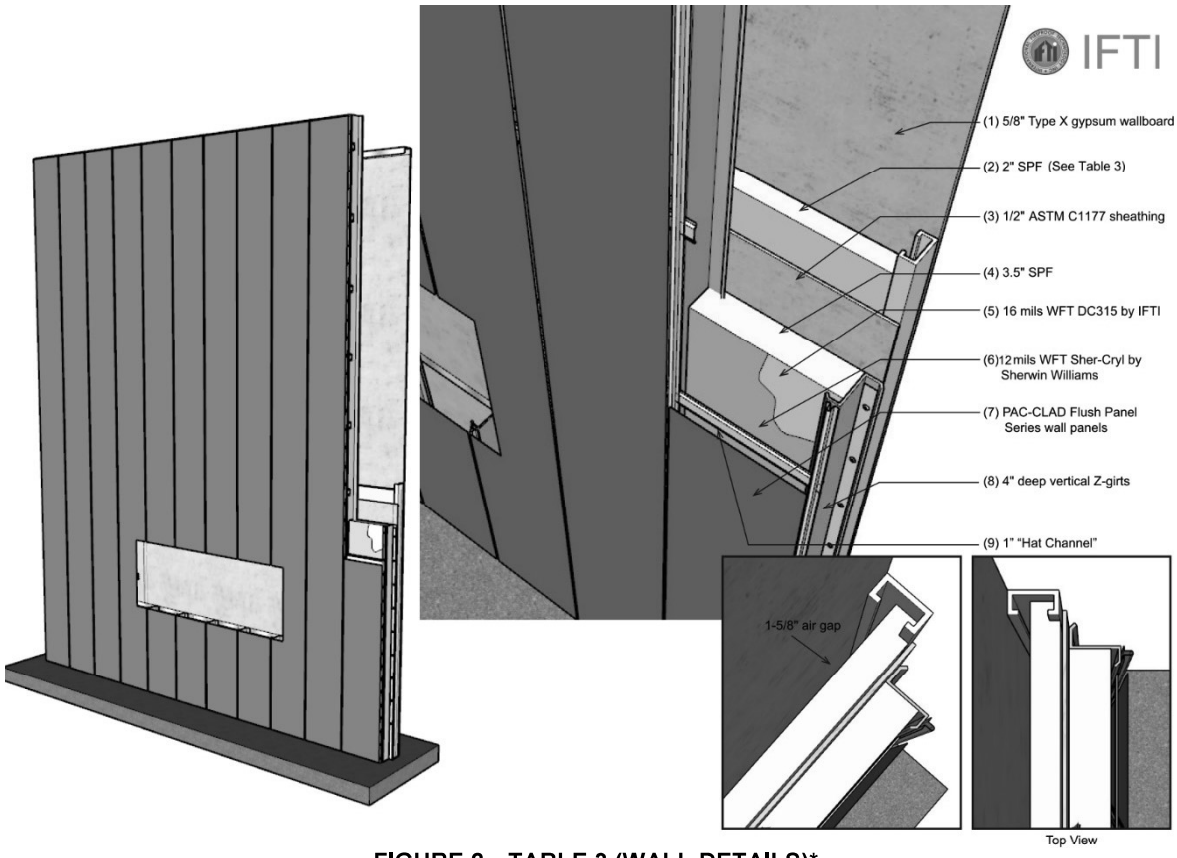


FIGURE 2—TABLE 3 (WALL DETAILS)*

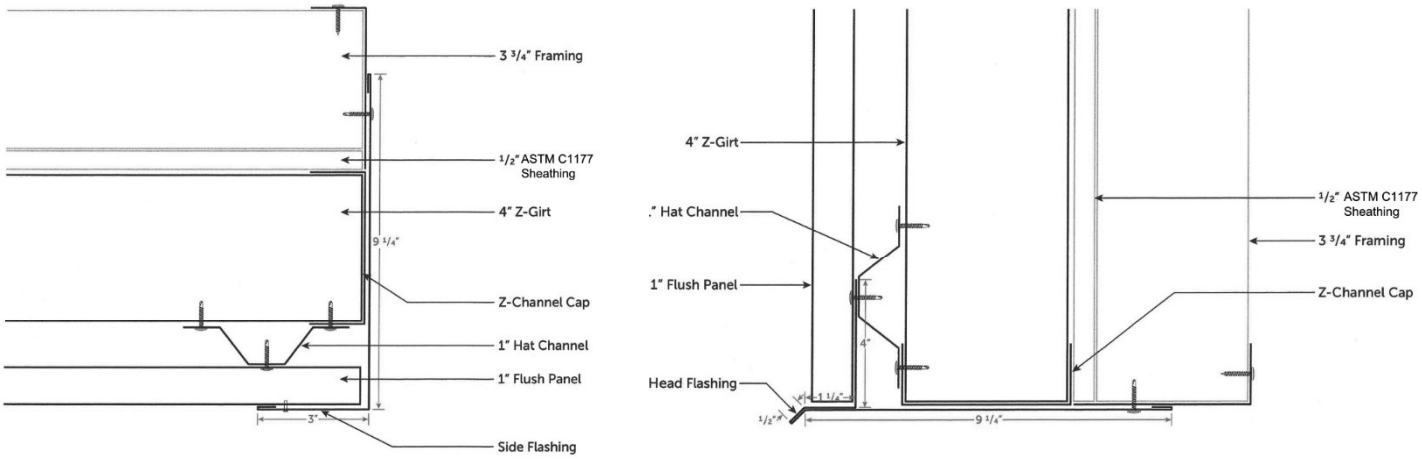


FIGURE 3—TABLE 3 (OPENING DETAILS)*

*In the event of conflict between the written descriptions in Table 3 and the Figure, the written description applies.

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949-975-8588

Installation Job Work Record

Job Work Records are an excellent way to track your installations and confirm compliance to your Building Official or Authority Having Jurisdiction. In the event of a concern on a job the installer is able to provide documented proof of the installation.

Contractor:				**Application Start Date:**		**Completion Date:**	**(M/D/Y)**
Contact Info:				**Installer Name:**			
Application guide on jobsite: Yes ◯ No ◯ (Circle One)							
PROJECT INFORMATION							
Customer Name:				**Occupied:**		**Unoccupied**	
Job Site Address:				**Square Feet Coated:**			
				Building Permit #:		**Yes ◯ No ◯**	
				Spray Area Isolated:		**Yes ◯ No ◯**	
Scope of Job:				**Ventilated at 0.3 ACH**		**N/A ◯ Yes ◯**	
				Coating Thickness Required			
				WFT		**DFT**	
IFTI Product Applied				**Batch #'s:**			
Mix Time per Bucket:	**mins**	**Material Temp:**	**F C**				
Quantity Used:	**Gals:**	**# of Passes:**					
EQUIPMENT INFORMATION							
Airless Sprayer:				**Hose Length: F ◉ M ◯ Hose Diameter:**			
Pressure				**Tip Size:**			
Gun Type:				**Other:**			
SUBSTRATE CONDITIONS							
Type:				**Clean:**		**Texture:**	
Free of Grease/Oil: Y ◯ N ◯ (*check One*)				**Dry:**		**Wet:**	
Special Preparation:							
Was Primer Used: Yes ◯ No ◯ Type:							
ENVIRONMENTAL CONDITIONS							
Ambient Temp: F C				**Substrate Temp: F C**			
Type of Ventilation:				**Ventilation Duration: hrs: days:**			
Heating Required: Yes ◯ No ◯ N/A ◯				**Type Of Heat:**			
Site Testing							
Thickness Required: (mils WFT) Were Medallions Used: Yes ◯ No ◯				**Daily Temp and Humidity Readings: C ◯ F ◯ (*check One*)**			

Record Actual WFT measurement							
1		7		13		19	
2		8		14		20	
3		9		15		21	
4		10		16		22	
5		11		17		23	
6		12		18		24	

Day	Temp	RH%	Day	Temp	RH%
1			7		
2			8		
3			9		
4			10		
5			11		
6			12		

For Projects Greater Than 10,000 Sq Ft Please use Additional Work Reports

I hereby certify that I have installed the listed fire protection per manufacturers installation instructions and product listings, and in a manner compliant with local building codes in effect at the time of installation.

Signature: **Date:**

Work Records should be completed for each and every job. Completed work records can be submitted to workrecord@painttoprotect.com

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Learn How to Measure the Wet Film Thickness of DC315 Thermal Barrier & Ignition Barrier

What is wet film thickness (WFT)? Coating are often used for thermal barriers over various substrates such as spray polyurethane foam, wood, I-joist and gypsum. When applying a coating to any substrate, the thickness of the coating is extremely important and needs to be measured and recorded accurately. Wet film thickness, or WFT, is the measured thickness of any liquid applied coating while it is still wet. A wet film thickness gauge should be used by the applicator, as the coating is being applied, to ensure that the average applied thickness is representative of the tested wet film thickness required to meet Code. Industry best practice is to measure the WFT of freshly sprayed coating within 3 minutes of application. *See Figure 1-3*

Why is WFT important? Measuring the WFT of a coating enables the applicator to adjust the spray gun speed, number of spray passes and to make spray gun adjustments to ensure sufficient coating is applied to meet the fire testing without over applying which negatively affects your profits.

*Code compliance made easy- measuring WFT of DC315 coating during the application process and recording it on a Job Work Record helps ensure your Authority Having Jurisdiction (AHJ) has documentation to support their inspection. IFTI Job Work Record

What is the relationship between WFT and profitability? Not only does measuring WFT ensure you are maximizing the yield of DC315, but DC315 Thermal Barrier and Ignition Barrier applications have also been third party tested to be applied in one coat (including ceilings) with no sagging, bagging or dripping. Single coat applications reduce labor by 50% when compared to less viscous products. One Coat 3rd Party Test Report

How is the WFT requirement determined? Wet Film Thickness requirements are determined by measuring the applied coating used to meet the criteria of full scale fire tests of audited, listed and sampled DC315 conducted at IAS certified 3rd party testing facilities. Every blend of every brand of SPF must be tested individually and the applied WFT for that specific system will be Listed on the coatings certified test or evaluation report. DC315 is the most tested and approved product for use as a Thermal Barrier or Ignition Barrier fire protective coating over hundreds of blends/brands of Spray Foam Insulation all tested for IBC / IRC code compliance. DC315 Testing Matrix.

Using Wet Film Notched Gauges & Medallions to Document, Install and Verify Coating Thickness

• The surface of SPF insulation is inherently irregular, for ease of Wet Film Thickness measurements IFTI suggests placing metal plates (aka Medallions) on the surface of the foam, prior to installing the coating.
• Medallions provide a smooth level surface that provides for a more accurate WFT measurement.
• Once the coating is applied, use your WFT gauge to measure WFT on the front side of the Medallion taking several measurements to determine the average WFT that has been applied.
• Once dried, remove the Medallions and write the job date, job location, applicator name and the average Wet Film measured, on the back of each plate. *(See Figure 3).*

Using a Wet Film Notched Gauge & Medallions to Verify the installed Coating Thickness

- The surface of SPF insulation is inherently irregular, for ease of Wet Film Thickness measurements IFTI suggests placing metal plates (aka Medallions) on the surface of the foam, prior to installing the coating.
- Medallions provide a smooth level surface that provides for a more accurate WFT measurement.
- Once the coating is applied, use your WFT gauge to measure WFT on the front side of the Medallion taking several measurements to determine the average WFT that has been applied.
- Once dried, remove the Medallions and write the job date, job location, applicator name and the average Wet Film measured, on the back of each plate. (See Figure 3).
- Collect your Medallions and keep them on file. They are a great tool to present your code official or Fire Marshal.
- Medallions allow for future verification of the Dry Film Thickness (DFT) using calipers, electronic or magnetic measuring tools.
- When measuring WFT on the SPF surface where no Medallions were used, take multiple measurements using the Notched Gauge, avoiding high and low spots on the SPF surface.
- Whether measuring WFT with or without Medallions be sure to record the applied WFT on **IFTI Job Work Record**

View Video Below

How to measure Wet Film Thickness WFT

How to Measuring Wet Film Thickness of Coatings on Spray Foam Insulation using the Medallion Method

Figure 1. Notch Type Wet Film gauge

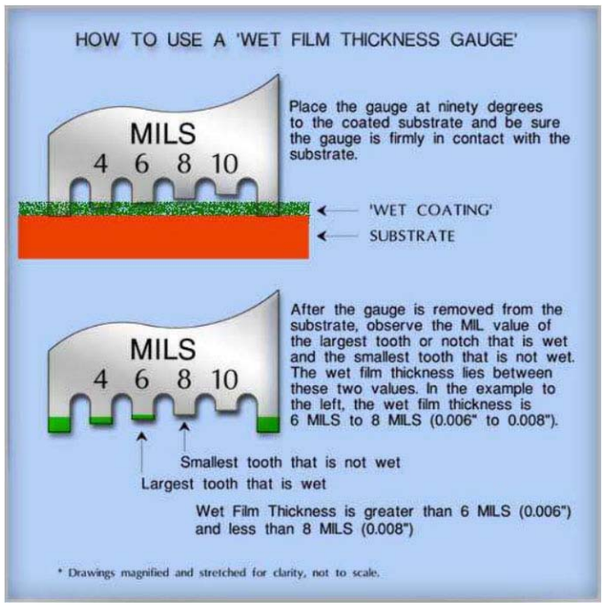

Figure 2. Details on measuring WFT using a notch type wet film gauge.
Image courtesy of www.geionline.com

Figure 3. Front and back of Medallions. These mending plates can be purchased at local hardware stores.

Specifications of Medallions

- Mending Plates
- Model # TP15
- UPC # 031107654803

Available at local or online hardware stores

VENTILATION GUIDE FOR DC315

IT IS VERY IMPORTANT TO HAVE PROPER VENTILATION DURING APPLICATION AND CURING OF DC315

Ventilation is critical for proper application and curing of DC315 coating. Listed below are some of the best practices in the industry when applying latex coatings such as DC315. **Failure to comply with ventilation guidelines may affect the adhesion of DC315.**

The Drying and Curing Process: DC315 is approximately 67% solid and 33% liquid. Simply stated, for every 5 gallons of DC315 applied on a job site, almost 2 gallons of liquid will be evaporated into the airspace as the coating cures. The need to create a negative pressure in the enclosed area ensures the humid air that contains the evaporated components of both the SPF and coating are evacuated to the exterior unoccupied area and not being forced into the occupied/living area or job area. The more liquid that evaporates from the coating the more stable and cured it becomes. The drying time of DC315 when applied at 18-24 Mils WFT, is longer than simply "dry to touch" and may take 48-72 hours for initial curing. Spraying DC315 thicker than 18-24 intentionally or unintentionally, or spraying the coating over an uncured substrate, may potentially create problems in the drying, curing process which may lead to adhesion issues. DC315 has not cured until all liquids have completely evaporated. Once fully cured DC315 becomes a durable and inert fire protective finish.

Impact of Temperature and Humidity When Applying and Curing DC315: Proper ambient air, substrate, coating temperatures, and low humidity are necessary for the adhesion and curing of DC315. Lower temperatures or higher humidity will prevent DC315 from curing properly and may lead to blistering and delamination. Another problem associated with the slower drying is the lingering odor associated with the evaporation of the liquid components. Under normal drying conditions these odors, which are similar to any low-odor latex paint, are quickly dissipated and do not cause any lingering issues.

The use of space heaters is necessary in colder temperatures to ensure the application area is maintained within specified temperatures found on the application guide. Do not use combustion source heaters, commonly referred to as "Salamanders" as these units add a significant amount of moisture as a byproduct of the combustion process. Indirect heaters or electric element forced air are ideal for maintaining temperature and aiding in the control of excess humidity. **Temperatures must be maintained above 50°F (10°C) for the duration of the application and curing process.**

Relative Humidity vs. Humidity

Absolute humidity is the water content of air. **Relative humidity**, expressed as a percent, measures the current absolute humidity relative to the maximum for that temperature. Temperature will affect the relative humidity. Warm air is less dense, and therefore the molecules are further spread apart, allowing more moisture between them. Cooler air causes the molecules to draw closer together limiting the amount of water the air can hold. The air acts like a sponge and absorbs water through the process of evaporation, which is how DC315 coatings cure.

Handheld Hygrometers like the one pictured here are ideal for monitoring Relative Humidity (RH). Ensure you monitor levels throughout the application process and adjust airflows as needed to keep the RH within specified limits. In certain cases, this may continue for several days following application. **RH must be maintained below 85% for the duration of the application and curing process.** Follow these steps below to control relative humidity throughout the application and curing process:

1. **Ventilation or air exchange is critical in unvented areas, areas with limited air movement, or if humidity is 65% or higher.** This is particularly important following the installation of SPF, due to its inherent air barrier properties. Care must be taken in unvented attics or spaces without mechanical ventilation, even if the application area is large. The larger the project, the more coating is installed and therefore more moisture is going to be added to the air.
2. **If relative humidity is above 65%, fans must be used to circulate air.** It is required to maintain at least 0.3 air changes per hour in the application area for 48-72 hours following application.
3. Installer must measure temperature and humidity for the duration of the application and initial curing. Results shall be recorded on the daily work report. Daily work reports can be downloaded at www.painttoprotect.com or by calling IFTI at 949.975.8588.

Installation Requirements:

- Apply DC315 when temperatures are above 10°C (50°F). Ideal conditions are 16°C-32°C (62°F to 90°F) and 65% Relative Humidity. **If temperatures are below 10°C (50°F) or when humidity is above 85% or temperature is within 5°C of dew point CONTACT IFTI for detailed application instructions.**
- Do not use propane or kerosene heaters to heat a closed space.
- Inspect the foam substrate to ensure it is dry, clean, and secured to its substrate. Use a moisture meter to ensure that the foam's moisture level is below 19%. **Also ensure that the foam's surface is consistent with an "Orange Peel" texture.**
- Use an "exhaust" blower at one end of the enclosed space and run a hose to the exterior of the building for removing stale air. Ensure large volume air output to maintain a negative pressure in the application area compared to the surrounding area.
- Air flow must be across the area DC315 was applied and not directly on it.
- Place a filter over intake of the exhaust to avoid spreading overspray. Check air flow periodically to make sure air is still moving.

- **If the relative humidity is greater than 85% at the end of spraying and cross ventilation is not drastically reducing it, then a mechanical industrial dehumidifier is required.**
- It is very important to maintain air exchange. Installer must avoid sealing up a work space at night with no active air exchange as it may dramatically affect curing and adhesion. Special attention and details should be given to areas that do not have HVAC systems or passive ventilation. Contact IFTI for application instructions in unconditioned spaces, areas of high humidity or cold storage buildings.

INTERNATIONAL FIREPROOF TECHNOLGY INC.

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Job Site Label

Job Address: ____________________

Product: __________ Substrate: ____________________

WFT Measured : __________ Total Square Feet: __________

Company: ____________________

Phone: ____________________

Date: ____________________

Signature: ____________________

INTERNATIONAL FIREPROOF TECHNOLGY INC.

The Ultimate in Fire Protection 949.975.8588

Job Site Label

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