



No-Burn[®], Inc.
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NO-BURN[®] PLUS, PLUS THB, PLUS XD, PLUS MIH, ORIGINAL, ORIGINAL MIH, WOOD GARD AND WOOD GARD MIH.

CSI Division:
 09 00 00 FINISHES
 CSI Section:
 09 96 46 Intumescent Paints
 09 96 43 Fire-Retardant Coatings

1.0 SCOPE OF EVALUATION

1.1 Compliance to the following codes & regulations:

- 2018, 2015, 2012, 2009 and 2006 International Building Code[®] (IBC)
- 2018, 2015, 2012, 2009 and 2006 International Residential Code[®] (IRC)
- 2018, 2015, 2012, 2009 and 2006 International Existing Building Code[®] (IEBC)

1.2 Evaluated in accordance with:

- IAPMO UES EC017, Evaluation Criteria for Field-Applied Fire Protective Coatings
- ICC-ES AC377, Acceptance Criteria for Spray-Applied Foam Plastic Insulation
- ICC-ES AC456 Acceptance Criteria for Fire-Protective Coatings Applied to Spray-Applied Foam Plastic Insulation Installed Without a Code-Prescribed Thermal Barrier

1.3 Properties assessed:

- Surface burning characteristics
- Interior finishes
- Alternative thermal barrier assemblies
- Alternative ignition barrier assemblies
- Fire resistance

2.0 PRODUCT USE

No-Burn[®] coatings comply with the IBC[®], IRC[®] and IEBC[®] for use in new and existing buildings. Applied to the substrates listed in [Tables 1](#) through [5](#) of this report, No-Burn[®] coatings provide the following attributes:

1. Surface burning characteristics and interior finish in accordance with Section 3.2 of this report.
2. Alternative thermal barrier assemblies in accordance with Section 3.3 of this report.
3. Alternative ignition barrier assemblies in accordance with Section 3.4 of this report.
4. Fire resistance performance in accordance with Section 3.5 and 3.6 of this report.

3.0 PRODUCT DESCRIPTION

3.1 Product information

3.1.1 No-Burn[®] Original, No-Burn[®] Original Mih, No-Burn[®] Wood Gard and No-Burn[®] Wood Gard Mih are transparent, water-based liquids, packaged in 5-gallon (18.9 L) pails and 55-gallon (208 L) drums. The coatings have a shelf life of two years when stored in unopened containers between 40°F and 90°F (4.4°C and 32.2°C). No-Burn[®] Original, No-Burn[®] Original Mih, No-Burn[®] Wood Gard and No-Burn[®] Wood Gard Mih shall be mixed with a power mixing wand or equivalent at or between 500-900 RPM for a mixing time of 5 minutes per container.

3.1.2 No-Burn[®] Plus, No-Burn[®] Plus ThB, No-Burn[®] Plus XD, and No-Burn[®] Plus Mih are white, water-based latex liquids, which exhibit intumescent properties when exposed to elevated temperatures and flame, packaged in 5-gallon (18.9 L) pails and 55-gallon (208 L) drums. No-Burn[®] Plus, No-Burn[®] Plus XD, and No-Burn[®] Plus Mih have a shelf life of two years when stored in unopened containers between 40°F and 90°F (4.4°C and 32.2°C). No-Burn[®] Plus ThB has a shelf life of 1 year when stored in unopened containers between 40°F and 90°F (4.4°C and 32.2°C). No-Burn[®] Plus, No-Burn[®] Plus XD, and No-Burn[®] Plus Mih shall be mixed with a power mixing wand or equivalent at or between 500-1500 RPM for a mixing time of 5 minutes per container. No-Burn[®] Plus ThB shall be mixed with a power mixing wand or equivalent at or between 800-1200 RPM for a mixing time of 5 minutes per container.

3.2 Surface Burning Characteristics: As shown in [Table 1](#) of this report, No-Burn[®] Plus, No-Burn[®] Plus ThB, No-Burn[®] Plus Mih, No-Burn[®] Original, No-Burn[®] Original Mih, No-Burn[®] Wood Gard and No-Burn[®] Wood Gard Mih provide a Class A interior finish when applied to the specified substrates. When tested in accordance with ASTM E84 or UL 723, the listed coatings provide flame spread indices complying with ranges set forth for interior finishes in IBC[®] Section 803.1 of the 2018, 2015, 2012, 2009, and 2006 IBC[®], Section R302.9 of the 2018, 2015, 2012 and 2009 IRC[®], and Section R315.1 of the 2006 IRC[®].

3.3 Alternative Thermal Barrier Assemblies: No-Burn[®] Plus ThB when applied to spray-applied polyurethane foam insulation listed in [Table 2](#) of this report may be installed without a prescriptive 15-minute thermal barrier in accordance with Section 2603.9 of the 2018 and 2015 IBC[®], Section 2603.10 of the 2012 IBC[®], Section 2603.4 of the 2009 and 2006 IBC[®], Section R316.6 of the 2018, 2015 and 2012 IRC[®], Section R316.4 of the 2009 IRC[®] and Section R314.4 of the 2006 IRC[®]. The assemblies noted in Table 2 of this report meet the wall and ceiling finish requirements of Sections 803.1 and 803.4 of the 2018 IBC[®], 2015 IBC[®], 2012 IBC[®] and 2009 IBC[®], Section 803.1 of the 2006 IBC[®], Sections R302.9 and R302.10.1 of the 2018, 2015, 2012 and 2009 IRC[®] and Sections R315.1 and R316.1 of the 2006 IRC[®]. Also, as shown in [Table 2](#) of this report, No-Burn[®] Plus provides an alternative thermal barrier assembly for walls and





ceilings when applied to Structural Insulated Panels (SIPs) with a maximum combined thickness of 12 ³/₈ inches (314 mm), consisting of a composite of nominal 11 1/2 inches (292 mm) thick expanded polystyrene foam plastic core, (1.0 pcf [16 kg/m³], density) sandwiched between two 7/16-inch-thick (11 mm) oriented strand board (OSB) sheets in accordance with Section 2603.9 of the 2018 and 2015 IBC[®], Section 2603.10 of the 2012 IBC[®], Section 2603.4 of the 2009 and 2006 IBC[®] and Section R316.6 of the 2018, 2015 and 2012 IRC[®], Section R316.4 of the 2009 IRC[®] and R314.4 of the 2006 IRC[®].

3.4 Alternative Ignition Barrier Assemblies: No-Burn[®] Plus, No-Burn[®] Plus XD and No-Burn[®] Plus ThB when applied to the spray applied polyurethane foam insulations listed in [Table 3](#) of this report may be installed in an attic or crawl space without a prescriptive ignition barrier in accordance with Sections 2603.4.1.6 of the 2018, 2015, 2012, 2009 and 2006 IBC[®] and Sections R316.5.3 and R316.5.4 of the 2018, 2015, 2012, and 2009 IRC[®] and Section R314.5.3 and R314.5.4 of the 2006 IRC[®]. As shown in [Table 3](#) of this report, No-Burn[®] Plus XD and ZIP System[®] R-Sheathing may be installed in an attic or crawl space without a prescriptive ignition barrier. ZIP System[®] R-Sheathing (Insulating Sheathing), consists of 7/16-inch-thick (11 mm) ZIP System[®] Wall Sheathing with a layer of maximum 1 inch thick (25.4 mm) rigid polyisocyanurate foam plastic board laminated to its interior face using PVA adhesive. The ZIP System[®] Wall Sheathing is OSB complying with U.S. DOC PS 2 for wood structural panels as Exposure 1 with a 24/0, 24/16, or Wall 24 span rating and is overlaid on the exterior side with a Grade D water-resistant barrier. The foam plastic insulation boards have a nominal density of 2.0 pcf (32 kg/m³), compressive strengths of 22 psi (152 kPa) and 20 psi (138 kPa), respectively, vapor permeance of less than 1.1 perm, flame-spread indices of 75 or less and smoke- developed indices of 450 or less. The ZIP System[®] R- Sheathing panels are nominally 4 feet (1219 mm) wide by 8, 9, 10, 11 or 12 feet (2438, 2743, 3048, 3353, or 3658 mm) long and have square-finished-edge or machined-edge profile.

No-Burn[®] Plus, No-Burn[®] Plus XD and No-Burn[®] Plus ThB may be installed in an attic or crawl space without a prescriptive ignition barrier when all of the following conditions are met:

- Entry to the attic or crawl space is only to repair, maintain, and service utilities and no storage are permitted.
- There are no interconnected attic or crawl space areas.
- Air in the attic or crawl space is not circulated to other parts of the building.
- Attic ventilation is provided when required by Section 1202.2 of the 2018 IBC[®] and 1203.2 of the 2015, 2012, 2009 and 2006 IBC[®] or Section R806 of the 2018, 2015, 2012, 2009 and 2006 IRC[®], except when air impermeable insulation is permitted in unvented attics in accordance with Section R806.5 of the 2018, 2015 and 2012 IRC[®], Section R806.4 of the 2009 and 2006 IRC[®], Under-floor (crawl space)

ventilation is provided, when required, by Section 1202.4 of the 2018 IBC[®] and 1203.4 of the 2015 IBC[®], Section 1203.3 of the 2012, 2009 and 2006 IBC[®] or Section R408.1 of the 2018, 2015, 2012, 2009 and 2006 IRC[®], as applicable.

- The foam plastic insulation is limited to the maximum thickness and density tested, shown in [Table 3](#) of this report.
- Combustion air is provided in accordance with Section 701 of the 2018, 2015, 2012 and 2009 IMC[®], or Section 701 and 703 of the 2006 IMC[®].

3.5 Fire Resistance (Table 4): As shown in [Table 4](#) of this report, No-Burn[®] Plus provides fire resistance to engineered wood framing members or components when applied to both sides of the web and top and bottom flanges and the interior facing side of the subfloor, once the components are installed, as an alternative to the 2-by-10 dimension lumber prescribed in Section R302.13, Exception 4 of the 2018 and 2015 IRC[®] and Section R501.3, Exception 4 of the 2012 IRC[®]. At a minimum, the assembly shall be constructed with the framing members or components in accordance with [Table 4](#) of this report affixed to the rim board with 16d common or 10d box nails or fasteners in accordance with Table R602.3 (1) of the 2018 and 2015 IRC[®] or 8d nails or fasteners in accordance with the 2012, 2009 and 2006 IRC[®], 23/32" tongue and groove oriented strand board subfloor affixed with 8d common nails or fasteners in accordance with Table R602.3 (1).

3.6 Fire Resistance (Table 5): As shown in [Table 5](#) of this report, No-Burn[®] Plus provides fire resistance to engineered wood framing members or components when applied to both sides of the web and top and bottom flanges, once the components are installed, as an alternative to the 2-by-10 dimension lumber prescribed in Section R302.13, Exception 4 of the 2018 and 2015 IRC[®] and Section R501.3, Exception 4 of the 2012 IRC[®].

4.0 DESIGN AND INSTALLATION

4.1 General: The coatings shall be field-applied to substrates in accordance with this report and the No-Burn[®], Inc. published processes. When coatings are applied in accordance with Section 3.5 or Section 3.6 for Fire Resistance, the applicator shall be certified by No-Burn[®], Inc. Copies of this report and the No-Burn[®], Inc. instructions shall be available at the jobsite. Where conflicts occur, the more restrictive shall govern. Before and during coating application, substrate surfaces shall be dry, clean and free from loose debris, dirt, grease, oil and all prior coating materials such as paint, stains and sealers. The substrate shall not have, nor have been exposed to, treatments, chemicals, coatings, etc. Visual observation of the applied coatings varies. Opaque coatings will result in a distinctive white color. Transparent coatings may result in a distinctive color dye on the substrate. For verification of the wet applied thickness, a standard painter's thickness gauge shall be used during the application. The finished dry mil thickness will be 0.40-0.70 times the wet mil thickness. When verification of transparent coatings is required by the code official, field testing shall be



conducted as follows: flame from a propane- fueled torch shall be applied to the coated area and to a sample of uncoated substrate for a minimum of 10 seconds. The presence of the coating shall be observable through the comparison of the reactions of the coated and uncoated substrates to the flame.

The coatings shall be applied only to the specific substrates listed in [Tables 1](#) through 5 of this report. Immediately before placing the coatings, the applicator shall verify the moisture content of the substrates, as applicable, in accordance with [Table 1](#), [Table 2](#) (SIPs only), [Table 4](#) or [Table 5](#) of this report. Substrates shall be in their final position in the building, directly exposed to the interior, protected from the weather, in conditioned and unconditioned locations. Surface and ambient temperatures before and during application shall be 40°F (4.4°C) minimum. Surface temperatures shall not exceed 100°F (37.7°C) during application. Cure time is 24 hours minimum.

The coatings shall be applied at an application rate set forth in [Table 1](#), [Table 2](#), [Table 3](#), [Table 4](#) or [Table 5](#) of this report by spraying, roller or brush. When coatings are applied in accordance with Section 3.5 and [Table 4](#) or Section 3.6 and [Table 5](#), the frequency of thickness measurements with a wet film thickness gauge during the application of each coat shall be at a minimum, measured once every 100 ft² (9.29 m²) of surface area.

4.2 Design: No-Burn® Plus, No-Burn® Plus ThB, No-Burn® Plus XD, No-Burn® Plus Mih, No-Burn® Original, No-Burn® Original Mih, No-Burn® Wood Gard and No-Burn® Wood Gard Mih shall be applied in one coat and may be overcoated with latex paint per manufacturer’s instructions.

5.0 LIMITATIONS

The No-Burn® coatings described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The coatings shall be applied in accordance with this report, the manufacturer’s instructions and the applicable code. In the event of a conflict between the manufacturer’s instructions and this report, the more restrictive shall prevail.

5.2 Application is limited to the substrates listed in [Tables 1](#) through 5 of this report.

5.3 When coatings are applied in accordance with Section 3.5 or Section 3.6 of this report for Fire Resistance, the coatings shall be applied prior to installation of mechanical, electrical and plumbing components.

5.4 When coatings are applied in accordance with Section 3.5 or Section 3.6 of this report for Fire Resistance, the No-Burn® qualified applicator shall affix a No-Burn®, Inc. issued label, shown in [Figure 1](#) of this report, to the substrate where the coating has been applied; at a minimum, one No-Burn®, Inc. issued label shall be affixed every 10,000 feet² (929.03 m²) of floor area.

5.5 When coatings are applied in accordance with Section 3.5 or Section 3.6 of this report for Fire Resistance, an installation certificate as shown in [Figure 2](#) of this report shall be completed by the certified applicator and submitted to the code official and No-Burn®, Inc.

5.6 No-Burn® coatings shall be applied to areas within the weatherproofing membrane or surfaces not exposed to weather, where the substrate’s in-service dry-use moisture content conditions are expected to be at or less than the recommended levels in accordance with [Table 1](#), [Table 2](#) (SIPs only), [Table 4](#) or [Table 5](#) of this report.

5.7 Other inspections may be required when determined to be necessary by the code official in accordance with Section R109.1.5 of the 2018, 2015, 2012, 2009 and 2006 IRC®. Special inspection shall be required when determined to be necessary by the code official in accordance with Section 1705.1.1 of the 2018, 2015 and 2012 IBC® or Section 1704.15 of the 2009 IBC® or 1704.13 of the 2006 IBC®. A statement of special inspection in accordance with Section 1704.2.3 of the 2018, 2015 and 2012 IBC® or 1705 of the 2009 or 2006 IBC® shall be submitted.

5.8 The coatings are manufactured in Sandusky, Ohio, under a quality control program with inspections under the supervision of IAPMO UES.

6.0 SUBSTANTIATING DATA

Data in accordance with the IAPMO UES Evaluation Criteria for Field-Applied Fire Protective Coatings (EC017) adopted February 2014 (editorially revised October 2019).

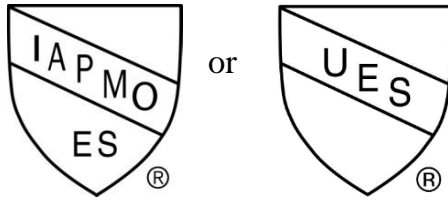
Data in accordance with ICC-ES AC377 Acceptance Criteria for Spray-Applied Foam Plastic Insulation, dated April 2016, (editorially revised April 2018) including test reports in accordance with Appendix X of AC377.

Data in accordance with ICC-ES AC456 Acceptance Criteria for Fire-Protective Coatings Applied to Spray-Applied Foam Plastic Insulation Installed Without a Code-Prescribed Thermal Barrier, dated October 2015, (editorially revised July 2018).

Reports of fire tests conducted in accordance with ASTM E84, ASTM E119, NFPA 286 (AC377, Appendix X), UL 723, and UL 1715.

7.0 IDENTIFICATION

Containers of the coatings are identified by a label affixed on product packaging. The label shall include the No Burn®, Inc., name and address, product name, batch number, expiration date, application instructions, name or logo of the inspection agency (Intertek Testing Services NA Ltd.) and the IAPMO Uniform ES Mark of Conformity; and the Evaluation Report Number (ER-305) to identify the products recognized in this report. A die-stamp label may also substitute for the label. Either Mark of Conformity may be used as shown below:



IAPMO UES ER-305

8.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on No-Burn[®] Plus, No-Burn[®] Plus ThB, No-Burn[®] Plus XD, No-Burn[®] Plus Mih, No-Burn[®] Original, No-Burn[®] Original Mih, No-Burn[®] Wood Gard and No-Burn[®] Wood Gard Mih to assess conformance to the codes shown in section 1.0 of this report and serves as documentation of the product certification. Products are manufactured at locations noted under Report Holder, this report is under a quality control program with periodic inspection under the supervision of IAPMO UES.

NO-BURN[®] INSTALLATION LABEL

Product Name:

Certified Applicator Number:

X00000000NB0000

IAPMO UES ER 305

NO-BURN[®] INC.

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Figure 1

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

TABLE 1 - CLASS A INTERIOR FINISH								
SUBSTRATE	MAX MOISTURE CONTENT	NO-BURN [®] PRODUCT NAME						
		Plus ²	Plus ThB	Plus Mih	Original	Original Mih	Wood Gard	Wood Gard Mih
Douglas Fir	19%	6 mils wet (4 mils dry) 275 sq. ft. per gallon	NR	6 mils wet (4 mils dry) 275 sq. ft. per gallon	5 mils wet (2 mils dry) 300 sq. ft. per gallon	NR	5 mils wet (3 mils dry) 300 sq. ft. per gallon	5 mils wet (3 mils dry) 300 sq. ft. per gallon
Red Oak	19%	6 mils wet (4 mils dry) 275 sq. ft. per gallon	NR	NR	NR	NR	NR	NR
Oriented Strand Board	16%	8 mils wet (5 mils dry) 200 sq. ft. per gallon	8 mils wet (5 mils dry) 200 sq. ft. per gallon	NR	5 mils wet (2 mils dry) 300 sq. ft. per gallon	NR	NR	5 mils wet (3 mils dry) 300 sq. ft. per gallon
Southern Yellow Pine	19%	NR	NR	NR	NR	5 mils wet (2 mils dry) 300 sq. ft. per gallon	NR	NR

¹NR = Not Recognized

²Coating may be overcoated with up to seven coats of latex paint with a pH of 7 to 8



TABLE 2 –ALTERNATIVE THERMAL BARRIER ASSEMBLIES

SUBSTRATE	NO-BURN® PRODUCT NAME	MAXIMUM THICKNESS (in) Walls & Vertical Surfaces	MAXIMUM THICKNESS (in) Ceilings, Underside of Roof Sheathing/Rafters & Floors	APPLICATION OF NO-BURN® COATING				Evaluation Report ^{1,4}
				MINIMUM INSTALLED THICKNESS (mils)		THEORETICAL APPLICATION RATE		
				Wet Film	Dry Film	Square Feet Per Gallon	Gallons Per 100 Square Feet	
BASF Enerlite G Open Cell Spray Foam	Plus ThB ²	8	14	14	9	115	0.87	CCRR-1032
BASF Enerlite NM Open Cell Spray Foam	Plus ThB ²	8	14	14	9	115	0.87	CCRR-1032
BASF Enerlite IB-418 Open Cell Spray Foam	Plus ThB ²	8	14	14	9	115	0.87	CCRR-1032
BASF Spraytite SP Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	CCRR-1031
BASF Spraytite 158 Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	CCRR-1031
BASF Spraytite 81205 Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	CCRR-1031
BASF Spraytite 178 Closed Cell Spray Foam	Plus ThB ²	6	8	17	11	94	1.06	CCRR-1031
BASF Spraytite 81206 Closed Cell Spray Foam	Plus ThB ²	6	8	17	11	94	1.06	CCRR-1031
BASF Walltite HP+ Closed Cell Spray Foam	Plus ThB ²	6	8	17	11	94	1.06	CCRR-1031
BASF Walltite US-N Closed Cell Spray Foam	Plus ThB ²	6	8	17	11	94	1.06	CCRR-1031
BASF Walltite US Closed Cell Spray Foam	Plus ThB ²	6	8	17	11	94	1.06	CCRR-1031
BASF Spraytite Comfort Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	CCRR-0374
BASF Spraytite Comfort Plus Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	CCRR-0374
BASF Spraytite Comfort XL Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	CCRR-0374
BASF Spraytite LWP-L Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	CCRR-0374
BASF Walltite LWP Closed Cell Spray Foam	Plus ThB ²	6	8	17	11	94	1.06	CCRR-0374
BASF Walltite HP+S Closed Cell Spray Foam	Plus ThB ²	6	8	17	11	94	1.06	CCRR-374
BASF Walltite 200 Closed Cell Spray Foam	Plus ThB ²	6	8	17	11	94	1.06	ESR-2642
Carlisle SeaTite Pro Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	ER-624
Carlisle Foamsulate 50 HY Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	ER-540
Carlisle SeaTite Pro High Yield Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	ER-623
Carlisle Foamsulate 50 Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	ER-351
Carlisle SeaTite Pro No Mix Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	ER-616
Carlisle SeaTite Pro Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	ER-621
Carlisle Foamsulate Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	ER-626
Carlisle SeaTite Pro One Zero Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	ER-640
Carlisle Foamsulate HFO Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	ER-650
Energy One America EOA 500 Open Cell Spray Foam	Plus ThB ²	9	14	14	9	115	0.87	ESR-3686
Energy One America EOA 2000 Closed Cell Spray Foam	Plus ThB ²	6	9.5	14	9	115	0.87	ER-443
Gaco Western EZSpray F4500 Open Cell Spray Foam	Plus ThB ²	12	16	14	9	115	0.87	CCRR-1107
Gaco Western 183M Closed Cell Spray Foam	Plus ThB ²	6.5	9	14	9	115	0.87	CCRR-1002
Gaco Western OnePass F1850 Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	CCRR-1043
Gaco Western OnePass Low GWP F1880 Closed Cell Spray Foam	Plus ThB ²	9	12.5	14	9	115	0.87	CCRR-1106
General Coatings Ultra-Thane 050 Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	CCRR-0358
General Coatings Ultra-Thane 050 Max Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	CCRR-0358
General Coatings Ultra-Thane 050 Max Pro Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	CCRR-0358



EVALUATION REPORT

Number: 305

Originally Issued: 03/21/2014

Revised: 03/26/2021

Valid Through: 03/31/2022

TABLE 2 CONTINUED –ALTERNATIVE THERMAL BARRIER ASSEMBLIES

SUBSTRATE	NO-BURN® PRODUCT NAME	MAXIMUM THICKNESS (in) Walls & Vertical Surfaces	MAXIMUM THICKNESS (in) Ceilings, Underside of Roof Sheathing/Rafters & Floors	APPLICATION OF NO-BURN® COATING				Evaluation Report ^{1,4}
				MINIMUM INSTALLED THICKNESS (mils)		THEORETICAL APPLICATION RATE		
				Wet Film	Dry Film	Square Feet Per Gallon	Gallons Per 100 Square Feet	
General Coatings Ultra-Thane 050X Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	CCRR-0362
General Coatings Ultra-Thane 170 Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	CCRR-0345
General Coatings Ultra-Thane 202 Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	CCRR-0345
General Coatings Ultra-Thane 202 High-Lift Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	CCRR-0345
General Coatings Ultra-Thane 205 HFO Closed Cell Spray Foam	Plus ThB ²	8	12	14	9	115	0.87	CCRR-0375
General Coatings Ultra-Thane 205 HFO High Lift Closed Cell Spray Foam	Plus ThB ²	8	12	14	9	115	0.87	CCRR-0375
Huntsman (Demilec) Sealection 500 Open Cell Spray Foam	Plus ThB ²	8	14	16	11	100	1.0	CCRR-1063
Huntsman (Demilec) Sealection NM Open Cell Spray Foam	Plus ThB ²	8	14	16	11	100	1.0	ESR-2668
Huntsman (Demilec) Agribalance Open Cell Spray Foam	Plus ThB ²	8	14	16	11	100	1.0	ESR-2600
Huntsman (Demilec) APX 1.2 Open Cell Spray Foam	Plus ThB ²	8	14	16	11	100	1.0	ESR-3470
Huntsman (Demilec) Heatlok HFO High Lift Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	16	11	100	1.0	ESR-4073
Huntsman (Demilec) Heatlok HFO Pro Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	16	11	100	1.0	ER-565
Huntsman (Demilec) Heatlok XT-s Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	16	11	100	1.0	ESR-3824
Huntsman (Demilec) Heatlok XT-w Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	16	11	100	1.0	ESR-3883
Huntsman (Demilec) Heatlok ECO Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	16	11	100	1.0	ESR-3198
Huntsman (Icynene) Classic Open Cell Spray Foam	Plus ThB ²	6	14	16	11	100	1.0	ESR-1826
Huntsman (Icynene) Classic Ultra Open Cell Spray Foam	Plus ThB ²	6	14	16	11	100	1.0	ESR-1826
Huntsman (Icynene) Classic Ultra Select Open Cell Spray Foam	Plus ThB ²	6	14	16	11	100	1.0	ESR-1826
Huntsman (Icynene) Classic Plus Open Cell Spray Foam	Plus ThB ²	6	14	16	11	100	1.0	ESR-1826
Huntsman (Icynene) Prime Gold Open Cell Spray Foam	Plus ThB ²	6	14	16	11	100	1.0	ESR-4323
Huntsman (Icynene) No Mix Open Cell Spray Foam	Plus ThB ²	8 ½	14	14	9	115	0.87	CCRR-1123
Huntsman (Icynene) ProSeal Closed Cell Foam	Plus ThB ²	4	8	14	9	115	0.87	ESR-3500
Huntsman (Icynene) ProSeal LE Closed Cell Foam	Plus ThB ²	4	8	14	9	115	0.87	ESR-3500
Huntsman (Icynene) ProSeal Eco Closed Cell Foam	Plus ThB ²	4	8	14	9	115	0.87	ESR-3493
Huntsman (Icynene) ProSeal HFO Closed Cell Foam	Plus ThB ²	4	8	14	9	115	0.87	CCRR-1108
Huntsman (Icynene) ProSeal HFO CW Closed Cell Foam	Plus ThB ²	4	8	14	9	115	0.87	CCRR-1108
Huntsman (Icynene) MD-C-200 Closed Cell Foam	Plus ThB ²	4	8	14	9	115	0.87	ESR-3199
Huntsman (Lapolla) Foam-Lok FL 450 Open Cell Spray Foam	Plus ThB ²	6	14	16	11	100	1.0	ESR-4242
Huntsman (Lapolla) Foam-Lok FL 500 Open Cell Spray Foam	Plus ThB ²	8 ½	14	14	9	115	0.87	CCRR-1091
Huntsman (Lapolla) Foam-Lok FL 750 Open Cell Spray Foam	Plus ThB ²	6	14	16	11	100	1.0	ESR-4322
Huntsman (Lapolla) Foam-Lok FL 2000-3G Closed Cell Spray Foam	Plus ThB ²	6	9	14	9	115	0.87	ESR-3198
Huntsman (Lapolla) Foam-Lok FL 2000-4G Closed Cell Spray Foam	Plus ThB ²	6	9	14	9	115	0.87	CCRR-1025
Huntsman (Lapolla) Foam-Lok FL 2000 Closed Cell Spray Foam	Plus ThB ²	6	9	14	9	115	0.87	ESR-2629
ICP Handi-Foam HVLP LD Open Cell Spray Foam	Plus ThB ²	8	14	14	9	115	0.87	CCRR-1124
Johns Manville JM Corbond Open Cell Spray Foam	Plus ThB ²	8	14	14	9	115	0.87	CCRR-1079
Johns Manville JM Corbond OCX Open Cell Spray Foam	Plus ThB ²	8	14	14	9	115	0.87	ER-372
Johns Manville JM Corbond III Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	ER-146
Johns Manville JM Corbond IV Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	ER-146
Johns Manville JM GEN IV Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	ER-700
Johns Manville JM Corbond MCS Closed Cell Spray Foam	Plus ThB ²	6	8	14	9	115	0.87	ESR-3159
SES EasySeal 0.5 Open Cell Spray Foam	Plus ThB ²	10	14	14	9	115	0.87	ER-492
SES SucraSeal 0.5 Open Cell Spray Foam	Plus ThB ²	9	14	14	9	115	0.87	ESR-3375
SES Nexseal 2.0 Closed Cell Spray Foam	Plus ThB ²	6	9.5	14	9	115	0.87	ER-374
SES Nexseal 2.0 LE Closed Cell Spray Foam	Plus ThB ²	6	9.5	14	9	115	0.87	ER-374
SWD Quik-Shield 108 Open Cell Spray Foam	Plus ThB ²	8	14	14	9	115	0.87	CCRR-1051
SWD Quik-Shield 108YM Open Cell Spray Foam	Plus ThB ²	8	14	14	9	115	0.87	CCRR-1051
SWD Quik-Shield 112XC Closed Cell Spray Foam	Plus ThB ²	5	8	14	9	115	0.87	CCRR-1011
SWD Quik-Shield 118 Closed Cell Spray Foam	Plus ThB ²	5	8	14	9	115	0.87	CCRR-1093
SWD Quik-Shield 133 Closed Cell Spray Foam	Plus ThB ²	9	12.5	14	9	115	0.87	CCRR-0368
ThermoSeal OCX Open Cell Spray Foam	Plus ThB ²	8	14	16	11	100	1.0	CCRR-1095
ThermoSeal CCX Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	16	11	100	1.0	ESR-4137
UPC 500 Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	CCRR-0358
UPC 500 Max Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	CCRR-0358
UPC 500 Max Pro Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	CCRR-0358



TABLE 2 CONTINUED –ALTERNATIVE THERMAL BARRIER ASSEMBLIES

SUBSTRATE	NO-BURN® PRODUCT NAME	MAXIMUM THICKNESS (in) Walls & Vertical Surfaces	MAXIMUM THICKNESS (in) Ceilings, Underside of Roof Sheathing/Rafters & Floors	APPLICATION OF NO-BURN® COATING				Evaluation Report ^{1,4}
				MINIMUM INSTALLED THICKNESS (mils)		THEORETICAL APPLICATION RATE		
				Wet Film	Dry Film	Square Feet Per Gallon	Gallons Per 100 Square Feet	
UPC 500 OCX Open Cell Spray Foam	Plus ThB ²	8.5	14	14	9	115	0.87	CCRR-0362
UPC 1.7 Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	CCRR-0345
UPC 2.0 Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	CCRR-0345
UPC 2.0 HL Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	CCRR-0345
UPC 2.0 MAX Closed Cell Spray Foam	Plus ThB ²	6.5	9.5	14	9	115	0.87	CCRR-0345
UPC 2.0 HFO Closed Cell Spray Foam	Plus ThB ²	8	12	14	9	115	0.87	CCRR-0375
UPC 2.0 HFO High Lift Closed Cell Spray Foam	Plus ThB ²	8	12	14	9	115	0.87	CCRR-0375
Victory Polymers VPC-CC SuperLift Closed Cell Foam	Plus ThB ²	6.5	9.5	16	11	100	1.0	ESR-4334
Victory Polymers VPC-CC SuperYield Closed Cell Foam	Plus ThB ²	6.5	9.5	16	11	100	1.0	ESR-4334
Xtremeseal 0.5 LX Open Cell Spray Foam	Plus ThB ²	10	14	14	9	115	0.87	ER-538
Xtremeseal 2.0 LE Closed Cell Spray Foam	Plus ThB ²	6	9.5	14	9	115	0.87	ER-537
Structural Insulated Panel (SIPs) ³	Plus ²	N/A	N/A	12	7	134	0.75	N/A

For SI: 1 mil = 0.0254 mm, 1 inch = 25.4 mm, 1 gal= 3.79 L

¹Use of No-Burn® Plus ThB for use with any insulation product listed herein is conditional upon that insulation product's compliance to AC377 in an evaluation report by an approved evaluation entity. Users shall independently verify the current validity of any evaluation report referenced herein. ER-Evaluation Reports from IAPMO Uniform Evaluation Service, CCRR-Code Compliance Research Reports from Intertek, and ESR-Evaluation Service Reports from ICC-ES.

²No-Burn® Plus ThB or Plus may be overcoated with latex paint with a pH of 7 to 8

³The maximum moisture content is limited to 16%.

⁴Approval of the use of Plus ThB for use over any insulation product listed in Table 2 is subject to the insulation meeting the requirements in the appropriate evaluation report.

TABLE 3 –ALTERNATIVE IGNITION BARRIER ASSEMBLIES

SUBSTRATE	NO-BURN® PRODUCT NAME ¹	MAXIMUM THICKNESS (in) Walls, Vertical Surfaces & Attic Floors	MAXIMUM THICKNESS (in) Ceilings, Underside of Roof Sheathing/Rafters & Floors	APPLICATION OF NO-BURN® COATING			
				MINIMUM INSTALLED THICKNESS (mils)		THEORETICAL APPLICATION RATE	
				Wet Film	Dry Film	Square Feet Per Gallon	Gallons Per 100 Square Feet
BASF ENERTITE® G Open Cell Spray Foam	Plus XD or Plus ThB	11 ¼	16	6	4	267	0.37
BASF ENERTITE® NM Open Cell Spray Foam	Plus XD or Plus ThB	11 ¼	16	6	4	267	0.37
BASF SPRAYTITE® 158 and 81205 Closed Cell Spray Foam	Plus XD or Plus ThB	8	8	6	4	267	0.37
BASF SPRAYTITE® SP Closed Cell Spray Foam	Plus XD or Plus ThB	8	8	6	4	267	0.37
BASF Spraytite Comfort Closed Cell Spray Foam	Plus XD or Plus ThB	8	8	6	4	267	0.37
BASF Spraytite Comfort Plus Closed Cell Spray Foam	Plus XD or Plus ThB	8	8	6	4	267	0.37
BASF Spraytite Comfort XL Closed Cell Spray Foam	Plus XD or Plus ThB	8	8	6	4	267	0.37
BASF Spraytite LWP-L Closed Cell Spray Foam	Plus XD or Plus ThB	8	8	6	4	267	0.37
BASF ENERTITE® US Open Cell Spray Foam	Plus, Plus XD or Plus ThB	11 ¼	11 ¼	12	7	134	0.75
BASF SPRAYTITE® 178 and 81206 Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9 ¼	11 ¼	12	7	134	0.75
BASF WALLTITE® US Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9 ¼	11 ¼	12	7	134	0.75
BASF WALLTITE® US-N Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9 ¼	11 ¼	12	7	134	0.75
BASF WALLTITE® HP+ Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9 ¼	11 ¼	12	7	134	0.75
BASF Walltite® 200 Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9 ¼	11 ¼	12	7	134	0.75
BASF Walltite® LWP Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9 ¼	11 ¼	12	7	134	0.75
BASF Walltite® HP+S Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9 ¼	11 ¼	12	7	134	0.75
BASF COMFORT FOAM® 178 Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9 ¼	11 ¼	12	7	134	0.75
Carlisle SealTite Pro Open Cell Spray Foam	Plus XD or Plus ThB	11 ¼	16	6	4	267	0.37
Carlisle Foamsulate 50 HY Open Cell Spray Foam	Plus XD or Plus ThB	11 ¼	16	6	4	267	0.37
Carlisle SealTite Pro High Yield Open Cell Spray Foam	Plus XD or Plus ThB	11 ¼	16	6	4	267	0.37
Carlisle Foamsulate 50 Open Cell Spray Foam	Plus XD or Plus ThB	11 ¼	16	6	4	267	0.37
Carlisle SealTite Pro No Mix Open Cell Spray Foam	Plus XD or Plus ThB	11 ¼	16	6	4	267	0.37
Convenience Touch 'n Seal® 2.0 PCF Closed Cell Spray Foam	Plus XD or Plus ThB	2	2	8	5	200	0.5
DAP Touch N' Seal Class I FR Closed Cell Spray Foam	Plus XD or Plus ThB	2	2	8	5	200	0.5
Franklin Titebond Weathermaster Superfoam Closed Cell Spray Foam	Plus XD or Plus ThB	2	2	10	6	160	0.63
Gaco Western EZ Spray F4500 Open Cell Spray Foam	Plus ThB	12	16	6	4	267	0.37
Huber ZIP System® R-Sheathing Panel (R-3 & R-6)	Plus XD or Plus ThB	N/A	N/A	10	6	160	0.63
Huntsman (Demilec) SEALECTION® 500 Open Cell Spray Foam	Plus XD or Plus ThB	9 ¼	11 ¼	6	4	267	0.37



TABLE 3 –ALTERNATIVE IGNITION BARRIER ASSEMBLIES

SUBSTRATE	NO-BURN® PRODUCT NAME ¹	MAXIMUM THICKNESS (in) Walls, Vertical Surfaces & Attic Floors	MAXIMUM THICKNESS (in) Ceilings, Underside of Roof Sheathing/Rafters & Floors	APPLICATION OF NO-BURN® COATING			
				MINIMUM INSTALLED THICKNESS (mils)		THEORETICAL APPLICATION RATE	
				Wet Film	Dry Film	Square Feet Per Gallon	Gallons Per 100 Square Feet
Huntsman (Demilec) Sealection NM Open Cell Spray Foam	Plus XD or Plus ThB		11 ¼	6	4	267	0.37
Huntsman (Demilec) Agribalance® Open Cell Spray Foam	Plus XD or Plus ThB	9 ½	11 ½	10	6	160	0.63
Huntsman (Icynene) Classic Open Cell Spray Foam	Plus XD or Plus ThB	5 ½	14	6	4	267	0.37
Huntsman (Icynene) Classic Ultra Open Cell Spray Foam	Plus XD or Plus ThB	5 ½	14	6	4	267	0.37
Huntsman (Icynene) Classic Ultra Select Open Cell Spray Foam	Plus XD or Plus ThB	5 ½	14	6	4	267	0.37
Huntsman (Icynene) Classic Plus Open Cell Spray Foam	Plus XD or Plus ThB	8	14	6	4	267	0.37
Huntsman (Icynene) Prime Gold Open Cell Spray Foam	Plus XD or Plus ThB	5 ½	14	6	4	267	0.37
Huntsman (Icynene) ProSeal Eco Closed Cell Spray Foam	Plus XD or Plus ThB	7 ¼	9 ¼	5	3	320	0.31
Huntsman (Icynene) MD-C-200 Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	11 ¼	11 ¼	16	10	100	1.0
Huntsman (Lapolla) FL 450 Open Cell Spray Foam	Plus XD or Plus ThB	5 ½	14	6	4	267	0.37
Huntsman (Lapolla) FL 750 Open Cell Spray Foam	Plus XD or Plus ThB	8	14	6	4	267	0.37
ICP Handi-Foam HVLP LD Open Cell Spray Foam	Plus XD or Plus ThB	11 ¼	16	6	4	267	0.37
ICP Handi-Foam® E-84 Class 1(A) Closed Cell Spray Foam	Plus XD or Plus ThB	2	2	10	6	160	0.63
SWD Quik-Shield 106 Open Cell Spray Foam	Plus ThB	8	14	6	4	267	0.37
ThermoSeal OCX Open Cell Spray Foam	Plus XD or Plus ThB	9 ½	11 ¼	6	4	267	0.37
Tiger Foam® E-84 Fire Rated SPF Class 1 Spray Foam	Plus XD or Plus ThB	2	2	10	6	160	0.63

For SI: 1 mil = 0.0254 mm, 1 inch = 25.4 mm, 1 gal = 3.79 L

¹No-Burn® Plus, Plus XD or Plus ThB may be overcoated with latex paint with a pH of 7 to 8

TABLE 4 - FIRE RESISTANCE (See Section 3.5)

SUBSTRATE	MAX MOISTURE CONTENT	MINIMUM DESIGN						NO-BURN® PRODUCT ¹
		Minimum Depth (in)	Web Thickness (in)	Flange Depth x Width (in)	Moment (ft-lbs)	EI x 106 (in ² -lbs)	Vertical Shear (lbs)	Plus
I-joist: solid sawn flange	16%	9 ½	¾	1.5 x 2	2725	170	1475	15 mils wet (9 mils dry) 107 sq. ft. per gallon
I-joist: structural composite lumber flange	16%	9 ½	¾	1.125 x 2	2725	170	1475	15 mils wet (9 mils dry) 107 sq. ft. per gallon
I-joist: structural composite lumber flange	16%	11 7/8	¾	1.125 x 1.75	3025	260	1625	15 mils wet (9 mils dry) 107 sq. ft. per gallon

For SI: 1 mil = 0.0254 mm, 1 inch = 25.4 mm, 1 gal = 3.79 L, 1 lb = 0.45 kg

¹No-Burn® Plus may be overcoated with latex paint with a pH of 7 to 8

TABLE 5 - FIRE RESISTANCE (See Section 3.6)

SUBSTRATE	MAX MOISTURE CONTENT	MINIMUM DESIGN						NO-BURN® PRODUCT ¹
		Minimum Depth (in)	Web Thickness (in)	Flange Depth x Width (in)	Moment (ft-lbs)	EI x 10 ⁶ (in ² -lbs)	Vertical Shear (lbs)	Plus
I-joist: solid sawn flange	16%	9 ½	¾	1.5 x 2.5	2800	198	1185	23 mils wet (14 mils dry) 70 sq. ft. per gallon
I-joist: structural composite lumber flange	16%	11 7/8	¾	1.125 x 1.75	3025	260	1625	23 mils wet (14 mils dry) 70 sq. ft. per gallon

For SI: 1 mil = 0.0254 mm, 1 inch = 25.4 mm, 1 gal = 3.79 L, 1 lb = 0.45 kg

¹No-Burn® Plus may be overcoated with latex paint with a pH of 7 to 8



NO-BURN® PRODUCT APPLICATION CERTIFICATE

LOCATION OF BUILDING:

Address Lot # City State Zip

DESCRIPTION AND USE OF BUILDING:

Certified Applicator Name Company Certified Applicator Number

Moisture Meter Reading (Max % Noted in Tables 4 or 5)	Temp Reading (°F)	Describe Area Treated	Size of Area Treated (Surface Area SqFt or Footprint SqFt)	Product Applied	Substrate (Noted in Tables 4 or 5)	Qty. (Wet film thickness)	Date Applied

Certified Applicator Signature

Date of Service

Figure 2