DrJ™ CERTIFICATION

ANAB ANSI National Accreditation Board ACCREDITED ISO/IEC 17065 PRODUCT CERTIFICATION BODY

IAF MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT

Approved. Sealed. Code Compliant.

Technical Evaluation Report

TER 1905-03

No-Burn® Products Used as a Thermal Barrier or Ignition Barrier

No-Burn®, Inc.

Products:

No-Burn® Plus
No-Burn® Plus ThB
No-Burn® Plus XD

Issue Date:
July 1, 2019
Revision Date:
November 30, 2022
Subject to Renewal:
July 1, 2023

COMPANY
INFORMATION:

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DIVISION: 09 00 00 - FINISHES

SECTION: 09 96 46 Intumescent Paints

1 Products Evaluated[1]

1.1 No-Burn® Plus
No-Burn® Plus ThB
No-Burn® Plus XD

2 Applicable Codes and Standards[2,3]

2.1 *Codes*

2.1.1 *IBC—15, 18, 21: International Building Code®*

2.1.2 *IRC—15, 18, 21: International Residential Code®*

2.1.3 *IEBC—15, 18, 21: International Existing Building Code*

2.2 *Standards and Referenced Documents*

2.2.1 *DrJ Evaluation Criteria (EC) 045: Evaluation Criteria for Field Applied Coatings on Spray Polyurethane Foam for use as a Thermal Barrier or Ignition Barrier*

2.2.2 *NFPA 286: Standard Methods of Fire Test for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*

2.2.3 *UL 1715: Fire Test of Interior Finish Material*

[1] For more information, visit drjcertification.org or call us at 608-310-6748.

[2] Unless otherwise noted, all references in this TER are from the 2021 version of the codes and the standards referenced therein. This material, design, or method of construction also complies with the 2000-2018 versions of the referenced codes and the standards referenced therein.

[3] All terms defined in the applicable building codes are italicized.

3 Performance Evaluation

3.1 The products listed in Section 1 have been evaluated for compliance with the following:

3.1.1 Approval for use as a thermal barrier in accordance with *IBC* Section 2603.5, *IBC* Section 2603.9, and *IRC* Section R316.6,

3.1.2 Approval for use as an ignition barrier in accordance with *IBC* Section 2603.4.1.6, *IBC* Section 2603.9, *IRC* Section R316.5.3, *IRC* Section R316.5.4, and *IRC* Section R316.6, and

3.1.3 Approval for use as an interior finish in accordance with *IBC* Section 803.1, *IBC* Section 803.4, *IRC* Section R302.9, and *IRC* Section R302.10.1.

3.2 Any code compliance issues not specifically addressed in this section are outside the scope of this TER.

3.3 Any engineering evaluation conducted for this TER was performed within DrJ's ANAB accredited ICS code scope and/or the defined professional engineering scope of work on the dates provided herein.

4 Product Description and Materials

4.1 No-Burn® Plus, No-Burn® Plus ThB, and No-Burn® Plus XD are water-based, liquid applied, intumescent coatings. When exposed to elevated temperatures and flame, they expand and form a protective char layer.

4.2 The products are packaged in either 5-gallon (18.9 liter) pails or 55-gallon (208 liter) drums.

4.3 *Shelf Life*

4.3.1 No-Burn® Plus and No-Burn® Plus XD: two years when stored in unopened containers between 40°F (4.4°C) and 90°F (32.2°C)

4.3.2 No-Burn® Plus ThB: one year when stored in unopened containers between 40°F (4.4°C) and 90°F (32.2°C)

4.4 No-Burn® Plus and No-Burn® Plus XD must be prepared with a power mixer (500-1500 RPM) or equivalent for a minimum of five minutes per container prior to application.

4.5 No-Burn® Plus ThB must be prepared with a power mixer (800-1200 RPM) or equivalent for a minimum of five minutes per container prior to application.

5 Applications

5.1 *Thermal Barrier Assemblies*

5.1.1 No-Burn® Plus ThB is used to protect spray-applied polyurethane foam (SPF) insulation to allow the SPF to be installed without a prescriptive 15-minute thermal barrier in accordance with *IBC* Section 2603.9 and *IRC* Section R316.6. No-Burn® Plus ThB meets the criteria for use as a wall and ceiling finish in accordance with *IBC* Section 803.1, *IBC* Section 803.4, *IRC* Section R302.9, and *IRC* Section R302.10.1. The approved assemblies are as listed in Table 1.

Table 1. Thermal Barrier Assemblies

Substrate	No-Burn® Product[2] Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Application of No-Burn® Coating				Evaluation Report[1]
				Minimum Installed Thickness (mils)		Theoretic Application Rate		
				Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
AMD Diamondback Closed Cell Spray Foam	Plus ThB	5.5	9.5	17	14	100	1.0	ESR-4438
BASF ENERTITE® G Open Cell Spray Foam	Plus ThB	8	14	14	9	115	0.87	CCRR-1032
BASF ENERTITE® Max Open Cell Spray Foam	Plus ThB	8	14	14	9	115	0.87	CCRR-1032
BASF SPRAYTITE® SP Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	CCRR-1031
BASF SPRAYTITE® 158 Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	CCRR-1031
BASF SPRAYTITE® 178 Closed Cell Spray Foam	Plus ThB	6	8	17	11	94	1.06	CCRR-1031
BASF SPRAYTITE® 81206 Closed Cell Spray Foam	Plus ThB	6	8	17	11	94	1.06	CCRR-1031
BASF WALLTITE® US Closed Cell Spray Foam	Plus ThB	6	8	17	11	94	1.06	CCRR-1031
BASF SPRAYTITE® Comfort Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	CCRR-0374
BASF SPRAYTITE® Comfort XL Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	CCRR-0374
BASF SPRAYTITE® LWP-L Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	CCRR-0374
BASF WALLTITE® LWP Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	CCRR-0374
BASF WALLTITE® Plus Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	CCRR-0374
Carlisle SealTite™ Pro Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	ER-624
Carlisle Foamsulate 50 HY Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	ER-540
Carlisle SealTite™ Pro No Mix Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	ER-616
Carlisle Foamsulate 50 Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	ER-351
Carlisle SealTite™ Pro High Yield Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	ER-623
Carlisle SealTite™ Pro Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	ER-621

Substrate	No-Burn® Product[2] Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Application of No-Burn® Coating				Evaluation Report[1]
				Minimum Installed Thickness (mils)		Theoretic Application Rate		
				Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
Carlisle Foamsulate Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	ER-626
Carlisle SealTite™ Pro HFO Closed Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	ER-720
Carlisle Foamsulate HFO 2.0 Closed Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	ER-841
Carlisle SealTite™ Pro One Zero Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	ER-640
Carlisle Foamsulate HFO Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	ER-650
Energy One America EOA 500 Open Cell Spray Foam	Plus ThB	9	14	14	9	115	0.87	ESR-3686
Energy One America EOA 2000 Closed Cell Spray Foam	Plus ThB	6	9.5	14	9	115	0.87	ER-443
Everest Evercell 2.0 (245fa) Closed Cell Spray Foam	Plus ThB	6	6	14	9	115	0.87	PD[3]
Everest Opticell 2.0 (HFO) Closed Cell Spray Foam	Plus ThB	6	6	14	9	115	0.87	PD[3]
GacoEZSpray F4500 Open Cell Spray Foam	Plus ThB	12	16	14	9	115	0.87	CCRR-1107
Gaco™ F183M Closed Cell Spray Foam	Plus ThB	6.5	9	14	9	115	0.87	CCRR-1002
Gaco™ OnePass F1850 Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	CCRR-1043
Gaco™ OnePass Low GWP F1880Open Cell Spray Foam	Plus ThB	9	12.5	14	9	115	0.87	CCRR-1106
General Coatings Ultra-Thane 050 Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	CCRR-0358
General Coatings Ultra-Thane 050 Max Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	CCRR-0358
General Coatings Ultra-Thane 050 Max Pro Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	CCRR-0358
General Coatings Ultra-Thane 050X Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	CCRR-0362
General Coatings Ultra-Thane 170 Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	CCRR-0345
General Coatings Ultra-Thane 202 Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	CCRR-0345

Substrate	No-Burn® Product[2] Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Application of No-Burn® Coating				Evaluation Report[1]
				Minimum Installed Thickness (mils)		Theoretic Application Rate		
				Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
General Coatings Ultra-Thane 202 High-Lift Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	CCRR-0345
General Coatings Ultra-Thane 205 HFO Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0375
General Coatings Ultra-Thane 205 HFO High-Lift Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0375
Huntsman (Demilec) SEALECTION 500 Open Cell Spray Foam	Plus ThB	8	14	16	11	100	1.0	CCRR-1063
Huntsman (Demilec) SEALECTION NM Open Cell Spray Foam	Plus ThB	8	14	16	11	100	1.0	ESR-2668
Huntsman (Demilec) Agribalance Open Cell Spray Foam	Plus ThB	8	14	16	11	100	1.0	ESR-2600
Huntsman (Demilec) APX 1.2 Open Cell Spray Foam	Plus ThB	8	14	16	11	100	1.0	ESR-3470
Huntsman (Demilec) Heatlok HFO High Lift Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.0	ESR-4073
Huntsman (Demilec) Heatlok HFO Pro Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.0	ER-565
Huntsman (Demilec) Heatlok XT-s Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.0	ESR-3824
Huntsman (Demilec) Heatlok XT-w Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.0	ESR-3883
Huntsman (Demilec) Heatlok ECO Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.0	ESR-3198
Huntsman (Icynene) Classic Open Cell Spray Foam	Plus ThB	6	14	16	11	100	1.0	ESR-1826
Huntsman (Icynene) Classic Ultra Open Cell Spray Foam	Plus ThB	6	14	16	11	100	1.0	ESR-1826
Huntsman (Icynene) Classic Ultra Select Open Cell Spray Foam	Plus ThB	6	14	16	11	100	1.0	ESR-1826
Huntsman (Icynene) Classic Plus Open Cell Spray Foam	Plus ThB	6	14	16	11	100	1.0	ESR-1826
Huntsman (Icynene) Prime Gold Open Cell Spray Foam	Plus ThB	6	14	16	11	100	1.0	ESR-4323
Huntsman (Icynene) No Mix Open Cell Spray Foam	Plus ThB	8 ½	14	14	9	115	0.87	CCRR-1123

Substrate	No-Burn® Product[2] Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Application of No-Burn® Coating				Evaluation Report[1]
				Minimum Installed Thickness (mils)		Theoretic Application Rate		
				Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
Huntsman (Icynene) ProSeal Closed Cell Spray Foam	Plus ThB	4	8	14	9	115	0.87	ESR-3500
Huntsman (Icynene) ProSeal LE Closed Cell Foam	Plus ThB	4	8	14	9	115	0.87	ESR-3500
Huntsman (Icynene) ProSeal Eco Closed Cell Spray Foam	Plus ThB	4	8	14	9	115	0.87	ESR-3493
Huntsman (Icynene) ProSeal HFO Closed Cell Foam	Plus ThB	4	8	14	9	115	0.87	CCRR-1108
Huntsman (Icynene) ProSeal HFO CW Closed Cell Foam	Plus ThB	4	8	14	9	115	0.87	CCRR-1108
Huntsman (Icynene) MD-C-200 Closed Cell Spray Foam	Plus ThB	4	8	14	9	115	0.87	ESR-3199
Huntsman (Lapolla) Foam-Lok FL 450 Open Cell Spray Foam	Plus ThB	6	14	16	11	100	1.0	ESR-4242
Huntsman (Lapolla) Foam-Lok FL 500 Open Cell Spray Foam	Plus ThB	8 ½	14	14	9	115	0.87	CCRR-1091
Huntsman (Lapolla) Foam-Lok FL 750 Open Cell Spray Foam	Plus ThB	6	14	16	11	100	1.0	ESR-4322
Huntsman (Lapolla) Foam-Lok FL 2000-3G Closed Cell Spray Foam	Plus ThB	6	9	14	9	115	0.87	ESR-4501
Huntsman (Lapolla) Foam-Lok FL 2000-4G Closed Cell Spray Foam	Plus ThB	6	9	14	9	115	0.87	CCRR-1025
Huntsman (Lapolla) Foam-Lok FL 2000 Closed Cell Spray Foam	Plus ThB	6	9	14	9	115	0.87	ESR-2629
ICP HandiFoam® HVLP LD Open Cell Spray Foam	Plus ThB	8	14	14	9	115	0.87	CCRR-1124
Johns Manville JM Corbond Open Cell Spray Foam	Plus ThB	8	14	14	9	115	0.87	CCRR-1079
Johns Manville JM Corbond HY Open Cell Spray Foam	Plus ThB	8	14	14	9	115	0.87	CCRR-1079
Johns Manville JM Corbond OCX Open Cell Spray Foam	Plus ThB	8	14	14	9	115	0.87	ER-372
Johns Manville JM Corbond III Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	ER-146
Johns Manville JM Corbond IV Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	ER-146
Johns Manville JM GEN IV Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	ER-700

Substrate	No-Burn® Product[2] Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Application of No-Burn® Coating				Evaluation Report[1]
				Minimum Installed Thickness (mils)		Theoretic Application Rate		
				Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
Johns Manville JM Corbond MCS Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	ESR-3159
NCFI InsulStar Light 12-008 Open Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0323
NCFI InsulStar Light 12-075 Open Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0323
NCFI InsulStar 11-036 Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	ER-340
NCFI InsulBloc 11-037 Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	ER-340
PSI Staycell 505 Open Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	QAI B1020-1
PSI Staycell 508 Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	QAI B1020-1
PSI Staycell 504-2 Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	QAI B1020-1
SES EasySeal 0.5 Open Cell Spray Foam	Plus ThB	10	14	14	9	115	0.87	ER-492
SES SucraSeal 0.5 Open Cell Spray Foam	Plus ThB	9	14	14	9	115	0.87	ESR-3375
SES Nexseal 2.0 Closed Cell Spray Foam	Plus ThB	6	9.5	14	9	115	0.87	ER-374
SES Nexseal 2.0 LE Closed Cell Spray Foam	Plus ThB	6	9.5	14	9	115	0.87	ER-374
SWD Quik-Shield 108 Open Cell Spray Foam	Plus ThB	8	14	14	9	115	0.87	CCRR-1051
SWD Quik-Shield 108YM Open Cell Spray Foam	Plus ThB	8	14	14	9	115	0.87	CCRR-1051
SWD Quik-Shield 112XC Closed Cell Spray Foam	Plus ThB	5	8	14	9	115	0.87	CCRR-1011
SWD Quik-Shield 118 Closed Cell Spray Foam	Plus ThB	5	8	14	9	115	0.87	CCRR-1093
SWD Quik-Shield 133 Closed Cell Spray Foam	Plus ThB	9	12.5	14	9	115	0.87	CCRR-0368
SWD Quik-Shield 144 Closed Cell Spray Foam	Plus ThB	5	8	14	9	115	0.87	CCRR-0391
ThermoSeal 2000/2000W Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	ER-581

Substrate	No-Burn® Product[2] Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Application of No-Burn® Coating				Evaluation Report[1]
				Minimum Installed Thickness (mils)		Theoretic Application Rate		
				Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
ThermoSeal™ OCX Open Cell Spray Foam	Plus ThB	8	14	16	11	100	1.0	CCRR-1095
ThermoSeal™ CCX Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.0	ESR-4137
UPC 500 Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	CCRR-0358
UPC 500 Max Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	CCRR-0358
UPC 500 Max Pro Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	CCRR-0358
UPC 500 OCX Open Cell Spray Foam	Plus ThB	8.5	14	14	9	115	0.87	CCRR-0362
UPC 1.7 Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	CCRR-0345
UPC 2.0 Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	CCRR-0345
UPC 2.0 HL Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	CCRR-0345
UPC 2.0 MAX Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	CCRR-0345
UPC 2.0 HFO Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0375
UPC 2.0 HFO High Lift Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0375
Victory Polymers VPC-CC SuperLift Closed Cell Foam	Plus ThB	6.5	9.5	16	11	100	1.0	ESR-4334
Victory Polymers VPC-CC SuperYield Closed Cell Foam	Plus ThB	6.5	9.5	16	11	100	1.0	ESR-4334
Xtremeseal® 0.5 LX Open Cell Spray Foam	Plus ThB	10	14	14	9	115	0.87	ER-538
Xtremeseal® 2.0 LE Closed Cell Spray Foam	Plus ThB	6	9.5	14	9	115	0.87	ER-537

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

1. Use of No-Burn® Plus ThB for use with any insulation product listed herein is conditional upon that insulation product's recognition in a valid evaluation report by an approved evaluation entity. Users shall independently verify the current validity of any referenced evaluation report, including Evaluation Reports (ER) from IAPMO Uniform Evaluation Service, Code Compliance Research Reports (CCRR) from Intertek, and Evaluation Service Reports (ESR) from ICC-ES.
2. No-Burn® Plus ThB or Plus may be overcoated or undercoated with latex paint with a pH of 7 to 8.
3. PD = Proprietary Data

5.2 *Ignition Barrier Assemblies*

5.2.1 No-Burn® Plus, No-Burn® Plus ThB, and No-Burn® Plus XD may be used to protect SPF in attics and crawlspaces to allow the SPF to be installed without a prescriptive ignition barrier in accordance with *IBC* Section 2603.4.1.6, *IBC* Section 2603.9, *IRC* Section R316.5.3, and *IRC* Section R316.5.4. No-Burn® Plus, No-Burn® Plus ThB, and No-Burn® Plus XD meet the criteria for use as wall and ceiling finishes in accordance with *IBC* Section 803.1, *IBC* Section 803.4, *IRC* Section R302.9, and *IRC* Section R302.10.1.

5.2.2 The approved assemblies are shown in Table 2.

5.2.3 The assemblies listed in Table 2 may be installed in an attic or crawlspace without a prescriptive ignition barrier when all of the following are met:

5.2.3.1 Entry into the attic or crawlspace is only for the maintenance, repair, or servicing of the building or equipment. No storage is permitted,

5.2.3.2 There are no interconnected attic or crawlspace areas,

5.2.3.3 Air is not circulated to other parts of the building,

5.2.3.4 The foam plastic insulation does not exceed the maximum density and thickness shown in Table 2,

5.2.3.5 Combustion air is provided in accordance with the *IBC* Section 701, and

5.2.3.6 When required, attic ventilation is provided in accordance with *IBC* Section 1202.2[4] or *IRC* Section R806 and crawlspace ventilation is provided in accordance with *IBC* Section 1202.4.[5]

5.2.3.6.1 **Exception**: unvented attics and crawlspaces meeting the requirements of *IBC* Section 1202.3, *IRC* Section R408.3 or Section R806.5.

Table 2. Ignition Barrier Assemblies

Substrate	No-Burn® Product[1] Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Application of No-Burn® Coating			
				Minimum Installed Thickness (mils)		Theoretic Application Rate	
				Wet Film	Dry Film	Sq. Ft. per Gallon	Gallons per 100 Sq. Ft.
BASF ENERTITE® G Open Cell Spray Foam	Plus XD or Plus ThB	11¼	16	6	4	267	0.37
BASF ENERTITE® Max Open Cell Spray Foam	Plus XD or Plus ThB	11¼	16	6	4	267	0.37
BASF SPRAYTITE® 158 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 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 SPRAYTITE® 178 and 81206 Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9¼	11¼	12	7	134	0.75

[4] 2015 *IBC* Section 1203.2

[5] 2015 *IBC* Section 1203.4

Substrate	No-Burn® Product[1] Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Application of No-Burn® Coating			
				Minimum Installed Thickness (mils)		Theoretic Application Rate	
				Wet Film	Dry Film	Sq. Ft. per Gallon	Gallons per 100 Sq. Ft.
BASF WALLTITE® US Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	9¼	11¼	12	7	134	0.75
BASF WALLTITE® LWP Closed Cell Spray Foam	Plus, Plus XD, or Plus ThB	8	8	6	4	267	0.37
BASF WALLTITE® Plus Closed Cell Spray Foam	Plus, Plus XD, or Plus ThB	8	8	6	4	267	0.37
Carlisle SealTite™ Pro Open Cell Spray Foam	Plus XD or Plus ThB	11¼	16	6	4	267	0.37
Carlisle Foamsulate 50 HY Open Cell Spray Foam	Plus XD or Plus ThB	11¼	16	6	4	267	0.37
Carlisle SealTite™ Pro No Mix Open Cell Spray Foam	Plus XD or Plus ThB	11¼	16	6	4	267	0.37
Carlisle Foamsulate 50 Open Cell Spray Foam	Plus XD or Plus ThB	11¼	16	6	4	267	0.37
Carlisle SealTite™ Pro High Yield Open Cell Spray Foam	Plus XD or Plus ThB	11¼	16	6	4	267	0.37
Creative Polymer Accufoam® Open Cell Spray Foam	Plus XD or Plus ThB	8	14	6	4	267	0.37
DAP Touch 'n Seal® 2.2 PCF 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
GacoEZSpray F4500 Open Cell Spray Foam	Plus ThB	12	16	6	4	267	0.37
Huntsman (Demilec) SEALECTION 500 Open Cell Spray Foam	Plus XD or Plus ThB	9¼	11¼	6	4	267	0.37
Huntsman (Demilec) SEALECTION NM Open Cell Spray Foam	Plus XD or Plus ThB	9¼	11¼	6	4	267	0.37
Huntsman (Demilec) Agribalance Open Cell Spray Foam	Plus XD or Plus ThB	9½	11½	10	6	160	0.63
Huntsman (Icynene) Classic Open Cell Spray Foam	Plus XD or Plus ThB	5½	14	6	4	267	0.37
Huntsman (Icynene) Classic Ultra Open Cell Spray Foam	Plus XD or Plus ThB	5½	14	6	4	267	0.37
Huntsman (Icynene) Classic Ultra Select Open Cell Spray Foam	Plus XD or Plus ThB	5½	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

Substrate	No-Burn® Product[1] Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Application of No-Burn® Coating			
				Minimum Installed Thickness (mils)		Theoretic Application Rate	
				Wet Film	Dry Film	Sq. Ft. per Gallon	Gallons per 100 Sq. Ft.
Huntsman (Icynene) Prime Gold Open Cell Spray Foam	Plus XD or Plus ThB	5½	14	6	4	267	0.37
Huntsman (Icynene) ProSeal Eco Closed Cell Spray Foam	Plus XD or Plus ThB	7¼	9¼	5	3	320	0.31
Huntsman (Icynene) MD-C-200 Closed Cell Spray Foam	Plus, Plus XD or Plus ThB	11¼	11¼	16	10	100	1.0
Huntsman (Lapolla) Foam-Lok FL 450 Open Cell Spray Foam	Plus XD or Plus ThB	5½	14	6	4	267	0.37
Huntsman (Lapolla) Foam-Lok FL 750 Open Cell Spray Foam	Plus XD or Plus ThB	8	14	6	4	267	0.37
ICP HandiFoam® HVLP LD Open Cell Spray Foam	Plus XD or Plus ThB	11¼	16	6	4	267	0.37
ICP HandiFoam® E-84 Class 1(A) Closed Cell Spray Foam	Plus XD or Plus ThB	2	2	10	6	160	0.63
Johns Manville JM Corbond HY Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37
SWD Quick 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	9¼	11¼	6	4	267	0.37
Tiger Foam™ Insulation E-84 Fire Rated SPF Class 1 Spray Foam	Plus XD or Plus ThB	3½	3½	10	6	160	0.63

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

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

6 Installation

6.1 Installation shall comply with the manufacturer installation instructions, and this TER. In the event of a conflict between the manufacturer installation instructions and this TER, the more restrictive shall govern.

6.2 *Installation Procedure*

6.2.1 The substrates that the No-Burn® products are applied to shall be clean, dry, and free from loose dirt, debris, grease, oil, or any other materials that would inhibit proper adhesion of No-Burn® products, including, but not limited to, any paints, stains, or sealants.

6.2.2 Latex paints may be used as an undercoat for No-Burn® Plus ThB, Plus XD or Plus coatings, including primers and vapor retardant coatings, per manufacturer instructions.

6.2.3 No-Burn® Plus, No-Burn® Plus ThB, and No-Burn® Plus XD are white in color.

6.2.4 A painter's gauge shall be used to verify the proper thickness during application.

6.2.5 The dry mil thickness will be 0.4 to 0.7 times the wet mil thickness.

6.2.6 Apply the No-Burn® products only to the substrates listed in Table 1 and Table 2 in accordance with the assembly selected.

6.2.7 Substrates shall be fully protected from the weather and fully installed prior to application.

6.2.8 Both the substrate surface and the ambient temperature shall be maintained between 40°F (4.4°C) and 100°F (37.7°C) immediately before and during application. Minimum cure time is 24 hours.

6.2.9 Apply the coatings at the rate specified in Table 1 and Table 2.

6.2.10 Coatings may be applied via roller, brush, or spraying equipment.

6.2.11 After curing, the coating may be overcoated with latex paint per the paint manufacturer instructions.

6.2.12 Spray Polyurethane Foam Insulation Certificate (SPFA-148), or spray polyurethane foam insulation manufacturer insulation certificate, may be completed by the intumescent coating installer and submitted upon request.

7 Substantiating Data

7.1 Testing has been performed under the supervision of a professional engineer and/or under the requirements of ISO/IEC 17025 as follows:

7.1.1 Reports of fire tests in accordance with *NFPA 286* and *UL 1715,*

7.1.2 Data in accordance with *DrJ EC 45, and*

7.1.3 Supporting documentation from spray foam manufacturers and evidence of code compliance.

7.2 Information contained herein is the result of testing and/or data analysis by sources which conform to *IBC* Section 1703 and/or professional engineering regulations. DrJ relies upon accurate data to perform its ISO/IEC 17065 evaluations.

7.3 Where appropriate, DrJ's analysis is based on provisions that have been codified into law through state or local adoption of codes and standards. The providers of the codes and standards are legally responsible for their content. DrJ analysis may use code-adopted provisions as a control sample. A control sample versus a test sample establishes a product as being equivalent to that prescribed in this code in quality, *strength*, effectiveness, *fire resistance*, durability, and safety. Where the accuracy of the provisions provided herein is reliant upon the published properties of materials, DrJ relies upon the grade mark, grade stamp, mill certificate, and/or test data provided by material suppliers to be minimum properties. DrJ analysis relies upon these properties to be accurate.

8 Findings

8.1 When used and installed in accordance with this TER and the manufacturer installation instructions, the products listed in Section 1 are approved for the following:

8.1.1 No-Burn® Plus ThB is approved for the protection of SPF insulation to allow the SPF to be installed without a prescriptive 15-minute thermal barrier, and

8.1.2 No-Burn® Plus, No-Burn® Plus ThB, and No-Burn® Plus XD are approved for the protection of SPF in attics and crawlspaces to allow the SPF to be installed without a prescriptive ignition barrier.

8.2 Building codes require data from valid *research reports* be obtained from *approved sources* (i.e., licensed *registered design professionals* [RDPs]).

8.2.1 Building official approval of a licensed RDP is performed by verifying the RDP and/or their business entity is listed by the licensing board of the relevant *jurisdiction*.

8.3 Agencies who are accredited through ISO/IEC 17065 have met the code requirements for approval by the *building official*. DrJ is an ISO/IEC 17065 ANAB-Accredited Product Certification Body – Accreditation #1131 and employs RDPs.

8.4 Through ANAB accreditation and the IAF MLA, DrJ certification can be used to obtain product approval in any *jurisdiction* or country that has IAF MLA Members & Signatories to meet the Purpose of the MLA – "certified once, accepted everywhere."

8.5 *IBC* Section 104.11 (*IRC* Section R104.11 and *IFC* Section 104.10[6] are similar) states:

> **104.11 Alternative materials, design and methods of construction and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code…Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons the alternative was not *approved*.

[6] 2018 *IFC* Section 104.9

9 Conditions of Use

9.1 When used in accordance with this report, No-Burn® Plus, No-Burn® Plus ThB, and No-Burn® Plus XD comply with the codes listed in Section 2, subject to the following:

9.1.1 Assemblies shall be limited to those shown in Table 1 and Table 2, as applicable,

9.1.2 No-Burn® Plus, No-Burn® Plus ThB, and No-Burn® Plus XD shall be applied only to areas within the water resistive barrier of the building envelope or in areas that are otherwise not exposed to weather, and

9.1.3 When required by the building official, inspections in accordance with *IRC* Section R109.1 or special inspections in accordance with *IBC* Section 1705.1.1 shall be conducted. Where required in accordance with *IBC* Section 1704.2.3, a statement of special inspections shall be submitted to the building official.

9.2 Where required by the *building official*, also known as the authority having jurisdiction (AHJ) in which the project is to be constructed, this TER and the installation instructions shall be submitted at the time of *permit* application.

9.3 Any generally accepted engineering calculations needed to show compliance with this TER shall be submitted to the AHJ for review and approval.

9.4 *Design loads* shall be determined in accordance with the building code adopted by the *jurisdiction* in which the project is to be constructed and/or by the building designer (e.g., *owner* or RDP).

9.5 At a minimum, this product shall be installed per Section 6 of this TER.

9.6 This product has an internal quality control program and a third-party quality assurance program in accordance with *IBC* Section 104.4, *IBC* Section 110.4, *IRC* Section R104.4, and *IRC* Section R109.2.

9.7 The actual design, suitability, and use of this TER, for any particular building, is the responsibility of the *owner* or the owner's authorized agent.

9.8 This TER shall be reviewed for code compliance by the AHJ in concert with *IBC* Section 104.

9.9 The implementation of this TER for this product is dependent on the design, quality control, third-party quality assurance, proper implementation of installation instructions, inspections required by *IBC* Section 110.3, and any other code or regulatory requirements that may apply.

10 Identification

10.1 The products listed in Section 1 are identified by a label on the board or packaging material bearing the manufacturer name, product name, TER number, and other information to confirm code compliance.

10.2 Additional technical information can be found at noburn.com.

11 Review Schedule

11.1 This TER is subject to periodic review and revision. For the most recent version, visit drjcertification.org.

11.2 For information on the current status of this TER, contact DrJ Certification.