



Listing and Technical Evaluation Report™

Report No: 1905-03 Issue Date: July 1, 2019

Revision Date: October 7, 2024

Subject to Renewal: July 1, 2025

No-Burn® Products Used as a Thermal Barrier, Ignition Barrier and Class II Vapor Retarder

Trade Secret Report Holder:

No-Burn®, Inc.

Phone: 800-989-8577 Website: www.noburn.com Email: info@noburn.com

CSI Designations:

DIVISION: 09 00 00 - FINISHES Section: 09 96 46 - Intumescent Painting

1 Innovative Products Evaluated¹

1.1 No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal™

2 Product Description and Materials

- 2.1 No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal are water-based, liquid applied, intumescent coatings. When exposed to elevated temperatures and flame, they expand and form a protective char layer.
- 2.2 The products are packaged in either 5-gallon (18.9-liter) pails or 55-gallon (208-liter) drums.
- 2.3 Shelf Life
 - 2.3.1 No-Burn Plus XD has a shelf life of two years when stored in unopened containers between 40°F (4.4°C) and 90°F (32.2°C).
 - 2.3.2 No-Burn Plus ThB and No-Burn ThB Spray Seal have a shelf life of one year when stored in unopened containers between 40°F (4.4°C) and 90°F (32.2°C).
- 2.4 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.
- 2.5 No-Burn Plus ThB and No-Burn ThB Spray Seal must be prepared with a power mixer (800-1200 RPM) or equivalent for a minimum of five minutes per container prior to application.
- 2.6 As needed, review material properties for design in **Section 6** and to regulatory evaluation in **Section 8**.





3 Definitions

- 3.1 New Materials² are defined as building materials, equipment, appliances, systems, or methods of construction not provided for by prescriptive and/or legislatively adopted regulations, known as alternative materials.³ The design strengths and permissible stresses shall be established by tests⁴ and/or engineering analysis.⁵
- 3.2 <u>Duly Authenticated Reports</u>⁶ and <u>Research Reports</u>⁷ are test reports and related engineering evaluations, which are written by an approved agency⁸ and/or an approved source.⁹
 - 3.2.1 These reports contain intellectual property and/or trade secrets, which are protected by the <u>Defend Trade</u> Secrets Act (DTSA). 10
- 3.3 An <u>approved agency</u> is "approved" when it is <u>ANAB ISO/IEC 17065 accredited</u>. DrJ Engineering, LLC (DrJ) is listed in the ANAB directory.
- 3.4 An <u>approved source</u> is "approved" when a professional engineer (i.e., <u>Registered Design Professional</u>) is properly licensed to transact engineering commerce. The regulatory authority governing approved sources is the state legislature via its professional engineering regulations.¹¹
- 3.5 Testing and/or inspections conducted for this <u>Duly Authenticated Report</u> were performed by an <u>ISO/IEC 17025</u> accredited testing laboratory, an <u>ISO/IEC 17020</u> accredited inspection body, and/or a licensed <u>Registered</u> Design Professional (RDP).
 - 3.5.1 The Center for Building Innovation (CBI) is ANAB 12 ISO/IEC 17025 and ISO/IEC 17020 accredited.
- 3.6 The regulatory authority shall <u>enforce</u>¹³ the specific provisions of each legislatively adopted regulation. If there is a non-conformance, the specific regulatory section and language of the non-conformance shall be provided in <u>writing</u>¹⁴ stating the nonconformance and the path to its cure.
- 3.7 The regulatory authority shall accept <u>Duly Authenticated Reports</u> from an <u>approved agency</u> and/or an <u>approved source</u> with respect to the quality and manner of use of new materials or assemblies as provided for in regulations regarding the use of alternative materials, designs, or methods of construction.¹⁵
- 3.8 ANAB is an <u>International Accreditation Forum</u> (IAF) <u>Multilateral Recognition Arrangement</u> (MLA) signatory where recognition of certificates, validation, and verification statements issued by conformity assessment bodies accredited by all other signatories of the IAF MLA with the appropriate scope, shall be approved.

 Therefore, all ANAB ISO/IEC 17065 <u>Duly Authenticated Reports</u> are approval equivalent.

 Therefore, all ANAB ISO/IEC 17065 <u>Duly Authenticated Reports</u> are approval equivalent.
- 3.9 Approval equity is a fundamental commercial and legal principle. 18

4 Applicable Standards for the Listing; Regulations for the Regulatory Evaluation¹⁹

- 4.1 Standards
 - 4.1.1 ASTM E96A: Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials
 - 4.1.2 ASTM G154-16: Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Materials
 - 4.1.3 NFPA 286: Standard Methods of Fire Test for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth
 - 4.1.4 UL 1715: Fire Test of Interior Finish Material
- 4.2 Regulations
 - 4.2.1 IBC 15, 18, 21: International Building Code®
 - 4.2.2 IRC 15, 18, 21: International Residential Code®
 - 4.2.3 IEBC 15, 18, 21; International Existing Building Code®
 - 4.2.4 IMC 15, 18, 21: International Mechanical Code®





5 Listed²⁰

5.1 Equipment, materials, products or services included in a List published by a <u>nationally recognized testing</u> <u>laboratory</u> (i.e., CBI), <u>approved agency</u> (i.e., CBI and DrJ), and/or <u>approved source</u> (i.e., DrJ) or other organization concerned with product evaluation (i.e., DrJ) that maintains periodic inspection (i.e., CBI) of production of listed equipment or materials, and whose listing states either that the equipment or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner.

6 Tabulated Properties Generated from Nationally Recognized Standards

- 6.1 Thermal Barrier Assemblies
 - 6.1.1 No-Burn Plus ThB and No-Burn ThB Spray Seal are 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.
 - 6.1.2 No-Burn Plus ThB and No-Burn ThB Spray Seal meet 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.
 - 6.1.3 No-Burn Plus ThB and No-Burn ThB Spray Seal meet the criteria for use as an interior finish or interior trim in plenums in accordance with <u>IBC Section 2603.7</u> and <u>IMC Section 602.2.1.6</u>.
 - 6.1.4 The approved Thermal Barrier Assemblies for No-Burn Plus ThB are as listed in Table 1.
 - 6.1.5 The approved Thermal Barrier with Class II Vapor Retarder Assemblies for No-Burn ThB Spray Seal are as listed in **Table 3**.

Table 1. Thermal Barrier Assemblies

Substrate				Applic	ation of N	lo-Burn C	Coating	
	No-Burn Product ²	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Minimum Installed Thickness (mils)		Appli	oretic cation ate	Evaluation Report ¹
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
Accufoam OC Open Cell Spray Foam	Plus ThB	10	16	14	9	115	0.87	ER-699
Accufoam CC Closed Cell Spray Foam	Plus ThB	7.5	9.5	14	9	115	0.87	ER-699
Accufoam CC-HFO Closed Cell Foam	Plus ThB	7.5	9.5	14	9	115	0.87	ER-833
AMBIT AMBI-SEAL 5.0 Open Cell Spray Foam	Plus ThB	9	16	14	9	115	0.87	CCRR-0393
AMBIT Ambi-Tite 201 (245fa) Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	ESR-4426
AMBIT Ambi-Tite 204 HFO Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	ESR-4427
Alpha Polymers AP 100 (OC) Open Cell Foam	Plus ThB	9	16	14	9	115	0.87	CCRR-0483
Alpha Polymers AP 200 245fa (CC) Closed Cell Foam	Plus ThB	8	12	14	9	115	0.87	ESR-5241





Table 1. Thermal Barrier Assemblies

				Applic	ation of N	lo-Burn C	Coating	
Substrate	No-Burn Product ²	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Minii Insta Thicknes	-	Appli	oretic cation ate	Evaluation Report ¹
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
Alpha Polymers AP 210 HFO (CC) Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	ESR-5242
AMD Diamondback Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ESR-4438
BASF ENERTITE® G Open Cell Spray Foam	Plus ThB	8	16	14	9	115	0.87	CCRR-1032
BASF ENERTITE® X Open Cell Spray Foam	Plus ThB	8	16	14	9	115	0.87	CCRR-1032
BASF ENERTITE® Max Open Cell Spray Foam	Plus ThB	8	16	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® MAX Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	CCRR-0374
BASF WALLTITE® XL 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







Table 1. Thermal Barrier Assemblies

				Applic	ation of N	lo-Burn C	Coating	
Substrate	No-Burn Product ² Name	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Minii Insta Thickne	alled	Appli	oretic cation ate	Evaluation Report ¹
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	ER-624 ER-540 ER-906 ER-907 ER-616 ER-351 ER-623 ER-621 ER-626 ER-720 ER-841 ER-640 ER-650 ER-834 ER-834
Carlisle SealTite™ Pro Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	ER-624
Carlisle Foamsulate 50 HY Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	ER-540
Carlisle SealTite PRO XTR Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	ER-906
Carlisle Foamsulate 50 ES Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	ER-907
Carlisle SealTite™ Pro No Mix Open Cell Spray Foam	Plus ThB	8.5	16	14	0	115	0.87	ER-616
Carlisle Foamsulate 50 Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	ER-351
Carlisle SealTite™ Pro High Yield Open Cell Spray Foam	Plus ThB	8.5	16	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
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	16	14	9	115	0.87	ER-720
Carlisle Foamsulate HFO 2.0 Closed Cell Spray Foam	Plus ThB	8.5	16	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
Central Urethane X-Press Seal 170 Closed Cell Foam	Plus ThB	8	10	14	9	115	0.87	ER-834
Central Urethanes X-Press Seal 200 Closed Cell Foam	Plus ThB	8	10	14	9	115	0.87	ER-834
Creative Polymer Solutions Accufoam OC Open Cell Foam	Plus ThB	10	16	14	9	115	0.87	ER-699
Creative Polymer Solutions Accufoam CC Closed Cell Foam	Plus ThB	7.5	9.5	14	9	115	0.87	ER-699









Table 1. Thermal Barrier Assemblies

				Applic	ation of N	lo-Burn (Coating	Evaluation Report ¹ ER-833 CCRR-0491 CCRR-0491 CCRR-0396 CCRR-0396 CCRR-0396 CCRR-1107 CCRR-1107 CCRR-1002 CCRR-1043 ER-858 ER-859
Substrate	No-Burn Product ²	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Insta	mum alled ss (mils)	Appli	oretic cation ate	
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	ER-833 CCRR-0491 CCRR-0491 CCRR-0396 CCRR-0396 CCRR-0396 CCRR-1107 CCRR-1107 CCRR-1002 CCRR-1043 ER-858 ER-859 CCRR-1106 ER-492
Creative Polymer Solutions Accufoam CC-HFO Closed Cell Foam	Plus ThB	7.5	9.5	14	9	115	0.87	ER-833
Dynamo ECO2000 HFO Closed Cell Spray Foam	Plus ThB	8	10	14	9	115	0.87	CCRR-0491
Dynamo ECO2000 HFO 2x Lift Closed Cell Spray Foam	Plus ThB	8	10	14	9	115	0.87	CCRR-0491
Elastochem Insulthane 450 NM Open Cell Spray Foam	Plus ThB	10	16	14	9	115	0.87	CCRR-0396
Elastochem Insulthane 200 Evolution Closed Cell Spray Foam	Plus ThB	8	10	14	9	115	0.87	CCRR-0396
Elastochem Insulthane Extreme HFO Closed Cell Spray Foam	Plus ThB	8	10	14	9	115	0.87	CCRR-0396
Elastochem Insulthane Extreme HL Closed Cell Spray Foam	Plus ThB	8	10	14	9	115	0.87	CCRR-0396
Enverge/Gaco EZSpray F4500 Open Cell Spray Foam	Plus ThB	12	16	14	9	115	0.87	CCRR-1107
Enverge/Gaco 183M Closed Cell Spray Foam	Plus ThB	6.5	9	14	9	115	0.87	CCRR-1002
Enverge/Gaco OnePass F1850 Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	
Enverge/Gaco OnePass HFO F1860 Closed Cell Spray Foam	Plus ThB	6	9.5	14	9	115	0.87	ER-859
Enverge/Gaco OnePass Low GWP F1880 Closed Cell Spray Foam	Plus ThB	9	12.5	14	9	115	0.87	CCRR-1106
Enverge/SES EasySeal 0.5 Open Cell Spray Foam	Plus ThB	10	16	14	9	115	0.87	ER-492
Enverge/SES SucraSeal 0.5 Open Cell Spray Foam	Plus ThB	9	16	14	9	115	0.87	ESR-3375
Enverge/SES Nexseal 2.0 Closed Cell Spray Foam	Plus ThB	6	9.5	14	9	115	0.87	ER-374
Enverge/SES Nexseal 2.0 LE Closed Cell Spray Foam	Plus ThB	6	9.5	14	9	115	0.87	ER-374







Table 1. Thermal Barrier Assemblies

				Applic	ation of N	lo-Burn (Coating	
Substrate	No-Burn Product ² Name	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Minii Insta Thickne	-	Appli	oretic cation ate	Evaluation Report ¹
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
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
FireStable StableBase Max R HFO Closed Cell Spray Foam	Plus ThB	7.5	9.5	14	9	115	0.87	ER-877
Foam Supplies Genfoam™ Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0389
Foam Supplies genX [™] Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0390
Foam Supplies ecostar™ Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	CCRR-0388
General Coatings Ultra-Thane 050 Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0358
General Coatings Ultra-Thane 050 Max Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0358
General Coatings Ultra-Thane 050 Max Pro Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0358
General Coatings Ultra-Thane 050X Open Cell Spray Foam	Plus ThB	8.5	16	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
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 202 Max 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









Table 1. Thermal Barrier Assemblies

				Applic	ation of N	lo-Burn C	Coating	Evaluation Report ¹ CCRR-0375 CCRR-0375 ESR-5150 ER-910 ER-917 ESR-5499 ESR-5499 ESR-5498
Substrate	No-Burn Product ² Name	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Minii Insta Thicknes		Appli	oretic cation ate	
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	CCRR-0375 CCRR-0375 ESR-5150 ER-910 ER-917 ESR-5499 ESR-5498 ESR-5497
General Coatings Ultra-Thane 205 HFO MAX Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0375
General Coatings Ultra-Thane 205 HFO Premium Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0375
Genyk Elite 2.0 Closed Cell Spray Foam	Plus ThB	6	10	14	9	115	0.87	ESR-5150
Green Valley Products GVP500 NM Open Cell Spray Foam	Plus ThB	10	16	16	10	100	1.00	ER-910
Green Valley Products GVP 2.0 HFO Closed Cell Spray Foam	Plus ThB	7	10	16	10	100	1.00	ER-917
Huntsman Premium Icynene OC No-Mix Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	ESR-5499
Huntsman Premium Icynene Classic 45 Open Cell Spray Foam	Plus ThB	6	16	16	11	100	1.00	ESR-5498
Huntsman Premium Icynene Ultra 50 Open Cell Spray Foam	Plus ThB	8	16	16	11	100	1.00	ESR-5497
Huntsman Premium Icynene Classic 75 Open Cell Spray Foam	Plus ThB	6	16	16	11	100	1.00	ESR-5495
Huntsman Premium Icynene High-R 80 Open Cell Spray Foam	Plus ThB	8	16	16	11	100	1.00	ESR-5494
Huntsman Premium Icynene HFO 200 Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ER-926
Huntsman Premium Icynene HFO Max Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ESR-5496
Huntsman (Demilec) SEALECTION 500 Open Cell Spray Foam	Plus ThB	8	16	16	11	100	1.00	CCRR-1063
Huntsman (Demilec) SEALECTION NM Open Cell Spray Foam	Plus ThB	8	16	16	11	100	1.00	ESR-2668
Huntsman (Demilec) Agribalance® Open Cell Spray Foam	Plus ThB	8	16	16	11	100	1.00	ESR-2600





Table 1. Thermal Barrier Assemblies

				Applic	ation of N	lo-Burn C	Coating	
Substrate	No-Burn Product ²	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Minii Insta Thicknes		Appli	oretic cation ate	Evaluation Report ¹
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	ESR-4073 ER-565 ESR-3824 ESR-3883 ESR-3198 ER-871 ESR-1826 ESR-1826 ESR-1826 CCRR-1123 ESR-3500 ESR-3500 ESR-3493 CCRR-1108
Huntsman (Demilec) Heatlok HFO High Lift Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ESR-4073
Huntsman (Demilec) Heatlok HFO Pro Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ER-565
Huntsman (Demilec) Heatlok XT-s Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ESR-3824
Huntsman (Demilec) Heatlok XT-w Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ESR-3883
Huntsman (Demilec) Heatlok ECO Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ESR-3198
Huntsman (Demilec) Heatlok HFO EZ Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ER-871
Huntsman (Icynene) Classic Open Cell Spray Foam	Plus ThB	6	16	16	11	100	1.00	ESR-1826
Huntsman (Icynene) Classic Ultra Open Cell Spray Foam	Plus ThB	6	16	16	11	100	1.00	ESR-1826
Huntsman (Icynene) Classic Ultra Select Open Cell Spray Foam	Plus ThB	6	16	16	11	100	1.00	ESR-1826
Huntsman (Icynene) Classic Plus Open Cell Spray Foam	Plus ThB	6	16	16	11	100	1.00	ESR-1826
Huntsman (Icynene) No Mix Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-1123
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





Table 1. Thermal Barrier Assemblies

		able 1. The	ermal Barrier Assei		ation of N	lo-Rurn (`oating	
Substrate	No-Burn Product ² Name	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters & Floors (in)	Minii Insta Thicknes	mum alled ss (mils) Dry	Theo Appli	oretic cation ate Gallons per 100	Evaluation Report ¹
				Film	Film	Gallon	Sq. Ft.	
Huntsman (Lapolla) Foam-Lok FL 450 Open Cell Spray Foam	Plus ThB	6	16	16	11	100	1.00	ESR-4242
Huntsman (Lapolla) Foam-Lok FL 500 Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-1091
Huntsman (Lapolla) Foam-Lok FL 750 Open Cell Spray Foam	Plus ThB	6	16	16	11	100	1.00	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 0.5 Open Cell Spray Foam	Plus ThB	8	16	14	9	115	0.87	CCRR-1124
ICP HandiFoam® HVLP MD HFO Closed Cell Spray Foam	Plus ThB	12	16	14	9	115	0.87	ER-728
Innovative Polymer Systems IPS 2000 HFO Closed Cell Spray Foam	Plus ThB	8	10	14	9	115	0.87	CCRR-0510
Johns Manville JM Corbond Open Cell Spray Foam	Plus ThB	8	16	14	9	115	0.87	CCRR-1079
Johns Manville JM Corbond HY Open Cell Spray Foam	Plus ThB	8	16	14	9	115	0.87	CCRR-1079
Johns Manville JM Corbond OCX Open Cell Spray Foam	Plus ThB	8	16	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
Johns Manville JM Corbond MCS Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	ESR-3159
Natural Polymers Natural-Therm 0.4 Open Cell Spray Foam	Plus ThB	8	12	16	11	100	1.00	ER-589







Table 1. Thermal Barrier Assemblies

		1. 1116	ermal Barrier Asse		ation of N	lo-Burn C	Coating	
Substrate	No-Burn Product ² Name	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Insta	Minimum Theoretic Installed Application Rate		cation	Evaluation Report ¹
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
Natural Polymers Natural-Therm 0.5 Open Cell Spray Foam	Plus ThB	8	12	16	11	100	1.00	ER-503
Natural Polymers Ultra-Pure Open Cell Spray Foam	Plus ThB	8	12	16	11	100	1.00	ER-801
Natural Polymers Natural-Therm® Zero Closed Cell Spray Foam	Plus ThB	12	16	14	9	115	0.87	ER-527
Natural Polymers Natural-Therm® 2.0 Closed Cell Spray Foam	Plus ThB	12	16	14	9	115	0.87	ER-336
Natural Polymers Natural-Therm 2.0 HFO Closed Cell Spray Foam	Plus ThB	12	16	14	9	115	0.87	ER-714
Natural Polymers Ultra-Pure® Closed Cell Spray Foam	Plus ThB	12	16	14	9	115	0.87	ER-800
NCFI InsulStar Light 12-008 Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0323
NCFI InsulStar Light 12-075 Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0323
NCFI InsulStar HFO Smart SPF Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	0	115	0.87	ER-667
NCFI InsulBloc Smart SPF Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	ER-667
NCFI InsulStar 11-033 1.7 HFO Closed Cell Spray Foam	Plus ThB	6	9.5	14	9	115	0.87	ER-667
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
NSF Polymers CC OG HFC Closed Cell Spray Foam	Plus ThB	7.5	9.5	14	9	115	0.87	ER-869
NSF Polymers R-Max Closed Cell Spray Foam	Plus ThB	7.5	9.5	14	9	115	0.87	ER-868
Nu-Wool Nu-Seal 0.5 Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0490
Nu-Wool Nu-Seal 2.0 HFO Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0490









Table 1. Thermal Barrier Assemblies

		able 1. The	ermal Barrier Assei		ation of N	lo-Rurn (`oating	
Substrate	No-Burn Product ² Name	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Application of No-Burn Coating Minimum Installed Thickness (mils) Theoretic Application Rate		oretic cation	Evaluation Report ¹	
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
Nu-Wool Nu-Seal Plus Closed Cell Spray Foam	Plus ThB	8	12	14	0	115	0.87	CCRR-0490
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 Closed Cell Spray Foam	Plus ThB	6	8	14	9	115	0.87	QAI B1020-1
Quadrant Performance EnviroSeal OC Platinum Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	ER-856
Quadrant Performance EnviroSeal HFO Closed Cell Spray Foam	Plus ThB	8	10	14	0	115	0.87	ER-854
Quadrant Performance EnviroSeal HFO MB Closed Cell Spray Foam	Plus ThB	8	10	14	0	115	0.87	ER-854
Quadrant Performance EnviroSeal CC Platinum Closed Cell Spray Foam	Plus ThB	8	10	14	0	115	0.87	ER-854
Spray Foam Genie SFG 1.7 Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	ER-924
Spray Foam Genie SFG 2.0 Closed Cell Spray Foam	Plus ThB	6.5	9.5	14	9	115	0.87	ER-924
SWD Quik-Shield 108 Open Cell Spray Foam	Plus ThB	8	16	14	9	115	0.87	CCRR-1051
SWD Quik-Shield 108YM Open Cell Spray Foam	Plus ThB	8	16	14	9	115	0.87	CCRR-1051
SWD Quik-Shield GOBLIN Closed Cell Spray Foam	Plus ThB	5	8	14	9	115	0.87	CCRR-0507
SWD Quik-Shield 112 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









Table 1. Thermal Barrier Assemblies

			ermai barrier Asse		ation of N	lo-Burn C	Coating	Evaluation Report ¹ CCRR-0391 CCRR-0478 ER-698 ER-603 CCRR-1095 ESR-4137 CCRR-0358 CCRR-0358 CCRR-0358 CCRR-0358
Substrate	No-Burn Product ²	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Minii Insta Thicknes		Appli	oretic cation ate	
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	CCRR-0391 CCRR-0478 ER-698 ER-603 CCRR-1095 ESR-4137 CCRR-0358 CCRR-0358 CCRR-0358 CCRR-0358 CCRR-0345 CCRR-0345
SWD Quik-Shield 144 Closed Cell Spray Foam	Plus ThB	5	8	14	9	115	0.87	CCRR-0391
SWD Quik-Shield YETI Closed Cell Spray Foam	Plus ThB	5	8	14	9	115	0.87	CCRR-0478
ThermoSeal 5G Closed Cell Spray Foam	Plus ThB	7	10	14	9	115	0.87	ER-698
ThermoSeal TS HFO Closed Cell Spray Foam	Plus ThB	7	10	14	9	115	0.87	ER-603
ThermoSeal™ OCX Open Cell Spray Foam	Plus ThB	8	16	16	11	100	1.00	CCRR-1095
ThermoSeal™ CCX Closed Cell Spray Foam	Plus ThB	6.5	9.5	16	11	100	1.00	ESR-4137
UPC 500 Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0358
UPC 500 Classic Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0358
UPC 500 Max Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0358
UPC 500 Max Pro Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	CCRR-0358
UPC 500 OCX Open Cell Spray Foam	Plus ThB	8.5	16	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 Premium 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





Table 1. Thermal Barrier Assemblies

				Applic	ation of N	lo-Burn C	Coating	
Substrate Pro	No-Burn Product ²	Max. Thickness of Walls & Vertical	Max. Thickness of Ceilings, Underside of Roof Sheathing/Rafters	Insta	mum alled ss (mils)	Appli	oretic cation ate	Evaluation Report ¹
	Name	Surfaces (in)	& Floors (in)	Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.	
UPC 2.0 HFO High Lift Closed Cell Spray Foam	Plus ThB	8	12	14	9	115	0.87	CCRR-0375
Victory Polymers VPC-50 Open Cell Spray Foam	Plus ThB	8.5	16	14	9	115	0.87	ER-674
Xcelus XLS 200 Closed Cell Spray Foam	Plus ThB	8	10	14	9	115	0.87	CCRR-0397
Xcelus XLS 2000 Closed Cell Spray Foam	Plus ThB	8	10	14	9	115	0.87	CCRR-0397

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

6.2 Ignition Barrier Assemblies

- 6.2.1 No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal 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.
- 6.2.2 No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal meet the criteria for use as wall and ceiling finishes in accordance with <u>IBC Section 803.1</u>, <u>IBC Section 803.4</u>, <u>IRC Section R302.9</u> and <u>IRC Section R302.10.1</u>.
- 6.2.3 The approved assemblies for No-Burn Plus ThB and No-Burn Plus XD are as listed in **Table 2**.
- 6.2.4 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:
 - 6.2.4.1 Entry into the attic or crawlspace is only for the maintenance, repair or servicing of the building or equipment. No storage is permitted.
 - 6.2.4.2 There are no interconnected attic or crawlspace areas.
 - 6.2.4.3 Air is not circulated to other parts of the building.
 - 6.2.4.4 The foam plastic insulation does not exceed the maximum density and thickness shown in **Table 2**.
 - 6.2.4.5 Combustion air is provided in accordance with the IBC Section 701.

Use of No-Burn Plus ThB 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









- 6.2.4.6 When required, attic ventilation is provided in accordance with <u>IBC Section 1202.2</u>²¹ or <u>IRC Section R806</u> and crawlspace ventilation is provided in accordance with <u>IBC Section 1202.4</u>.²²
 - 6.2.4.6.1 **Exception:** Unvented attics and crawlspaces meeting the requirements of <u>IBC Section 1202.3</u>, <u>IRC Section R408.3</u> or <u>IRC Section R806.5</u>.
- 6.2.4.7 The approved Ignition Barrier with Class II Vapor Retarder Assemblies for No-Burn ThB Spray Seal are as listed in **Table 3**.

Table 2. Ignition Barrier Assemblies

		Max.	Max. Thickness	Application of No-Burn Coating				
Substrate	No-Burn Product ¹	Thickness of Walls	of Ceilings, Underside of Roof	Minimum Installed Thickness (mils)		Theoretic Application Rate		
	Name	& Vertical Surfaces (in)	Sheathing/Rafters & Floors (in)	Wet Film	Dry Film	Sq. Ft. per Gallon	Gallons per 100 Sq. Ft.	
AMBIT AMBI-SEAL 5.0 Open Cell Spray Foam	Plus ThB	9	16	6	4	267	0.37	
BASF ENERTITE G Open Cell Spray Foam	Plus XD or Plus ThB	11 ¹ / ₄	16	6	4	267	0.37	
BASF ENERTITE Max Open Cell Spray Foam	Plus XD or Plus ThB	11 ¹ / ₄	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 XD or Plus ThB	9 1/4	11 ¹ / ₄	12	7	134	0.75	
BASF WALLTITE US Closed Cell Spray Foam	Plus XD or Plus ThB	9 1/4	11 ¹ / ₄	12	7	134	0.75	
BASF WALLTITE LWP Closed Cell Spray Foam	Plus XD, or Plus ThB	8	8	6	4	267	0.37	
BASF WALLTITE XL Closed Cell Spray Foam	Plus XD, or Plus ThB	8	8	6	4	267	0.37	
BASF WALLTITE Plus Closed Cell Spray Foam	Plus XD, or Plus ThB	8	8	6	4	267	0.37	
BASF WALLTITE Max Closed Cell Spray Foam	Plus XD, or Plus ThB	8	8	6	4	267	0.37	





Table 2. Ignition Barrier Assemblies

		Max.	Max. Thickness	Application of No-Burn Coating				
Substrate	No-Burn Product ¹	Thickness of Walls	of Ceilings, Underside of Roof	Minimum Installed Thickness (mils)		Theoretic Application Rate		
	Name	& Vertical Surfaces (in)	Sheathing/Rafters & Floors (in)	Wet Film	Dry Film	Sq. Ft. per Gallon	Gallons per 100 Sq. Ft.	
Carlisle SealTite Pro Open Cell Spray Foam	Plus XD or Plus ThB	11 1/4	16	6	4	267	0.37	
Carlisle Foamsulate 50 HY Open Cell Spray Foam	Plus XD or Plus ThB	11 ¹ / ₄	16	6	4	267	0.37	
Carlisle SealTite Pro XTR Open Cell Spray Foam	Plus XD or Plus ThB	11 ¹ / ₄	16	6	4	267	0.37	
Carlisle Foamsulate 50 ES Open Cell Spray Foam	Plus XD or Plus ThB	11 ¹ / ₄	16	6	4	267	0.37	
Carlisle SealTite Pro No Mix Open Cell Spray Foam	Plus XD or Plus ThB	11 1/4	16	6	4	267	0.37	
Carlisle Foamsulate 50 Open Cell Spray Foam	Plus XD or Plus ThB	11 ¹ / ₄	16	6	4	267	0.37	
Carlisle SealTite Pro High Yield Open Cell Spray Foam	Plus XD or Plus ThB	11 ¹ / ₄	16	6	4	267	0.37	
Central Urethanes X-Press Seal 50 Open Cell Spray Foam	Plus ThB	10	16	6	4	267	0.37	
Creative Polymer Accufoam Open Cell Spray Foam	Plus XD or Plus ThB	8	16	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	0.50	
Enverge/Gaco EZSpray F4500 Open Cell Spray Foam	Plus ThB	12	16	6	4	267	0.37	
Enverge/SES EasySeal 0.5 Spray Foam Insulation	Plus ThB	12	18	5	3	320	0.31	
Enverge/SES EasySeal ULD Spray Foam Insulation	Plus ThB	10	16	6	4	267	0.37	
Franklin Titebond Weathermaster Superfoam Closed Cell Spray Foam	Plus XD or Plus ThB	2	2	10	6	160	0.63	
General Coatings Ultra-Thane 050 Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37	
General Coatings Ultra-Thane 050 Max Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37	
General Coatings Ultra-Thane 050 Max Pro Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37	





Table 2. Ignition Barrier Assemblies

		Max.	Max. Thickness of Ceilings, Underside of Roof	Application of No-Burn Coating				
Substrate	No-Burn Product ¹	Thickness of Walls		Minimum Installed Thickness (mils)		Theoretic Application Rate		
	Name	& Vertical Surfaces (in)	Sheathing/Rafters & Floors (in)	Wet Film	Dry Film	Sq. Ft. per Gallon	Gallons per 100 Sq. Ft.	
Green Valley Products GVP500 NM Open Cell Spray Foam	Plus ThB	10	16	6	4	267	0.37	
Huntsman Premium Icynene Classic 45 Open Cell Spray Foam	Plus XD or Plus ThB	5 ¹ / ₂	16	6	4	267	0.37	
Huntsman Premium Icynene Ultra 50 Open Cell Spray Foam	Plus XD or Plus ThB	9 1/4	11 1/4	6	4	267	0.37	
Huntsman Premium Icynene Classic 75 Open Cell Spray Foam	Plus XD or Plus ThB	8	16	6	4	267	0.37	
Huntsman Premium Icynene High-R 80 Open Cell Spray Foam	Plus XD or Plus ThB	9 1/2	11 1/2	10	6	160	0.63	
Huntsman (Demilec) SEALECTION 500 Open Cell Spray Foam	Plus XD or Plus ThB	9 1/4	11 1/4	6	4	267	0.37	
Huntsman (Demilec) SEALECTION NM Open Cell Spray Foam	Plus XD or Plus ThB	9 1/4	11 ¹ / ₄	6	4	267	0.37	
Huntsman (Demilec) Agribalance Open Cell Spray Foam	Plus XD or Plus ThB	9 1/2	11 ¹ / ₂	10	6	160	0.63	
Huntsman (Icynene) Classic Open Cell Spray Foam	Plus XD or Plus ThB	5 ¹ / ₂	16	6	4	267	0.37	
Huntsman (Icynene) Classic Ultra Open Cell Spray Foam	Plus XD or Plus ThB	5 ¹ / ₂	16	6	4	267	0.37	
Huntsman (Icynene) Classic Ultra Select Open Cell Spray Foam	Plus XD or Plus ThB	5 ¹ / ₂	16	6	4	267	0.37	
Huntsman (Icynene) Classic Plus Open Cell Spray Foam	Plus XD or Plus ThB	8	16	6	4	267	0.37	
Huntsman (Icynene) Prime Gold Open Cell Spray Foam	Plus XD or Plus ThB	5 1/2	16	6	4	267	0.37	
Huntsman (Icynene) ProSeal Eco Closed Cell Spray Foam	Plus XD or Plus ThB	7 1/4	9 1/4	5	3	320	0.31	
Huntsman (Icynene) MD-C-200 Closed Cell Spray Foam	Plus XD or Plus ThB	11 ¹ / ₄	11 ¹ / ₄	16	10	100	1.00	
Huntsman (Lapolla) Foam-Lok FL 450 Open Cell Spray Foam	Plus XD or Plus ThB	5 ¹ / ₂	16	6	4	267	0.37	
Huntsman (Lapolla) Foam-Lok FL 750 Open Cell Spray Foam	Plus XD or Plus ThB	8	16	6	4	267	0.37	





Table 2. Ignition Barrier Assemblies

					Application of No-Burn Coating				
Substrate	No-Burn Product ¹	Max. Thickness of Walls & Vertical Surfaces (in)	Max. Thickness of Ceilings, Underside of Roof	Minimum Installed Thickness (mils)		Theoretic Application Rate			
	Name		Sheathing/Rafters & Floors (in)	Wet Film	Dry Film	Sq. Ft. per Gallon	Gallons per 100 Sq. Ft.		
ICP HandiFoam HVLP LD Open Cell Spray Foam	Plus XD or Plus ThB	11 1/4	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 NM Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37		
Johns Manville JM Corbond HY Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37		
Quadrant Performance EnviroSeal OC Platinum Open Cell Spray Foam	Plus XD or Plus ThB	11 1/4	16	6	4	267	0.37		
SWD Quick Shield 106 Open Cell Spray Foam	Plus ThB	8	16	6	4	267	0.37		
ThermoSeal TS 360 Open Cell Spray Foam	Plus ThB	10	16	4	3	401	0.25		
ThermoSeal TS 500 Open Cell Spray Foam	Plus ThB	10	16	4	3	401	0.25		
ThermoSeal TS 800 Open Cell Spray Foam	Plus ThB	10	16	4	3	401	0.25		
ThermoSeal OCX Open Cell Spray Foam	Plus XD or Plus ThB	9 1/4	11 1/4	6	4	267	0.37		
Tiger Foam Insulation E-84 Fire Rated SPF Class 1 Spray Foam	Plus XD or Plus ThB	3 1/2	3 1/2	10	6	160	0.63		
UPC 500 Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37		
UPC 500 Classic Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37		
UPC 500 Max Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37		
UPC 500 Max Pro Open Cell Spray Foam	Plus ThB	8	12	6	4	267	0.37		
Victory Polymers VPC-50 Open Cell Spray Foam	Plus XD or Plus ThB	11 1/4	16	6	4	267	0.37		

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

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





- 6.3 Class II Vapor Retarder, Thermal Barrier Assemblies or Ignition Barrier Assemblies
 - 6.3.1 No-Burn ThB Spray Seal is used as a Thermal Barrier, Ignition Barrier and Class II Vapor Retarder over spray polyurethane foams listed in **Table 1** and **Table 2**, and in accordance with **Table 3**.
 - 6.3.2 No-Burn ThB Spray Seal is used to protect SPF insulation to allow the SPF to be installed without a prescriptive 15-minute thermal barrier in accordance with **Section 6.1.1**.
 - 6.3.3 No-Burn ThB Spray Seal is used to protect SPF in attics and crawlspaces to allow the SPF to be installed without a prescriptive ignition barrier in accordance with **Section 6.2.1**.
 - 6.3.4 No-Burn ThB Spray Seal showed no deleterious effects such as discoloration, cracking, crazing or delamination when exposed to UV, irradiance and condensation or accelerated weathering and durability.
 - 6.3.5 The approved Class II Vapor Retarder, Thermal Barrier Assemblies or Ignition Barrier Assemblies are in accordance with **Table 3**.

Table 3. ThB Spray Seal use as a Class II Vapor Retarder, Thermal Barrier or Ignition Barrier

		Application of No-Burn Coating					
Substrate	No-Burn Product ² Name	Minimum Thickne	Installed ss (mils)	Theoretic Application Rate			
		Wet Film	Dry Film	Sq. Ft. Per Gallon	Gallons per 100 Sq. Ft.		
Spray Polyurethane Foams listed in Table 1 for Thermal Barrier Assemblies	ThB Spray Seal	16	11	100	1.00		
Spray Polyurethane Foams listed in Table 2 for Ignition Barrier Assemblies	ThB Spray Seal	16	11	100	1.00		

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

6.4 Where the application falls outside of the performance evaluation, conditions of use and/or installation requirements set forth herein, alternative techniques shall be permitted in accordance with accepted engineering practice and experience. This includes but is not limited to the following areas of engineering: mechanics or materials, structural, building science, and fire science.

7 Certified Performance²³

- 7.1 All construction methods shall conform to accepted engineering practices to ensure durable, livable, and safe construction and shall demonstrate acceptable workmanship reflecting journeyman quality of work of the various trades.²⁴
- 7.2 The strength and rigidity of the component parts and/or the integrated structure shall be determined by engineering analysis or by suitable load tests to simulate the actual loads and conditions of application that occur.²⁵

^{1.} No-Burn ThB Spray Seal may be over-coated with latex paint with a pH of 7 to 8.





8 Regulatory Evaluation and Accepted Engineering Practice

- 8.1 No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal comply with the following legislatively adopted regulations and/or accepted engineering practice for the following reasons:
 - 8.1.1 Approval for use as a thermal barrier in accordance with <u>IBC Section 2603.5</u>, <u>IBC Section 2603.9</u> and <u>IRC Section R316.6</u>.
 - 8.1.2 Approval for use as an ignition barrier in accordance with <u>IBC Section 2603.4.1.6</u>, <u>IBC Section 2603.9</u>, <u>IRC Section R316.5.3</u>, <u>IRC Section R316.5.4</u> and <u>IRC Section R316.6</u>.
 - 8.1.3 Approval for use as an interior finish in accordance with <u>IBC Section 803.1</u>, <u>IBC Section 803.4</u>, <u>IRC Section 803.4</u>, <u>IRC Section 803.2</u>, and IRC Section R302.10.1.
 - 8.1.4 Approval for use as an interior finish or interior trim in plenums in accordance with <u>IBC Section 2603.7</u> and IMC Section 602.2.1.6.
 - 8.1.5 Approval for use as a Class II vapor retarder in accordance with <u>IBC Section 1202</u>, <u>IBC Section 1404.3</u>, IRC Section R702.7 and IRC Section R806.
- 8.2 Any building code, regulation, and/or accepted engineering evaluations (i.e., research reports, <u>Duly Authenticated Reports</u>, etc.) that are conducted for this Listing were performed by DrJ Engineering, LLC (DrJ), an <u>ISO/IEC 17065 accredited certification body</u> and a professional engineering company operated by <u>RDP/approved sources</u>. DrJ is qualified²⁶ to practice product and regulatory compliance services within its scope of accreditation and engineering expertise, respectively.
- 8.3 Engineering evaluations are conducted with DrJ's ANAB <u>accredited ICS code scope</u> of expertise, which are also its areas of professional engineering competence.
- 8.4 Any regulation specific issues not addressed in this section are outside the scope of this report.

9 Installation

- 9.1 Installation shall comply with the approved construction documents, the manufacturer installation instructions, this report and the applicable building code.
- 9.2 In the event of a conflict between the manufacturer installation instructions and this report, the more restrictive shall govern.
- 9.3 Installation Procedure
 - 9.3.1 The substrates that No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal 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.
 - 9.3.2 No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal are white in color.
 - 9.3.3 A paint thickness gauge shall be used to verify the proper thickness during application.
 - 9.3.4 The dry mil thickness will be 0.4 to 0.7 times the wet mil thickness.
 - 9.3.5 Apply No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal only to the substrates listed in **Table 1**, **Table 2** and **Table 3**, in accordance with the assembly selected.
 - 9.3.6 Substrates shall be fully protected from the weather and fully installed prior to application.
 - 9.3.7 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.
 - 9.3.8 Apply the coatings at the rate specified in **Table 1**, **Table 2** and **Table 3**.
 - 9.3.9 Coatings may be applied via roller, brush or spraying equipment.





- 9.3.10 After curing, the coating may be over-coated with latex paint per the paint manufacturer instructions.
- 9.3.11 The No-Burn & SPF Installation Form Spray Polyurethane Foam Insulation Certificate (SPFA-148), or the spray polyurethane foam insulation manufacturer insulation certificate may be completed by the intumescent coating installer and submitted upon request.

10 Substantiating Data

- 10.1 Testing has been performed under the supervision of a professional engineer and/or under the requirements of ISO/IEC 17025 as follows:
 - 10.1.1 Reports of fire tests in accordance with NFPA 286 and UL 1715
 - 10.1.2 Supporting documentation from spray foam manufacturer and evidence of code compliance
- 10.2 Information contained herein may include the result of testing and/or data analysis by sources that are <u>approved agencies</u>, <u>approved sources</u>, and/or <u>RDP</u>s. Accuracy of external test data and resulting analysis is relied upon.
- 10.3 Where pertinent, testing and/or engineering analysis are based upon provisions that have been codified into law through state or local adoption of regulations and standards. The developers of these regulations and standards are responsible for the reliability of published content. DrJ's engineering practice may use a regulation-adopted provision as the control. A regulation-endorsed control versus a simulation of the conditions of application to occur establishes a new material as being equivalent to the regulatory provision in terms of quality, strength, effectiveness, fire resistance, durability, and safety.
- 10.4 The accuracy of the provisions provided herein may be reliant upon the published properties of raw materials, which are defined by the grade mark, grade stamp, mill certificate, or Duly Authenticated Reports from approved agencies and/or approved sources provided by the supplier. These are presumed to be minimum properties and relied upon to be accurate. The reliability of DrJ's engineering practice, as contained in this Duly Authenticated Report, may be dependent upon published design properties by others.
- 10.5 Testing and engineering analysis: The strength, rigidity, and/or general performance of component parts and/or the integrated structure are determined by suitable tests that simulate the actual conditions of application that occur and/or by accepted engineering practice and experience.²⁷
- 10.6 Where additional condition of use and/or regulatory compliance information is required, please search for No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal on the DrJ Certification website.

11 Findings

- 11.1 As outlined in **Section 6**, No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal have performance characteristics that were tested and/or meet applicable regulations and are suitable for use pursuant to its specified purpose.
- 11.2 When used and installed in accordance with this <u>Duly Authenticated Report</u> and the manufacturer installation instructions, No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal shall be approved for the following applications:
 - 11.2.1 No-Burn Plus ThB and No-Burn ThB Spray Seal are approved for the protection of SPF insulation to allow the SPF to be installed without a prescriptive 15-minute thermal barrier.
 - 11.2.2 No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal are approved for the protection of SPF in attics and crawlspaces to allow the SPF to be installed without a prescriptive ignition barrier.
 - 11.2.3 No-Burn ThB Spray Seal is approved as a Class II Vapor Retarder.
- 11.3 Any application specific issues not addressed herein can be engineered by an RDP. Assistance with engineering is available from No-Burn, Inc.





11.4 IBC Section 104.11 (IRC Section R104.11 and IFC Section 104.10²⁸ are similar) in pertinent part 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.

- 11.5 Approved:²⁹ Building regulations require that the building official shall accept Duly Authenticated Reports.³⁰
 - 11.5.1 An approved agency is "approved" when it is ANAB ISO/IEC 17065 accredited.
 - 11.5.2 An <u>approved source</u> is "approved" when an <u>RDP</u> is properly licensed to transact engineering commerce.
 - 11.5.3 Federal law, <u>Title 18 US Code Section 242</u>, requires that where the alternative product, material, service, design, assembly, and/or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. Denial without written reason deprives a protected right to free and fair competition in the marketplace.
- 11.6 DrJ is a licensed engineering company, employs licensed <u>RDP</u>s and is an <u>ANAB-Accredited Product</u> Certification Body Accreditation #1131.
- 11.7 Through the <u>IAF Multilateral Agreements</u> (MLA), this <u>Duly Authenticated Report</u> can be used to obtain product approval in any <u>jurisdiction</u> or <u>country</u> because all ANAB ISO/IEC 17065 <u>Duly Authenticated Reports</u> are equivalent.³¹

12 Conditions of Use

- 12.1 Material properties shall not fall outside the boundaries defined in Section 6.
- 12.2 As defined in **Section 6**, where material and/or engineering mechanics properties are created for load resisting design purposes, the resistance to the applied load shall not exceed the ability of the defined properties to resist those loads using the principles of accepted engineering practice.
- 12.3 Assemblies shall be limited to those shown in **Table 1**, **Table 2** and **Table 3**, as applicable.
- 12.4 When required by adopted legislation and enforced by the <u>building official</u>, also known as the authority having jurisdiction (AHJ) in which the project is to be constructed:
 - 12.4.1 Any calculations incorporated into the construction documents shall conform to accepted engineering practice and, when prepared by an <u>approved source</u>, shall be approved when signed and sealed.
 - 12.4.2 This report and the installation instructions shall be submitted at the time of permit application.
 - 12.4.3 These innovative products have an internal quality control program and a third-party quality assurance program.
 - 12.4.4 At a minimum, these innovative products shall be installed per **Section 9** of this report.
 - 12.4.5 The review of this report by the AHJ shall comply with IBC Section 104 and IBC Section 105.4.
 - 12.4.6 These innovative products have an internal quality control program and a third party quality assurance program in accordance with <u>IBC Section 104.4</u>, <u>IBC Section 110.4</u>, <u>IBC Section 1703</u>, <u>IRC Section R104.4</u>, and IRC Section R109.2.
 - 12.4.7 The application of these innovative products in the context of this report is dependent upon the accuracy of the construction documents, implementation of installation instructions, inspection as required by IBC Section 110.3, IRC Section R109.2, and any other regulatory requirements that may apply.
- 12.5 The approval of this report by the AHJ shall comply with <u>IBC Section 1707.1</u>, where legislation states in part, "the <u>building official</u> shall accept duly authenticated reports from <u>approved agencies</u> in respect to the quality and manner of <u>use</u> of new material or assemblies as provided for in <u>Section 104.11</u>," all of <u>IBC Section 104</u>, and <u>IBC Section 105.4</u>.





- 12.6 <u>Design loads</u> shall be determined in accordance with the regulations adopted by the <u>jurisdiction</u> in which the project is to be constructed and/or by the building designer (i.e., <u>owner</u> or <u>RDP</u>).
- 12.7 The actual design, suitability, and use of this report for any particular building, is the responsibility of the <u>owner</u> or the authorized agent of the owner.

13 Identification

- 13.1 The innovative products listed in **Section 1.1** are identified by a label on the board or packaging material bearing the manufacturer name, product name, this report number, and other information to confirm code compliance.
- 13.2 Additional technical information can be found at www.noburn.com.

14 Review Schedule

- 14.1 This report is subject to periodic review and revision. For the latest version, visit dricertification.org.
- 14.2 For information on the status of this report, please contact DrJ Certification.

15 Approved for Use Pursuant to U.S. and International Legislation Defined in Appendix A

15.1 No-Burn Plus ThB, No-Burn Plus XD and No-Burn ThB Spray Seal are included in this report published by an approved agency that is concerned with evaluation of products or services, maintains periodic inspection of the production of listed materials or periodic evaluation of services. This report states either that the material, product, or service meets recognized standards or has been tested and found suitable for a specified purpose. This report meets the legislative intent and definition of being acceptable to the AHJ.





Appendix A

1 Legislation that Authorizes AHJ Approval

- 1.1 **Fair Competition**: <u>State legislatures</u> have adopted Federal regulations for the examination and approval of building code referenced and alternative products, materials, designs, services, assemblies and/or methods of construction that:
 - 1.1.1 Advance innovation
 - 1.1.2 Promote competition so all businesses have the opportunity to compete on price and quality in an open market on a level playing field unhampered by anticompetitive constraints
 - 1.1.3 Benefit consumers through lower prices, better quality, and greater choice
- 1.2 **Adopted Legislation**: The following local, state, and federal regulations affirmatively authorize these innovative products to be approved by AHJs, delegates of building departments, and/or delegates of an agency of the federal government:
 - 1.2.1 Interstate commerce is governed by the <u>Federal Department of Justice</u> to encourage the use of innovative products, materials, designs, services, assemblies, and/or methods of construction. The goal is to "protect economic freedom and opportunity by promoting free and fair competition in the marketplace."
 - 1.2.2 <u>Title 18 US Code Section 242</u> affirms and regulates the right of individuals and businesses to freely and fairly have new products, materials, designs, services, assemblies, and/or methods of construction approved for use in commerce. Disapproval of alternatives shall be based upon non-conformance with respect to specific provisions of adopted legislation and shall be provided in writing <u>stating the reasons why the alternative was not approved</u>, with reference to the specific legislation violated.
 - 1.2.3 The <u>federal government</u> and each state have a <u>public records act</u>. In addition, each state also has legislation that mimics the federal <u>Defend Trade Secrets Act 2016</u> (DTSA),³² where providing test reports, engineering analysis and/or other related IP/TS is subject to <u>prison of not more than ten years</u>³³ and/or a \$5,000,000 fine or 3 times the value of³⁴ the Intellectual Property (IP) and Trade Secrets (TS).
 - 1.2.3.1 Compliance with public records and trade secret legislation requires approval through the use of Listings, certified reports, Technical Evaluation Reports, Duly Authenticated Reports, and/or research reports prepared by approved agencies and/or approved sources.
 - 1.2.4 For <u>new materials</u>³⁵ that are not specifically provided for in any regulation, the <u>design strengths and</u> <u>permissible stresses</u> shall be established by <u>tests</u>, where <u>suitable load tests simulate the actual loads and</u> conditions of application that occur.
 - 1.2.5 The <u>design strengths and permissible stresses</u> of any structural material shall <u>conform</u> to the specifications and methods of design using accepted engineering practice.³⁶
 - 1.2.6 The commerce of <u>approved sources</u> (i.e., registered PEs) is regulated by <u>professional engineering</u> <u>legislation</u>. Professional engineering <u>commerce shall always be approved</u> by AHJs, except where there is evidence provided in writing, that specific legislation have been violated by an individual registered PE.
 - 1.2.7 The AHJ shall accept <u>Duly Authenticated Reports</u> from <u>approved agencies</u> in respect to the quality and manner of use of new materials or assemblies as provided for in <u>IBC Section 104.11</u>.³⁷





- 1.3 Approved³⁸ by Los Angeles: The Los Angeles Municipal Code (LAMC) states in pertinent part that the provisions of LAMC are not intended to prevent the use of any material, device, or method of construction not specifically prescribed by LAMC. The Department shall use Part III, Recognized Standards in addition to Part II, Uniform Building Code Standards of Division 35, Article 1, Chapter IX of the LAMC in evaluation of products for approval where such standard exists for the product or the material and may use other approved standards that apply. Whenever tests or certificates of any material or fabricated assembly are required by Chapter IX of the LAMC, such tests or certification shall be made by a testing agency approved by the Superintendent of Building to conduct such tests or provide such certifications. The testing agency shall publish the scope and limitation(s) of the listed material or fabricated assembly. ³⁹ The Superintendent of Building Approved Testing Agency Roster is provided by the Los Angeles Department of Building and Safety (LADBS). The Center for Building Innovation (CBI) Certificate of Approval License is TA24945. Tests and certifications found in a DrJ Listing are LAMC approved. In addition, the Superintendent of Building shall accept Duly Authenticated Reports from approved agencies in respect to the quality and manner of use of new materials or assemblies as provided for in the California Building Code (CBC) Section 1707.1.⁴⁰
- 1.4 Approved by Chicago: The Municipal Code of Chicago (MCC) states in pertinent part that an Approved Agency is a Nationally Recognized Testing Laboratory (NRTL) acting within its recognized scope and/or a certification body accredited by the American National Standards Institute (ANSI) acting within its accredited scope. Construction materials and test procedures shall conform to the applicable standards listed in the MCC. Sufficient technical data shall be submitted to the building official to substantiate the proposed use of any product, material, service, design, assembly, and/or method of construction not specifically provided for in the MCC. This technical data shall consist of research reports from approved sources (i.e., MCC defined Approved Agencies).
- 1.5 **Approved by New York City**: The 2022 NYC Building Code (NYCBC) states in part that an <u>approved agency</u> shall be deemed⁴¹ an approved testing agency via <u>ISO/IEC 17025 accreditation</u>, an approved inspection agency via <u>ISO/IEC 17020 accreditation</u>, and an approved product evaluation agency via <u>ISO/IEC 17065</u> <u>accreditation</u>. Accrediting agencies, other than federal agencies, must be members of an internationally recognized cooperation of laboratory and inspection accreditation bodies subject to a mutual recognition agreement⁴² (i.e., ANAB, International Accreditation Forum [IAF], etc.).
- 1.6 **Approved by Florida**: <u>Statewide approval</u> of products, methods, or systems of construction shall be approved, without further evaluation by:
 - 1.6.1 A certification mark or listing of an approved certification agency,
 - 1.6.2 A test report from an approved testing laboratory,
 - 1.6.3 A product evaluation report based upon testing or comparative or rational analysis, or a combination thereof, from an approved product evaluation entity, or
 - 1.6.4 A product evaluation report based upon testing, comparative or rational analysis, or a combination thereof, developed, signed and sealed by a professional engineer or architect, licensed in Florida.
 - 1.6.5 For local product approval, products or systems of construction shall demonstrate compliance with the structural wind load requirements of the Florida Building Code (FBC) through one of the following methods:
 - 1.6.5.1 A certification mark, listing or label from a commission-approved certification agency indicating that the product complies with the code,
 - 1.6.5.2 A test report from a commission-approved testing laboratory indicating that the product tested complies with the code,
 - 1.6.5.3 A product-evaluation report based upon testing, comparative or rational analysis, or a combination thereof, from a commission-approved product evaluation entity which indicates that the product evaluated complies with the code,





- 1.6.5.4 A product-evaluation report or certification based upon testing or comparative or rational analysis, or a combination thereof, developed and signed and sealed by a Florida professional engineer or Florida registered architect, which indicates that the product complies with the code, or
- 1.6.5.5 A statewide product approval issued by the Florida Building Commission.
- 1.6.6 The <u>Florida Department of Business and Professional Regulation</u> (DBPR) website provides a listing of companies certified as a <u>Product Evaluation Agency</u> (i.e., EVLMiami 13692), a <u>Product Certification Agency</u> (i.e., CER10642), and as a <u>Florida Registered Engineer</u> (i.e., ANE13741).
- 1.7 **Approved by Miami-Dade County (i.e., Notice of Acceptance [NOA])**: A Florida statewide approval is an NOA. An NOA is a Florida local product approval. By Florida law, Miami-Dade County shall accept the statewide and local Florida Product Approval as provided for in Florida legislation 553.842 and 553.8425.
- 1.8 **Approved by New Jersey**: Pursuant to the 2018 Building Code of New Jersey in <u>IBC Section 1707.1</u>

 <u>General</u>, ⁴³ it states: "In the absence of approved rules or other approved standards, the building official shall accept duly authenticated reports from <u>approved agencies</u> in respect to the quality and manner of use of new materials or assemblies as provided for in the administrative provisions of the Uniform Construction Code (<u>N.J.A.C. 5:23</u>)". ⁴⁴ Furthermore N.J.A.C 5:23-3.7 states: "Municipal approvals of alternative materials, equipment, or methods of construction."
 - 1.8.1 **Approvals**: Alternative materials, equipment, or methods of construction shall be approved by the appropriate subcode official provided the proposed design is satisfactory and that the materials, equipment, or methods of construction are suitable for the intended use and are at least the equivalent in quality, strength, effectiveness, fire resistance, durability, and safety of those conforming with the requirements of the regulations.
 - 1.8.1.1 A field evaluation label and report or letter issued by a nationally recognized testing laboratory verifying that the specific material, equipment, or method of construction meets the identified standards or has been tested and found to be suitable for the intended use, shall be accepted by the appropriate subcode official as meeting the requirements of the above.
 - 1.8.1.2 Reports of engineering findings issued by nationally recognized evaluation service programs such as but not limited to, the Building Officials and Code Administrators (BOCA), the International Conference of Building Officials (ICBO), the Southern Building Code Congress International (SBCCI), the International Code Council (ICC), and the National Evaluation Service, Inc., shall be accepted by the appropriate subcode official as meeting the requirements of the above.
 - 1.8.2 The New Jersey Department of Community Affairs has confirmed that technical evaluation reports, from any accredited entity listed by ANAB, meets the requirements of item the previous paragraph, given that the listed entities are no longer in existence and/or do not provide "reports of engineering findings."
- 1.9 Approved by the Code of Federal Regulations Manufactured Home Construction and Safety Standards: Pursuant to Title 24, Subtitle B, Chapter XX, Part 3282.14 for and Part 3280, for the Department encourages innovation and the use of new technology in manufactured homes. The design and construction of a manufactured home shall conform to the provisions of Part 3282 and Part 3280 where key approval provisions in mandatory language follow:
 - 1.9.1 "All construction methods shall be in conformance with accepted engineering practices."
 - 1.9.2 "The strength and rigidity of the component parts and/or the integrated structure shall be determined by engineering analysis or by suitable load tests to simulate the actual loads and conditions of application that occur."
 - 1.9.3 "The design stresses of all materials shall conform to accepted engineering practice."





- 1.10 **Approval by US, Local and State Jurisdictions in General**: In all other local and state jurisdictions, the adopted building code legislation states in pertinent part that:
 - 1.10.1 For <u>new materials</u> that are not specifically provided for in this code, the <u>design strengths and permissible</u> stresses shall be established by tests.⁴⁷
 - 1.10.2 For innovative <u>alternatives</u> and/or methods of construction, the building official shall accept <u>Duly</u>
 <u>Authenticated Reports</u> from <u>approved agencies</u> with respect to the quality and manner of use of <u>new</u>
 materials or assemblies.⁴⁸
 - 1.10.2.1 An <u>approved agency</u> is "approved" when it is <u>ANAB ISO/IEC 17065 accredited</u>. DrJ Engineering, LLC (DrJ) is in the ANAB directory.
 - 1.10.2.2 An <u>approved source</u> is "approved" when an <u>RDP</u> is properly licensed to transact engineering commerce. The regulatory authority governing approved sources is the <u>state legislature</u> via its professional engineering regulations.⁴⁹
 - 1.10.3 The <u>design strengths and permissible stresses</u> of any structural material...shall conform to the specifications and methods of design of accepted engineering practice performed by an <u>approved</u> source.⁵⁰
- 1.11 **Approval by International Jurisdictions**: The <u>USMCA</u> and <u>GATT</u> agreements provide for approval of innovative materials, designs, services, and/or methods of construction through the <u>Agreement on Technical Barriers to Trade</u> and the <u>IAF Multilateral Recognition Arrangement</u> (MLA), where these agreements:
 - 1.11.1 State that <u>conformity assessment procedures</u> (i.e., ISO/IEC 17020, 17025, 17065, etc.) are prepared, adopted, and applied so as to grant access for suppliers of like products originating in the territories of other Members under conditions no less favourable than those accorded to suppliers of like products of national origin or originating in any other country, in a comparable situation.
 - 1.11.2 **Approved**: The <u>purpose of the MLA</u> is to ensure mutual recognition of accredited certification and validation/verification statements between signatories to the MLA and subsequently, acceptance of accredited certification and validation/verification statements in many markets based on one accreditation for the timely approval of innovative materials, designs, services, and/or methods of construction.
 - 1.11.3 ANAB is an <u>IAF-MLA</u> signatory where recognition of certificates, validation, and verification statements issued by conformity assessment bodies accredited by all other signatories of the IAF MLA, with the appropriate scope, shall be approved.⁵¹
 - 1.11.4 Therefore, all ANAB ISO/IEC 17065 Duly Authenticated Reports are approval equivalent.⁵²
- 1.12 Approval equity is a fundamental commercial and legal principle. 53





Notes

- For more information, visit dricertification.org or call us at 608-310-6748.
- https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1702
- 3 Alternative Materials, Design and Methods of Construction and Equipment: The provisions of any regulation code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by a regulation. Please review https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-administration#104.11
- 4 https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1706:~:text=the%20design%20strengths%20and%20permissible%20stresses%20shall%20be%20established%20by%20tests%20as
- The design strengths and permissible stresses of any structural material shall conform to the specifications and methods of design of accepted engineering practice. https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1706:~:text=shall%20conform%20to%20the%20specifications%20and%20methods%20of%20design%20of%20accepted%20engineering%20practice
- https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and
 - tests#1707.1:~:text=the%20building%20official%20shall%20accept%20duly%20authenticated%20reports%20from%20approved%20agencies
- https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1703.4.2
- 8 https://up.codes/viewer/wyoming/ibc-2021/chapter/2/definitions#approved_agency
- https://up.codes/viewer/wyoming/ibc-2021/chapter/2/definitions#approved_source
- https://www.law.cornell.edu/uscode/text/18/1832 (b) Any organization that commits any offense described in subsection (a) shall be fined not more than the greater of \$5,000,000 or 3 times the value of the stolen trade secret to the organization, including expenses for research and design and other costs of reproducing the trade secret that the organization has thereby avoided. The federal government and each state have a public records act. To follow DTSA and comply state public records and trade secret legislation requires approval through ANAB ISO/IEC 17065 accredited certification bodies or approved sources. For more information, please review this website: Intellectual Property and Trade Secrets.
- https://www.nspe.org/resources/issues-and-advocacy/professional-policies-and-position-statements/regulation-professional AND https://apassociation.org/list-of-engineering-boards-in-each-state-archive/
- 12 <u>https://www.cbitest.com/accreditation/</u>
- 13 https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-administration#104:~:text=to%20enforce%20the%20provisions%20of%20this%20code
- https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and
 - administration#104.11:~:text=Where%20the%20alternative%20material%2C%20design%20or%20method%20of%20construction%20is%20not%20approved%2C%20the%20building%20official%20shall%20respond%20in%20writing%2C%20stating%20the%20reasons%20why%20the%20alternative%20was%20not%20approved AND https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-
 - $administration \#105.3.1: \\ \text{\simtext=1f\%20$the\%20$application\%20$or\%20$the\%20$construction\%20$documents\%20$do\%20$not\%20$conform\%20$to\%20$the\%20$equirements\%20$of\%20$pertinent $$\%20$laws\%2C\%20$the\%20$building\%20$fficial\%20$shall\%20$reject\%20$such\%20$application\%20$in\%20$writing\%2C\%20$stating\%20$the\%20$reasons\%20$therefore$
- https://up.codes/viewer/colorado/ibc-2021/chapter/17/special-inspections-and-tests#1707.1:~:text=the%20building%20official%20shall%20accept%20duly%20authenticated%20reports%20from%20approved%20agencies%20in%20respect%20to%20the%20 guality%20and%20manner%20of%20use%20of%20new%20materials%20or%20assemblies%20as%20provided%20for%20in%20Section%20104.11
- https://iaf.nu/en/about-iaf
 - mla/#:~:text=it%20is%20required%20to%20recognise%20certificates%20and%20validation%20and%20verification%20statements%20issued%20by%20conformity%20assessmen t%20bodies%20accredited%20by%20all%20other%20signatories%20of%20the%20IAF%20MLA%2C%20with%20the%20appropriate%20scope
- True for all ANAB accredited product evaluation agencies and all International Trade Agreements.
- https://www.justice.gov/crt/deprivation-rights-under-color-law AND https://www.justice.gov/atr/mission
- Unless otherwise noted, all references in this Listing are from the 2021 version of the codes and the standards referenced therein. This material, product, design, service and/or method of construction also complies with the 2000-2021 versions of the referenced codes and the standards referenced therein.
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#p-3280.2(Listed%20or%20certified); https://up.codes/viewer/colorado/ibc-2021/chapter/2/definitions#listed AND https://up.codes/viewer/colorado/ibc-2021/chapter/2/definitions#labeled
- 21 2015 IBC Section 1203.2
- 22 2015 IBC Section 1203.4
- https://up.codes/viewer/colorado/ibc-2021/chapter/17/special-inspections-and-tests#1703.4
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#:~:text=All%20construction%20methods%20shall%20be%20in%20conformance%20with%20accepted%20engineering%20practices%20to%20insure%20durable%2C%20livable%2C%20and%20safe%20housing%20and%20shall%20demonstrate%20acceptable%20workmanship%20reflecting%20journeyman%20quality%20of%20work%20of%20the%20various%20trades
- 25 <u>https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-</u>
 - 3280#:~:text=The%20strength%20and%20rigidity%20of%20the%20component%20parts%20and/or%20the%20integrated%20structure%20shall%20be%20determined%20by%20 engineering%20analysis%20or%20by%20suitable%20load%20tests%20to%20simulate%20the%20actual%20loads%20and%20conditions%20of%20application%20that%20occur
- Qualification is performed by a legislatively defined <u>Accreditation Body</u>. <u>ANSI National Accreditation Board (ANAB)</u> is the largest independent accreditation body in North America and provides services in more than 75 countries. <u>DrJ</u> is an ANAB accredited <u>product certification body</u>.
- ²⁷ See Code of Federal Regulations (CFR) <u>Title 24 Subtitle B Chapter XX Part 3280</u> for definition.
- 28 2018 IFC Section 104.9
- Approved is an adjective that modifies the noun after it. For example, Approved Agency means that the Agency is accepted officially as being suitable in a particular situation. This example conforms to IBC/IRC/IFC Section 201.4 where the building code authorizes sentences to have an ordinarily accepted meaning such as the context implies.

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- https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1707.1
- 31 Multilateral approval is true for all ANAB accredited product evaluation agencies and all International Trade Agreements.
- 32 http://www.drjengineering.org/AppendixC AND https://www.drjecrtification.org/cornell-2016-protection-trade-secrets
- https://www.law.comell.edu/uscode/text/18/1832#:~:text=imprisoned%20not%20more%20than%2010%20years
- https://www.law.cornell.edu/uscode/text/18/1832#:~:text=Any%20organization%20that,has%20thereby%20avoided
- https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1706.2
- 36 IBC 2021, Section 1706.1 Conformance to Standards
- ³⁷ IBC 2021, Section 1707 Alternative Test Procedure, 1707.1 General
- 38 See Section 11 for the distilled building code definition of **Approved**
- 39 Los Angeles Municipal Code, SEC. 98.0503. TESTING AGENCIES
- 40 https://up.codes/viewer/california/ca-building-code-2022/chapter/17/special-inspections-and-tests#1707.1
- New York City, The Rules of the City of New York, § 101-07 Approved Agencies
- 42 New York City, The Rules of the City of New York, § 101-07 Approved Agencies
- https://up.codes/viewer/new_jersey/ibc-2018/chapter/17/special-inspections-and-tests#1707.1
- 44 https://www.nj.gov/dca/divisions/codes/codreg/ucc.html
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3282/subpart-A/section-3282.14
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280
- ⁴⁷ IBC 2021, Section 1706 Design Strengths of Materials, 1706.2 New Materials. Adopted law pursuant to IBC model code language 1706.2.
- 48 IBC 2021, Section 1707 Alternative Test Procedure, 1707.1 General. Adopted law pursuant to IBC model code language 1707.1.
- 49 https://www.nspe.org/resources/issues-and-advocacy/professional-policies-and-position-statements/regulation-professional AND https://apassociation.org/list-of-engineering-boards-in-each-state-archive/
- 50 IBC 2021, Section 1706 Design Strengths of Materials, Section 1706.1 Conformance to Standards Adopted law pursuant to IBC model code language 1706.1.
- https://iaf.nu/en/about-iaf-mla/#:~:text=it%20is%20required%20to%20recognise%20certificates%20and%20validation%20and%20verification%20statements%20issued%20by%20conformity%20assessment%20bodies%20accredited%20by%20all%20other%20signatories%20of%20the%20IAF%20MLA%2C%20with%20the%20appropriate%20scope
- True for all ANAB accredited product evaluation agencies and all International Trade Agreements.
- https://www.justice.gov/crt/deprivation-rights-under-color-law AND https://www.justice.gov/atr/mission