



ThB Spray Seal™

Intumescent Coating

Spray Polyurethane Foam Insulation



PRODUCT DESCRIPTION

No-Burn ThB Spray Seal™ is an intumescent coating for use over open and closed cell spray polyurethane foam as a Class II vapor retarder, thermal barrier, and ignition barrier in one application. Durability features also include exposure to UV and weather for up to 6 months. Compliant with the International Building Code and International Residential Code, ThB Spray Seal™ approvals are listed in Technical Evaluation Report TER 1905-03.

ABOUT US

No-Burn intumescent coatings provide the high-performance, code-compliant fire protection needed in new and existing residential and commercial construction. In the presence of extreme heat or fire, intumescent coatings char and swell up to multiple times their original thickness, which shields the substrate and significantly reduces its rate of combustion.

Designed with the professional in mind, our simple one-coat spray application achieves the code compliance you need with a water-based, low VOC emission formula, available in white and tinted coloring.

PRODUCT SPECIFICATIONS

Color: White/Tinted

Light Gray

Tinted

Finish: Flat

pH: 7-9

Film Thickness: Reference Code and Compliance Report

Dry Time: 60-90 minutes

Overcoat: Water-based with pH of 7-9

Safety: ThB Spray Seal™ Safety Data Sheet

VOC Content: 18 g/L



PACKAGING/STORAGE

Pails: 5 gallons (19 L), 58.5 lbs.

Drums: 55 gallon drum (208 L), net 45 gallons (170 L) 586.5 lbs.

Shelf Life: 12 months in unopened sealed containers, properly stored

Storage: 40°F (4°C) – 90°F (32°C)

ThB Spray Seal

Code Requirement	Compliance
Thermal Barrier Assembly/ Interior Finish	NFPA 286 & UL 1715 15 minutes: TER 1905-03
Ignition Barrier Assembly/ Interior Finish	AC377, App X 5± minutes: TER 1905-03
Class II Vapor Retarder	ASTM E96A, 0.60 perms: TER 1905-03
Exterior Rated Wall Assembly	NFPA 285, ThB Spray Seal without an exterior topcoat
Accelerated UV, weather, and durability	ASTM G154, up to 6 months exposure: TER 1905-03
USDA Incidental Food Contact	ANSI/NSF 51 Food Zone Materials

Code-compliant solutions. Life-saving protection.

No-Burn, Inc.

SALES INFORMATION AND ORDER PLACEMENT

1-800-989-8577

TECHNICAL INFORMATION

1-800-989-8577

www.noburn.com

TRADEMARKS No-Burn, No-Burn logo and Fire Wise are trademarks owned by or licensed to No-Burn, Inc.

LIMITED WARRANTY No-Burn, Inc. warrants that the No-Burn formula will be manufactured to the same specifications and quality, and will perform equally to the tests performed by the independent laboratories when properly applied. Warranty coverage is limited solely to the cost of product purchased hereunder and specifically excludes incidental expenses and consequential damages. The applicator warrants that the product, in its original form from the Manufacturer, will be stored, mixed and/or applied as directed in the guidelines published by No-Burn, Inc., to every reasonably accessible area that has been specified for protection. All implied warranties, from No-Burn, Inc. or the applicator are excluded. There may be situations and materials for which No-Burn will not prevent a fire from igniting or retard the progress of a fire.

POLICY & PROCEDURES All sales of this product by No-Burn, Inc. are subjected to our Policy & Procedures available at <https://www.noburn.com/policies-procedures/>

UPDATES AND CURRENT INFORMATION Revised 7-May-2025. The information in this document may change without notice.

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SECTION 072119 – FOAMED-IN-PLACE INSULATION

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes:

1. Closed-cell spray polyurethane foam insulation.
2. Open-cell spray polyurethane foam insulation.
3. Accessories including thermal barrier, ignition barrier, and Class II vapor retarder coatings.

B. Related Requirements:

1. Section 072100 "Thermal Insulation" for foam-plastic board insulation.
2. Section 075700 "Coated Foamed Roofing" for spray polyurethane foam insulation used for roofing applications.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Sustainable Design Submittals:

1. Product Data: For paints and coatings, indicating VOC content.
2. Evaluation Reports or Certificates: For paints and coatings, indicating compliance with requirements for low-emitting materials.

1.3 INFORMATIONAL SUBMITTALS

A. Test and Evaluation Reports:

1. Product Test Reports: For each product, for tests performed by qualified testing agency.
2. Research Reports:
 - a. For spray-applied polyurethane foam-plastic insulation, from [an agency acceptable to authorities having jurisdiction] [ICC-ES] [UES/IAPMO] [DrJ TER] <Insert evaluation agency> showing compliance with <Insert requirement>.
 - b. For fire-protective coatings applied to spray-applied polyurethane foam-plastic insulation, from [UES/IAPMO] [DrJ TER] [Intertek] <Insert evaluation agency> showing compliance with <Insert requirement>.

B. Field Quality-Control Submittals:

1. Field quality-control reports for foamed-in-place insulation.

C. Qualification Statements: For Installer.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A[n authorized] representative who is trained on applications of spray-applied polyurethane foam-plastic insulation and intumescent coatings, or similar product types[and approved by manufacturer].

PART 2 – PRODUCTS

2.1 CLOSED-CELL SPRAY POLYURETHANE FOAM INSULATION

- A. Closed-Cell Spray Polyurethane Foam: ASTM C1029, Type II, minimum density of [1.5 lb/cu. ft. (24 kg/cu. m)] <Insert density> and minimum aged R-value at 1-inch (25.4-mm) thickness of 6.2 deg F x h x sq. ft./Btu at 75 deg F (43 K x sq. m/W at 24 deg C).

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BASF Corporation.
 - b. Carlisle Spray Foam Insulation.
 - c. Demilec; a brand of Huntsman Building Products.
 - d. Gaco Western LLC.
 - e. Icynene; a brand of Huntsman Building Products.
 - f. SWD Urethane Company.
 - i. <Insert manufacturer's name>.

2. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - a. Flame-Spread Index: [25] [75] <Insert value> or less.
 - b. Smoke-Developed Index: [450] <Insert value> or less.
3. Fire Propagation Characteristics: Passes [NFPA 285] [and] [NFPA 276] testing as part of an approved assembly.

2.2 OPEN-CELL SPRAY POLYURETHANE FOAM INSULATION

- A. Open-Cell Spray Polyurethane Foam: Spray-applied polyurethane foam using water as a blowing agent. Minimum density of [0.4 lb/cu. ft. (6.4 kg/cu. m)] <Insert density> and minimum aged R-value at 1-inch (25.4-mm) thickness of 3.4 deg F x h x sq. ft./Btu at 75 deg F (24 K x sq. m/W at 24 deg C).

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BASF Corporation.
 - b. Carlisle Spray Foam Insulation.
 - c. Demilec; a brand of Huntsman Building Products.
 - d. Gaco Western LLC.
 - e. Icynene; a brand of Huntsman Building Products.
 - f. Johns Manville; a Berkshire Hathaway company.
 - h. SWD Urethane Company.
 - i. <Insert manufacturer's name>.
2. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - a. Flame-Spread Index: [25] [75] <Insert value> or less.
 - b. Smoke-Developed Index: [450] <Insert value> or less.
3. Fire Propagation Characteristics: Passes [NFPA 285] [and] [NFPA 276] testing as part of an approved assembly.

2.3 ACCESSORIES

- A. Thermal Barrier Coating: Fire-protective intumescent coating formulated for application over polyurethane foam plastics, compatible with insulation, and passes NFPA 286, FM 4880, UL 1040, or UL 1715 testing as part of an approved assembly.

1. Basis-of-Design Product: Subject to compliance with requirements, provide No-Burn, Inc.; [Plus ThB] [ThB Spray Seal] intumescent coating.
2. Performance Criteria:
 - a. Finish: Flat.
 - b. Color: [White] [Gray] [Tinted].
 - c. VOC Content: 18 g/L or less of water in accordance with EPA 24.
 - d. Solids by Volume: 70 percent.
3. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - a. Flame-Spread Index: 25 or less.
 - b. Smoke-Developed Index: [50] [450] <Insert value> or less.
4. Fire Propagation Characteristics: Passes NFPA 285 testing as part of an approved assembly.
5. Topcoat: As recommended in writing by intumescent thermal barrier manufacturer as compatible with substrate materials.
 - a. Decorative Topcoat: 6- to 8-mil (0.15- to 0.20-mm) thick, water-based latex-based paint for interior conditioned spaces recommended in writing by intumescent thermal barrier manufacturer as compatible with substrate materials.
 - b. Protective Topcoat, Interior or Exterior: 6- to 8-mil (0.15- to 0.20-mm) thick, exterior topcoat, VOC compliant, for interior unconditioned spaces subject to constant high humidity, condensation, or direct contact with moisture.

- B. Ignition Barrier Coating: Fire-protective coating formulated for application over polyurethane foam plastics, compatible with insulation, and in compliance with ICC-ES AC307, Appendix X. Products identified with testing agency markings.

1. Basis-of-Design Product: Subject to compliance with requirements, provide No-Burn, Inc.; [Plus ThB] [ThB Spray Seal].
2. Performance Criteria:
 - a. Finish: Flat.
 - b. Color: [White] [] [Tinted].
 - c. VOC Content: 18 g/L or less of water in accordance with EPA 24.
 - d. Solids by Volume: 60 to 70 percent.
3. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - a. Flame-Spread Index: 25 or less.
 - b. Smoke-Developed Index: 50 or less.
4. Topcoat: As recommended in writing by intumescent thermal barrier manufacturer as compatible with substrate materials.

- a. Decorative Topcoat: 6- to 8-mil (0.15- to 0.20-mm) thick, water-based latex-based paint for interior conditioned spaces recommended in writing by intumescent thermal barrier manufacturer as compatible with substrate materials.
- b. Protective Topcoat, Interior: 6- to 8-mil (0.15- to 0.20-mm) thick, heavy-duty protective topcoat, VOC compliant, for interior unconditioned spaces subject to constant high humidity, condensation, or direct contact with moisture.

- C. Liquid-Applied Vapor Retarder Coating: Water vapor retarder coating formulated for application over open-cell polyurethane foam plastics with a maximum vapor permeance of 1.0 perm in accordance with ASTM E96.

1. Basis-of-Design Product: Subject to compliance with requirements, provide No-Burn, Inc.; ThB Spray Seal.
2. Performance Criteria:
 - a. Finish: Flat.
 - b. Color: [Gray] [Tinted].
 - c. VOC Content: 18 g/L or less of water in accordance with EPA 24.
 - d. Solids by Volume: 60 to 70 percent.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions for compliance with manufacturer's requirements for surface treatments, maximum moisture content, and other conditions affecting performance of the Work.

- B. Proceed with coating application only after unsatisfactory conditions have been corrected and surfaces are dry.

3.2 PREPARATION

- A. Verify that substrates are clean, dry, and free of substances that are harmful to insulation.

3.3 INSTALLATION

- A. Comply with insulation manufacturer's written instructions applicable to products and applications.
- B. Spray insulation to envelop entire area to be insulated and fill voids.
- C. Do not exceed maximum thicknesses recommended by manufacturer. Do not spray into rising foam.
- D. Framed Construction: Install into cavities formed by framing members to achieve thickness indicated on Drawings.
- E. Cavity Walls: Install into cavities to [thickness indicated on Drawings] [fully fill void].
- F. Miscellaneous Voids: Apply in accordance with manufacturer's written instructions.
- G. Apply fire-protective intumescent coatings in accordance with manufacturer's written instructions and to comply with requirements for listing and labeling for fire-propagation characteristics and surface-burning characteristics specified.
 1. Use equipment and techniques best suited for substrate and type of material applied as recommended by coating manufacturer.
 2. Apply coatings to prepared surfaces as soon as practical after preparation and before subsequent surface soiling or deterioration.
 3. Apply coatings to produce surface films without holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Produce sharp lines and color breaks.

3.4 FIELD QUALITY CONTROL

- A. Continuously monitor wet film thickness (WFT) by performing periodic checks to ensure correct thicknesses are applied.
 1. Measuring Thickness:
 - a. Install medallions prior to applying intumescent thermal barrier coating to measure wet film thickness and dry film thickness.
 - b. Perform thickness measurements by measuring representative sample of installed intumescent coating material by means of calipers, optical comparators, or similar devices.

3.5 PROTECTION

- A. Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes.

END OF SECTION 072119