

MANUFACTURER

No-Burn, Inc.
1392 High Street, Suite 211
Wadsworth, Ohio 44281
www.noburn.com

DESCRIPTION

No-Burn® Plus is a white, water-based thin film intumescent coating when exposed to high temperatures and flame, intumesces creating a char-barrier protecting treated *Substrates* from fire. Certified to be applied to a variety of *Substrates*, fire performance compliance is achieved with the appropriate wet film thickness.

1. PRIMARY USES

For use in new and existing buildings, complying with the IBC®, IRC® IEBC® and other applicable codes or standards, Plus is utilized in applications where it provides:

- Surface Burning Characteristics
- Interior Finish Classification Class I or Class A: FS 0-5 / SD 0-35
- Thermal Barrier Protection
- Alternative or Non-prescriptive Thermal Barrier Protection
- Alternative or Non-prescriptive Ignition Barrier Protection
- Fire Resistance
- Class III Vapor Retardancy

View [Evaluation Report \(ER 305\)](#) and [Evaluation Listing \(UEL 5005\)](#) for more information.

2. SPECIFICATIONS

Color: Opaque/White/Tinted
Finish: Flat
VOC Content: 18 g/L EPA Method 24
Dry Time: 60-90 Minutes
Pails: 5 Gallons (19 L), 55 lbs.
Drums: 55 Gallons (208 L), 605 lbs.
Shelf Life: 24 Months
Cure Time: 24 Hours
Boiling Point: 212°F
Freezing Point: 32°F
% Volatile by Volume: 38%
Specific Gravity: 1.25

View product [Safety Data Sheet \(M\)SDS](#) for more information.

3. PRODUCT PERFORMANCE

No-Burn® Plus may be used in any of the *Primary Uses* expressed and in addition, may have the feasibility to meet other fire performance requirements.

As an intumescent non-corrosive product, Plus limits flame spread and smoke developed, providing intumescent protection when applied and where lapped or butted lumber and sheeting edges are joined together.

Penetrations or openings for ducts, vents, electrical outlets, lighting, devices, luminaries, wires, speakers, drainage, piping and similar penetrations or openings do not compromise Plus's performance. Complies with USDA requirements for incidental food contact and ANSI/NSF 51 Food Zone Materials.

4. APPLICABLE STANDARDS

No-Burn® Plus may be specified in compliance of the following:

AC14	CARB
AC257	CDPH (CA Spec 01350)
AC377	CHPS
ANSI/ASHRAE/ICC/USGBC Standard 189.1	CSFM: 2280-2014:0100
ANSI/NSF 51	EC017
ASTM A653	GSA PBS-P100
ASTM D2915	ICC/ASHRAE 700 NGBS
ASTM D5055	IgCC
ASTM E84	LEED v3 2009
ASTM E84, 30 min	LEED v4
ASTM E96	NFPA 255
ASTM E119	NFPA 286
ASTM E1623	SCAQMD Rule 1113
ASTM E2768	UL 723
CAN/ULC-S102	UL 1715

Table 1			
Substrates			
Material	Film Thickness	Spread Rate	Max Moisture Content
BASF COMFORT FOAM® 178 Closed Cell SPF	12 wet	134 sq. ft./gal.	N/A
BASF ENERTITE® US Open Cell SPF	12 wet	134 sq. ft./gal.	N/A
BASF SPRAYTITE® 178 Closed Cell SPF	12 wet	134 sq. ft./gal.	N/A
BASF SPRAYTITE® 18206 Closed Cell SPF	12 wet	134 sq. ft./gal.	N/A
BASF WALLTITE® US Closed Cell SPF	12 wet	134 sq. ft./gal.	N/A
BASF WALLTITE® US-N Closed Cell SPF	12 wet	134 sq. ft./gal.	N/A
BASF WALLTITE® HP+ Closed Cell SPF	12 wet	134 sq. ft./gal.	N/A
Douglas Fir	6 wet	275 sq. ft./gal.	19%
Gypsum Board 5/8" Type X	15 wet	107 sq. ft./gal.	N/A
Icynene MD-C-200 Closed Cell SPF	16 wet	100 sq. ft./gal.	N/A
I-joist and subfloor	15 wet	107 sq. ft./gal.	16%
*I-joist only	23 wet	70 sq. ft./gal.	16%
Laminated Strand Lumber (LSL)	10 wet	160 sq. ft./gal.	16%
Laminated Veneer Lumber (LVL)	10 wet	160 sq. ft./gal.	16%
Oriented Strand Board (OSB)/Plywood	8 wet	200 sq. ft./gal.	16%
Red Oak	6 wet	275 sq. ft./gal.	19%
Southern Yellow Pine	10 wet	160 sq. ft./gal.	19%
Structural Insulated Panel (SIP)	12 wet	134 sq. ft./gal.	16%

*See ER 305, revised date 4/12/2018

N/A=Not applicable

5. MIXING and TINTING

Plus must be thoroughly mixed before use in accordance with the manufacturer's recommendations. Mix with a Squirrel™ 5 gallon power mixing wand or equivalent at or between 500-1500 RPM for a mixing time of 5 minutes per pail. Shaking No-Burn® Plus with a paint shaker is NOT sufficient. Filtering or straining Plus is not recommended. Use the product as is: **DO NOT DILUTE**. If No-Burn® Plus is mixed more than 24 hours prior to use, mix it again according to manufacturer's instructions.

Plus should never be allowed to freeze 32°F (0°C), stored between 40°F and 90°F (4.4°C and 32.2°C), and kept out of direct sunlight; if you cannot verify that these conditions have been maintained, the product may be disposed of in accordance with the manufacturer's (M)SDS.

If tinting is desired, Plus may be tinted at a maximum rate of 2 oz. of tint per gallon. It is recommended that No-Burn® Green Dye or No-Burn® Black Tint, manufactured by No-Burn, Inc., be used for tinting. Contact the manufacturer for additional tinting information.

To recycle pails visit, <http://www.wbdg.org/tools/cwm.php>.

6. APPLICATION

When No-Burn® Plus is applied in accordance with Section 3.5 or Section 3.6 of Evaluation Report (ER) 305, or Evaluation Listing (UEL) 5005, the applicator shall be qualified by No-Burn®, Inc. Certified installation ensures quality control and product best practices. A No-Burn® Product Application Certificate shall be completed by the certified applicator and submitted to the code official and No-Burn, Inc. Plus shall be applied to *Substrate(s)* in accordance with manufacturer's technical data sheet/instructions. Copies of relevant technical data and/or documents shall be available at the jobsite.

Before and during coating application, the *Substrates'* surfaces shall be dry, clean and free from loose debris, dust, dirt, grease, oil, and all prior coating materials, such as paint, stains and sealers. The *Substrate(s)* shall not have, nor have been exposed to, treatments, chemicals, coatings, etc. prior to the application of Plus. Visual observation of the intumescent coating is naturally and distinctively white in color. For verification of the wet applied thickness, a standard painter's thickness gauge shall be used during the application. The finished dry mil thickness will be 0.40-0.70 times the wet mil thickness.

Plus shall be applied to the *Substrate(s)* and immediately before placing the intumescent coating, the applicator shall verify the moisture content of the *Substrate(s)* with a moisture meter, as applicable, in accordance with manufacturer recommendations. The *Substrate(s)* shall be in the final position in the building, directly exposed to the interior, protected from the weather, in conditioned and unconditioned locations. Furthermore, Plus shall be applied to areas within the weatherproofing membrane or surfaces not exposed to weather, where the *Substrates'* in-service dry-use moisture content conditions are expected to be at or less than recommended.

Surface and ambient temperatures before and during application shall be 40°F (4.4°C) minimum. Surface temperatures shall not exceed 100°F (37.7°C) during application. The coating shall be applied at an application rate set forth by spraying, roller or brush. When Plus is applied in accordance with Section 3.5, or Section 3.6 of Evaluation Report (ER) 305, the frequency of thickness measurements with a wet film thickness gauge during the application of each coat shall be at a minimum, measured once every 100 ft² (9.29 m²) of surface area. Dry time is typically 60-90 minutes and cure time is 24 hours minimum, depending on the ambient temperature and relative humidity conditions. If more than one coat is required or before the addition of a top coat, allow No-Burn® Plus to dry completely between coats. Overcoats shall be water-based with a pH of 7-8. Prior to the use of any overcoat, it is recommended that an inconspicuous area be tested for compatibility before widespread application. Compatibility may be noted as the overall satisfactory condition of the *Substrate(s)* once No-Burn® Plus and an overcoat have been applied. For exterior applications, Plus must be overcoated with a high quality exterior water-based, UV resistant paint. Exterior topcoats may be recommended by the manufacturer. When overcoated in exterior applications, special consideration should be paid to the overcoat's instructions and recommendations. Prior to the reapplication of an overcoat, No-Burn® Plus may need to be reapplied.

When applying Plus in accordance with Section 3.5 or Section 3.6 of Evaluation Report (ER) 305, the No-Burn® qualified applicator shall affix a No-Burn, Inc. issued label to the *Substrate* where the coating has been applied; at a minimum, one No-Burn, Inc. issued label shall be affixed every 10,000 feet² (929.03 m²) of floor area as stated in Evaluation

Report (ER) 305. See Evaluation Report (ER) 305, page 6 to view the installation label. Additionally, for Section 3.5 and Section 3.6, the Evaluation Report requires Plus be applied prior to the installation of mechanical, electrical, and plumbing components.

No-Burn® Plus coated *Substrate(s)*, other than during normal construction delays, may need protection from prolonged exposure to adverse weather conditions. Use plastic sheets or tarps to protect from extended weather exposure while in transit, storage or during construction. Follow manufacturer instructions and APA's Engineered Wood Construction Guide Form E30 for storage and handling recommendations.

Store No-Burn® Plus coated *Substrate(s)* in clean, dry areas off the ground. It is recommended to store No-Burn® Plus coated *Substrate(s)* indoors; if stored outside, cover with plastic sheets or tarps, and keep cover open and away from the sides and bottom of *Substrate(s)* to allow for air circulation. No-Burn® Plus coated *Substrate(s)* being transported on open truck beds or railcars should be covered with tarps to avoid extended weather exposure.

7. EQUIPMENT

Methods of application include airless sprayer, roller or brush. Manufacturers and models of airless spray *Equipment* vary and examples of applicable *Equipment* follow. Airless spray *Equipment* recommendations have been linked for reference to manufacturer specifications.

Table 2		
Equipment		
Manufacturer	Model	
Graco®	Ultra Max II 795	Ultra Max II 1595
	Ultra Max II 1095	TexSpray Mark V
Titan®	Impact™ 840	PowrTwin™ 6900 Plus
	Impact™ 1140	PowrTwin™ 8900 Plus

Spray *Equipment* must be capable of producing a minimum of 3,300 psi, and recommended tip orifice sizes are .021-.027. Removal of filter from both the spray gun and pump to allow for the passage of solid content is recommended. Airless sprayer hoses are recommended to have an inside diameter of ¼" or larger. Variations in spray pattern width and tip size may be required depending on the surface area and the *Substrate(s)* to which Plus is being applied. Cleanup of *Equipment* may be with water, or other methods recommended by the *Equipment* manufacturer.

8. PERSONAL PROTECTION & EXPOSURE CONTROLS

Wearing a certified respirator and goggles to avoid overspray and splashing are recommended. Eye and face protection should be in accordance with OSHA 29 CFR 1910.133. Rubber or plastic gloves are recommended for hand and arm protection. Personal cleanup may be with soap and water.

If sprayed, wear an air-purifying respirator approved by NIOSH in accordance with OSHA 29 CFR 1910.134(d)(1)(ii). If used in a confined area, a full-face, powered air-purifying respirator (PAPR) or supplied-air respirator (SAR) is recommended. Use respirators in accordance with 29 CFR 1910.134(d)(3)(i)(A) Table 1, 29 CFR 1910.134(d)(3)(iii)(B) and 29 CFR 1910.134(d)(3)(iv)(B).

Use appropriate engineering controls, such as proper ventilation. Where such systems are not effective, wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards.

Table 3		
Code Compliance		
INTERNATIONAL BUILDING CODE® (IBC®)		
2018	2015	
Chapter 7 Fire and Smoke Protection Features 706.6 Exception 4.3/104.11 Fire Wall Continuity 722.6.2 Calculated Fire Resistance Walls/Floors/Roofs 722.6.2(1) Time Assigned to Wallboard Membranes Chapter 8 Interior Finish 803.1.1 Interior Wall and Ceiling Finish Materials NFPA 286 803.1.2 Interior Wall and Ceiling Finish Materials ASTM E84 or UL 723 803.13 Interior Finish Requirements Based on Occupancy 806.7 Interior Trim 806.8 Interior Floor-wall Base Chapter 23 Wood 2303.2/104.11 FRTw Alternate Chapter 26 Plastic 2603.4/2603.9 Thermal Barrier Special Approval (SIPs) 2603.4.1.6 Attics and Crawl Spaces	Chapter 7 Fire and Smoke Protection Features 706.6 Exception 4.3/104.11 Fire Wall Continuity 722.6.2 Calculated Fire Resistance Walls/Floors/Roofs 722.6.2(1) Time Assigned to Wallboard Membranes Chapter 8 Interior Finish 803.1.1 Interior Wall and Ceiling Finish Material 803.1.2 Corner Test for Interior Wall or Ceiling Finish 803.11 Interior Finish Requirements Based on Group 806.7 Interior Trim 806.8 Interior Floor-wall Base Chapter 23 Wood 2303.2/104.11 FRTw Alternate Chapter 26 Plastic 2603.4/2603.9 Thermal Barrier Special Approval (SIPs) 2603.4.1.6 Attics and Crawl Spaces	
2012	2009	
Chapter 7 Fire and Smoke Protection Features 706.6 Exception 4.3/104.11 Fire Wall Continuity 722.6.2 Calculated Fire Resistance Walls/Floors/Roofs 722.6.2(1) Time Assigned to Wallboard Membranes Chapter 8 Interior Finish 803.1.1 Interior Wall and Ceiling Finish Material 803.1.2 Corner Test for Interior Wall or Ceiling Finish 803.9 Interior Finish Requirements Based on Group 806.5 Interior Trim 806.6 Interior Floor-wall Base Chapter 23 Wood 2303.2/104.11 FRTw Alternate Chapter 26 Plastic 2603.4/2603.10 Thermal Barrier Special Approval (SIPs) 2603.4.1.6 Attics and Crawl Spaces	Chapter 7 Fire and Smoke Protection Features 706.6 Exception 4.3/104.11 Fire Wall Continuity 721.6.2 Calculated Fire Resistance Walls/Floors/Roofs 721.6.2(1) Time Assigned to Wallboard Membranes Chapter 8 Interior Finish 803.1.1 Interior Wall and Ceiling Finish Material 803.1.2 Corner Test for Interior Wall or Ceiling Finish 803.9 Interior Finish Requirements Based on Group 806.5 Interior Trim 806.6 Interior Floor-wall Base Chapter 23 Wood 2303.2/104.11 FRTw Alternate Chapter 26 Plastic 2603.4/2603.9 Thermal Barrier Special Approval (SIPs) 2603.4.1.6 Attics and Crawl Spaces	
INTERNATIONAL RESIDENTIAL CODE® (IRC®)		
2018	2015	
Chapter 3 Building and Planning R302.2.4 Exception/R104.11 Parapets for Townhouses R302.9 Flame Spread and Smoke Developed Index for Wall and Ceiling Finishes R302.13 Exception 4 Fire Protection of Floors R316.4/R316.6 Thermal Barrier Specific Approval (SIPs) R316.5.3 (AC377 Appx X) Foam Plastic in Attics R316.5.4 (AC377 Appx X) Foam Plastic in Crawl Spaces	Chapter 3 Building and Planning R302.2.2 Exception/R104.11 Parapets for Townhouses R302.9 Flame Spread and Smoke Developed Index for Wall and Ceiling Finishes R302.13 Exception 4 Fire Protection of Floors R316.4/R316.6 Thermal Barrier Specific Approval (SIPs) R316.5.3 (AC377 Appx X) Foam Plastic in Attics R316.5.4 (AC377 Appx X) Foam Plastic in Crawl Spaces	
2012	2009	
Chapter 3 Building and Planning R302.2.2 Exception/R104.11 Parapets for Townhouses R302.9 Flame Spread and Smoke Developed Index for Wall and Ceiling Finishes R316.4/R316.6 Thermal Barrier Specific Approval (SIPs) R316.5.3 (AC377 Appx X) Foam Plastic in Attics R316.5.4 (AC377 Appx X) Foam Plastic in Crawl Spaces Chapter 5 Floors R501.3 Exception 4 Fire Protection of Floors	Chapter 3 Building and Planning R302.2.2 Exception/R104.11 Parapets for Townhouses R302.9 Flame Spread and Smoke Developed Index for Wall and Ceiling Finishes R316.4/R316.6 Thermal Barrier Specific Approval (SIPs) R316.5.3 (AC377 Appx X) Foam Plastic in Attics R316.5.4 (AC377 Appx X) Foam Plastic in Crawl Spaces Chapter 8 Roof-Ceiling and Construction R806.4(4) Unvented Attic and Unvented Enclosed Rafter Assemblies	
NATIONAL FIRE PROTECTION ASSOCIATION® (NFPA®) 13		
2016	2013	2010
Chapter 8 Installation Requirements 8.15.1.2/1.5 Concealed Spaces Not Requiring Sprinkler Protection	Chapter 8 Installation Requirements 8.15.1.2/1.5 Concealed Spaces Not Requiring Sprinkler Protection	Chapter 8 Installation Requirements 8.15.1.2/1.5 Concealed Spaces Not Requiring Sprinkler Protection
NATIONAL FIRE PROTECTION ASSOCIATION® (NFPA®) 101		
2018	2015	2012
Chapter 10 Interior Finish 10.2.3 Interior Wall/Ceiling Finish Testing & Classification 10.2.3.4 Required to be Tested ASTM E84 or UL 723 10.2.4.3 Cellular or Foamed Plastic (SIPs) 10.2.4.3.1 Cellular or Foamed Plastic Testing (SIPs) 10.2.4.3.2 Cellular or Foamed Plastic Trim (SIPs) 10.2.6.1 Fire Retardant Coatings FSI/SD Chapter 33 Existing Residential Board/Care Occupancies 33.2.3.5.7.2(4)/1.4 Attics	Chapter 10 Interior Finish 10.2.3 Interior Wall/Ceiling Finish Testing & Classification 10.2.3.4 Required to be Tested ASTM E84 or UL 723 10.2.4.3 Cellular or Foamed Plastic (SIPs) 10.2.4.3.1 Cellular or Foamed Plastic Testing (SIPs) 10.2.4.3.2 Cellular or Foamed Plastic Trim (SIPs) 10.2.6.1 Fire Retardant Coatings FSI/SD Chapter 33 Existing Residential Board/Care Occupancies 33.2.3.5.7.2(4)/1.4 Attics	Chapter 10 Interior Finish 10.2.3 Interior Wall/Ceiling Finish Testing & Classification 10.2.3.4 Required to be Tested ASTM E84 or UL 723 10.2.4.3 Cellular or Foamed Plastic (SIPs) 10.2.4.3.1 Cellular or Foamed Plastic Testing (SIPs) 10.2.4.3.2 Cellular or Foamed Plastic Trim (SIPs) 10.2.6.1 Fire Retardant Coatings FSI/SD Chapter 33 Existing Residential Board/Care Occupancies 33.2.3.5.7.2(4)/1.4 Attics

Table 4	
Green Standards	
ANSI/ASHRAE/ICC/USGBC STANDARD 189.1	
2017	2014
8. Indoor Environmental Quality (IEQ) 8.4.2.2 Paints and Coatings 8.4.2.2.1/8.4.2.2.2 Emissions Requirements & VOC Content Requirements: a and b 8.5.2 Materials 9. The Buildings Impact on the Atmosphere, Materials, and Resources 9.3.1.1 Diversion 9.3.1.2 Total Waste 9.3.1.3 Construction Waste Management Plan 9.4.1.1.2 Salvaged Material Content 9.4.1.2 Regional Materials	8. Indoor Environmental Quality (IEQ) 8.4.2.2 Paints and Coatings 8.4.2.2.1/8.4.2.2.2 Emissions Requirements & VOC Content Requirements: a and b 8.5.2 Materials 9. The Buildings Impact on the Atmosphere, Materials, and Resources 9.3.1.1 Diversion 9.3.1.2 Total Waste 9.3.1.3 Construction Waste Management Plan 9.4.1.1.2 Salvaged Material Content 9.4.1.2 Regional Materials
CALIFORNIA AIR RESOURCES BOARD (ARB)	
2008	
8. Compliance and Test Methods 8.1/8.2 Calculation of VOC Content & VOC Content of Coatings 8.5.1 Flame Spread Index 8.5.2 Fire Resistance Rating 8.5.9 VOC Content of Coatings Table 1, VOC Content Limits for Architectural Coatings: Flat Coatings	
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH)	
2017	2010
STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOC EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS V1.2 California Specification 01350	STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOC EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS V1.1 California Specification 01350
COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS)	
2017	2016
Core Criteria New Construction and Renovation Indoor Environmental Quality Prerequisite: EQ 7.0 Low Emitting Materials/Paints & Coatings EQ 7.1 Additional Low Emitting Materials/EQ 7.1.5 Paints & Coatings Materials & Waste Management Prerequisite MW 1.0 Storage & Collection Recyclables MW 6.1 Single Attribute – Materials Reuse MW 9.1 Building Reuse - Interior	Core Criteria New Construction and Renovation Indoor Environmental Quality Prerequisite: EQ 7.0 Low Emitting Materials/Paints & Coatings EQ 7.1 Additional Low Emitting Materials/EQ 7.1.5 Paints & Coatings Materials & Waste Management Prerequisite MW 1.0 Storage & Collection Recyclables MW 6.1 Single Attribute – Materials Reuse MW 9.1 Building Reuse - Interior
GENERAL SERVICES ADMINISTRATION (GSA) PUBLIC BUILDING SERVICE (PBS) - P100	
2017	2016
Chapter 3 Architecture and Interior Design 3.5.2 Interior Finishes and Materials 3.5.2.19 Interior Coatings (Paint) 3.5.4 Fire Performance and Smoke Development Chapter 4 Prescriptive Structural Engineering 4.3.1 Innovative Materials and Methods Chapter 7 Fire Protection 7.1.3.3 Alternative Designs 7.5 Interior Finishes 7.15 Performance-Based Design	Chapter 3 Architecture and Interior Design 3.5.2 Interior Finishes and Materials 3.5.2.19 Interior Coatings (Paint) 3.5.4 Fire Performance and Smoke Development Chapter 4 Structural Engineering 4.3.1 Innovative Materials and Methods Chapter 7 Fire Protection and Life Safety 7.3.1.3 Alternative Designs 7.5 Interior Finishes 7.15 Performance-Based Design
ICC/ASHRAE 700 NATIONAL GREEN BUILDING STANDARD™ (NGBS)	
2015	2012
Chapter 4 Site Design 403.9 Existing Buildings Chapter 6 Resource Efficiency 601.2 Material Usage – Option (2) 603.1 Reuse of Existing Building 603.2 Salvaged Materials 605.3 Recycled Construction Materials 609.1 Regional Materials Chapter 9 Indoor Environmental Quality 901.8/901.9 Wall Coverings & Interior Architectural Coatings 901.9.1 VOC Content Limits Architectural Coatings Flat Coatings or 901.9.3 904.1/904.2 Indoor Air Quality (IAQ) During & Post Construction Chapter 11 Remodeling 11.601.2 Material Usage – Option (2) 11.603.1 Reuse of Existing Building 11.605.3 On-site Recycling 11.605.4 Recycled Construction Materials 11.609.1 Regional Materials	Chapter 4 Site Design 403.9 Existing Buildings Chapter 6 Resource Efficiency 601.2 Material Usage – Option (2) 603.1 Reuse of Existing Building 603.2 Salvaged Materials 605.3 Recycled Construction Materials 609.1 Regional Materials Chapter 9 Indoor Environmental Quality 901.8/901.9 Wall Coverings & Interior Architectural Coatings 901.9.1 VOC Content Limits Architectural Coatings Flat Coatings or 901.9.3 Chapter 11 Remodeling 11.601.2 Material Usage – Option (2) 11.603.1 Reuse of Existing Building 11.605.3 On-site Recycling 11.605.4 Recycled Construction Materials 11.609.1 Regional Materials

Table 4 Continued

ICC/ASHRAE 700 NATIONAL GREEN BUILDING STANDARD™ (NGBS) Continued

2015

2012

11.901.8/11.901.9 Wall Coverings & Interior Architectural Coatings
 11.901.9.1 VOC Content Limits Architectural Coatings Flat Coatings or 11.901.9.3
 11.901.9.4 Mandatory Requirement
 11.904.1/11.904.2 Indoor Air Quality (IAQ) During & Post Construction
Chapter 12 Remodeling of Functional Areas
 12.1.601.2 Material Usage – Option (2)
 12.1(A).603.2 Reused and Salvaged Materials
 12.1(A).609.1 Regional Materials
 12.1.901.8/12.1.9.1.8 Interior Wall Coverings & Architectural Coatings
 12.1.901.9.1 VOC Content Limits Architectural Coatings Flat Coatings or 12.1.901.9.2

11.901.8/11.901.9 Wall Coverings & Interior Architectural Coatings
 11.901.9.1 VOC Content Limits Architectural Coatings Flat Coatings or 11.901.9.3
 11.901.9.4 Mandatory Requirement
Chapter 12 Remodeling of Functional Areas
 12.1.601.2 Material Usage – Option (2)
 12.1(A).603.1 Reused and Salvaged Materials
 12.1(A).609.1 Regional Materials
 12.1.901.8/12.1.901.9 Interior Wall Coverings & Architectural Coatings
 12.1.901.9.1 VOC Content Limits Architectural Coatings Flat Coatings or 12.1.901.9.2

INTERNATIONAL GREEN CONSTRUCTION CODE® (IgCC®)

2018

2015

Chapter 8 Indoor Environmental Quality (IEQ)
 801.4.2.2 Paints and Coatings
 801.4.2.2.1 / 801.4.2.2.2 Emission Requirements & VOC Content Requirements: a and b
 801.5.2 Materials
Chapter 9 Materials and Resources
 901.3.1.1 Diversion
 901.3.1.2 Total Waste
 901.3.1.3 Construction Waste Management Plan
 901.4.1.1.2 Salvaged Material Content
 901.4.1.2 Regional Materials

Chapter 5 Material Resource Conservation and Efficiency
 503.1 Construction Material and Waste Management Plan
 505.2.3 Recyclable Building Materials and Building Components
Chapter 8 Indoor Environmental Quality and Comfort
 806.3 Architectural Paints and Coatings/Table 806.3(1) or 806.3(2)

U.S. GREEN BUILDING COUNCIL® LEED®

v4 2018

v3 2009

BUILDING DESIGN (BD) AND CONSTRUCTION (C)
Materials and Resources (MR)
 MR Prerequisite: Storage and Collection of Recyclables
 MR Credit: Building Life-Cycle Impact Reduction: Option 1, Option 2 or Option 3
 MR Credit: Building Product Disclosure and Optimization- Material Ingredients:
 Option 2 International Alternative Compliance Path- Reach Optimization
 MR Credit: Construction and Demolition Waste Management
Indoor Environmental Quality (EQ)
 EQ Credit: Low-Emitting Materials: Option 1
Innovation in Design (ID)
 Credit 1 Innovation in Design
HOMES DESIGN (HD) and CONSTRUCTION (C)
Materials and Resources (MR)
 MR Credit: Construction Waste Management
Indoor Environmental Quality (EQ)
 EQ Credit: Low-Emitting Products
INTERIOR DESIGN (ID) and CONSTRUCTION (C)
Materials and Resources (MR)
 MR Prerequisite: Storage and Collection of Recyclables
 MR Credit: Building Product Disclosure and Optimization- Material Ingredients:
 Option 2 International Alternative Compliance Path- Reach Optimization
 MR Credit: Construction and Demolition of Waste Management
Indoor Environmental Quality (EQ)
 EQ Credit: Low-Emitting Materials: Option 1
Innovation in Design (ID)
 Credit 1 Innovation in Design

NEW CONSTRUCTION AND MAJOR RENOVATIONS
Materials and Resources (MR)
 MR Credit 1.1 Building Reuse- Maintain Existing Walls, Floors & Roofs
 MR Credit 1.2 Building Reuse- Maintain Interior Nonstructural Elements
 MR Credit 2 Construction Waste Management
 MR Credit 3 Materials Reuse
 MR Credit 5 Regional Materials
Indoor Environmental Quality (IEQ)
 IEQ Credit 4.2 Low Emitting Materials- Paints & Coatings
Innovation in Design (ID)
 Credit 1 Innovation in Design

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) RULE 1113

2016

2013

Table of Standards 1, VOC Limits

Flats / (e) Test Methods / (e)(1)(A) U.S. EPA Reference Test Method 24

Table of Standards 1, VOC Limits

Flats / (e) Test Methods / (e)(1)(A) U.S. EPA Reference Test Method 24

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. On occasion, No-Burn® Plus may be applied to substrates that need protected from the environment in transit or on a jobsite. The No-Burn® Warranty may be void if the No-Burn® Plus coated substrates, while in transit or during construction, are not protected from prolonged exposure to adverse weather conditions as specified by manufacturer recommendations. 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 <http://noburn.com/polices-procedures>

UPDATES AND CURRENT INFORMATION Revised 18-Feb-2019. The information in this document may change without notice.

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FABRICANTE

No-Burn, Inc.
1392 High Street, Suite 211
Wadsworth, Ohio 44281
www.noburn.com

DESCRIPCIÓN

No-Burn® Plus es un recubrimiento intumescente de película delgada a base de agua color blanco que, cuando se expone a altas temperaturas y a llamas, se hincha y se carboniza para crear una barrera aislante que protege los *Sustratos* tratados del fuego. Este material está certificado para aplicarse en una gran variedad de *Sustratos* y la conformidad con la reacción al fuego se logra con el adecuado espesor de película húmeda.

1. PRINCIPALES USOS

Plus se puede usar en edificios nuevos y existentes, de conformidad con las normas IBC®, IRC®, IEBC® y otros códigos o normas aplicables, y se utiliza en aplicaciones donde se ofrece:

- Características de quemado superficial
- Clasificación de acabado interior de Clase I o Clase A: FS 0-5 / SD 0-35
- Barrera de protección térmica
- Barrera de protección térmica alternativa o no preceptiva
- Barrera de protección de contacto alternativa o no preceptiva
- Resistencia al fuego
- Resistencia al vapor de Clase III

Consultar el [Informe de Evaluación \(ER 305\)](#) y la [Lista de evaluaciones \(UEL 5005\)](#) para obtener más información.

2. ESPECIFICACIONES

Color:	Opaco/Blanco/Tintado
Acabado:	Plano
Contenido de químicos orgánicos volátiles:	18 g/l método EPA 24
Tiempo de secado:	De 60 a 90 minutos
Cubetas:	5 galones (19 l), 55 lbs
Tambores:	55 galones (208 l), 605 lbs
Vida útil:	24 meses
Tiempo de curado:	24 horas
Punto de ebullición:	212 °F (97.7 °C)
Punto de congelamiento:	32 °F (0 °C)
% volátil por volumen:	38%
Gravedad específica:	1.25

Consultar la [ficha de datos de seguridad \(M\)SDS](#) del producto para obtener información adicional.

3. RENDIMIENTO DEL PRODUCTO

No-Burn® Plus se puede utilizar en cualquiera de los *Usos Principales* expresadas y, además, es posible que satisfaga otros requisitos de rendimiento al fuego.

Siendo un producto intumescente no corrosivo, Plus limita la propagación de las flamas y humo, proporciona protección intumescente donde se unen o traslapan los bordes de la madera y las láminas.

Las penetraciones o aberturas para conductos, rejillas, tomas eléctricas, iluminación, dispositivos, luminarias, cables, altavoces, sistemas de drenaje, tuberías y penetraciones o aberturas similares no comprometen el rendimiento de Plus. Cumple con los requisitos del USDA para contacto incidental con alimentos y materiales ANSI / NSF 51 para la zona de alimentos.

4. NORMAS APLICABLES

No-Burn® Plus puede ser especificado en el cumplimiento de los siguientes:

AC14	CARB
AC257	CDPH (CA Spec 01350)
AC377	CHPS
Normas ANSI/ASHRAE/ICC/USGBC 189.1	CSFM: 2280-2014:0100
ANSI/NSF 51	ECO17
ASTM A653	GSA PBS-P100
ASTM D2915	ICC/ASHRAE 700 NGBS
ASTM D5055	IgCC
ASTM E84	LEED v3 2009
ASTM E84, 30 min	LEED v4
ASTM E96	NFPA 255
ASTM E119	NFPA 286
ASTM E1623	SCAQMD Regla 1113
ASTM E2768	UL 723
CAN/ULC-S102	UL 1715

Tabla 1

Sustratos			
Material	Grosor de Película	Índice de propagación	Contenido máx. de humedad
BASF COMFORT FOAM® 178 SPF de celda cerrada	12 húmedo	134 sq. ft./gal.	N/A
BASF ENERTITE® SPF US de celda abierta	12 húmedo	134 sq. ft./gal.	N/A
BASF SPRAYTITE® 178 SPF de celda cerrada	12 húmedo	134 sq. ft./gal.	N/A
BASF SPRAYTITE® 81206 SPF de celda cerrada	12 húmedo	134 sq. ft./gal.	N/A
BASF WALLTITE® SPF US de celda cerrada	12 húmedo	134 sq. ft./gal.	N/A
BASF WALLTITE® SPF US-N de celda cerrada	12 húmedo	134 sq. ft./gal.	N/A
BASF WALLTITE® SPF HP+ de celda cerrada	12 húmedo	134 sq. ft./gal.	N/A
Douglas Fir	6 húmedo	275 sq. ft./gal.	19%
Placa de yeso de 5/8" Tipo X	15 húmedo	107 sq. ft./gal.	N/A
Icnene MD-C-200 SPF de celda cerrada	16 húmedo	100 sq. ft./gal.	N/A
I-vigueta y subsuelo	15 húmedo	107 sq. ft./gal.	16%
*I-vigueta solamente	23 húmedo	70 sq. ft./gal.	16%
Madera de filamento laminado (LSL)	10 húmedo	160 sq. ft./gal.	16%
Chapa de madera laminada (LVL)	10 húmedo	160 sq. ft./gal.	16%
Tablones de virutas orientadas (OSB)/Madera contrachapada	8 húmedo	200 sq. ft./gal.	16%
Roble rojo	6 húmedo	275 sq. ft./gal.	19%
Pino amarillo del sur	10 húmedo	160 sq. ft./gal.	19%
Paneles aislados estructurales (SIP)	12 húmedo	134 sq. ft./gal.	16%

*Ver ER 305, fecha revisada 4/12/2018
N/A = No aplicable

5. MEZCLADO Y APLICACIÓN DE TINTAS

Plus debe estar bien mezclada antes de su uso de conformidad con las recomendaciones del fabricante. Mezclar con un mezclador helicoidal Squirrel™ eléctrico para 5 galones o un aparato similar de 500 a 1500 RPM durante un tiempo de mezclado mínimo de 5 minutos por cubeta. NO es suficiente agitar el No-Burn® Plus con un agitador de pinturas. NO se recomienda filtrar o colar el Plus. Utilizar el producto como es: **NO DILUIR**. Si se mezcla No-Burn® Plus más de 24 horas antes de usarlo, mezclarlo nuevamente de conformidad con las instrucciones del fabricante.

Nunca permitir que Plus se congele a 32°F (0°C), almacenar entre 40 °F y 90 °F (4.4 °C y 32.2 °C) y mantener fuera de la luz directa del sol; si no puede comprobar que se han mantenido estas condiciones, el producto puede eliminarse de conformidad con la (M)SDS del fabricante. Si se desea agregar color al Plus, puede hacerlo a una relación máxima de 2 oz. de tinte por galón. Es recomendable utilizar No-Burn® Green Dye

o No-Burn® Black Tint, fabricado por No-Burn, Inc. para teñir. Póngase en contacto con el fabricante para obtener información adicional acerca del teñido.

Para reciclar las cubetas, visite <http://www.wbdg.org/tools/cwm.php>.

6. APLICACIÓN

Cuando se aplica No-Burn® Plus de acuerdo con la Sección 3.5 o la Sección 3.6 del Informe de Evaluación (ER) 305, o el Listado de Evaluación (UEL) 5005, el aplicador debe ser calificado por No-Burn®, Inc. La instalación certificada garantiza el control de calidad y mejores prácticas de productos. El aplicador certificado completará un certificado de aplicación de producto No-Burn® y lo enviará al oficial del código y No-Burn, Inc. Plus se aplicará al *Sustrato(s)* de acuerdo con la hoja de datos técnicos del fabricante. Copias de datos técnicos relevantes y / o documentos estarán disponibles en el lugar de trabajo. Antes y durante la aplicación del recubrimiento, las superficies del *Sustrato(s)* deberán estar secas, limpias y libres de suciedad, polvo, aceite, grasa, y todo material de recubrimiento anterior, como son pinturas, tintes y selladores. El *Sustrato(s)* no debe tener, ni haber sido expuesto a, tratamientos, sustancias químicas, recubrimientos, etc. antes de la aplicación de Plus. La observación visual de un recubrimiento intumesciente es de un distintivo color blanco por naturaleza. Para la verificación del espesor aplicado en húmedo, se debe usar un medidor de espesores estándar para pintores durante la aplicación. El espesor del producto seco será de 0.40 a 0.70 veces el espesor húmedo.

Plus se aplicará en los *Sustrato(s)* e inmediatamente antes de colocar el recubrimiento intumesciente, el aplicador deberá verificar el contenido de humedad del *Sustrato(s)* con un medidor de humedad, según corresponda, de conformidad con las recomendaciones del fabricante. Los *Sustrato(s)* deberán estar en su posición final en el edificio, expuestos directamente al interior, protegidos de la intemperie, en lugares acondicionados y no acondicionados. Además, Plus se aplicará en las zonas dentro de la membrana impermeabilizante o superficies no expuestas a la intemperie, donde se espera que el contenido de humedad en servicio del *Sustrato(s)* sea igual o inferior al recomendado.

La temperaturas de la superficie y la ambiental antes y durante la aplicación será de al menos 40 °F (4.4 °C). Las temperaturas de superficie no deben exceder de 100 °F (37.7 °C) durante la aplicación. El recubrimiento se aplicará en una tasa de aplicación establecida mediante atomización, rodillo o pincel. Cuando Plus se aplica de acuerdo con la Sección 3.5 o la Sección 3.6 del Informe de Evaluación (ER) 305, la frecuencia de las mediciones de espesor con un espesor de película húmeda durante la aplicación de cada capa será como mínimo, medido una vez cada 100 ft² (9.29 m²) de superficie. El tiempo de secado es típicamente de 60 a 90 minutos y el tiempo de curado es de 24 horas como mínimo, aunque depende de la temperatura ambiente y la humedad relativa. Si es necesario aplicar más de una capa o antes de la adición de una capa superior, deje secar el No-Burn® Plus completamente entre capas. La capa superior debe ser a base de agua con un pH de 7 u 8. Antes de usar alguna capa superior, se recomienda hacer una prueba de compatibilidad en un lugar poco visible antes de su aplicación general. Hay compatibilidad cuando la condición general es satisfactoria después de aplicar el No-Burn® Plus y la capa superior. Para aplicaciones exteriores, No-Burn® Plus tiene que ser recubierto con una pintura para exteriores de alta calidad, a base de agua y resistente a los rayos ultravioleta. El fabricante puede recomendar recubrimientos

exteriores. Cuando se aplica una capa superior en aplicaciones exteriores, preste especial atención a las instrucciones y recomendaciones sobre la capa superior. Al aplicar Plus de acuerdo con la Sección 3.5 o la Sección 3.6 del Informe de Evaluación (ER) 305, el aplicador calificado No-Burn® colocará una etiqueta emitida por No-Burn, Inc. al sustrato donde se ha aplicado el revestimiento; como mínimo, se colocará una etiqueta emitida por No-Burn, Inc. cada 10,000 pies² (929.03 m²) de área del piso como se indica en el Informe de evaluación (ER) 305. Consulte el Informe de evaluación (ER) 305, página 6 para ver la instalación etiqueta. Además, para la Sección 3.5 y la Sección 3.6, el Informe de Evaluación requiere que Plus se aplique antes de la instalación de componentes mecánicos, eléctricos y de plomería..

Excepto durante las demoras normales de una construcción, es necesario proteger los *sustratos* recubiertos con No-Burn® Plus de la exposición prolongada a condiciones meteorológicas adversas. Utilizar hojas o lonas de plástico para proteger el sustrato de la exposición prolongada al clima durante el tránsito, almacenamiento o construcción. Seguir las instrucciones del fabricante y el Formulario E30 de la Guía de construcción para maderas contrachapadas de la APA en cuanto a recomendaciones para el almacenamiento y la manipulación.

Almacenar los *sustratos* recubiertos con No-Burn® Plus en un lugar limpio y seco, lejos del suelo. Se recomienda almacenar los *sustratos* recubiertos con No-Burn® Plus en el interior; si se almacena en el exterior, cubrir los *sustratos* con hojas o lonas de plástico, y no cubrir la parte lateral e inferior del sustrato para permitir la circulación de aire. Cuando se transportan los *sustratos* recubiertos con No-Burn® Plus sobre una plataforma de camión o vagón de tren abiertos, cubrir el sustrato con una lona para evitar la exposición prolongado al clima.

7. EQUIPO

Los métodos de aplicación pueden incluir atomizadores sin aire (airless), rodillo o brocha. Los fabricantes de *Equipos* y los modelos de *Equipo* atomizador de aplicador sin aire (airless) varían y a continuación presentamos ejemplos de *Equipos* aplicables. Las recomendaciones de los *Equipos* atomizadores de aplicador sin aire (airless) contienen enlaces a las especificaciones del fabricante para referencia.

Tabla 2		
Equipo		
Fabricante	Modelo	
Graco®	Ultra Max II 795	Ultra Max II 1595
	Ultra Max II 1095	TexSpray Mark V
Titan®	Impact™ 840	PowrTwin™ 6900 Plus
	Impact™ 1140	PowrTwin™ 8900 Plus

El *Equipo* atomizador debe ser capaz de producir un mínimo de 3 300 psi y se recomienda usar boquillas con orificio de tamaño 0.021 a 0.027. Se recomienda quitar los filtros de la pistola atomizadora y de la bomba para permitir el paso del contenido sólido. Se recomienda que las mangueras para atomizadores sin aire (airless) tengan un diámetro interior de ¼" o superior. Probablemente se requieran variaciones en el ancho del patrón de atomizado y el tamaño de la boquilla según el área expuesta y el *Sustrato(s)* donde se aplica el producto. La limpieza de los *Equipos* se puede llevar a cabo con agua, u otros métodos recomendados por el fabricante del *Equipo*.

8. PROTECCIÓN PERSONAL Y CONTROLES DE EXPOSICIÓN Se recomienda usar un respirador certificado y gafas de seguridad para evitar el rociado y salpicaduras. La protección para los ojos y la cara debe estar en conformidad con la norma OSHA 29 CFR 1910,133.

Se recomienda usar guantes de goma o plástico para la protección de manos y brazos. La limpieza personal se puede llevar a cabo con agua y jabón. Si se aplica con atomizador, utilizar un respirador con purificador de aire aprobado por NIOSH de conformidad con la norma OSHA 29 CFR 1910,134 (d)(1)(ii). Si se utiliza en un área limitada, se recomienda utilizar un respirador con purificador de aire de cara completa (PAPR) o un respirador con suministro de aire (SAR). Utilizar los respiradores de conformidad con las normas 29 CFR 1910,134 (d)(3)(i) (A) Cuadro 1, 29 CFR 1910.134(d)(3)(iii)(B) y 29 CFR 1910.134(d)(3)(iv)(B).

Utilizar controles de ingeniería adecuados, como una ventilación adecuada. Cuando estos sistemas no son eficaces, se debe usar equipo de protección personal adecuado, que funcione de manera satisfactoria y cumpla con la norma OSHA u otras normas reconocidas.

No-Burn, Inc.
INFORMACIÓN DE VENTAS Y PEDIDOS
1-800-989-8577
INFORMACIÓN TÉCNICA
1-800-989-8577
www.noburn.com

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GARANTÍA LIMITADA No-Burn®, Inc. garantiza que la fórmula No-Burn® se fabricará con las mismas especificaciones y calidad, y se comportará de forma similar a las pruebas realizadas por los laboratorios independientes cuando se aplica correctamente. La cobertura de la garantía se limita únicamente al costo del producto adquirido a continuación y excluye específicamente los gastos imprevistos y los daños consecuentes. El aplicador garantiza que el producto, en su forma original del fabricante, se almacenará, mezclará y / o aplicará como se indica en las pautas publicadas por No-Burn®, Inc., a cada área razonablemente accesible que se haya especificado para protección. En ocasiones, No-Burn® Plus se puede aplicar a sustratos que necesitan protección del medio ambiente en tránsito o en el lugar de trabajo. La garantía de No-Burn® puede quedar invalidada si los sustratos con revestimiento No-Burn® Plus, durante el tránsito o durante la construcción, no están protegidos contra la exposición prolongada a condiciones climáticas adversas según lo especificado por las recomendaciones del fabricante. Se excluyen todas las garantías implícitas de No-Burn®, Inc. o del aplicador. Puede haber situaciones y materiales para los cuales No-Burn® no evitará que un incendio encienda o retarde el progreso de un incendio.

POLÍTICA Y PROCEDIMIENTOS Toda venta de este producto por parte de No-Burn, Inc. están sujeta a nuestra política y procedimientos disponibles en <http://noburn.com/polices-procedures>

NOTICIAS E INFORMACIÓN ACTUAL Revisado 18-Feb-2019. La información contenida en este documento puede cambiar sin previo aviso.

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