

Structodek® High Density Data Sheet

Updated: 7/15



*Quality You Can Trust...From
North America's Largest Roofing Manufacturer!™*



STRUCTODEK® HIGH DENSITY

Fiberboard Roof Insulation Cover Board With Primed Red Coating No. 002-A (1 of 2)

Description

The proprietary, patent-pending, non-asphaltic Primed Red Coating integrated on the surface of STRUCTODEK® High Density possesses unique bonding characteristics that ultimately result in superior adhesion capabilities with the current membrane and adhesive technology on the market today. The non-asphaltic Primed Red Coating is compatible with all single-ply membranes including PVC, TPO, EPDM, and CSPE without concern of premature membrane degradation that is often associated with asphalt emulsion-coated fiberboard products. Additionally, the Primed Red Coating, unlike asphalt emulsion-coated products, has proven to be compatible with traditional, low-VOC, and water-based adhesives as well as many foam adhesives. The Primed Red Coating allows adhesives and foams to “key” into the STRUCTODEK® High Density surface while at the same time deterring excessive adhesive absorption. The unique Primed Red Coating allows for a solid membrane bond while still providing optimal square foot per gallon of adhesive coverage, thus ensuring a quality and cost-effective membrane installation.

While STRUCTODEK® High Density with Primed Red Coating was designed with the single-ply application in mind, it contains many of the same great attributes as STRUCTODEK® High Density with the traditional non-asphaltic black coating. Accordingly, it also works well with asphaltic-based systems (BUR), coal tar, and cold-process adhesive products. Additionally, STRUCTODEK® High Density with Primed Red Coating has also been successful in peel-and-stick applications without the typical need for an additional primer in many instances. The rigid and strong yet lightweight nature of STRUCTODEK® High Density with Primed Red Coating is better than heavier alternatives and will keep the roof load below the specified maximum weight. STRUCTODEK® High Density with Primed Red Coating is offered coated on two sides and available in 4' x 4' (1.22 m x 1.22 m) and 4' x 8' (1.22 m x 2.44 m) panels.

Uses

STRUCTODEK® High Density with Primed Red Coating can be used as an

insulation board, cover board, or reroof/re-cover board. The product is a high-density roofing board designed for low-slope single-ply, as well as traditional roof system applications.

Specifications

- ASTM C208, Type II, Grade 1 and Grade 2
- CAN/ULC-S706-09 Type II, Classes 1 and 2
- UL Classified, Std UL 790
- ULC Classified, Std CAN/ULC-S107
- FM Approved Class 1 – FM Approval Standard 4450/4470
- Canadian Evaluation CCMC #13186-L
- FBC FL # 13792
- Miami-Dade County Product Control Approved

Masterformat Number And Title

07 22 16 - Roof Board Insulation

Features/Benefits

- Compatible with PVC, TPO, EPDM, and CSPE single-ply membranes as well as more traditional systems.
- Compatible with most low-VOC, water-based, and traditional adhesives.
- Superior adhesion without excess adhesive absorption.
- Compatible with most direct peel-and-stick applications.
- BUR compatible - easily handles hot asphalt.
- Approved in thousands of FM RoofNav® & UL Class A and Class 1 rated roof system assemblies.
- Non-asphaltic coating – may contribute to LEED® credits.
- Hail resistant, structurally rigid, and easily handles heavy foot traffic and wheeled loads.
- Possesses SOUNDSTOP® sound deadening technology.
- Contributes to thermal insulation with R-values of 1.3 per ½" (12.7 mm).
- Lightweight, fiberglass free, and cuts with a standard utility knife.
- Compressive strength exceeds the Canadian standard at 10% deformation for ½" (12.7 mm) thickness.
- Primed Red Coating provides optimal surface-bonding characteristics ideal for use in single- and multiple-layer roof systems.



STRUCTODEK[®] HIGH DENSITY Fiberboard Roof Insulation Cover Board With Primed Red Coating No. 002-A (2 of 2)

Features/Benefits (continued)

- Waxes and other moisture-resistant components are added early in the manufacturing process providing superior core and edge protection. The integral moisture-resistant components protect the edges in stock panel size (4' x 4' [1.22 m x 1.22 m] or 4' x 8' [1.22 m x 2.44 m]) and, more importantly, also protect the edges when the product is cut on the jobsite.
- Cost-effective solution – a value-engineered champion.

Precautions

Do not expose to open flame or excessive heat. May smoulder if ignited. If ignited, extinguish completely. Do not apply flame directly to material when installing a modified bitumen system. Material must be kept dry at all times, in storage and during application. Apply only as much STRUCTODEK[®] High Density with Primed Red Coating in one day as can be covered by completed roofing system that day. Do not use as an underlayment for shingles. In reroofing applications, all wet areas in old roof should be cut out and replaced. Before material is installed,

remove all loose and protruding gravel. STRUCTODEK[®] High Density with Primed Red Coating must not be used in close proximity to chimneys, heater units, fireplaces, steam pipes, or other surfaces that could provide long-term exposure to excessive heat (maximum 212° F [100° C]) without adequate thermal protection. Consult appropriate heating appliance manufacturer's instructions before installation.

LEED[®] Information

May help contribute to LEED[®] credits:

- MR Credit 4: Recycled Content
- MR Credit 6: Rapidly Renewable Materials
- IEQ Credit 4.4: Low-Emitting Materials – Composite Wood and Agrifiber Products

Fastening Patterns: Fastening patterns will vary based upon specific membrane manufacturers' assemblies. Please refer to membrane manufacturer fastening requirements.

PHYSICAL PROPERTY	1/2" THICKNESS VALUES	1" THICKNESS VALUES
Weight, lbs/ft ² (kg/m ²)	0.7 (3.42)	1.4 (6.84)
Transverse Strength, min, lbf (N)	12-14 (53-62)	24 (107)
Tensile Strength Parallel, min, lbf/in ² (kPa)	150 (1034)	150 (1034)
Tensile Strength Perpendicular, min, lbf/ft ² (kPa)	600 (28.7)	600 (28.7)
Water Absorption by volume, max, %	7	7
Moisture Content by weight, max, %	10	10
Linear Expansion 50-90% RH, max, %	0.5	0.5
Modulus of Rupture, min, lbf/in ² (kPa)	275 (1896)	140 (965)
Deflection at Specified Min. Load, max in. (mm)	0.75 (19)	0.42 (11)
Flute Spanability, max width, in. (mm)	1-5/8 (41.3)	2-5/8 (66.7)
Compressive Strength, min, lbf/in ² (kPa)	15 (103)	15 (103)
R-Value, ft ² ·h·°F/BTU in (K·m ² /W)	1.3 (0.23)	2.5 (0.44)

Limited Warranty: BLUE RIDGE FIBERBOARD, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

Disclaimer: The information contained herein is included for illustrative purpose only, and to the best of our knowledge, is accurate and reliable. BLUE RIDGE FIBERBOARD, INC. cannot however under any circumstance make any guarantee of results or assume any obligation or liability in connection with the use of this information. As BLUE RIDGE FIBERBOARD, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor, and owner for the design, application, and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.