

ULTRA-MAX[®] HD 1/2" HIGH DENSITY COVERBOARD

PRODUCT DESCRIPTION

Rmax Ultra-Max[®] HD is a 1/2" high density roof cover board composed of a closed-cell polyisocyanurate (polyiso) foam core bonded to inorganic polymer coated glass fiber mat facers on both sides. Ultra-Max[®] HD utilizes a CFC-, HCFC- and HFC-free blowing agent that has zero Ozone Depletion Potential (ODP) and negligible Global Warming Potential (GWP).

COMPLIANCES

- ASTM C1289 Type II, Class 4
- International Building Code (ICC) Chapter 26 Section 2603, Foam Plastic
- Factory Mutual – Class 1 roofing insulation subject to the conditions of approval as a roof insulation when installed as described in the current edition of the FMRC "Approval Guide". Refer to FM Approvals RoofNav for specific system details.
 - FM Standard 4450/4470 approved
 - FM Severe Hail
- Underwriters Laboratories – UL listed and labeled as shown in UL Certifications Directory:
 - Class A for External Flame – UL Standard 790
 - Class A for Internal Flame – UL Standard 1256
 - Fire Rated Roof/Ceiling Assemblies – UL Standard 263

NOTE: For details, requirements and/or limitations, refer to Third-Party Evaluation Reports

APPLICATIONS

Fully adhered single ply, mechanically attached single ply, loose laid ballasted single ply

THERMAL PROPERTIES / PRODUCT DATA

"R" means resistance to heat flow. The higher the R-value, the greater the insulating power.

NOMINAL THICKNESS	THERMAL R-VALUE ¹	BUNDLE DATA (48" X 96")		TRUCKLOAD DATA (48" X 96")	
		PIECES	SQ. FT.	PIECES	SQ. FT.
0.50	2.5	42	1,344	2,016	64,512

¹Thermal values are determined by using ASTM C518 test method at 75°F mean temperature on material conditioned according to PIMA Technical Bulletin No. 101.

Visit www.rmax.com for a complete list of thicknesses and packaging information.

TYPICAL PHYSICAL PROPERTIES

Physical properties shown are based on data obtained under controlled conditions and are subject to normal manufacturing tolerances.

PROPERTY	TEST METHOD	RESULTS
Compressive Strength	ASTM D1621	Grade 1 ¹
Tensile Strength	ASTM D1623	>2000psf
Flame Spread	ASTM E84	60 or Less
Smoke Developed	ASTM E84	170 or Less
Water Vapor Transmission	ASTM E96	< 1.5 perm
Water Absorption	ASTM C209	< 3.0% Vol.
Dimensional Stability	ASTM D2126	< 0.5% Linear Change
Mold Resistance	ASTM D3273	10, no defacement
Service Temperatures		250°F max

¹80 psi (551 kPa) minimum

²Flame spread and smoke numbers are shown for comparison purposes only and are not intended to represent the performance of Ultra-Max[®] HD and related components under actual fire conditions.



BUILDING TRUST



APPLICATION / INSTALLATION

General - Ultra-Max® HD is applied above the roof deck and insulation layer in order to provide a continuous layer of thermal insulation and a suitable substrate for the application of many different kinds of roofing membranes available in the market today.

When using Ultra-Max® HD in adhered systems, field testing has confirmed significantly more efficient use of solvent-based adhesives than with glass fiber/organic mat faced insulations. Adhesive application rates vary by manufacturer. Check adhesive manufacturer's recommendation for application rates.

Ultra-Max® HD may be secured with mechanical fasteners or air-cured polyurethane adhesives as appropriate for approved deck and assembly, refer to FM/UL directories or cover manufacturer. NOTE: Panel size shall be limited to 4'x4' when adhesives are used. Joints should be offset a minimum of 6" with insulation below. No more insulation shall be laid than can be covered with the completed membrane system by the end of the day's work or before the onset of inclement weather. Refer to PIMA Technical Bulletin 109 for storage and handling recommendations.

Rmax strongly recommends that the decision to use or not use a vapor retarder in any insulated roofing assembly be guided by the recommendations of the National Roofing Contractors Association (NRCA) in the latest edition of the "NRCA Roofing and Waterproofing Manual." Designers and installers are referred to Rmax publication "General Notes for Use of Rmax Roofing Insulations in Low Slope Applications," for specifics regarding construction applications utilizing Rmax roof insulation products.

LIMITATIONS

Ultra-Max® HD is not recommended nor warranted for use in inverted or protected roofing membrane systems (IRMA).
DO NOT use hot asphalt to attach Ultra-Max® HD or apply asphalt roofing systems directly.
DO NOT torch apply membranes directly to Ultra-Max® HD.

Ultra-Max® HD is not a structural panel.

WARNING

DO NOT leave Ultra-Max® HD exposed. Polyiso foam is an organic material which will burn when exposed to an ignition source of sufficient heat and intensity and may contribute to flames spreading.

WARRANTY

See Rmax "Sales Policy" for warranty conditions. Rmax does not assume any responsibility or liability for the performance of any products other than those manufactured by Rmax.

NOTE: All Rmax products must be tarped, placed on skids and kept dry before and throughout construction. Requests for Certification Letters and/or special warranty considerations must be submitted to Rmax Sales prior to delivery of the products.



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Engineered in the U.S.A.

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PRODUCT DATA SHEET

ULTRA-MAX® HD

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