

DURASHEATH®

INSULATION FOR THE BUILDING ENVELOPE

PRODUCT DESCRIPTION

Rmax Durasheath® is an energy-efficient thermal insulation board composed of a closed-cell polyisocyanurate (polyiso) foam core bonded to inorganic polymer coated glass fiber mat facers on each side.

COMPLIANCES

- ASTM C1289 Type II, Class 2
- ASHRAE 90.1
- International Building Code (IBC) Section 2603, Foam Plastic
- DRJ TER 2202-02
- California Code of Regulations, Title 24 (BHFTI License T1523)
- Tested per NFPA 286 (ICC-ES AC12 Appendix B)
- Tested per NFPA 285 to comply with IBC Section 2603.5.5
- 1, 2, 3 or 4 hour Fire Rated Assemblies as shown in the UL Fire Resistance Directory.

NOTE: For details, requirements and/or limitations, refer to [Third-Party Evaluation Reports](#)

APPLICATIONS

Exterior walls (Type I-IV): Masonry, steel stud, FRTW stud; exterior stucco, re-siding; vaulted-ceilings; attics and crawls spaces; and limited roofing applications

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
Inches	°F•ft ² •hr/Btu
0.50	3.0
0.75	4.5
1.00	6.0
1.10	6.6
1.25	7.5
1.30	7.8
1.50	9.1
1.60	9.7
1.90	11.5
2.00	12.1
2.20	13.4
2.50	15.3
3.00	18.5
3.20	19.8
3.50	21.8
4.00	25.0
4.50	28.3

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.

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
Density, Overall, Nominal	ASTM D1622	2.0 pcf
Compressive Strength	ASTM D1621	20 psi ¹
Flame Spread, Core ²	ASTM E84	≥ 1" 25 or Less < 1" 75 or Less
Smoke Developed, Core ²	ASTM E84	< 450
Air Permeance	ASTM E2178	< 0.02 L / (s•m ²)
Water Vapor Permeance	ASTM E96	< 1.5 perm
Water Absorption	ASTM C209	< 1% Vol.
Dimensional Stability Length and Width	ASTM D2126	< 2% Linear Change
Mold Resistance	ASTM D3273	10, no defacement
Service Temperatures		250°F max

¹Also available in 25 psi upon request. Less than 1" is standard at 16 psi.

²Flame spread and smoke numbers are shown for comparison purposes only and are not intended to represent the performance of Durasheath® and related components under actual fire conditions.

Durasheath® is shipped in bundles that are approximately 48" high and wrapped in plastic for easy handling. Visit www.rmax.com for a complete list of thicknesses and packaging information.

APPLICATION / INSTALLATION

General – Durasheath® shall be installed vertically or horizontally with all edges tightly butted. Vertical joints must be backed by framing or structural sheathing. Taping the joints is acceptable, although not required.

Securement – Rmax recommends a minimum of eight fasteners per 4'x8' board. Additional fasteners may be required in locations expected to experience additional loading (heavy wind drafts/gusts, accelerated wear and tear, etc.) prior to attachment of covering material (cladding, furring, thermal barrier, etc.) or when not being covered. Exact number of fasteners also depends on the type being used and the capacity, consult fastener manufacturer. Fasten to wood framing using roofing nails, bugle head screws, cap nails, or staples. The fasteners shall be long enough to penetrate wood framing a minimum of 1". Fasten to metal framing using self-taping screws and plastic washers. The fasteners shall be long enough to penetrate metal framing a minimum of four threads. Secure to concrete surfaces using plastic masonry fasteners with washer or a quality grade construction adhesive. TRUFAST Walls fasteners, sold by Rmax, are a great option for fastening Durasheath® to wood, steel and concrete substrates. Refer to the [Rmax/TRUFAST Walls Fastener List and Installation Guide](#) for more details.

LIMITATIONS

Durasheath® is not recommended, nor warranted, for use as a commercial roof insulation. Consult Rmax Sales for suitable commercial roof insulation products. Durasheath® is not a structural panel; stud walls insulated with Durasheath® must be properly braced for lateral loads according to the requirements of local Building Codes.

WARNING

Polyiso is an organic material which will burn when exposed to an ignition source of sufficient heat and intensity and may contribute to flames spreading.

Installations utilizing Durasheath® must be fully protected on the inhabited side of the building by a thermal barrier such as a minimum of 1/2" gypsum wallboard. Consult local building codes and insurance authorities regarding special applications or details required when using Durasheath® as an exposed product in uninhabited spaces.

Per the IBC, a WRB is required behind the exterior wall veneer. The code also has provisions regarding vapor retarders, type and location, based on the assembly, climate zone and the amount of continuous insulation. It is up to the design professional to specify an assembly that will perform adequately and meet these requirements.

WARRANTY

See Rmax "Sales Policy" for terms and 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.



RMAX SALES OFFICES / PLANT

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PRODUCT DATA SHEET DURASHEATH®

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BUILDING TRUST

