



SOPRAROCK MD PLUS

SOPRAROCK MD PLUS (83D)

Order No. *

* Contact your Customer Service or Sales Representative.

DESCRIPTION

SopraRock MD Plus (mono density) is a rigid mineral wool board insulation. The top surface is impregnated with a bitumen layer which is compatible with torch, mop or cold adhesive applied membrane. SopraRock MD Plus is designed for use on both new construction and re-roofing in low slope roofing applications.

SopraRock MD Plus is made from rock and slag. This combination results in a noncombustible product with a melting point of approximately 2150°F (1177°C). It is water resistant yet vapor permeable.

INSTALLATION & APPLICATION

Each SopraRock MD Plus panel must be secured to the deck with approved fasteners and plates (appropriate to the deck type), a mopping of hot asphalt, acceptable insulation adhesive or approved base sheets over nailable decks. Butt edges and stagger joints of adjacent panels and subsequent overlay panels.

A coverboard is not required on most applications. In the one (1") inch (25.4mm) thickness, SopraRock MD Plus is suitable as a recover board over existing roofs. A coverboard may be required to achieve elevated wind resistance of the total roof/insulation system. Contact the Technical Department for additional information.

SopraRock MD Plus is a suitable substrate for fully adhered modified bitumen. SopraRock MD Plus is a suitable substrate for hot asphalt, asphalt based cold adhesive and heat welded systems. Contact the Soprema Technical Department for additional information.

FEATURES & BENEFITS

- Does not require a coverboard in many applications
- Will not promote blistering
- Does not off-gas
- Will not warp or cup
- Dimensionally stable
- High impact resistance
- Low moisture absorption
- Non-corrosive
- Fire resistant
- Made from natural & recycled materials



SOPRAROCK MD PLUS THERMAL VALUES

THICKNESS INCHES (mm)	WEIGHT PER SQUARE POUNDS (kg)	R VALUE	C VALUE	FLUTE SPANABILITY INCHES (mm)
1.0" (25.4)	91.7 (41.59)	3.5	0.286	1 1/4" (31.75)
1.5" (38.1)	137.5 (62.36)	5.2	0.190	1 1/4" (31.75)
2.0" (50.8)	183.3 (83.14)	7.0	0.143	1 1/2" (38.10)
2.5" (63.5)	229.2 (103.96)	8.8	0.114	1 1/2" (38.10)
3.0" (76.2)	275.0 (124.73)	10.5	0.095	2 3/4" (69.85)
3.5" (88.9)	320.8 (145.51)	12.2	0.082	2 3/4" (69.85)
4.0" (101.6)	366.7 (166.33)	14.0	0.071	2 3/4" (69.85)
4.5" (114.3)	412.5 (187.10)	15.8	0.063	2 3/4" (69.85)
5.0" (127.0)	458.3 (207.88)	17.5	0.057	3 1/2" (88.90)

APPROVALS / COMPLIANCES

Underwriters Laboratories (UL)

UL Classified component of Class A Roof Systems: Built-Up and Modified Bitumen (UL 790).

Qualified for hourly rated P series roof assemblies: P004, P213, P214, P225, P228, P230, P237, P238, P242, P245, P250, P254, P259, P404, P501, P502, P504, P506, P508, P510, P512, P514, P701, P708, P710, P711, P718, P729, P732, P734, P735, P737, P740, P801, P810, P815, P828, P904, P909, P912, & P915 (UL 263).

FM Global (FM)

SopraRock MD Plus is FM Class 1 Approved (FM 4450 & FM 4470) for constructions with Modified Bitumen and Built-Up roof coverings subject to conditions of approval described in FM Global RoofNav. SopraRock MD Plus may be suitable for additional construction approvals. Please call Soprema Corporate Technical Department at 1-800-356-3521 for specifics.

ASTM Specifications

SopraRock DD meets ASTM C 726.

WARNINGS & LIMITATIONS

SopraRock MD Plus must be kept dry at all times. Install only as much insulation as can be covered the same day by completed roof covering material. Soprema, Inc. will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only. Please call the Soprema Technical Department at 1-800-356-3521 for specifics.

STANDARD SIZES

Available in 4'x4' (1220mm x 1220mm) panels in thickness of 1" (25.4 mm) to 5.0" (127 mm).



SOPRAROCK MD PLUS PHYSICAL PROPERTIES

PROPERTY	TEST STANDARD	MEASURE	VALUE
Dimensional Stability	ASTM C 356	Linear Shrinkage	0.01% @ 350°F (177°C)
Hail Performance	FM 4470	Test Standard for Susceptibility to Hail Damage	Class 1 - SH (Severe Hail)
Hail Performance	FM 4473	Impact Resistance by Impacting with Freezer Ice Balls	Class 4
Hail Performance	UL 2218	Impact Resistance of Prepared Roof Covering Materials	Class 4
Moisture Resistance	ASTM C 1104	Water Vapor Absorption	0.03%
Moisture Resistance	ASTM C 209	Water Absorption	<1.0%
Moisture Resistance	ASTM E 96	Water Vapor Transmission, Desiccant Method	>1716 ng/Pa.s.m ² (>30 Perm)
Thermal Resistance	ASTM C 518 (C 177)	R-value/inch @ 75°F	3.5 hr.ft ² /F/Btu
Thermal Resistance	ASTM C 518 (C 177)	RSI value/25.4 mm @ 24°C	0.62 m ² /K/W
Corrosive Resistance	ASTM C 665	Corrosiveness to steel	Pass
Corrosive Resistance	ASTM C 795*	Corrosiveness to steel	Conforms
Compressive Strength (1" thickness)	ASTM C 165	at 10%	12.1 psi (84 kPa)
Density	ASTM C 612-00 Actual	Density	11.0 lbs/ft ² (176 kg/m ³)

* Provisions for lot testing may be required.

ACOUSTICAL PERFORMANCE

ASTM C 423		CO-EFFICIENTS AT FREQUENCIES					
Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1.0"	0.13	0.49	0.85	0.89	0.89	0.97	0.80
2.0"	0.50	0.71	0.85	0.90	0.96	1.01	0.85

WARRANTY

SOPREMA offers several warranty options dependent upon membrane combinations, system assembly, and environmental conditions. Contact your local SOPREMA representative for project warranty offerings.