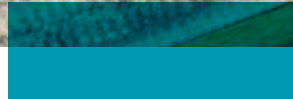


# Toprock<sup>®</sup> DD PLUS

Bitumen-coated Flat Roof Insulation



ROCKWOOL TOPROCK<sup>®</sup> DD Plus is a high-density, bitumen-coated stone wool insulation board for low-slope roof applications. It is compatible as the substrate for the following membrane attachment types: torched and hot mopped.

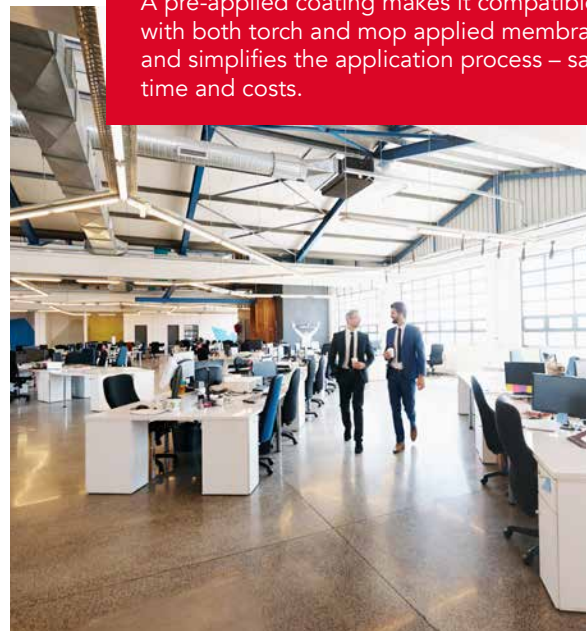
It has excellent acoustic properties and can be used either as a top layer of thermal insulation in an assembly with TOPROCK<sup>®</sup> DD or as the top layer of a hybrid roof assembly with polyisocyanurate or other roof insulations.

TOPROCK<sup>®</sup> DD Plus has exclusive stone wool dual-density properties that feature a higher-density top layer, providing strong point load resistance and effective load distribution to minimize puncture damage to the membrane – particularly during installation.

Learn more at [rockwool.com](http://rockwool.com)

## Simplified Application

A pre-applied coating makes it compatible with both torch and mop applied membranes and simplifies the application process – saving time and costs.



# Toprock® DD PLUS

## Bitumen-coated Flat Roof Insulation

### Technical Data Sheet

Roof Insulation 07220\* • Roof Insulation 07 22 00\*\*  
Mineral Wool Board Insulation 07 21 13\*\*

**ROCKWOOL TOPROCK® DD PLUS is a dual-density, bitumen-coated, mineral wool insulation board for flat roofing applications.**

|                       | Performance   | Test Standard   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
|-----------------------|---|---|---------|-----------|-------------|-------------------------------|-------------------------|-------------|-------------------------------|-------------------------|------------|-------------------------------|-------------------------|--------------|-------------------------------|-------------------------|------------------|
| Compliance            | Standard Specification for Mineral Fiber Roof Insulation Boards<br>Approval Standard for Single Ply, Polymer Modified Bitumen Sheet, Built-Up Roof and Liquid Applied Roof Assemblies for use in Class 1 and Noncombustible Roof Deck Construction<br>NCC (Non Combustible Core) Rated Roof Insulation  | ASTM C726***<br>FM 4470<br><br>FM 4470  |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| Reaction to Fire      | Flame spread index = 0; Smoke developed index = 0<br>Flame spread index = 0; Smoke developed index = 0<br>Determination of Non Combustibility of Building Materials - Non Combustible<br>Standard Method of Fire Tests for Determining Heat Release Rate of Roofing Assemblies with Combustible Above Deck Roofing Components - Class 1<br>Fire Tests of Roof Coverings - Class A<br>Fire Spread under Roof Deck Assemblies - See ULC Directory<br>Standard Test Methods for Fire Tests of Roof Coverings - Class A<br>Fire Tests of Building Construction and Materials - See UL Directory | ASTM E84 (UL 723)***<br>CAN/ULC S102***<br>CAN/ULC S114<br>NFPA 276<br><br>CAN/ULC S107-03<br>CAN/ULC S126-06<br>UL 790 (ASTM E108)<br>UL 263 (ASTM E119) |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| Density               | Top Layer - 13.75 lb/ft <sup>3</sup> (220 kg/m <sup>3</sup> )<br>Bottom Layer - 10 lb/ft <sup>3</sup> (160 kg/m <sup>3</sup> ) - for 2" (50.8mm) and 2.5" (63.5mm) thickness<br>Bottom Layer - 9.36 lb/ft <sup>3</sup> (150 kg/m <sup>3</sup> ) - for >2.5" (63.5mm) thicknesses  | ASTM C303<br>ASTM C303<br>ASTM C303   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| Dimensional Stability | Linear Shrinkage - 0.71% @ 1200°F (650°C)<br>Linear Change 7 days @ -40°F (-40°C), ambient RH - 0.1%<br>Linear Change 7 days @ 200°F (93°C), ambient RH - 0.1%<br>Linear Change 7 days @ 158°F (70°C), 97% RH - 0.0%  | ASTM C356<br>ASTM D2126   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| Hail Performance      | Test Standard for Susceptibility to Hail Damage - Class 1 - SH (Severe Hail)<br>Impact Resistance by Impacting with Freezer Ice Balls - Class 4<br>Impact Resistance of Prepared Roof Covering Materials - Class 4  | FM 4470<br>FM 4473<br>UL 2218   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| Thermal Resistance    | <table border="1"> <thead> <tr> <th>Mean Temperature</th> <th>R-Value</th> <th>RSI Value</th> </tr> </thead> <tbody> <tr> <td>75°F (24°C)</td> <td>3.8 hr.ft<sup>2</sup>.F/Btu</td> <td>0.68 m<sup>2</sup>K/W</td> </tr> <tr> <td>25°F (-4°C)</td> <td>4.3 hr.ft<sup>2</sup>.F/Btu</td> <td>0.74 m<sup>2</sup>K/W</td> </tr> <tr> <td>40°F (4°C)</td> <td>4.2 hr.ft<sup>2</sup>.F/Btu</td> <td>0.72 m<sup>2</sup>K/W</td> </tr> <tr> <td>110°F (43°C)</td> <td>3.6 hr.ft<sup>2</sup>.F/Btu</td> <td>0.64 m<sup>2</sup>K/W</td> </tr> </tbody> </table>                                      | Mean Temperature  | R-Value | RSI Value | 75°F (24°C) | 3.8 hr.ft <sup>2</sup> .F/Btu | 0.68 m <sup>2</sup> K/W | 25°F (-4°C) | 4.3 hr.ft <sup>2</sup> .F/Btu | 0.74 m <sup>2</sup> K/W | 40°F (4°C) | 4.2 hr.ft <sup>2</sup> .F/Btu | 0.72 m <sup>2</sup> K/W | 110°F (43°C) | 3.6 hr.ft <sup>2</sup> .F/Btu | 0.64 m <sup>2</sup> K/W | ASTM C518 (C177) |
| Mean Temperature      | R-Value   | RSI Value   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| 75°F (24°C)           | 3.8 hr.ft <sup>2</sup> .F/Btu   | 0.68 m <sup>2</sup> K/W   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| 25°F (-4°C)           | 4.3 hr.ft <sup>2</sup> .F/Btu   | 0.74 m <sup>2</sup> K/W   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| 40°F (4°C)            | 4.2 hr.ft <sup>2</sup> .F/Btu   | 0.72 m <sup>2</sup> K/W   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| 110°F (43°C)          | 3.6 hr.ft <sup>2</sup> .F/Btu   | 0.64 m <sup>2</sup> K/W   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| Reaction to Moisture  | Moisture Sorption - 0.15%<br>Water Absorption - <1.0%<br>Water Vapor Transmission, Desiccant Method - 2330 ng/Pa.s.m <sup>2</sup> (41 perm)   | ASTM C1104<br>ASTM C209<br>ASTM E96   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| Compressive Strength  | Top Layer - 20psi (140kPa) @ 10%, 37psi (250kPa) @ 25%<br>Entire Board - 11psi (75kPa) @ 10%, 15psi (105kPa) @ 25%<br>Point Load @ 5 mm Compression - 30psi (205 kPa)   | ASTM C165<br><br>EN 12430   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| Corrosion Resistance  | Stress Corrosion Cracking Tendency of Austenitic Stainless Steel - Passed<br>Corrosion of Steel - Passed  | ASTM C795<br>ASTM C665  |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |
| Thickness Dimensions  | Product available in 2" - 4" (50.8 mm - 101.6 mm) in 1/2" (12.7 mm) increments<br>48" x 48" (1219 mm x 1219 mm)   |   |         |           |             |                               |                         |             |                               |                         |            |                               |                         |              |                               |                         |                  |

| Acoustical Performance | Thickness | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000Hz | 4000 Hz | NRC  | ASTM C423 |
|------------------------|-----------|--------|--------|--------|---------|--------|---------|------|-----------|
|                        | 2"        | 0.5    | 0.71   | 0.85   | 0.9     | 0.96   | 1.01    | 0.85 |           |

Contact ROCKWOOL for STC rated assemblies

ASTM E90



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NOTE: \*Master Format 1995 Edition \*\*Master Format 2004 Edition\*\*\*. As ROCKWOOL has no control over installation design and workmanship, accessory materials or application conditions, ROCKWOOL does not warranty the performance or results of any installation containing ROCKWOOL's products. ROCKWOOL's overall liability and the remedies available are limited by the general terms and conditions of sale. This warranty is in lieu of all other warranties and conditions expressed or implied, including the warranties of merchantability and fitness for a particular purpose.



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