

PRODUCT IDENTIFICATION

# PERMAROOF<sup>®</sup> MB HE FR

#400HEFR100 (sold by  
pallet-20 rolls) 39 3/8" x  
34'5"

A HIGH ELONGATION GRANULE SURFACED POLYESTER REINFORCED MODIFIED BITUMEN MEMBRANE

## Description

PERMAROOF MB HE FR is a granule surfaced, fire resistant modified bitumen membrane. It consists of specially selected bitumens, modified with compatible SBS elastomers and reinforced with a non-woven polyester mat. PERMAROOF MB HE FR is furnished with a factory applied white granule surfacing. PERMAROOF MB HE FR is asbestos free. PERMAROOF MB HE FR meets ASTM D 6164, Type I.

## Uses

PERMAROOF MB HE FR is designed for applications over multi-ply systems where a polyester granule surfaced membrane is desired.

## Limitations

PERMAROOF MB HE FR is not intended to perform under ponding conditions. Positive drainage required. PERMAROOF MB HE FR is not to be exposed to solvents, oils or other contaminants harmful to asphaltic materials. You must back nail on all roofs with slopes 2:12 (2"/foot) or greater.

## Advantages

PERMAROOF MB HE FR resists thermal shock and splitting. PERMAROOF MB HE FR is strong yet very pliable to resist tears and splits. PERMAROOF MB HE FR is UL Classified.

## General Application

Roof replacement usually involves more complexities than new construction roofing. Often encountered are situations such as rusted/deteriorated decks, rotted wood

components, rooftop equipment which cannot be moved or shut down and numerous other conditions.

The following application information is designed to serve as a general guide. Detailed specifications should be prepared based upon each roof's conditions.

## Structural Deck

Must be properly designed and structurally sound.

## Drainage

Ponding conditions are unacceptable and will adversely affect performance of any roofing system. If positive drainage does not exist, water removal must be facilitated by lowering drains, and/or installing additional drains or tapered insulation.

## Insulation

Insulation must be dry and kept dry. No more insulation shall be installed than can be covered that day. The use of Republic's Insulation Adhesive for solvent, free, fastener free insulation attachment is the preferred method of attachment unless otherwise specified.

## Installation Procedures

According to job specifications, prepare the surface to be covered:

- Replace areas of wet insulation, deteriorated deck and wood components.
- Install roof insulation or nailed base sheet and multi-ply base ply system.

Plan the placement of PERMAROOF MB HE FR to ensure that water flows over or along, but not against, the exposed edges.

Starting at the low point of the roof, install the modified bitumen roof system according to specification. Embed

## TECHNICAL DATA

<b>Thickness ASTM D 5147-91</b>	160 mils & 4.0 mm
<b>Tensile Strength @ 0°F ASTM D 5147-91</b>	148 lbf/in. MD 122 lbf/in. XMD
<b>Elongation at 0°F ASTM D 5147-91</b>	58% MD 55% XMD
<b>Tear Strength @ ASTM D 5147-91</b>	150 lbf/in. MD 96 lbf/in. XMD
<b>Low Temperature flexibility ASTM D5147-91</b>	-15°F



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ply sheets as specified. Avoid walking on plies during placement.

Place PERMAROOF MB HE FR in a uniform and continuous application of adhesive. Side laps 4" (100mm) minimum; end laps 6" (150 mm) minimum. Offset base laps from membrane laps. Stagger ends 36" (approx. 1m) minimum. To assure complete and uniform adhesion, adhesive should exude past lap edges.

PERMAROOF MB Cold Adhesive or Type IV Asphalt are recommended as adhesives for PERMAROOF MB HE FR. Hot applied modified bitumen membranes require special application techniques under cool ambient temperatures and/or moderate wind conditions.

## Precautions

Users must read container labels and Material Safety Data Sheets for health and safety precautions prior to use.

## Maintenance

A scheduled, periodic maintenance inspection of the PERMAROOF MB HE FR installation is recommended. Punctures may occur through mechanical damage, vandalism, etc., and should be attended to as quickly as possible. Always follow NRCA standards.

## Technical Services

Advice on technical concerns may be solicited any time by contacting Republic Powdered Metals Inc. For project start-ups where the contractor has received material and the work is to commence, it is necessary to coordinate the involvement of Republic's Independent Sales Representative and Technical Field Service Department. A field service representative will be dispatched to the project for start-up assistance and final inspection to ensure a proper installation.



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The information provided on this data sheet is effective as of October 2005 and supersedes all previous data concerning this product and its application.

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