

EPDM

EPDM WATERPROOFING MEMBRANE SHEET

DESCRIPTION

EPDM is an elastomer synthetic rubber material, available with either a fabric finish on both sides or a smooth finish. EPDM sheets are available in thicknesses ranging from 1.0mm to 6.0mm, widths from 1 to 1.5 meters. EPDM sheets offer properties such as durability without cracking, heat resistance, long lifespan, chemical resistance, excellent dynamic performance, flexibility in low temperatures, and ease of installation.

USES

EPDM, a versatile elastomer synthetic rubber, is widely used across industries for its flexibility, resilience, and weather resistance. It finds applications in automotive components, industrial parts like O-rings and hoses, durable roofing materials in construction, and HVAC systems for gaskets and seals, owing to its enduring properties.

ADVANTAGES

- Longevity, EPDM roofs last 30 years or more
- Durability, Flexible, withstands temperature changes and building movement
- Easy Installation
- UV Resistant
- Wide Operating Temperature Range, Performs well in extreme cold and heat
- Water Resistance
- Ozone and Weather Resistance; withstands exposure to ozone, UV rays, and oxidation

STANDARD

EPDM Sheets complies with the following standards:
ASTM D 412, ASTM D 2240.

TYPICAL PROPERTIES

Appearance	Black
Thickness	1.4 - 1.6 mm
Width	1.5 m
Length	20 m
Hardness (ASTM D2240)	63 - 68
Tensile strength (ASTM D412)	72.0 - 75.4
Elongation at break (ASTM D412)	330 - 390
Working Temperature	-25C° - 100C°

APPLICATION

SURFACE PREPARATION:

1. Ensure the roof surface is clean, dry, and debris-free.
2. Remove any old roofing material or damaged sections.

UNROLL THE EPDM MEMBRANE:

1. Lay out the EPDM membrane over the substrate, ensuring it's wrinkle-free.
2. Position it to allow proper overlap of adjacent sheets.
3. Let the membrane relax for about 30 minutes.

APPLY ADHESIVE:

1. Choose from various methods for attaching EPDM:
 - Fully Adhered: Use adhesive to attach the membrane directly to the roof.
 - Mechanically Attached: Fasten the membrane with plates and screws.
 - Ballasted: Secure the membrane with concrete pavers or stones.

2. FOR FULLY ADHERED INSTALLATION:

- Apply adhesive to the roof deck.
- Apply yellow bonding adhesive to both the roof deck and the back of the sheet.
- Wait for the adhesive to tack off (no wet spots).
- Press the sheet onto the adhesive surface and remove air bubbles with a broom.

Seal the Edges and Seams:

1. Use a seam roller to ensure proper adhesion along edges and seams.
2. Trim any excess membrane.
3. Pay attention to corners, gutters, and critical points.
4. Follow manufacturer guidelines for details like splicing and flashing.

STORAGE

Keep away from sparking area, flammable items, and storage temperature less than 55°C.

HEALTH AND SAFETY

For more information, please check the Material Safety Data Sheet.

CONTACT

For information regarding the licensee or manufacturer for ECA, please contact us at techsupport@alfaihaengineering.com.

DISCLAIMER

ECA aims to ensure the accuracy of information and recommendations in the product literature. However, due to variations in materials, substrates, and site conditions, and without control over product application, storage, weather, and usage conditions, ECA cannot be held liable for any resulting issues.