

Top 10 Reasons to Choose EPDM

Carlisle SynTec Systems' EPDM membranes offer an optimal solution for nearly any low-slope roofing situation. EPDM is a durable material that has more than 50 years of proven, in-field performance. With significant physical property advantages, warming benefits in northern climates, and innovations in product technologies, EPDM is still defining the standard in the commercial roofing market. Below are the top 10 reasons to consider EPDM on your next roofing project.

TIME TESTED

EPDM is time-tested in real-world conditions. Black EPDM roofing systems have been used for more than 50 years, and white EPDM roofing systems have been used for more than 25 years. Testing of 30-year old EPDM shows tear, tensile strength, and flexibility meet or exceed ASTM standards.

SUPERIOR WEATHERING RESISTANCE

EPDM has advanced resistance to UV exposure, heat, and mold:

- » ASTM G155 for Xenon Arc = 41,580 kJ/m² for black EPDM and 25,200 kJ/m² for white EPDM
- » ASTM D573 for heat aging = 68 weeks at 240°F
- » ASTM G21 for fungi = zero (no growth)

THICKNESS

EPDM's nominal 60 mils of weathering protection is significantly greater than the 20-25 mils over scrim of most plastic-based sheets. A 40-year ELITE non-prorated material warranty is available with 90-mil Sure-Seal® EPDM.

SUPERIOR HAIL RESISTANCE

Numerous studies and real-world experience confirm that EPDM's 465% elongation (ASTM D412) and weathering resistance result in superior hail damage resistance and UL2218 Class 4 rating.





In northern climates, the solar thermal benefits of black EPDM helps to reduce heating costs, which are typically 3-5 times greater than air-conditioning costs. Reflective white EPDM helps to reduce cooling costs in southern climates. The cross-linked nature of EPDM can handle the heat of southern climates.

**ENERGY
EFFICIENT**

EPDM's dark-colored surface helps to melt frost, dew, and ice that can create slippery conditions on white membranes. A black EPDM membrane helps to reduce a roof's snow load and dries much more quickly than a reflective roof.

**ROOFTOP
SAFETY**

EPDM is the most dimensionally stable membrane, remaining flexible even in extremely cold conditions. Per ASTM D5279-08, EPDM is more flexible at 0°F than TPO at 100°F.

STABLE

The solar thermal benefits of black EPDM also help to reduce potential condensation issues. Undetected condensation in a roofing assembly can negatively affect the performance of paper insulation facers, weakening the bond between insulation and adhesive, and can have a detrimental effect on the insulation's R-value, resulting in reduced thermal efficiency.

CONDENSATION

Carlisle's labor-saving Factory-Applied Tape (FAT™) and pressure-sensitive flashings improve the quality and consistency of seams. Electrical seaming equipment consumes natural resources and is dependent on the applicator using correct speed, temperature, and pressure to avoid false or cold welds.

**QUALITY
SEAMS**

EPDM is available in large 16'-wide to 30'-wide sheets for adhered applications, reducing the number of seams by up to 67% when compared to 10' sheets.

**FEWER
SEAMS**