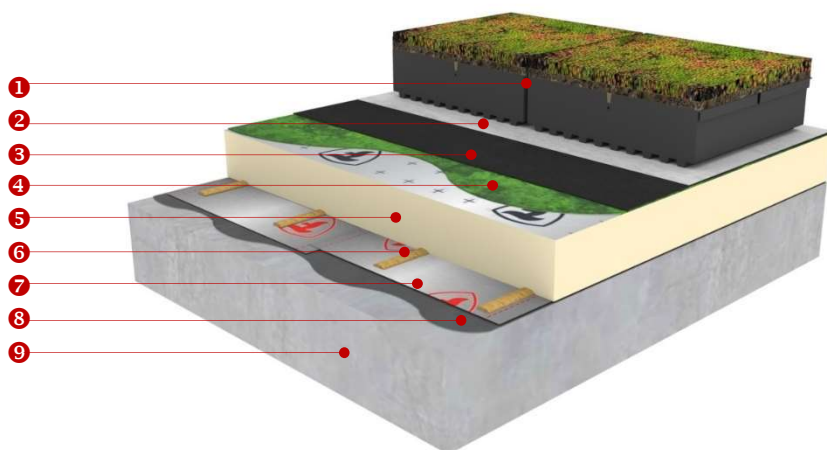




QUICK SPEC

RubberGard™ EPDM Single-Ply Roofing System

FULLY ADHERED SYSTEM WITH EXTENSIVE GREEN ROOF



Firestone's Fully Adhered System is root resistant as per EN13948, and therefore compatible with extensive green roof systems. It is suitable for use on contoured roofs and roofs with irregular shapes.

The concrete deck ⑨ is laid to falls designed to achieve a minimum finished slope as per local requirements to encourage efficient roof drainage.

The concrete deck is primed with **SA-19 Primer** ⑧ in preparation for the application of a vapor control layer. The vapor control layer ⑦ is placed on top of the concrete deck (if required) and will restrict the passage of moisture vapor up into the insulation layer where it could otherwise condense and cause damage. Firestone offers **V-Gard™**, a self-adhesive SBS/polyethylene vapor control layer.

Firestone's Polyiso (PIR) roof insulation boards, such as **RESISTA AK** ⑤ (of appropriate thickness to achieve the required roof U-value) are adhered to the vapor control layer on beads of **I.S.O. Twin-Pack** insulation adhesive. ⑥

The **RubberGard™ EPDM** single-ply roofing membrane ③ is fully adhered to the insulation boards using **BA-2004(T)** or **BA-2012 Bonding Adhesive**. ④

A geotextile protection mat ② and extensive green roof system ① is then installed over the RubberGard™ EPDM membrane.

SYSTEM FEATURES

- Suitable for unusual roof configuration
- Lightweight system
- Fast coverage
- Aesthetics
- High wind uplift performance
- Perfectly suited for green roofs and roofs with PV installations

RUBBERGARD™ EPDM FEATURES

- > 300% elasticity to cope with building & thermal movement
- High flexibility at low temperatures (down to -45°C)
- Large, seamless sheets – less detailing on site, faster installation
- UV resistant for long service life
- Environmentally friendly
- Compatible with extensive green roof systems & photovoltaic systems
- May only be installed by Firestone-trained, Authorised and Licensed Contractors

SYSTEM COMPONENTS

- RubberGard™ EPDM
- BA-2004(T) Bonding Adhesive
- BA-2012 Bonding Adhesive
- I.S.O. Twin Pack Insulation Adhesive
- RESISTA AK PIR insulation
- V-Gard™ vapor control layer
- SA-19 Primer



QUICK SPEC

Specification Details & Options

Membrane	Thickness	Grade
RubberGard™ EPDM	1.5 mm	LS-FR E (Low Slope Fire Retardant)
The RubberGard™ EPDM single-ply waterproofing membrane is made of 100% cured, non-reinforced Ethylene-Propylene-Diene-Terpolymer (EPDM) synthetic rubber, manufactured in an ISO9001 and ISO14001 registered facility. It has a minimum unspliced width of 3.05 m		
Specification compliance: UL Classified/ FM Approved ASTM D 4637/ EN 13956 (CE Mark) 7500 hrs of Artificial Ageing as per EN 1297		

Thermal insulation	Thickness	Thermal conductivity (λ-value)
RESISTA AK	Ranging from 30 to 140 mm	0.023 W/m.K
Please consult Firestone's technical department for detailed R-Value/U-value calculations, as required		
Firestone's RESISTA AK insulation board consists of a closed-cell polyiso foam core laminated on both sides to a gastight multi-layered aluminium complex. The foam technology uses a HCFC-free blowing agent with a GWP (Global Warming Potential) of less than 5 and zero ODP (Ozone Depletion Potential).		
Specification compliance: EN 13165 (CE Mark)		

Membrane Bonding Adhesives	Application Method	Approximate Coverage rate
BA-2004(T)	Super spreader or roller applied contact adhesive	5 to 7m ² /US Gallon (2-sided)
BA-2012	Super spreader or roller applied contact adhesive	2.35 to 3 m ² / Liter (2-sided)

Waterproofing Details

Lap Splices	100mm minimum overlap with 76 mm QuickSeam™ Splice Tape For green roofs, lap splices should additionally be treated with a bead of Pourable Sealer. Alternatively, the green roof system must incorporate a separate root barrier membrane consisting of min. 0.4 mm LDPE which is overlapped min. 1 m at all edges
Base Tie-in <i>(required at all membrane angle changes >15%)</i>	1 QuickSeam™ RPF Strips mechanically attached to the structure with metal batten bars or approved plates & appropriate fasteners @300mm max. o.c. 2 RubberGard™ membrane mechanically attached to the structure with metal batten bars & appropriate fasteners @300mm max. o.c.
Flashings	RubberGard™ EPDM membrane is fully adhered to all abutments and reveals to masonry with Bonding Adhesive and terminated at a height not less than 150 mm above the finished roof level
Corners	1 QuickSeam™ FormFlash is used for corner flashing 2 Folded internal corners are preferred where practical
Pipe penetrations	1 Field-fabricate using QuickSeam™ FormFlash 2 Flashing of pipe penetrations with QuickSeam™ Pipe Flashing
Drains	1 Water block sealant installed between membrane and outlet bowl. Membrane mechanically secured to outlet using integral clamping ring 2 Insert outlet bedded on Water Block Sealant, secured & flashed with QuickSeam FormFlash or SA Flashing
Wall Terminations	1 Termination bar, fastened @200mm max. o.c. with Water Block Sealant and Lap Sealant HS installed along top edge 2 Metal batten bar fastened @150mm max. o.c. with surface mounted or inserted metal counterflashing protection
Surface protection	Extensive green roof system by specialist. Maintain a vegetation-free zone min. 500 mm wide, consisting of rounded, river washed pebbles at all perimeters, abutments and penetration details

Green Building Rating Schemes

Firestone is a leading BREEAM® and LEED® advocate and is pleased to offer roofing, lining and insulation products which contribute to achieve high ratings. Please contact your local Firestone representative for an overview of the standards set by both BREEAM® and LEED® and how Firestone products can minimize your environmental impact and maximize building value.

BREEAM®	By using the RubberGard™ EPDM roof fully adhered system in combination with an Extensive Green Roof, up to 33 credits can be gained as per BREEAM® standards
LEED®	By using the RubberGard™ EPDM roof fully adhered system in combination with an Extensive Green Roof, up to 46 credits can be gained as per LEED® standards

NB: Specifications provided for guidance only and subject to change without notice. Always consult www.firestonebpe.com for the latest information