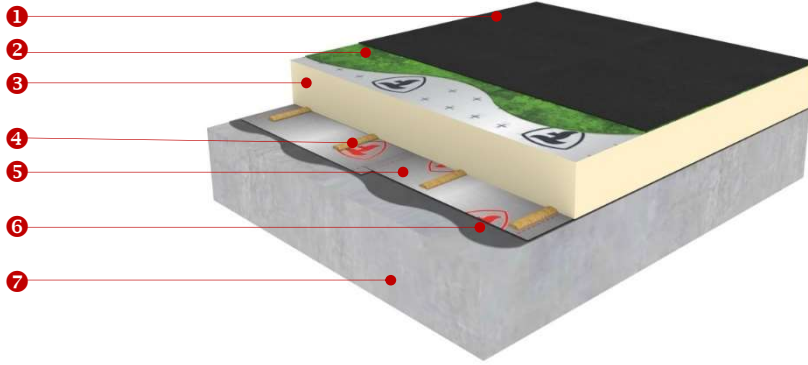


## RubberGard™ EPDM Single-Ply Roofing System

### FULLY ADHERED SYSTEM (FAS)



Firestone's EPDM Fully Adhered System is a lightweight system with outstanding design flexibility. It is suitable for contoured roofs, roofs with irregular shape and any roof with limited load bearing capacity, provided the substrate is compatible with Firestone contact adhesives.

The concrete deck ⑦ is laid to falls designed to achieve a minimum finished slope as per local requirement to encourage efficient roof drainage.

The concrete deck is primed with **SA-19 Primer** ⑥ in preparation for application of the vapor control layer. A vapor control layer ⑤ 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™** self-adhesive SBS/polyethylene vapor control layer.

Firestone Polyiso (PIR) roof insulation boards, for example **RESISTA AK** ③ (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. ④

The **RubberGard™ EPDM** single-ply roofing membrane ① is fully adhered to the insulation boards using **BA-2004(T)** or **BA-2012 bonding Adhesive**. ②

#### SYSTEM FEATURES

- Suitable for unusual roof configurations
- 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



## Specification Details & Options

Membrane	Thickness	Grade
RubberGard™ EPDM	1.1 mm	LS-FR E (Low Slope Fire Retardant)
RubberGard™ EPDM	1.5 mm	LS-FR E (Low Slope Fire Retardant)

The RubberGard™ 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. The membrane 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 <sup>2</sup> /US Gallon (2-sided)
BA-2012	Super spreader or roller applied contact adhesive	2.35 to 3 m <sup>2</sup> / Liter (2-sided)

## Waterproofing Details

Lap Splices	100 mm minimum overlap with 76 mm Firestone QuickSeam™ Splice Tape
Base Tie-in (required at all membrane angle changes >15%)	1 QuickSeam™ RPF Strips are mechanically attached to the structure with metal batten bars or approved plates and appropriate fasteners @300 mm max. o.c.
	2 RubberGard™ EPDM membrane is mechanically attached to the structure with metal batten bars and 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 Seal is installed between membrane and outlet bowl. Membrane is mechanically secured to outlet using integral clamping ring
	2 Insert outlet bedded on Water-Block Seal, secured and flashed with QuickSeam™ FormFlash or SA Flashing
Wall Terminations	1 Termination bar, fastened @ 200mm max. o.c. with Water-Block Seal 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	QuickSeam™ Walkway Pads to define and protect access routes

## 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 (FAS), up to <b>33 credits</b> can be gained as per BREEAM® standards.
LEED®	By using the RubberGard™ EPDM roof fully adhered system (FAS), up to <b>46 credits</b> can be gained as per LEED® standards.

NB: Specifications provided for guidance only and subject to change without notice. Always consult [www.firestonebpe.com](http://www.firestonebpe.com) for the latest information.