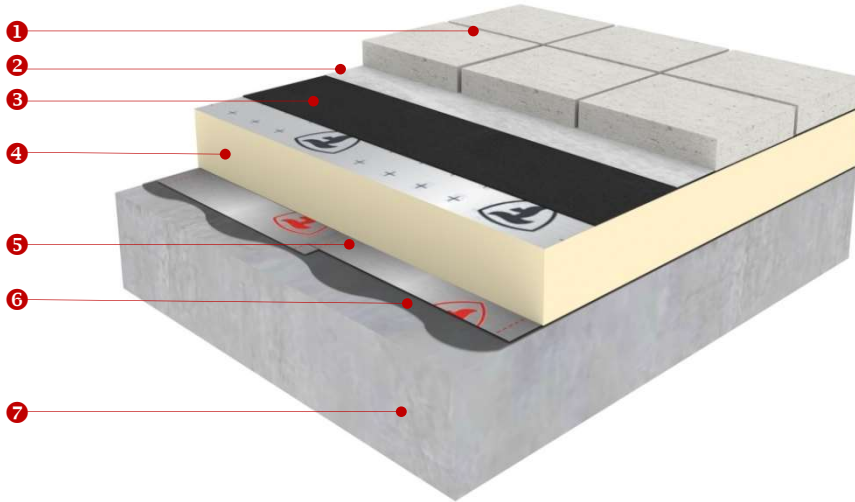# QUICK SPEC

RubberGard™EPDM Single-Ply Roofing System

BALLASTED SYSTEM (TERRACE)

Firestone's EPDM Ballasted System is an economical EPDM roofing system, suitable for a wide variety of buildings. It can be applied on any building that can accommodate the extra load of the ballast and where the roof slope does not exceed 10%.

The concrete deck ❼ 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** ❻ in preparation for the application of a vapor control layer. The vapor control layer ❺ is placed on top of the concrete deck (if required) and will restrict the passage of moisture vapour 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** ❹ (of appropriate thickness to achieve the required roof U-value) is loose laid over the substrate.

Firestone's **RubberGard**™ **EPDM** single ply roofing membrane ❸ is loose laid over the RESISTA AK Polyiso (PIR) roof insulation board on the horizontal roof area.

A geotextile protection mat ❷ is placed over the RubberGard™ EPDM membrane to avoid any damage to the waterproofing layer. ❶ The ballast layer, tiles in this case, is placed on top of the geotextile protection mat. The minimum weight of the ballast material required for this system is 50 kg/m². More ballast weight may be required for roofs with a higher wind load.

SYSTEM FEATURES

- Low installation cost
- Use of large EPDM sheets
- Fewer seams
- Fast installation
- Large choice of compatible substrates
- Excellent fire rating
- Superb weathering resistance

RUBBERGARD™ EPDM FEATURES

- \> 300% elasticity to cope with building & thermal movement
- High flexibility at low temperatures (down to -45ºC)
- Large, seamless sheets – less detailing onsite, 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
- RESISTA AK PIR insulation
- V-Gard™ vapor control layer
- SA-19 Primer

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QUICK SPEC

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™ 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)

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 @300mm 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		The 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 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		The RubberGard™ EPDM membrane is overlaid with geotextile protection mat of minimum 200g/m² weight, lapped and turned up at all abutments and penetration. Ballast layer is installed over geotextile or pedestal supports

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 ballasted system, up to **33 credits** can be gained as per BREEAM® standards.
LEED®	By using the RubberGard™ EPDM roof ballasted system, 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