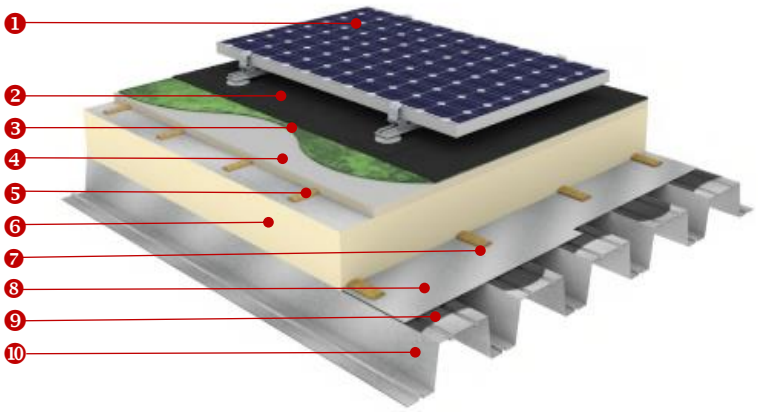
RubberGard™ EPDM Single Ply Roofing System
Fully Adhered System with Photovoltaic Roof



Elevate RubberGard EPDM membrane is compatible with all types of photovoltaic installations, thanks to their high temperature resistance, wear and tear resistance and exceptional life-time expectancy.

The profiled steel deck (min. 0.75mm thick) ⑩ is laid to falls designed to achieve a minimum finished slope as per local requirement to encourage efficient roof drainage.

A vapor control layer ⑧ is placed on top of the steel deck and will restrict the passage of moisture vapour up into the insulation layer where it could otherwise condense and cause damage. Elevate offers **V-Gard** with self-adhesive bituminous backing/reinforced aluminium foil vapor control layer. The steel deck has to be primed with **SA-19 Primer** ⑨ in preparation for application of the vapor control layer.

Elevate **ISOGARD** Polyiso (PIR) roof insulation boards ⑥ (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. ⑦ The spacing between beads is determined by the wind uplift requirement.

A high-density **ISOGARD HD** cover board ④ is adhered to the thermal insulation boards on beads of I.S.O. Twin-Pack insulation adhesive. ⑤

The **RubberGard EPDM** Single Ply Roofing Membrane ② is fully adhered to the cover boards using **Elevate Bonding Adhesive.** ③

The photovoltaic installation ① is then mounted over the RubberGard EPDM membrane. For the protection of the Elevate RubberGard™ EPDM membrane in areas that subject to periodic traffic for maintenance of technical equipment, **Elevate QuickSeam Walkway Pads** must be installed.

Fully Adhered System Features Include:

- 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 Include:

- > 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
- May only be installed by Elevate-trained, Authorised and Licensed Contractors

Elevate System Components:

- **RubberGard** EPDM
- **QuickSeam Walkway Pad**
- **BA-2004(T)** Bonding
- **BA-2012** Bonding Adhesive
- **ISOGARD HD** Cover Board
- **ISOGARD AK** PIR
- **ISOGARD MG** PIR
- **I.S.O. Twin Pack** Adhesive
- **V-Gard** Vapor Control layer
- **SA-19 Primer**

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Specification Details & Options

Membrane	Thickness
RubberGard EPDM	1.5mm

The single ply waterproofing membrane will be made of 100% cured non-reinforced, Ethylene-Propylene-Diene Terpolymer (EPDM) synthetic rubber, manufactured in a ISO9001 registered facility. The membrane will have minimum unspliced width of 3.05m.

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)
ISOGARD AK	Ranging from 30 to 160 mm	0.023 W/m.K
ISOGARD MG	Ranging from 30 to 160 mm	0.025-0.028 W/m.K

Please consult Elevate Technical Services Department for R-Value/U-value calculations as required.

Elevate **ISOGARD AK** insulation board consists of a closed-cell polyiso (PIR) foam core laminated on both sides to a gastight multi-layered aluminium complex.

Elevate **ISOGARD MG** insulation board consists of a closed-cell polyiso (PIR) foam core laminated on both sides to a gasopen mineral glassfibre facer.

Specification compliance:
EN 13165 (CE Mark)

Cover Board	Thickness	Density	Compressive Strength
ISOGARD HD	12.7 mm	80 kg/m^3	> 800 kPa

ISOGARD HD enhances the durability of roofs requiring frequent access, green roofs and photovoltaic roofs

Membrane Bonding Adhesives	Application Method
BA-2004(T)	Super spreader or roller applied contact adhesive
BA-2012	Super spreader or roller applied contact adhesive

Waterproofing Details

Lap Splices		100mm minimum overlap with 76mm QuickSeam Splice Tape
Base Tie-in	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		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 150mm 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 boots & Conduit 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		Photovoltaic installation by specialist

Green Building Rating Schemes

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

BREEAM	Up to **28 credits** can be contributed by using the RubberGard™ EPDM Roof System in combination with solar panels, as per BREEAM Green Building Rating Scheme.
LEED	Up to **38 credits** can be contributed by using the RubberGard™ EPDM Roof System in combination with solar panels, as per LEED Green Building Rating Scheme.

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