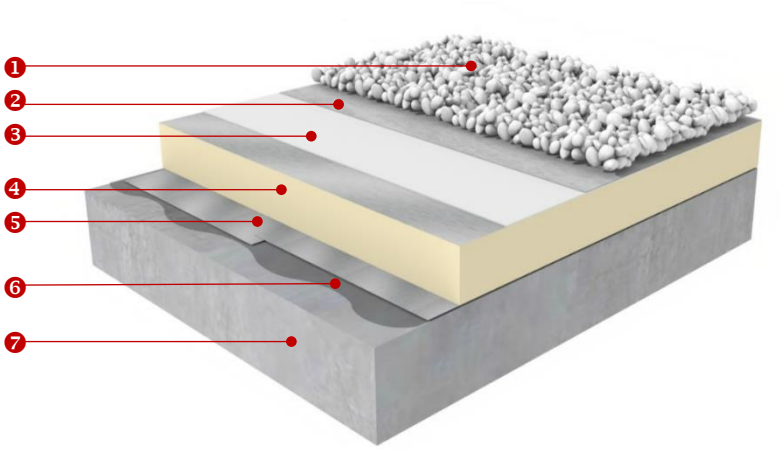
UltraPlyTM TPO Single-Ply Roofing System
Ballasted System



The Elevate TPO Ballasted System is an economical TPO 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.

A vapor control layer ❺ 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. Elevate offers **V-Gard** with self-adhesive bituminous backing aluminium foil vapor control layer. For better performance, the concrete deck can be primed with **SA-19 Primer** ❻ in preparation for application of the vapor control layer.

Elevate **ISOGARD** Polyiso (PIR) roof insulation boards ❹ (of appropriate thickness to achieve the required roof U-value) are loose laid over the substrate.

The **UltraPly TPO** Single Ply Roofing Membrane ❸ is loose laid over ISOGARD Polyiso (PIR) roof insulation board on the horizontal roof area.

A geotextile protection mat ❷ is placed over the UltraPly TPO membrane to avoid any damage to waterproofing layer. ❶ The ballast layer such as pavers, pebbles, concrete, etc. are placed on top of the geotextile protection mat. The minimum weight of ballast material required for this system is 50 kg/m^2. More ballast weight may be required for roofs with higher wind load.

Ballasted System

Features Include:

- Circular System
- Low installation cost
- Use of large TPO panels up to 3.05 m
- Fewer seams
- Fast installation
- Large choice of compatible substrates
- Excellent fire rating
- Superb weathering resistance

UltraPly™ TPO
Features Include:

- Weft Scrim Reinforcement for increased durability
- High Flexibility at low temperatures (down to -40ºC)
- Hot air welded seams
- UV Resistant for long service life
- Environmentally friendly
- Heat reflective, energy efficient
- May only be installed by Elevate-trained, Authorised and Licenced Contractors

Elevate System Components:

- **UltraPly** TPO
- **ISOGARD AK** PIR Insulation
- **ISOGARD MG** PIR Insulation
- **V-Gard** Vapor Control layer
- **SA-19 Primer**

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Specification Details & Options

Membrane	Thickness	Colours	Roll sizes:
UltraPly TPO	1.1mm	White, Grey	1.52m, 2.44m, 2.64m*, 3.05m x 30.50m
UltraPly TPO	1.2mm	White, Grey	1.00m, 1.50m, 2.00m x 30.50m
UltraPly TPO	1.5mm	White, Grey	1.00m, 1.50m, 2.00m, 2.44m*, 3.05m* x 30.50m
UltraPly TPO	1.8mm	White, Grey	1.00m, 1.50m, 2.00m x 30.50m
***** *In white only*			

The UltraPly TPO single ply waterproofing is a flexible thermoplastic polyolefin membrane, incorporating ethylene-propylene rubber into a polypropylene matrix, with a polyester weft-inserted scrim reinforcement, manufactured in an ISO9001 registered facility.

Specification compliance:
UL Classified/ FM Approved
ASTM D 6878/ 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)

Waterproofing Details

Lap Splices		75mm minimum overlap with welded seam
Base Tie-in	1	UltraPly TPO membrane mechanically attached to the deck with HD seam plates & appropriate fasteners @300mm max. o.c.
	2	UltraPly TPO membrane mechanically attached to the upstand with HD seam plates & appropriate fasteners @300mm max. o.c.
Flashings		Fully adhered to all substrates with UltraPly TPO Bonding Adhesive or BA-2012
Corners	1	Corners formed using UltraPly TPO Pre-moulded inside/outside corner
	2	Corners field-fabricated using UltraPly TPO Unsupported Flashing
Pipe penetrations		Flash with pre-moulded UltraPly TPO Pipe Flashing, Field flashing using UltraPly TPO Unsupported Flashing or UltraPly TPO Penetration Pocket Kit
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 Flashing.
Wall Terminations	1	Termination bar, fastened @ 200mm max. o.c. with Water Block Sealant and GP Sealant installed along top edge
	2	Metal batten bar fastened @ 150mm max. o.c. with surface mounted or inserted metal counterflashing protection

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 **24 credits** can be contributed by using the UltraPly™ TPO Roof Ballasted System, as per BREEAM Green Building Rating Scheme.
LEED	Up to **30 credits** can be contributed by using the UltraPly™ TPO Roof Ballasted System, as per LEED Green Building Rating Scheme.

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