

# ULTRATEC

**ULTRATEC & mineral ULTRATEC** are prefabricated modified polymer-bitumen membranes whose compound is composed of distilled bitumen and elasto-plastomers (APP), reinforced with a Woven non Woven composite polyester fabric (**P & PA**) or fiberglass mat (**V & VA**). The modified compound offers excellent ageing properties, cold flexibility, durability and a very high elasticity.

**ULTRATEC (P) & ULTRATEC (V)** are available with either a polypropylene mat, talc or sand finish on the upper face to prevent the roll from sticking to itself and benefits the unrolling of the product during installation. The talc finish also enhances the adhesion of aluminium reflective coatings and acrylic paints after application.

**Mineral ULTRATEC (PA) & mineral ULTRATEC (VA)** are supplied with mineral slate chips which are available in natural or coloured version. This mineral finish acts as a weathering surface and enhances the aesthetics after application. A 10 cm side selvedge is provided to allow for easy alignment of the membrane during application. On request a 15 cm end lap selvedge is available.

The lower face of both **ULTRATEC & mineral ULTRATEC** is backed by a special polyethylene burn-off film which melts during torching and prevents the roll from sticking to itself. The correct application temperature is visible from the embossed surface of the membrane which is below the burn off film, when the correct temperature is reached, this embossment melts also helping vapour diffusion and avoiding blistering.

The burn off film also has a printed 10 cm square which allows the alignment of the side laps quickly and easily during application.

**ULTRATEC (P) & mineral ULTRATEC (PA)** offers an excellent static and dynamic puncture resistance, high tensile strength, both longitudinal and transversal, and ultimate elongation.

**ULTRATEC (V) & mineral ULTRATEC (VA)** on the other hand offers excellent dimensional stability and is normally used as a first layer in a two layer system (**V**) or as a cap sheet, mineral slate version (**VA**), over a polyester reinforced membrane.

Technical properties	Measure units	P	PA	V	VA	Tolerances
Reinforcement		composite polyester	composite polyester	glass fiber	glass fiber	
Finish: Upper face:		polypropylene mat or talc	mineral	talc	mineral	
Roll length (EN 1848-1)	m	10	10	10	10	± 1%
Roll width (EN 1848-1)	m	1	1	1	1	± 1%
Thickness (EN 1849-1)	mm	3-4-5	-	2-3-4	-	± 5%
Nominal weight (EN 1849-1)	Kg/m <sup>2</sup>	-	3.5-4.0-4.5	-	3.5-4.0-4.5	± 10%
<b>Tensile strength</b> (EN 12311-1)						
Longitudinal / Transversal	N/5 cm	750 / 600	750 / 600	350 / 200	350 / 200	± 20%
<b>Ultimate elongation</b>						
Longitudinal / Transversal	%	45 / 45	45 / 45	2 / 2	2 / 2	± 15
Tear strength L/T (EN 12310-1)	N	170 / 170	170 / 170	80 / 80	80 / 80	min
Static puncture resistance (EN 12730)	Kg	15	15	5	5	min
Dymanic puncture resistance (EN 12691)	mm	20	20	30	30	min
Cold flexibility (EN 1109)	°C	-15	-15	- 15	- 15	max
Dimensional stability (EN 1107)	%	L±0.3T±0.3	L±0.3T±0.3	-	-	max
Flow resistance (EN 1110)	°C	140	140	140	140	min
Watertightness (EN 1928)	Kpa	60	60	60	60	min
Softening point (ring & ball ASTM-D36)	°C	150	150	150	150	min

### INSTALLATION & LAP-JOINTS

The **ULTRATEC** polymer-bitumen membranes are applied:

- with a propane gas torch
- mechanically fastened

The suggested application tools required are a knife and rounded tip trowel.

Depending on the application, structure and specification, the **ULTRATEC** polymer-bitumen membranes can be:

- fully bonded
- spot bonded
- loose laid

In case of spot bonding, an area of 100 cm at each side of the end laps should always be fully bonded. An alternative system is to use the **IPERTEC FORATO** vented membrane. This membrane is provided with evenly distributed holes for a uniform application (please refer to technical data sheet).

Side joints should always be of 100 mm with head joints of 150 mm.

### USES

**ULTRATEC (P) & mineral ULTRATEC (PA)** are designed to be used in a wide range of waterproofing as foundations, terraces, basements, concrete decks (flat, curved, etc.), metal & timber decks, etc. They are suitable for renovation and with or without thermal insulation.

**ULTRATEC (V) & mineral ULTRATEC (VA)** are instead conceived to be used in multi-ply systems as a complementary layer on the condition that one layer is polyester reinforced.

### STORAGE

**ULTRATEC** polymer-bitumen membranes should be correctly stored in a dry location to prevent deformation and should not be stacked more than two pallets high using wooden spacers between the first and second pallet to distribute the weight.

### RECOMMENDATIONS

1. Application surface must be smooth, free of moisture, ponding water and dust.
2. The application area must be provided with an adequate drainage system.
3. The substrate must be primed with a bituminous based product (**PRIMERTEC** or **IDROPRIMER**) and allowed to dry prior to application.
4. Do not apply below +5 °C.
5. Do not apply during adverse weather conditions.
6. In case of application on vertical or considerable slopes, apply proper mechanical fasteners.
7. See our handbook "**Waterproofing with Pluvitec**" for application details.

### SIZES AND PACKING

<b>ULTRATEC P; V; PA; VA</b>	<b>2 mm *</b>	<b>3 mm</b>	<b>4 mm</b>	<b>5 mm</b>	<b>3.5 Kg/m<sup>2</sup> mineral</b>	<b>4.0 Kg/m<sup>2</sup> mineral</b>	<b>4.5 Kg/m<sup>2</sup> mineral</b>
Rolls size (m)	15X1	10X1	10X1	10X1	10X1	10X1	10X1
Rolls per pallet	33	30	25	20	27	25	23

\* Only for fiberglass

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*The technical data given is based on average values obtained during production.*

*Pluvitec reserves the rights to change or modify the nominal values without prior notice or advice.*