

# Technical Commercial data Sheet

## Tender Plus

Waterproofing bitumen polymer membrane



### Dimensional features

Length	8 / 10 m - 1% (UNI EN 1848-1)	Toll. ≥
Width	1 m - 1% (UNI EN 1848-1)	Toll. ≥
Thickness	3/4 mm (UNI EN 1849-1)	Toll. 0,4 mm
Weight per m <sup>2</sup> (MINERAL)	4/4,5 kg (UNI EN 1849-1)	Toll. 10%

### Description

The membranes of the TENDER PLUS range are realized with an elastoplastomeric compound with a -10°C cold flexibility and are reinforced polyester strengthened with glass cloth.

TENDER PLUS 4 MM P is also available in the "TEX" version with "DECOTEX" treatment, consisting in the application on the upper face of a special black polypropylene tissue.

### Application

- Use Personal Protective Equipment as requested by law;
- Clean properly the surface on which membranes has to be applied;
- TENDER PLUS is meant to be applied by flame with a gas propane blow torch by heating the lower face, covered with a special termofusibile film;
- Apply between +5° C and + 35° C.

### Recommended Use

The TENDER PLUS membranes can be employed on structures of any type, like base layers, top layers, basement structures and foundations. TENDER PLUS P and TENDER PLUS MINERAL can be used as top layers.

### Storage

Keep the rolls in warehouse, not exposed to the sun rays and at a higher temperature than +5°C. Keep the rolls in the upright position. If possible, avoid stacking pallets, especially with slated membranes. It is advisable to use the product within 2/3 months from delivery.

TYPE	REINFORCEMENT	UPPER FACING	THICKNESS WEIGHT/m <sup>2</sup>	m <sup>2</sup> PER PALLET
TENDER PLUS 3 MM P	Polyester	Sand	3 mm	250
TENDER PLUS 4 MM P	Polyester	Sand	4 mm	230
TENDER PLUS TEX 4 MM P	Polyester	Polypropylene TNT	4 mm	230
TENDER PLUS MINERAL 4 KG P	Polyester	Slate	4 kg	250
TENDER PLUS MINERAL 4,5 KG P	Polyester	Slate	4,5 kg	230
TENDER PLUS MINERAL 4,5 KG P	Polyester	Slate	4,5 kg	200

# Technical Commercial data Sheet

## Tender Plus

Test	Standard Reference	TENDER PLUS P	TENDER PLUS MINERAL P	TOLERANCE
Visible Faults	UNI EN 1850-1	absent	absent	-
Straightness	UNI EN 1848-1	10 mm	10 mm	≤
Watertightness	UNI EN 1928	60 kPa	60 kPa	≥
Cold flexibility	UNI EN 1109	- 10 °C	- 10 °C	≤
L dimensional stability	UNI EN 1107-1	- 0,3 %	- 0,3 %	≥
Flow resistance	EN 1110	120 °C	120 °C	≥
Flow resistance after ageing	UNI EN 1296 UNI EN 1109	110 °C	110 °C	- 10 °C
Tensile strength at breaking L/T	UNI EN 12311-1	400 N/5 cm 250 N/5 cm	400 N/5 cm 250 N/5 cm	- 20 %
Elongation at breaking L/T	UNI EN 12311-1	35% / 35%	35% / 35%	-15 a.v. (P) - 2 a.v. (V)
Tear resistance (B method) L/T	UNI EN 12310-1	130 N 130 N	130 N 130 N	- 30 %
Static load resistance	UNI EN 12730	10 Kg	10 Kg	≥
Dynamic punching resistance	UNI EN 12691	700 mm	700 mm	≥
Vapour permeability	UNI EN 1931	μ 20000	μ 20000	-
UV ageing	UNI EN 1297	Passes the test (4 mm)	-	-
Fire reaction	EN 13501-1	NPD	NPD	-
External fire reaction	EN 13501-5	F roof	F roof	-
Granules adhesion	UNI EN 12039	-	30%	≤
Watertightness after exposure to chemical agents artificial ageing	UNI EN 1928 UNI EN 1847/ UNI EN 1296	NPD	-	-
Resistance to water penetration	UNI EN 1928	-	CLASS W1	-
Res. to water penetration Tensile properties after artificial ageing	App. C EN 13859-1	-	NPD	-
Uses	EN 13707 System 2+	Base layer Middle layer Top layer	Top Layer	-
	EN 13969 System 2+	Foundations Earth retention	-	-
	EN 13859-1 System 4	-	Under tiles	-

The Saint-Gobain PPC Italia S.p.A. quality system is certified according to EN ISO 9001

Follow proper application and storage modalities.

The CE marking of this bituminous membrane is in accordance with the European Construction Products Regulation 305/2011, is in agreement to the reference technical standards and is supported by certification no. 1370-CPR-0050.

Saint Gobain PPC Italia has the right to change the technical data of this data sheet any time with no need of notice.



CODICE: STCBE 011  
REVISIONE: 07  
DATA: april 2016  
Pag. 2 di 2



Saint-Gobain PPC Italia S.p.A. – Attività Isover  
Headquarters: Via Ettore Romagnoli, 6 – 20146 Milano  
Bituver plant: Via G.Pastore, 15 - 66013 Chieti Scalo (CH) - Tel. 0871/599022 - Fax 0871/ 552483  
[www.bituver.com](http://www.bituver.com)

