

BITUSMART

WATERPROOFING MEMBRANES FOR
SLOPED OR FLAT ROOFS

- Complete waterproofing system
- State-of-the-art technologies
- Durable



Industrial
buildings



Public-access
buildings



Commercial
buildings
and resorts



Individual
& collective
housing



Flat roofs



Leisure
housing

YouTube <http://www.youtube.com/ondulineavrasya>

facebook <http://www.facebook.com/ondulineavrasya/>

facebook <http://www.facebook.com/ondulineAfrica/>

Instagram <http://www.instagram.com/ondulineafrika/>

Onduline[®]
AVRASYA A.Ş.

An **Ondura** Group Company

BITUSMART

WATERPROOFING MEMBRANES FOR SLOPED OR FLAT ROOFS



Innovating waterproofing Technologies !

BITUSMART®, the professional's choice: high quality and effective range of waterproofing membranes for reliable applications.

BITUSMART® base sheets have been developed following evolution of state-of-the-art technologies and are manufactured in Onduline Avrasya

Sapanca plant. Used for BURs; flat roof terraces under ballasts gravel, paving slabs, roof gardens or ground level tanking and waterproofings of internal or external underground walls and public works and civil engineering projects or for waterproofing of industrial floors; in new, renovation and repair works for tourism complexes, hotels, institutional buildings and housing waterproofing works BITUSMART® waterproofing membranes offers reliable products for multi-layer waterproofing.

BITUSMART® membranes line have a wide range of characteristics and performances in order to provide turnkey solutions to meet all reliable waterproofing needs. Manufactured with the standards EN 13707 Flexible sheets for waterproofing-Reinforced bitumen sheets for roof waterproofing and EN 13969 Flexible sheets for waterproofing-Bitumen damp proof sheets including bitumen basement tanking sheets complying with Directive 89/106/EEC of European Council, BITULINE® waterproofing felts are marked CE.



Waterproofing



Chemical resistant



Complete system



Professional Quality

					BITUSMART - ULTRA	BITUSMART - SUPER	BITUSMART - HIGH
TEST		METHOD	UNIT	TOLERANCE	UP300	SP300	HP300
Tensile strength	L/T	TS EN 12311-1	N/50mm	± %30	800/600	800/600	800/400
Elongation at break	L/T	TS EN 12311-1	%	P (± 10) G (± 1)	35/35	35/35	30/30
Determination of flexibility at low temperature : Research of cold bending temperature	FF	TS EN 1109	°C	max	-25/-10	-15/-5	-10/0
Determination of flow resistance at elevated temperature		TS EN 1110	°C	min	110	110	110
Methods for exposure to liquid chemicals, including water (TS EN 13969)		TS EN 1847 TS EN 1928	-	-	CONFORM		

The values indicated are valid for polyester reinforced 3 mm waterproofing felts.

BITUSMART® - ULTRA

Membranes with elastomeric SBS modification.

BITUSMART® felts modified with elastomeric polymers SBS styrene-butadiene-styrene have excellent flexibility in extreme weather conditions and offers extraordinary cold bending properties of -20°C. The high flexibility allows the use of the range in cold countries with extreme climatic conditions. The flexibility allows also the easy application of the membrane in civil engineering structures and Public Works ensuring efficient waterproofing of the engineering structure.

Benefits:

- Use in extreme climatic conditions,
- Tensile strength,
- Dimensional stability

Use:

BUR of civil works, for waterproofing of industrial floors, rooftop terraces, damp or wet rooms, under all hard floor coverings and masonry work, foundation slab tanking for new, renovation and repair works and solutions adapted to civil engineering works.

Cold
bending **-25**



BITUSMART® - SUPER

Membranes with plastomeric APP modification.

The BITUSMART® Super range offers membranes modified with polymers and atactic polypropylene APP having cold bending properties of -15°C, therefore they resist to extreme changes in temperature.

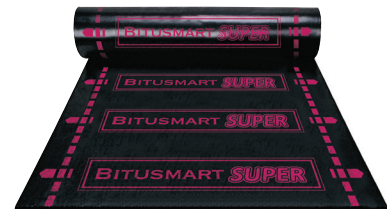
Benefits:

- Use in extreme climatic conditions,
- Cold bending,
- Dimensional stability

Use:

BUR of civil works, for waterproofing of industrial floors, rooftop terraces, damp or wet rooms, under all hard floor coverings and masonry work, foundation slab tanking for new, renovation and repair works and solutions adapted to civil engineering works.

Cold
bending **-15**



BITUSMART® - HIGH

Membranes with plastomeric APP modification

The BITUSMART® High range offers membranes modified with polymers and atactic polypropylene APP having cold bending properties of -10°C, therefore they can resist to extreme temperature fluctuations. They are mainly used in temperate countries.

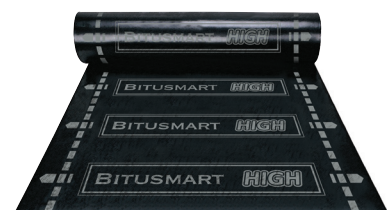
Benefits:

- Use in low climatic conditions,
- Flow resistance at elevated temperature
- Dimensional stability

Use:

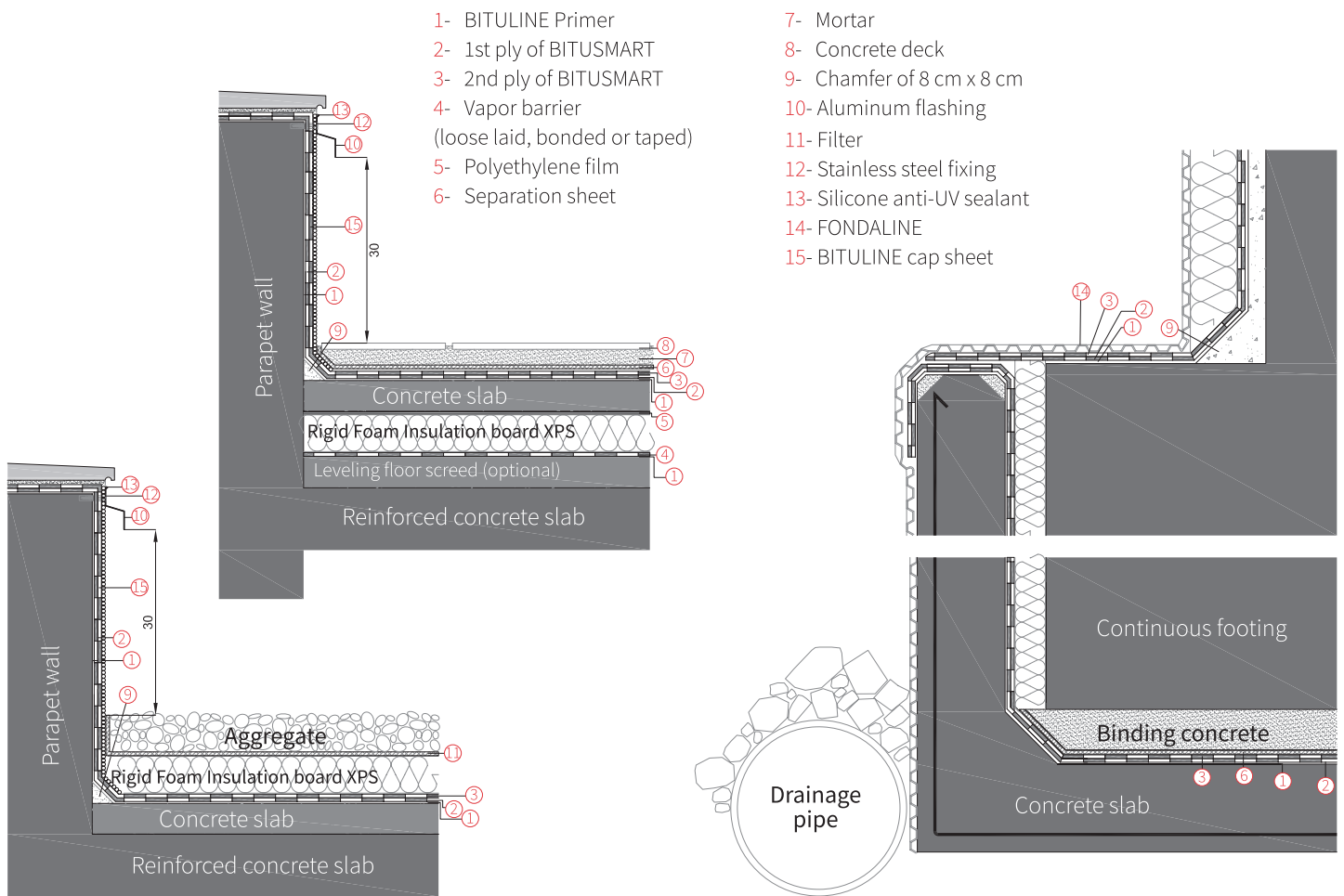
For waterproofing of industrial floors, rooftop terraces, damp or wet rooms, under all hard floor coverings and masonry work, foundation slab tanking for new, renovation and repair works .

Cold
bending **-10**





- Choose the proper waterproofing felt adapted to the artwork for effective waterproofing.
- Before application the substrate must be clean and dry.
- Prime all the substrate with BITULINE® Primer.
- The overlapping lines of BITUSMART® base sheets at side lap joints serve as a guide for proper side overlapping. Side laps must be 10 cm and end lap joints must be at least 15 cm.



BITUSMART waterproofing felts are reliable solution for waterproofing of all BUR "Built-Up Roof's" classical or inverted terrace roofs.

BITUSMART waterproofing felts are reliable solution for waterproofing of industrial floors, damp or wet rooms, under all hard floor coverings and masonry work, foundation slab tanking for new, renovation and repair works and solutions adapted to civil engineering works.