

THERMAL INSULATION

# **SOPRA XPS**



# **SOPREMA** INSULATION

# SOPREMA DELIVERING MARKET LEADING INSULATION IN THE UK

Insulation products and solutions manufactured by **SOPREMA**, installed all over the world. The **SOPRA XPS** insulation range has been developed specifically for the UK construction industry, and is fully compatible with multiple SOPREMA roofing and waterproofing systems, providing industry professionals with a total insulation and waterproofing solution, from one single source, covered by the **SOPRACOVER** Insurance backed single point warranty.

SOPRA XPS insulation, is an industry leading range of extremely high performance, extruded polystyrene (XPS) closed cell insulation boards, suitable for many demanding and varied insulation applications including inverted and green roofs, floors, walls and below ground works.



#### **ENERGY EFFICIENCY**

Boasting impressive thermal conductivity, **SOPRA** XPS Lambda values guarantee high thermal insulation performance year after year and can be used in areas where other types of insulation cannot perform. The **SOPRA XPS** range has thermal conductivity ratings as low as 0.029W/mk enabling thinner board thicknesses to be utilised.

#### **COMPRESSIVE STRENGTH**

Designed for applications where additional load bearing capability is required, SOPRA XPS provides exceptional compressive strength in the most challenging environments; under slabs, concrete floors, foundations, plaza and podium decks and is also suitable for cold storage applications and underground works.

#### WARRANTY

SOPREMA offer the SOPRACOVER Insurancebacked, single-point warranty on all SOPRA XPS products. SOPRA XPS is fully compatible with SOPREMA waterproofing systems, a single-point total waterproofing and insulation warranty can be supplied when **SOPRA XPS** is installed together with **SOPREMA** waterproofing.

# INSULATION SELECTION GUIDE

		WALL		R0	0F	FL00R	FAÇADE	P.
	INTERIOR WALL	CAVITY WALL	FOUNDATION WALL	SARKING ROOF	FLAT ROOF			
SOPRA XPS SL			λ	λ	λ	λ		10
SOPRA XPS SL ARTIC			λ	λ	λ	λ		11
SOPRA XPS CW	λ	λ		λ			λ	12
SOPRA XPS CW ARTIC				λ			λ	13
SOPRA XPS CB	λ							13
SOPRA XPS 500					λ	λ		14
SOPRA XPS 700					λ	λ		15
R00F 115					λ			15



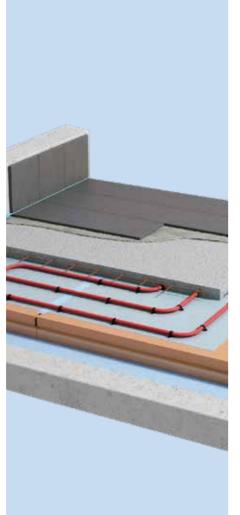
# **SOPRA XPS INSULATION:**

# WIDE APPLICATIONS FOR THE COMPLETE BUILDING ENVELOPE

#### A GREEN SPACE

Rainwater attenuation in built up cities should be a design consideration, green roofs can provide roof top habitats for insects and birds, also managing rainwater discharge by storing water at roof level.



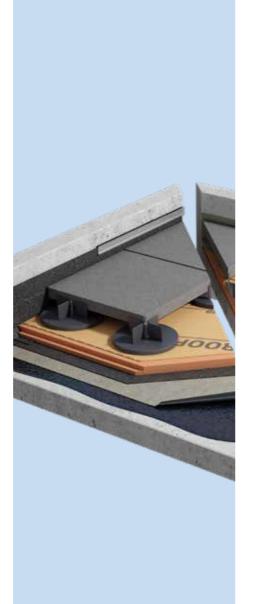


### PRESSURE RESISTANT SOPRA XPS

More than 25% of the total energy lost within a building, goes through poorly insulated floors. Due to its moisture resistance and excellent compressive strength properties (300 - 700 kPa), SOPRA XPS is the ideal insulation material for floors which have to deal with high loads.



When a roof top car park requires insulation the compressive strength of SOPRA XPS means vehicular access is not an issue. The combination of a liquid waterproofing system with a bituminous vapour barrier and SOPRA XPS insulation also ensures a better load capacity (700 kPa).

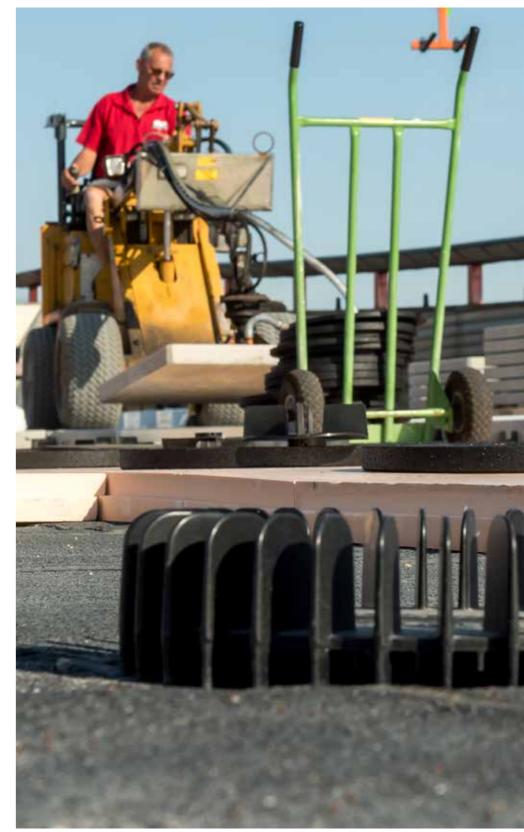




#### A FIRM FOUNDATION

Foundation walls are renowned for their complexity and can cause problems on site. Good project preparation is extremely important. First of all, it is important to consider how the foundation wall compares relative to the groundwater level. For waterproofing foundation walls located above the level of the water table, the possibilities include flame-less and welded systems. Foundation walls can be sealed with the Colphene 1500 self-adhesive waterproofing membrane. This is an innovative SBS bitumen based membrane with an extremely strong adhesive strength and is simple to use. This ready-to-use solution for foundation walls is also very safe thanks to to its flame-less application.





# **ADVANTAGES**OF SOPRA XPS

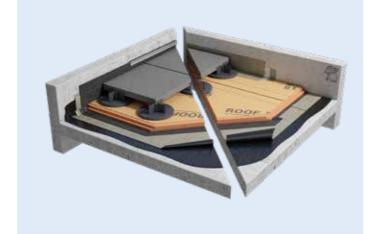
- + Excellent moisture resistance
- + Exceptional compressive strength
- + Outstanding energy efficiency
- + Resistant to fungi and micro-organisms
- + Lightweight and easy to cut and process
- + Application versatility
- + 100% recyclable
- + Total waterproofing & Insulation solution compatible with SOPREMA waterproofing

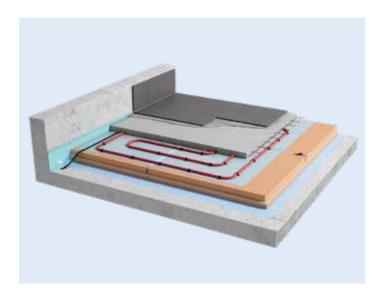


Following the SOPREMA 'ECOSTRUCTION' initiatives to reduce carbon emissions and use of raw materials in product manufacturing, the production process utilises reuse of recycled materials and uses SOPREMA climate-friendly propellants during the manufacture of SOPRA XPS products meeting BREEAM A and A+ ratings.

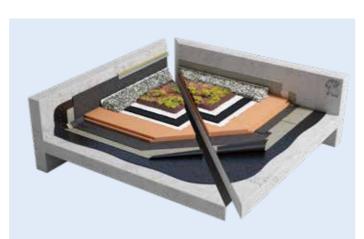
#### **EXPERTISE**

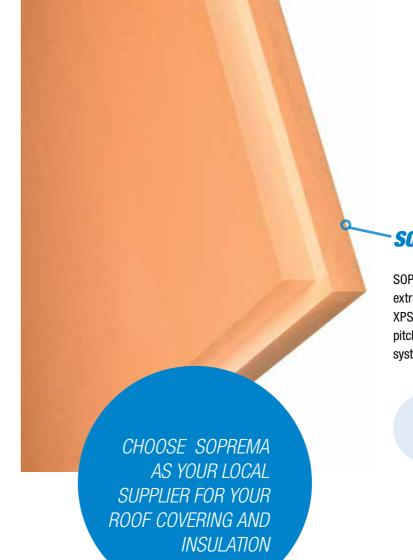
Experts in the manufacture of waterproofing and insulation systems, SOPRA XPS insulation has been designed and developed by SOPREMA, with extreme performance in mind. The closed cell structure of SOPRA XPS insulation boards delivers extremely high compressive strength and outstanding thermal performance properties.











#### SOPRA XPS SL ARTIC

SOPRA XPS SL ARTIC is a rigid thermal insulation board made of extruded polystyrene (XPS) foam with improved lambda. SOPRA XPS SL ARTIC is mainly used as thermal insulation including flat and pitched roofs, floors and underground constructions. On flat roofs the system must be ballasted.







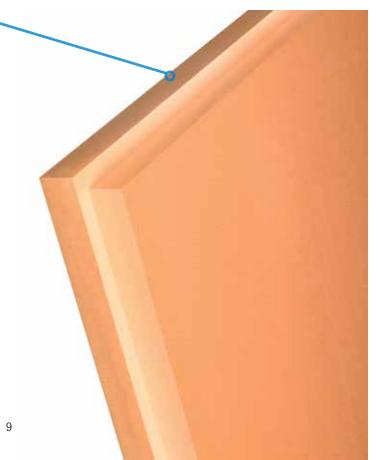




SOPRA XPS 500 is a rigid thermal insulation board made of extruded polystyrene (XPS) foam produced according to climate-friendly  ${\rm CO_2}$  technology. SOPRA XPS 500 is mainly used as thermal insulation including floors and car parks where a high compressive strength is required.



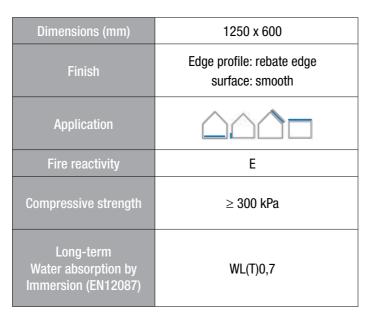






## SOPRA XPS SL

SOPRA XPS SL is a rigid thermal insulation board made of extruded polystyrene (XPS) foam produced according to climate-friendly  ${\rm CO_2}$  technology. SOPRA XPS SL is mainly used as thermal insulation including flat and pitched roofs, floors and underground constructions. On flat roofs the system must be ballasted.





Thickness (mm)	30	40	50	60	80	100	120	140
Thermal resistance RD: (m².K/W)	0,90	1,20	1,50	1,80	2,25	2,85	3,40	4,00
Boards/pack	14	10	8	7	5	4	;	3
m²/pack	10,50	7,50	6	5,25	3,75	3	2,	25
Packs/pallet			1	2			14	12
m²/pallet	126	90	72	63	45	36	31,50	27
Thermal conductivity (W/(m.K))		0,033				0,0	)35	

Thickness (mm)	160	180	200	220	240	260	280	300
Thermal resistance RD: (m².K/W)	4,55	5,10	5,70	6,10	6,65	7,20	7,75	8,30
Boards/pack		;	2		1			
m²/pack		1,	50			0,	75	
Packs/pallet	16	14	1	2	20	18	1	6
m²/pallet	24	21	1	8	15	13,50	1	2
Thermal conductivity (W/(m.K))		0,035				0,036		

In addition to the default pallet, there is also a "jumbo" pack, composed of 2x2 pallets.



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## SOPRA XPS SL ARTIC

SOPRA XPS SL ARTIC is a rigid thermal insulation board made of extruded polystyrene (XPS) foam with improved lambda. SOPRA XPS SL ARTIC is mainly used as thermal insulation including flat and pitched roofs, floors and underground constructions. On flat roofs the system must be ballasted.

Dimensions (mm)	1250 x 600 (30 – 180 mm) 1250 x 500 (200mm)
Finish	Edge profile: rebate edge surface: smooth
Application	
Fire reactivity	E
Compressive strength	≥ 300 kPa
Long-term Water absorption by Immersion (EN12087)	WL(T)0,7

Thickness (mm)	30	40	50	60	80	100	120	140		
Thermal resistance RD: (m².K/W)	1,05	1,40	1,75	2,10	2,75	3,45	4,15	4,80		
Boards/pack	14	10	8	7	5	4	3	3		
m²/pack	10,50	7,50	6,00	5,30	3,80	3,00	2,25	2,25		
Packs/pallet	12	12	12	12	12	12	14	12		
m²/pallet	126	90	72	63	45	36	31,50	27		
Thermal conductivity (W/(m.K))	0,029									

Thickness (mm)	160	180	200
Thermal resistance RD: (m².K/W)	5,50	5,80	6,45
Boards/pack	2	2	2
m²/pack	1,50	1,50	1,25
Packs/pallet	16	14	12
m²/pallet	24	21	15
Thermal conductivity (W/(m.K))	0,029	0,031	

In addition to the default pallet, there is also a "jumbo" pack, composed of 2x2 pallets.



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# SOPRA XPS CW

SOPRA XPS CW is a rigid thermal insulation board made of extruded polystyrene (XPS) foam produced according to climate-friendly CO<sub>2</sub> technology. SOPRA XPS CW is mainly used as thermal insulation including pitched roofs and facades.

Dimensions (mm)	2500 x 600
Finish	Edge profile: tongue-groove  surface: smooth
Application	
Fire reactivity	E
Compressive strength	≥ 250 kPa
Long-term Water absorption by Immersion (EN12087)	WL(T)0,7

Thickness (mm)	30	40	50	60	80	100	120	140	160
Thermal resistance RD: (m².K/W)	0,90	1,20	1,50	1,80	2,25	2,85	3,40	4,00	4,55
Boards/pack	14	10	8	7	5	4	3	3	2
m²/pack	21	15	12	10,50	7,50	6	4,50	4,50	1,50
Packs/pallet			1	2			14	12	14
m²/pallet	252	180	144	126	90	72	63	54	42
Thermal conductivity (W/(m.K))	0,033						0,035		

12

In addition to the default pallet, there is also a "jumbo" pack, composed of 2x1 pallets.





## SOPRA XPS CW ARTIC

SOPRA XPS CW Artic is a rigid thermal insulation board made of extruded polystyrene (XPS) foam with improved lambda. SOPRA XPS CW Artic is mainly used as thermal insulation including pitched roofs and facades.

Dimensions (mm)	2500 x 600
Finish	Edge profile: tongue-groove surface: smooth
Application	
Fire reactivity	E
Compressive strength	≥ 300 kPa
Long-term Water absorption by Immersion (EN12087)	WL(T)0,7

Thickness (mm)	30	40	50	60	80	100	120		
Thermal resistance RD: (m².K/W)	1,05	1,40	1,75	2,10	2,75	3,45	4,15		
Boards/pack	14	10	8	7	5	4	3		
m²/pack	21	15	12	10,50	7,50	6	4,50		
Packs/pallet	12	12	12	12	12	12	14		
m²/pallet	252	180	144	126	90	72	63		
Thermal conductivity (W/(m.K))	0,029								

In addition to the default pallet, there is also a "jumbo" pack, composed of 2 pallets.



# SOPRA XPS CB

SOPRA XPS CB is a rigid thermal insulation board made of extruded polystyrene (XPS) foam produced according to climate-friendly  ${\rm CO_2}$  technology. SOPRA XPS CB is mainly used as thermal insulation of interior walls. The rough surface of the panel allows interior plastering.

Dimensions (mm)	1250 x 600
Finish	Edge profile: straight edge Surface: rough
Application	
Fire reactivity	E
Compressive strength	≥ 300 kPa
Long-term Water absorption by Immersion (EN12087)	WL(T)0,7

Thickness (mm)	30	40	50	60	80	100	120	
Thermal resistance RD: (m².K/W)	0,90	1,20	1,50	1,80	2,25	2,85	3,40	
Boards/pack	14	10	8	7	5	4	3	
m²/pack	10,50	7,50	6	5,25	3,75	3	2,25	
Packs/pallet	12 14							
m²/pallet	126	90	72	63	45	36	31,50	
Thermal conductivity (W/(m.K))	0,033 0,035							





# SOPRA XPS 500

SOPRA XPS 500 is a rigid thermal insulation board made of extruded polystyrene (XPS) foam produced according to climate-friendly  ${\rm CO_2}$  technology. SOPRA XPS 500 is mainly used as thermal insulation including floors and car parks where a high compressive strength is required.

Dimensions (mm)	1250 x 600
Finish	Edge profile: rebate edge surface: smooth
Application	
Fire reactivity	E
Compressive strength	≥ 500 kPa
Long-term water absorption by immersion (EN12087)	WL(T)0,7

Thickness (mm)	40	50	60	80	100	120	140	160
Thermal resistance RD: (m².K/W)	1,20	1,50	1,80	2,25	2,85	3,40	4,00	4,55
Boards/pack	10	8	7	5	4	3	3	2
m²/pack	7,50 6 5,30 3,80 3				2,	1,50		
Packs/pallet	12					14	12	16
m²/pallet	90	72	63	45	36	31,50	27	24
Thermal conductivity (W/(m.K))	0,033					0,035		

Thickness (mm)	180	200	220	240	260	280	300	
Thermal resistance RD: (m².K/W)	5,10	5,70	6,10	6,65	7,20	7,75	8,30	
Boards/pack	2			1				
m²/pack	1,50			0,75				
Packs/pallet	14	14 12			18	1	6	
m²/pallet	21	21 18		15	13,50	3,50 12		
Thermal conductivity (W/(m.K))	0,0	)35			0,036			

14

In addition to the default pallet, there is also a "jumbo" pack, composed of 2x2 pallets.



## SOPRA XPS 700

SOPRA XPS 700 is a rigid thermal insulation board made of extruded polystyrene (XPS) foam produced according to climate-friendly CO<sub>2</sub> technology. SOPRA XPS 700 is mainly used as thermal insulation including floors and car parks where a very high compressive strength is required.

Dimensions (mm)	1250 x 600
Finish	Edge profile: rebate edge surface: smooth
Application	
Fire reactivity	E
Compressive strength	≥ 700 kPa
Long-term water absorption by immersion (EN12087)	WL(T)0,7

Thickness (mm)	50	60	80	100	120	140	160
Thermal resistance RD: (m².K/W)	1,50	1,80	2,25	2,85	3,40	4,00	4,55
Boards/pack	8	7	5	4	,	3	2
m²/pack	6,00	5,25	3,75	3	2,25 1,50		
Packs/pallet	12				14	12	16
m²/pallet	72	63	45	36	31,50	27	24
Thermal conductivity (W/(m.K))	0,0	)33			0,035		

Thickness (mm)	180	200	220	240	260	280	300	
Thermal resistance RD: (m².K/W)	5,10	5,70	6,10	6,65	7,20	7,75	8,30	
Boards/pack	2			1				
m²/pack	1,50			0,75				
Packs/pallet	14	1	2	20	18	1	6	
m²/pallet	21	18		15 13,50 12		2		
Thermal conductivity (W/(m.K))	0,0	)35			0,036			

In addition to the default pallet, there is also a "jumbo" pack, composed of 2x2 pallets.



#### **ROOF 115**

A waterproof and damp-permeable geotextile of non-woven polypropylene. It is used as a separation and protection layer on inverted roofs.

Composition	non woven polypropylene
Mass	120 g/m²
Dimensions of the roll (m)	50 x 1,5
Mass/roll	9 kg

#### **ADVANTAGES**

- + Thermal improvement of the roof: up to 20%
- + Prevents the water to penetrate to the waterproofing layer
- + High resistance to bacteria, rot and bitumen
- + UV resistance

**SOPREMA** at your service:

Do you have a question about a specific project, the products or application possibilities? Then contact our technical team.

All information can be found on: www.soprema.co.uk

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