





Meet the new super family; **Sundolitt® XPS**

Sundolitt® is now launching a super family in isolation! Sundolitt® XPS (extruded polystyrene) is extremely strong, absorbs a minimum of water, has a long service life and is easy to handle. Our new XPS production line at Skedsmo outside Oslo is among the most modern of its kind in Europe. Here, we produce a wide range of insulation types, thicknesses and formats. On the following pages we give a more detailed presentation of the properties of Sundolitt® XPS, the newest addition to our product range.

Sundolitt® XPS

Extreme strength



Flexing muscles

Sundolitt® XPS can withstand extreme loads. This makes the material well-suited for use in structures where there are strict requirements for solid flooring and foundations. Sundolitt® XPS is ideal for insulating railway lines, airports and roads where a heavy traffic load is expected, as well as for the insulation of industrial floors, cold stores and chill stores. In other words, Sundolitt® XPS has the strength required to be a genuine super product.

Retains its strength

Sundolitt® XPS is not affected by rain, snow or frost, and the material can be stored outside. The only thing you need to do is to keep the boards out of direct sunlight. The boards are available with both square and overlapping edges. The use of overlapping edges has the advantage of preventing thermal bridges should the plates slide slightly apart during installation. This, in combination with the material's low moisture absorption, is why Sundolitt® XPS retains its strength.





Sundolitt® XPS

Minimum moisture absorption

Closed pore system

Many materials absorb moisture in the form of vapours or liquids. The moisture content in building materials may be built in with the material or a result of precipitation, leakages or ingress of groundwater. Sundolitt® XPS has a closed-pore system that reduces moisture absorption. Tests of long-term water absorption carried out using both submersion and diffusion show that Sundolitt® XPS retains its insulating capacity even in moist surroundings. (See the table on page 14).

Protects against air and ground frost

Moisture in the ground places extreme demands on the insulation material. Materials that absorb moisture lose some of their heat-insulating properties. That is why Sundolitt® XPS is superb as ground insulation in structures with strict requirements for low moisture absorption, for example roads and cable trenches. Sundolitt® XPS protects structures on and in the ground against air and ground frost.





Light material

Sundolitt® XPS is a lightweight material that performs like a heavyweight. The product comes in suitable packaging, in manageable small units or in large units for efficient logistics. The boards are available in various sizes and are easy to handle at the construction site. Heavy lifting is therefore not necessary and construction can be carried out faster.

Save time and energy

Due to their high insulating capacity, the boards can be laid at a shallower depth, thus saving you time and excavation work. The strength of Sundolitt® XPS allows you to place an even greater load on the concrete slab. The boards can be installed using ordinary tools, and they are easy to form and customise. Sundolitt® XPS satisfies all technical building requirements.

Sundolitt® XPS

Pressure resistance from 200 to 700 kPa

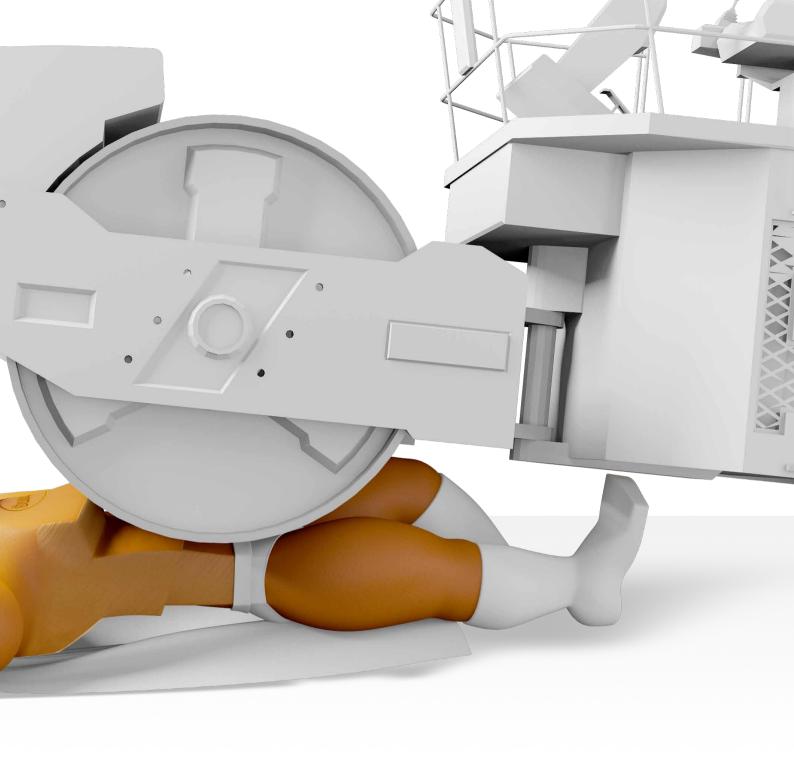


Choose according to your needs

Sundolitt® XPS is available in different pressure classes from 200 to 700 kPa. You choose the appropriate pressure class according to the area of use. Strict requirements apply to materials used in ground isolation. The material must be able to withstand high traffic loads, among other things. It must have good insulating properties and retain them even in moist environments and for long periods. Sundolitt® has a selection of products that covers most applications.

Withstands extreme loads

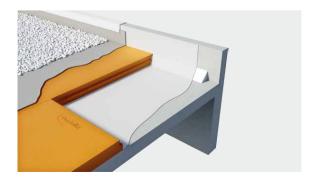
Sundolitt® XPS is a versatile material that is suitable even where the demands are extremely high. By using Sundolitt® XPS in industrial buildings, you get floors that can withstand extreme loads and are protected against frost damage at the same time. Sundolitt® XPS can be used to advantage in airport runways, sports facilities and undrained ground. It is also a well-suited as an insulation material for inverted roofs, car parks, terraces etc.



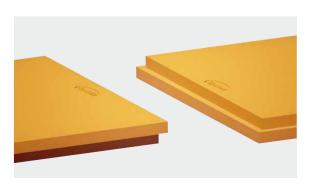


Sundolitt® XPS Insulation of tunnels and road surfaces

Sundolitt® XPS Insulation of deckings



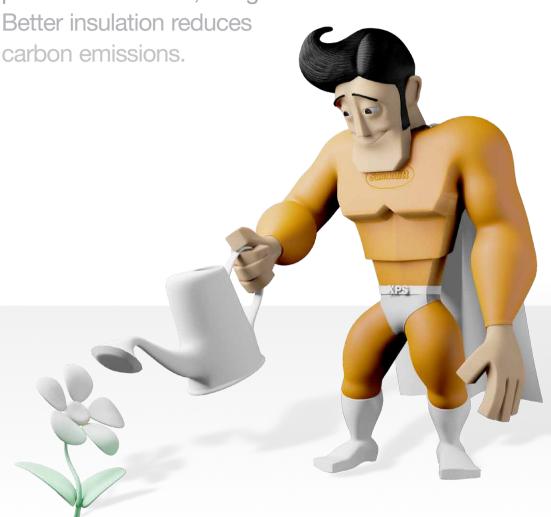
Sundolitt® XPS With overlapping edges



A warm heart

Behind the strong exterior lies a soft interior.

Sundolitt® XPS is tough against external loads such as frost, pressure and water, but gentle towards the environment.



Considering the environment

Sundolitt® XPS is produced with no use of environmentally-harmful gasses, and both Sundolitt® XPS and Sundolitt® EPS are fully recyclable insulation materials.

Buildings account for 40% of Europe's energy consumption. In fact, buildings account for a bigger share than both transport and industry. The authorities stipulate minimum requirements, but at Sundolitt® we see no reason why we cannot go further.

Profitable

Reducing greenhouse gas emissions is the key to fighting global warming. Better insulation can in some cases reduce energy consumption by up to 75%. Greater energy efficiency means lower carbon emissions, and studies show that building insulation is the best known means of reducing greenhouse gas emissions. Increased use of insulation in new buildings and insulation upgrades of older buildings are both environmentally and financially beneficial.

Sundolitt ® XPS Dimensions and technical data

Properties		Sundolitt XPS 250 SL		Sundolitt XPS 300 SL		Sundolitt XPS 400 SL		Sundolitt XPS 500 SL		Sundolitt XPS 700 SL		Sundolitt XPS 300 BE		Standard
Dimensions	mm	585 x 1185	585 x 2385	600 x 1200	600 x 2400									
Thickness	Boards pr pk													
30 mm	14 pcs			x	х									
40 mm	10 pcs													
50 mm	8 pcs	х		x	х	x		x		x		x	х	
60 mm	7 pcs			x	х	x								
70 mm	6 pcs			х		х								
80 mm	5 pcs			х	х			x		х				
100 mm	4 pcs	х		х	х	х		х		х			х	
125 mm	3 pcs			x										
Thermal conductivity	λD W/mK	0,033	- 0,039	0,033	- 0,039	0,033	- 0,039	0,033	- 0,039	0,033	- 0,039	0,033	- 0,039	EN 13164
Compr.behaviour	Short.10% kPa	250		300		400		500		700		300		EN 826
Creep behaviour	Longt.2% kPa	110		140		180		225		250		140		
Thickness	< 50 mm	-2 / + 2		-2 / + 2		-2,	′ + 2	-2 / + 2		-2 / + 2		-2 / + 2		
	50 ≤ 120 mm	-2 / + 3		-2 / + 3		-2 /	-2 / + 3		-2 / + 3		-2 / + 3		+ 3	EN 823
	> 120 mm	-2 / + 8		-2 / + 8		-2 / + 8		-2 / + 8		-2 / + 8		-2 / + 8		
Compr. moduls of elasicity	kPa	12500		15000		20	000	30000		40000		15000		EN 826
Dimensional stability 23°C og 90 % RH	%	≤ 2 %		≤ 2 %		≤ 2 %		≤ 2 %		≤ 2 %		≤ 2 %		EN 1604
Linear coeff. of thermal exp.														
Length	mm/mK	0,08		0,08		0,08		0,08		0,08		0,08		
Cross	mm/mK	0,06		0,06		0,06		0,06		0,06		0,06		
Reaction to fire		Euroclass F		EN 13501-1										
Water absorption														
Long term by immer.	Vol %	0,7		0,7		0,7		0,7		0,7		0,7		EN 12087
Water absorption* Long term by diffusi.	Vol %	Vol % 1,5		1,5-5		1,5-5		1,5-5		1,5-5		1,5-5		EN 12088
Water absorption*		,										,		
Freeze-thaw-resist.	Vol %	≤ 2	2 %	≤ 2	2 %	≤ 2	2 %	≤ 2	2 %	≤ 2	2 %	≤ 2	2 %	EN 12091

Avaliable / delivery time

On stock

Sundolitt XPS 250 XPS - EN 13164 - T1 - CS(10\Y)250 - DS(TH) - WL(T)0,7 Sundolitt XPS 300 XPS - EN 13164 - T1 - CS(10\Y)300 - DS(TH) - WL(T)0,7 Sundolitt XPS 400 XPS - EN 13164 - T1 - CS(10\Y)400 - DS(TH) - WL(T)0,7 Sundolitt XPS 500 XPS - EN 13164 - T1 - CS(10\Y)500 - DS(TH) - WL(T)0,7 Sundolitt XPS 700 XPS - EN 13164 - T1 - CS(10\Y)700 - DS(TH) - WL(T)0,7

Sundolitt XPS SL = XPS product with fold (ship lap). Sundolitt XPS BE = XPS product with straight edge (but edge).

All products are without flame retardents and HCFC / HFC

Spesifications are subject to change whitout notice.

* Expected values.

Ålesund

Valid from 2012.12.01





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