

UNIVERCELL+

Description

UNIVERCELL+ is thermal and acoustic insulation made of loose, free cellulose fibers obtained from recycled and shredded paper. It can be loosely applied, wet projected on vertical walls or can be blown in cavities with pneumatic blowing machines.

UNIVERCELL+ is used in new construction or renovation of:

- loft roof spaces
- infill insulation for walls, floors and ceilings. Suitable for residential buildings, offices or public buildings, as well as industrial and commercial buildings with low or medium humidity.

Packing & Storage

Bag	12,5 kg
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Store on a flat surface, keep dry and protected from UV rays. Pallets may not be placed on to each other during storage.

Characteristics

Composition		Selected recycled paper	89 % (± 1)
		Boric acid	4 % (± 0,5)
		Magnesium sulfate	7 % (± 0,5)
Thermal conductivity (W/(m.K))			
- dry blown in open horizontal spaces	23 to 35 kg/m ³		0,039
- wet projection in vertical walls	40 to 50 kg/m ³		0,041
- dry blown in closed vertical walls	50 to 60 kg/m ³		0,042
Biological resistance (growth of mould)			BA 0
Water vapour diffusion resistance coefficient (μ)			2
Water absorption			NPD
Corrosion development capacity			CR 0
Settlement as function of density			
- dry blown in open horizontal spaces	23 to 35 kg/m ³		SH 25
- dry blown in closed vertical walls	50 to 60 kg/m ³		SC 0
Reaction to fire (EN 13501-1)			E
Class of emission of volatile substances in indoor air			A
Sound absorption			NPD
Specific airflow resistivity			NPD
Hygroscopic sorption properties			NPD

NPD: no performance determined

Installation

UNIVERCELL+ is applied using a pneumatic device designed for cellulose insulation, equipped for carding and regulation of the air and material flow.

The application of cellulose insulation is carried out in accordance with the recommendations:

- insulation of loft spaces
- insulation of vertical cavity walls

It is not allowed to bring cellulose wadding into contact with heat-emitting elements such as chimneys, recessed spotlights, extractor hoods, electric coils, transformers, motors and all other electrical appliances.

Always consult the local regulations and installation guidelines of the manufacturer.

Insulation of loft spaces by BLOWING

UNIVERCELL+ is blown onto the floor or between the framework of the ceiling.

The device setting need to be adjusted to achieve a density of 23 to 35 kg/m³.

The thermal resistance is determined based on the usable thickness corresponding to the applied layer thickness, deducted with the settling and the density.

R (m ² .K/W)	Minimum thickness to install (mm)	Useful thickness (after settling) (mm)	Minimum bags per 100 m ²
5,00	247	195	46
5,50	272	215	50
6,00	296	234	55
6,50	321	254	60
7,00	346	273	64
7,50	370	293	69
8,00	395	312	73
8,50	420	332	78
9,00	444	351	82

Insulation of vertical walls by BLOWING

UNIVERCELL+ is injected under high pressure into a closed vertical cavity wall.

The device settings are adjusted to achieve a density of 50 to 60 kg/m³.

The thermal resistance is determined based on the thickness and the density.

R (m ² .K/W)	Thickness to install (mm)	Bags per 100 m ²
2,85	120	48
3,30	140	56
3,45	145	58
3,80	160	64
4,25	180	72
4,75	200	80
5,20	220	88
5,70	240	96
6,15	260	104
6,65	280	112
7,10	300	120
8,30	350	140
9,50	400	160
10,70	450	180

Insulation of vertical walls by WET PROJECTION

UNIVERCELL+ is applied under pressure combined with a small amount of water, on an open vertical wall.

The device settings must be adjusted to limit the amount of water mist to be used and to achieve a density between 40 to 50 kg/m³ when the insulation is dry.

The thermal resistance is determined based on the thickness and the density.

R (m ² .K/W)	Thickness to install (mm)	Bags per 100 m ²
2,90	120	39
3,40	140	45
3,50	145	47
3,90	160	52
4,35	180	58
4,85	200	64

Certifications

ETA-20/0378

Special indications

Hygiene, Health and Environment

The product does not contain any substance which is likely to be detrimental to your health or to the environment and complies with generally admitted Health and Safety Requirements.

Quality-, Environment- and Safety Management

SOPREMA always recognises as a high level of importance the quality of the products, the environment and safety. For this reason, we operate independently monitored Quality and Environment Assurance Systems in line with **EN ISO 9001** and **EN ISO 14001**.