

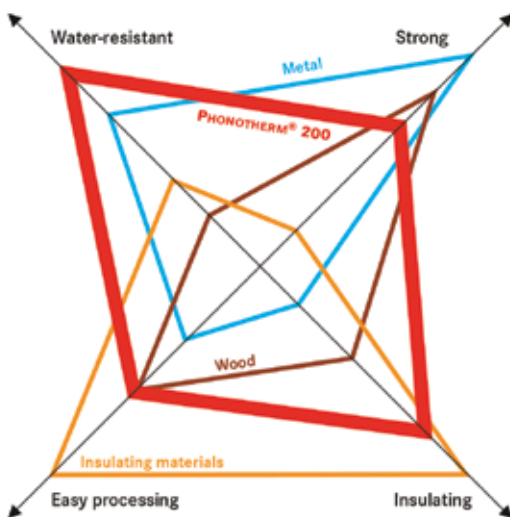


## Technical Information

BOSIG, the manufacturers of PHONOTHERM 200 was founded in Germany over 35 years ago. Over this period BOSIG have been developing and producing innovative complete solutions for industry, trade and the construction industry.

PHONOTHERM 200 is a formaldehyde free 100% up-cycled polyurethane thermal insulation whose raw material is sourced as a by-product from white goods, and from the motor and thermal insulation industries. From an ecological perspective, PHONOTHERM 200 utilises raw materials which would otherwise end up in landfill, and the manufacturing process is carried out in accordance with the environmental standard ISO 14001.

With increased requirements to address thermal bridging at critical junctions such as window, doors & foundation junctions, PHONOTHERM 200 offers homeowners, builders and specifiers a robust, practical and effective thermal solution.



## Why Phonotherm?

These excellent properties together explain the difference

PHONOTHERM 200 is primarily utilised for applications where structural support and the possibility of obtaining secure fixings into the material are required. It is ideally suited as a support for door thresholds and window installations, where it is important to minimise thermal bridging. PHONOTHERM 200 can also be plastered directly.

PHONOTHERM 200 is available off the shelf in 1.35m x 250m x 25mm lengths or 1.35m x 500m x 50mm lengths.

# BOSIG

## Phonotherm® 200

### The advantages:

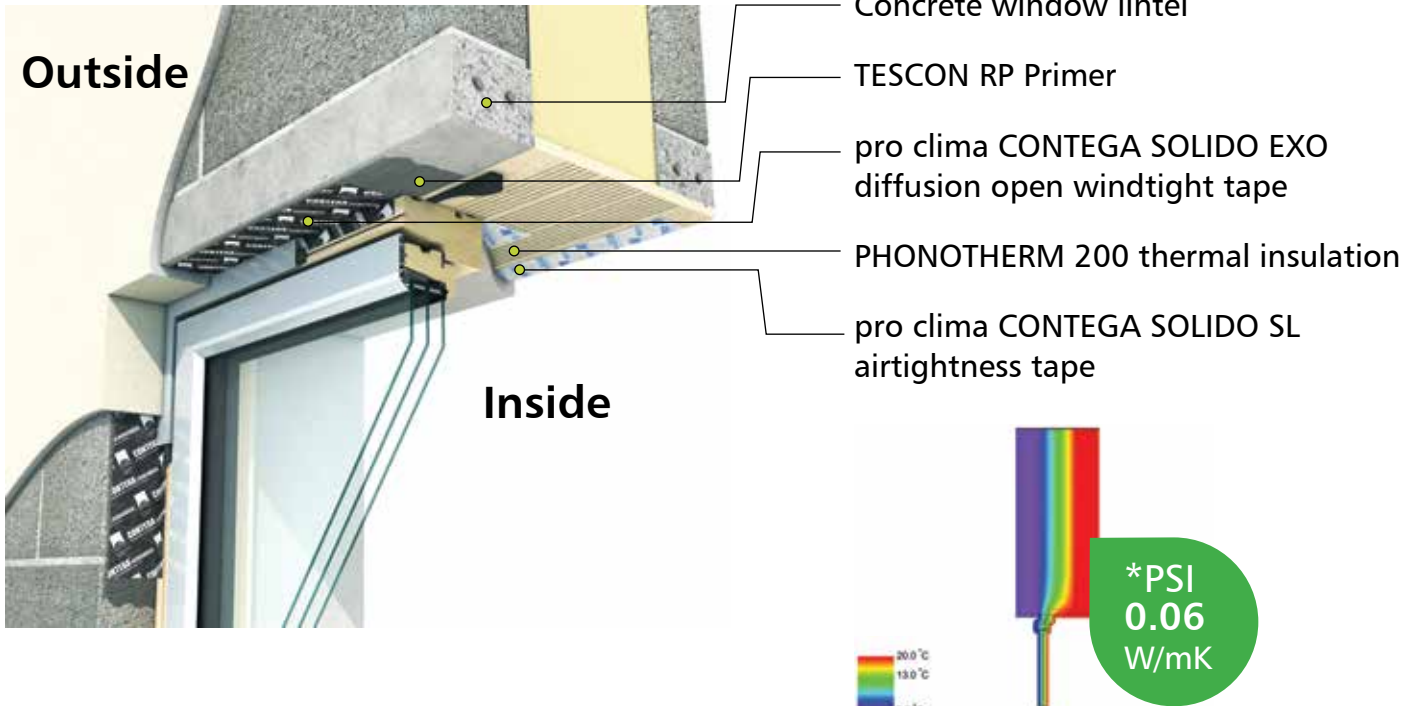
- 100% water resistant:  
No swelling, no decay, constant material thickness and stability
- Easy to machine with conventional carbide tools: drilling, sawing, milling, grooving, grinding, screws, etc.
- Optimum insulating properties: Effectively reduce thermal bridging at critical junctions
- Superior stability and lightweight
- Handy dimensions  
Available off the shelf in 1.35m x 250mm x 25mm lengths and or 1.35m x 500m x 50mm lengths.
- Excellent base material for tiles and plaster
- Formaldehyde-free
- Diffusion open
- 100% up-cycled and 100% recyclable
- High resistance to chemicals



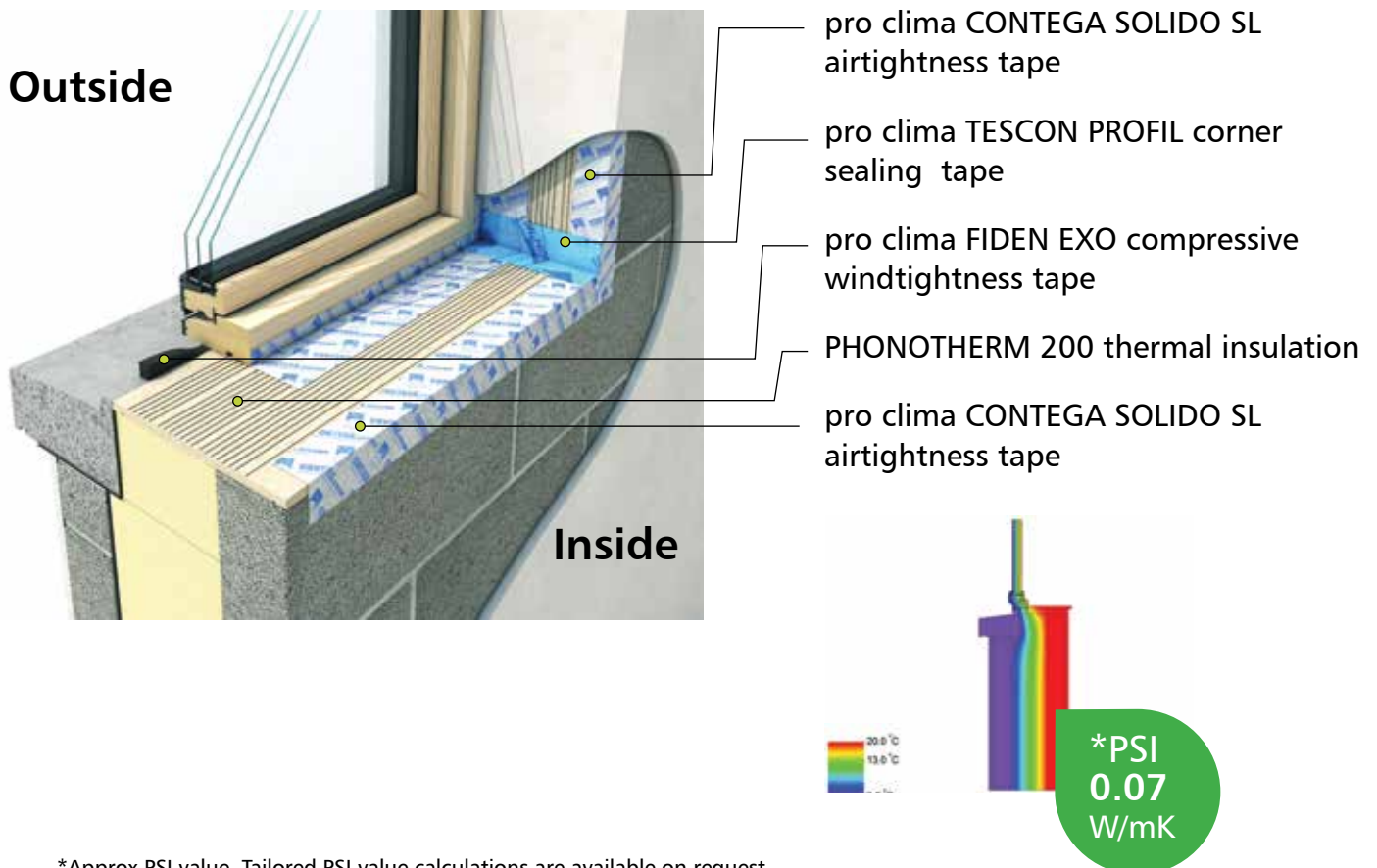


+ **BOSIG** = perfect partners  
Phonotherm® 200

## Thermally breaking Window Head



## Thermally breaking Window Sill



\*Approx PSI value. Tailored PSI value calculations are available on request.

## Environmental protection:

PHONOTHERM 200 is 100% recyclable. Phonotherm® 200 is free of formaldehydes and does not emit physiologically significant quantities of chemical substances.



Thermal bridge free window installation with PHONOTHERM 200

## Processing:

Use conventional tungsten-carbide tipped woodworking machinery for working. In principle, we recommend a dust extractor. The dust created during machining (sawing, grinding, milling) is physiologically harmless and not fibrous. Pre-drill before screwing or use self-drill screws. Phonotherm® 200 can be screwed, the material can be milled, ground and drilled and can be glued together.

## Gluing:

Gluing of butt joints of boards, cuts and strips is simple, using 2-component polyurethane adhesives for instance. Single or 2-component polyurethane adhesives are suitable for gluing of surfaces. For assistance please enquire about your specific application.

## Storage and transport:

Phonotherm® 200 should be stored dry and on a flat surface.

Phonotherm 200		
Material	CHC-HCFC and formaldehyde-free polyurethane hard foam material	
Raw density	550 + 50kg / m <sup>3</sup>	dep. on thickness
Bending strenght*	> 5 N / mm <sup>2</sup>	dep. on thickness
Modulus of elasticity*	> 450 N / mm <sup>2</sup>	dep. on thickness
Screw withdrawal resistance*	> 600 N	dep. on thickness
Thickness swell* after 24h in water	approx 1%	Intern.
Water absorption* after 24h in water	approx 5%	Intern.
Dimensional change* after 24h in water	approx 0,46%	Intern.
Thermal conductivity λ 10	approx 0.076 W/(mK)	EN 12 667 / DIN 52 612
Fire behaviour	Building material class B2 non-flammable drop free	DIN 4102
	Class E	DIN EN 13501-1
Residual moisture	approx 5%	
Thickness tolerance, not sanded	± 0.4mm	
Thickness tolerance, sanded	± 0.2mm	
Thermal stability	- 50 °C to + 100 °C	
Resistant to ageing	resistance against putrefaction and non-rotting	
Compression strength at 10% compression	approx 7000 kPa	DIN EN826

\* values measured for a 15mm board thickness.

## Additional information:

Where PHONOTHERM 200 is used for structural purposes an engineer's approval must be sought. PHONOTHERM 200 does not constitute as a cavity barrier against the penetration of smoke and flame in the context of the Building Regulations.



Ecological Building Systems can supply Phonotherm in a range of dimensions and thicknesses on request.

Please contact our office for more details.



PHONOTHERM applied even in the most extreme conditions



PHONOTHERM used to thermally break window blinds



PHONOTHERM used to thermally break window frames



**eco**logical  
BUILDING SYSTEMS

For stockists contact

Ireland

T. +353 (0) 46 9432104

F. +353 (0) 46 9432435

UK

T. +44 (0) 1228 711511

F. +44 (0) 1228 712280

E. [info@ecologicalbuildingsystems.com](mailto:info@ecologicalbuildingsystems.com)

[www.ecologicalbuildingsystems.com](http://www.ecologicalbuildingsystems.com)