

# ThermoFloor® 045

Wood-fibre impact sound insulation board (resilient layer) suitable for loads up to 5 kN/m<sup>2</sup>

## GENERAL

ThermoFloor boards are rigid insulation boards. Their most common use is as an acoustic isolation layer in floor constructions.

ThermoFloor boards can be installed below all types of commonly specified floating floors - screeds, dry flooring elements, unfired clay blocks, flooring grade chipboard and flooring grade OSB. ThermoFloor is often installed in two layers in order to accommodate conduit runs. ThermoFloor boards can be **composted** after their useful life.

## Applications

- Acoustic isolation for floors (i.e below screed)

## ADVANTAGES

### Composition & Manufacture

- Manufactured from renewable resources
- Manufactured from by-products
- No chemical additives
- No toxins or toxic emissions during manufacture
- CO<sub>2</sub> zero-rated
- Timber fuelled embodied energy
- Actively recycled

### Installation & Disposal

- No known health risks for workforce or installers
- Easily and quickly installed
- No VOC emissions
- Durable
- Low maintenance
- Reusable / Recyclable
- Compostable

### Performance

- Excellent dynamic rigidity ( 30 MN/m<sup>3</sup>)
- High impact sound reduction
- High airborne sound reduction
- Excellent thermal insulation
- Vapour permeable
- Hygroscopic (absorbs & releases moisture)
- Helps regulate indoor climate
- Vermin and fungus resistant
- Electrically neutral
- Non-radioactive
- Free from toxins and allergens
- Dimensionally stable (low thermal movement)



## PRODUCT DATA

### Composition

Raw materials	spruce / pine chippings
Hydrating agent	natural tree resin
Fire protecting agent	none

### Dimensions

Board thickness	<b>21(20) / 31(30)</b> mm
Board size	1200 x 600 mm
Boards per pallet	180 / 120
Coverage per pallet	129.6 / 86.4 m <sup>2</sup>
Weight per pallet	450 kg

### Technical data

Density, $\rho$	$\leq 160$ kg/m <sup>3</sup>
Thermal conductivity, $\lambda_R$	$\leq 0.045$ W/m.K
Thermal resistance, R	0.44 / 0.67 m <sup>2</sup> .K/W
Specific heat capacity, c	2100 J/kg.K
Vapour diffusion factor	$\mu = 5$
S <sub>D</sub> -value	0.10 / 0.11 m
Dynamic rigidity, s	$\geq 30$ MN/m <sup>3</sup>
Compressive deformation	$\leq 3$ m <sup>2</sup>
Fire rating	Class B2

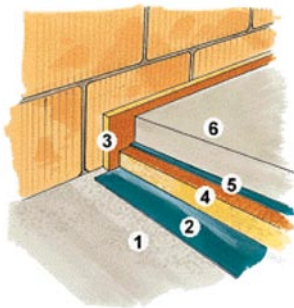
### Standards

- DIN 68755-2-WF-P-TK-S30-045-B2
- EN ISO 9001:2000 Certified ZQM01134-00
- EN ISO 14001:1996 Certified 290102GUTEX00

## TYPICAL APPLICATIONS

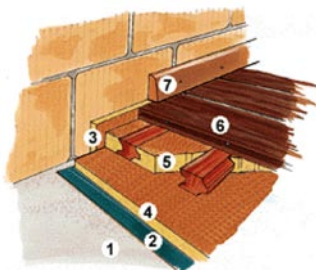
### ... Below screed

1. Floor slab
2. DPM
3. Edge strip
4. ThermoFloor
5. DPM
6. Screed



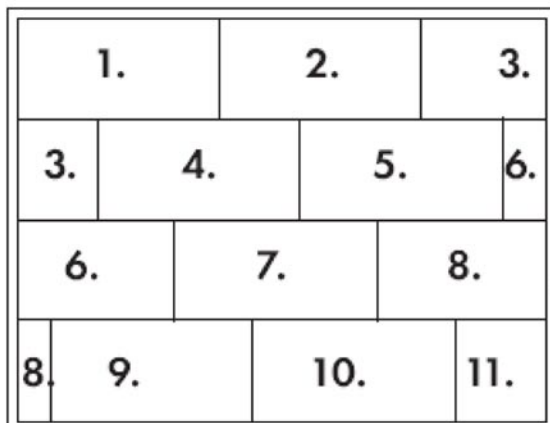
### ... Below solid timber flooring

1. Floor slab
2. DPM
3. Edge strip
4. ThermoFloor
5. ThermoSafe-tg
6. Floor boards
7. Skirting



## LAYING PATTERN

Start in one corner and use off-cut of first run to start second as shown below:



Use Standard-n as edge strip (height = thickness of insulation + thickness of floating floor)

## DESIGN CONSIDERATIONS

### Maximum installation thickness

Screed (cement, anhydrite, asphalt etc)	60 mm
Chipboard $\geq$ 25 mm	30 mm
OSB flooring $\geq$ 22 mm	30 mm
Dry Flooring Elements $\geq$ 25 mm	30 mm
ThermoSafe-nf 40mm	20 mm

For greater thicknesses use ThermoSafe 040

## STORAGE & HANDLING

### Storage

Store in dry conditions.

### Cutting

Cut boards using a fine-toothed hand saw, Jig saw, or circular saw with integral dust extractor.

### Installation

Protect boards from moisture in the substrate / screed. Avoid cross joints when laying. Stagger joints when installing more than one layer. Install edge strip to the full height of the proposed floor make up.

## SUPPLY

### Availability

ThermoFloor, ThermoSafe and Standard-n wood-fibre insulation boards are available direct from Construction Resources.

### Packaging

Boards are supplied individually or on pallets (see Dimensions).

## SERVICES

### Sales

For cost quotations please contact the Sales Department at the address below.

### Technical

For further technical information on this product please contact a product specialist at the address below.