

# HOMATHERM flexCL® 040

## Flexible recycled cellulose insulation batt suitable for all types of construction

### GENERAL

**HOMATHERM flexCL batts** are high-density semi-rigid insulation slabs made from recycled newsprint and 7 - 10% polyolefin fibres.

The cellulose fibres enable the insulation to absorb up to 17% **moisture** without losing on thermal performance. And since moisture is absorbed by the insulation, not the timbers, structural timbers **without preservative treatment** can be used.

The polyolefin fibres enable the slabs to be **flexible** in all directions (their inclusion also resulting in a significant reduction in the **embodied energy** of the product).

The density of the batts (typically 60-90 kg/m<sup>3</sup>) ensures superior **acoustic** performance relative to mineral wool insulation materials whilst the excellent specific heat capacity of the batts ensures that FlexCL batts not only insulate during the winter, but also prevent **summer overheating** (2.4 times better than a mineral wool of equivalent density).



### ADVANTAGES

#### Composition & Manufacture

- Contains over 90% re-cycled material
- No toxins or toxic emissions during manufacture

#### Installation & Disposal

- No health risks for workforce or installers
- Easily cut to shape
- Flexible in all directions
- No VOC emissions
- Helps to avoid the use of treated timber
- Durable / Low maintenance
- Reusable / actively recycled

#### Performance

- Excellent thermal performance in Winter
- Excellent thermal performance in Summer
- Excellent low-frequency acoustic performance
- High vapour permeability
- Hygroscopic (absorbs & releases moisture)
- Absorbs harmful VOC's and toxins
- Vermin and fungus resistant
- Electrically neutral
- Non-radioactive
- Free from toxins and allergens
- Dimensionally stable (low thermal movement)

#### Application

- Suitable for floors, walls, and roof constructions
- Suitable for partial fill cavity wall construction

### PRODUCT DATA

#### Composition

Raw materials	Cellulose from newsprint
Binder	Polyolefin
Fire protecting agent	Borax, Boric Acid
Hydrating agent	Aluminium sulphate

#### Dimensions & Packaging

Batt size	1200 x 625 mm
Batt thickness	50 / 80 / 100 / 140 / 160 mm
Coverage per pack	4.5 / 3.0 / 2.25 / 1.5 / 1.5 m <sup>2</sup>
Coverage per pallet	63 / 42 / 31.5 / 24 / 21 m <sup>2</sup>

#### Technical data

Density, $\rho$	60 - 90 kg/m <sup>3</sup>
Thermal conductivity, $\lambda_{10}$	<b>0.039</b> W/ m.K
Thermal conductivity, $\lambda_R$	0.040 W/m.K
Specific heat capacity, c	2000 J/Kg.K
Diffusion resistance, $\mu$	1,2
Tensile strength	≥ 6 kN/m <sup>2</sup>
Tear strength	≥ 3 kN/m <sup>2</sup>
Fire rating	Class B2

#### Standards

- Certification Z-23.11-1338 (DIBt)