

Cembrit Construction (Minerit HD)

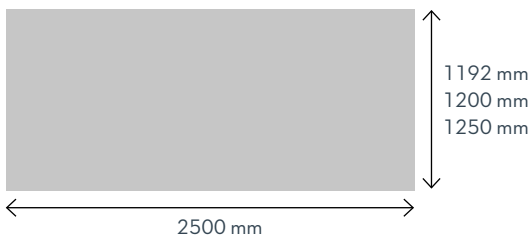
Datasheet

Cembrit Construction is an untreated fibre cement board that allows the authentic appearance of the rough fibre-cement to stand out. In nature, Cembrit Construction is a building board which can be installed for cladding purposes, when a natural and rough expression is desired.

Cembrit Construction is a natural material and variations may occur in the individual boards and from board to board, adding a lively expression to your facade. Cembrit Construction is a high quality fibercement building board used as both a building board as well as a part of a ventilated facade solution.

| Dimensions | Thickness | Width mm | Length mm |
|------------|-----------|----------------------|--------------------------------|
| Size | 6 mm | 1200 1250 | 2500 |
| Size | 8 mm | 1192 1200 1250 | 2500/3050 2500/3050 2500 |
| Size | 10 mm | 1192 1200 | 3050 |

Standard sizes



Project sales



www.cembrit.com

Please visit the local website for contact details and further information.

Cembrit Construction

| Dimension | | | | | | |
|--|------------------------|----------|----------|----------|----------|----------|
| Thickness | mm | 3.2 | 4.0 | 6.0 | 8.0 | 10.0 |
| Tolerances (ref. EN 12467) | | | | | | |
| Thickness | mm | ±0.6 | ±0.6 | ±0.6 | ±0.8 | ±1.0 |
| Length | mm | ±3 | ±3 | ±3 | ±3 | ±3 |
| Width | mm | ±2 | ±2 | ±2 | ±2 | ±2 |
| Physical properties | | | | | | |
| Density, dry, average (EN 12467) | Kg/m ³ | 1800 | 1800 | 1800 | 1800 | 1800 |
| Density, dry, minimum (EN 12467) | Kg/m ³ | 1550 | 1550 | 1550 | 1550 | 1550 |
| Weight (Average incl. 5% moisture) | Kg/m ² | 6.1 | 7.6 | 11.3 | 15.1 | 18.9 |
| Mechanical properties (EN 12467) | | | | | | |
| Bending modulus of elasticity | | | | | | |
| Ambient E-module with grain | GPa | 21 | 21 | 21 | 21 | 21 |
| Ambient E-module across grain | GPa | 20 | 20 | 20 | 20 | 20 |
| Wet E-module with grain | GPa | 13 | 13 | 13 | 13 | 13 |
| Wet E-module across grain | GPa | 9 | 9 | 9 | 9 | 9 |
| Bending strength (EN 12467) | | | | | | |
| Ambient with grain | MPa | 26 | 26 | 26 | 26 | 26 |
| Ambient across grain | MPa | 22 | 22 | 22 | 22 | 22 |
| Wet with grain | MPa | 20 | 20 | 20 | 20 | 20 |
| Wet across grain | MPa | 15 | 15 | 15 | 15 | 15 |
| Interlaminar bond | | | | | | |
| Dry | MPa | - | - | min. 0.5 | min. 0.5 | min. 0.5 |
| Impacts strength (Charpy) | | | | | | |
| Ambient with grain | kJ/m ² | - | - | 2.7 | 2.7 | 2.7 |
| Ambient across grain | kJ/m ² | - | - | 2.0 | 2.0 | 2.0 |
| Thermal properties | | | | | | |
| Coefficient of thermal expansion | mm/m °C | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 |
| Temperature range | °C | max. 105 | max. 105 | max. 105 | max. 105 | max. 105 |
| Frost resistance (EN 12467) | Cycles | >100 | >100 | >100 | >100 | >100 |
| Thermal conductivity (ISO 8301, EN 12667) | λ ₁₀ W/(mK) | - | - | - | 0.48 | - |

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| Hygrothermal properties | | | | | | |
|--|----------------------------------|---------|---------|-----------|-----------|-----------|
| Water absorption (wet over dry) | % | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Wet-dry-wet (max) | mm/m | 3 | 3 | 3 | 3 | 3 |
| Water vapour transmission properties (EN 12572-C) | | | | | | |
| Vapour transmission resistance (Z-value) | Gpa · m ² · s/kg | 1.93 | 2.2 | 4.23 | 5.21 | 3.15 |
| Vapour transmission resistance | s/m | 14146 | 16130 | 31023 | 38185 | 23106 |
| Vapour diffusion equivalent air layer thickness | Sd (m) | 0.37 | 0.43 | 0.82 | 1.01 | 0.61 |
| Vapour resistivity | MNs/(g · m) | 596 | 522 | 653 | 651 | 307 |
| Vapour resistance factor | μ | 116 | 102 | 127 | 127 | 59.4 |
| Vapour resistance | MNs/g | 1.9 | 2.2 | 4.2 | 5.2 | 3.2 |
| Vapour transmission | USPerm | 9.1 | 8 | 4.1 | 3.4 | 5.6 |
| Fire performance | | | | | | |
| Reaction to fire | EN 13501 | - | - | A2-s2, d0 | A2-s1, d0 | A2-s1, d0 |
| ASTM E136 | Flaming test | Pass | Pass | Pass | Pass | Pass |
| ASTM E84 | Flame spread index | - | - | - | 0 | - |
| | Smoke development index | - | - | - | 10 | - |
| | Flame spread rating | - | - | - | 0 | - |
| CAN/ULC-S102-10 | Smoke development classification | - | - | - | 5 | - |
| Other properties | | | | | | |
| pH surface | | 11 | 11 | 11 | 11 | 11 |
| Category, Class | EN 12467 | NT A3 I | NT A3 I | NT A3 I | NT A3 I | NT A3 I |

Cembrit Construction

Soft- and hard body impact resistance (ETAG 034, ISO 7892), 8 mm

| Type of impact | Energy | Category IV | Category III | Category II | Category I |
|----------------|-----------|-------------|--------------|-------------|------------|
| Hard body | 1 Joule | passed | - | - | - |
| | 3 Joule | - | passed | passed | passed |
| | 10 Joule | - | - | passed | passed |
| Soft body | 10 Joule | passed | passed | - | - |
| | 60 Joule | - | - | not passed | not passed |
| | 300 Joule | - | - | not passed | - |
| | 400 Joule | - | - | - | not passed |

Soft- and hard body impact resistance (ETAG 034, ISO 7892), 10 mm

| Type of impact | Energy | Category IV | Category III | Category II | Category I |
|----------------|-----------|-------------|--------------|-------------|------------|
| Hard body | 1 Joule | passed | - | - | - |
| | 3 Joule | - | passed | passed | passed |
| | 10 Joule | - | - | passed | passed |
| Soft body | 10 Joule | passed | passed | - | - |
| | 60 Joule | - | - | passed | passed |
| | 300 Joule | - | - | not passed | - |
| | 400 Joule | - | - | - | not passed |