TECHNICAL DATA SHEET · BB-13

FEBENG Brick Board

Channelled glass-fibre reinforced concrete carrier board for brick-slip ventilated façades

The FEBENG Brick Board is a pre-channelled, glass-fibre reinforced, cement-bound carrier panel developed with brick manufacturers for fast and accurate installation of brick slips. The integral channels position each course of slips at the correct gauge, so the façade is laid straight, level and at speed by a mechanically fixed rivet/screw system — with no wet bedding of the panel and no extra structural load on the building.



BRICK SLIP PLACED INTO THE CHANNEL OF A GREY BOARD

A1	605 × 1,250	75 mm	≈ 30 kg/m²
FIRE CLASS, EN 13501-1	STANDARD BOARD FORMAT, MM	STANDARD CHANNEL GAUGE	BOARD WEIGHT

GENERAL FEATURES

- Integral channels for brick slips: fast, straight and uniform workmanship
- Mechanically fixed (rivet/screw system) to vertical profiles — ventilated, rain-screen construction
- Reaction to fire class A1 — non-combustible
- Lightweight compared with masonry; no additional structural load
- High flexural, compressive and impact strength; resistant to cracking and breakage
- Excellent bond compatibility with clay brick slips and standard adhesive mortars
- UV-stable and frost-resistant; long service life
- White and grey board colours; custom channel gauges for regional brick formats

TECHNICAL PROPERTIES

MATERIAL

Composition	Cement-bound mineral composite, alkali-resistant (AR) glass-fibre reinforced (GRC)
Board colour	White · Grey

PHYSICAL & MECHANICAL

Density	1,800 – 2,200 kg/m³ typical 1,860 kg/m³
Compressive strength	30 – 50 N/mm² typical test value 55 N/mm²
Flexural strength (EN 1170-5)	8 – 20 N/mm² typical test value 21.6 N/mm²; limit of proportionality 10 N/mm²
Modulus of elasticity	≈ 19,000 N/mm²
Impact strength (Charpy, V-notch)	5 – 16 kJ/m² typical test value 13.9 kJ/m²
Water absorption (EN 1170-6)	≈ 7 – 8 % by mass
Water-vapour diffusion resistance μ (EN 12086)	≈ 180

THERMAL

Thermal conductivity (EN 12667)	0.6 – 1.4 W/(m·K) typical 0.9 W/(m·K)
Coefficient of thermal expansion	1.2 × 10^{-5} /°C

DURABILITY

Reaction to fire (EN 13501-1)	Class A1 EN ISO 1182 and EN ISO 1716: PCS ≤ 2.0 MJ/kg, ΔT ≤ 30 °C, Δm ≤ 50 %, tf = 0 s
UV ageing (EN ISO 4892-1)	No colour change; strength retention 99 %
Frost resistance	Suitable for external use in all European climate zones

STANDARDS & CERTIFICATION

Product standard	EN 12467:2012+A2:2018 — fibre-cement flat sheets Class 2, Category B
Factory production control	EN 12467 (certificate CPC-UHPC001) · EN 1169:1999 precast GRC (certificate CPC-UHPC002)

SIZES

Board format (A × B)	605 × 1,250 mm covers 8 courses at 75 mm gauge; other formats to drawing
Board thickness (h)	13 mm rib height 18 mm — overall depth 31 mm
Channel gauge	75 mm standard (65 mm slip + 10 mm joint) custom gauges for 50 mm (Waalformaat), 52 mm (DF), 71 mm (NF) and other slip heights
Brick slips	Clay brick slips 18 – 25 mm thick compatible with standard adhesive and pointing mortars
Weight (board only)	≈ 30 kg/m² indicative; depends on channel layout
Product code	BB-13

APPLICATIONS

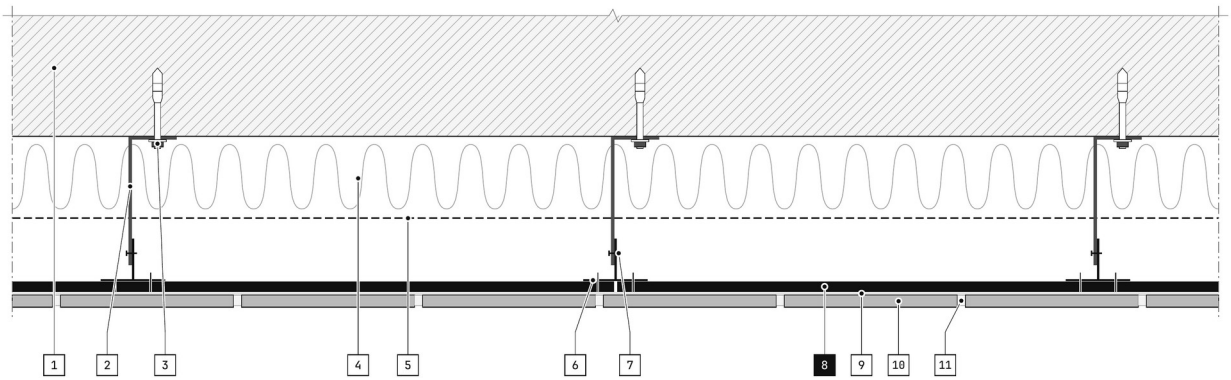
- New-build ventilated brick-slip façades on concrete, steel or timber-frame structures
- Renovation and over-cladding of existing façades where brick appearance is required at low weight
- High-rise and mid-rise residential and commercial buildings with rain-screen construction
- Prefabricated façade elements and modular construction
- Interior feature walls with genuine brick finish

INSTALLATION

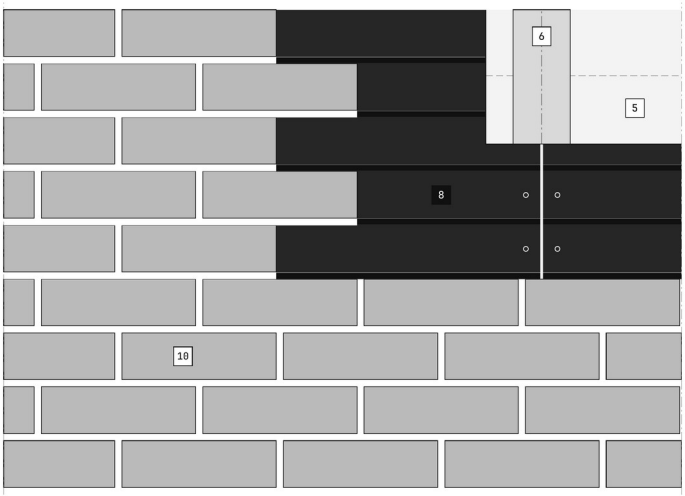
The FEBENG Brick Board is installed as a mechanically fixed, ventilated cladding system. The following sequence applies to a typical installation; project-specific details (bracket spacing, profile section, fixing pattern, cavity depth and fire-stopping) must be designed in accordance with the applicable national regulations and the fixing manufacturer's data.

1. Ensure the substrate is clean, sound and free from dust, oil and loose material.
2. Anchor L-brackets to the load-bearing structure at the spacing given in the project specification.
3. Fix vertical profiles (aluminium or box section) to the brackets, aligned and plumb.
4. Where specified, install thermal insulation between the wall and the profiles, leaving a ventilated cavity.
5. Fix the boards to the vertical profiles with rivets or screws through the flat zones of the board; keep the specified edge distances and do not over-tighten.
6. Seal board joints with a PU-based flexible sealant where required.
7. Bed the brick slips into the channels with a suitable adhesive mortar and fill the joints with a suitable pointing mortar.

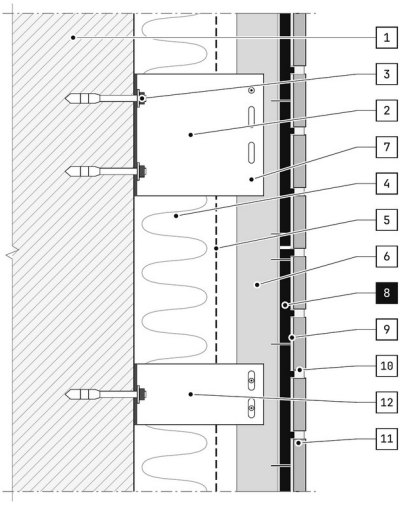
SYSTEM BUILD-UP (TYPICAL)



A · HORIZONTAL SECTION — TYPICAL BUILD-UP · NOT TO SCALE



C · FRONT VIEW — LAYERS CUT AWAY · NOT TO SCALE



B · VERTICAL SECTION · NOT TO SCALE

COMPONENTS

1	Wall (substrate)	7	Rivet
2	Wall bracket, galvanised steel (fixed point)	8	**FEBENG Brick Board BB-13**
3	Wall anchor / plug	9	Adhesive mortar
4	Thermal insulation	10	Brick slips
5	Breathable water-resistive membrane	11	Joint sealant, PU-based
6	Vertical support profile, galvanised steel	12	Steel bracket / angle (sliding point)

Drawings as in system detail sheet FEB-DET-BB-01 · schematic, not to scale

CUTTING & DRILLING

Boards can be cut with a diamond blade and drilled with masonry bits. Use dust extraction and wear respiratory protection (FFP2 or better), eye protection and gloves — see the FEBENG Brick Board Safety Data Sheet.

HANDLING & STORAGE

- Boards should be carried by two people to prevent cracking and deformation.
- Lift and transport boards vertically (on edge).
- Place protective film or sheets between boards when stacking.
- Store boards flat, indoors, in a dry and covered area.

PACKAGING & DELIVERY

Boards are delivered flat on wooden pallets, protected and strapped. Custom channel gauges and formats are produced to drawing; mould lead times apply for new formats.

NOTE — The information in this data sheet is based on laboratory testing and practical experience and is given in good faith. Typical values are averages from production control and do not constitute a specification unless stated. Structural and fire design of the façade system remains the responsibility of the designer. This revision supersedes all previous versions.

ISSUED BY

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RELATED DOCUMENTS: Safety data sheet FEB-SDS-BB-01 · Product brochure FEB-BRO-BB-01 · System detail sheet FEB-DET-BB-01
FEB-TDS-BB-01 · REV. 02 · OCTOBER 2026