FEBENG BAKING PANEL · BP-15 · BP-20 · BP-30

A hearth that bakes the same every day.



FEBENG BAKING PANEL · HEARTH OF A MULTI-DECK OVEN

The FEBENG Baking Panel is an engineered, cement-bound, glass-fibre reinforced hearth panel for deck, tube, conveyor and pizza ovens. It replaces natural stone, refractory brick and cordierite with a flat, dimensionally stable surface that stores heat and releases it evenly — cut to the size and edge profile of your oven, and produced under certified factory production control.

CARBONFIB BV · WWW.FEBENG.COM · SALES & DISTRIBUTION PARTNER (EU): KREDAS, BREDA, THE NETHERLANDS

WHY A MANUFACTURED HEARTH

Repeatable heat. Repeatable bread.

Natural stone and refractory brick vary from block to block, crack under thermal shock and are cut by hand to fit. The FEBENG Baking Panel is cast: every panel has the same density, the same thickness and the same surface, so every deck of every oven behaves the same way. Its dense mineral matrix stores heat and gives it back evenly across the whole surface — good oven spring, a consistent crust and the same result from the first bake to the last.

Oven manufacturers specify the panel as original equipment and receive it cut to drawing. Bakeries use it as a drop-in replacement for cracked or worn hearths, in the thickness and format of the original stone.

- High heat storage and uniform heat distribution
- Stable to 350 °C — no thermal-shock micro-cracking
- Flat and dimensionally stable; non-stick surface options
- Any size up to 1,250 × 2,500 mm in 15, 20 or 30 mm
- Food-contact safe — Pb and Cd not detected (ISO 6486-2)
- Non-combustible, reaction to fire class A1
- Cleaned with water only; long service life



RACK OVEN · LOAVES ON FEBENG PANELS

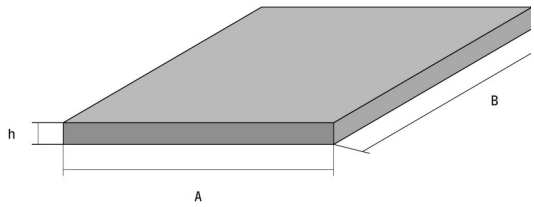
A1	350 °C	2,500 mm	≥ 40 N/mm²
FIRE CLASS, EN 13501-1	MAXIMUM SERVICE TEMPERATURE	MAXIMUM PANEL LENGTH	COMPRESSIVE STRENGTH



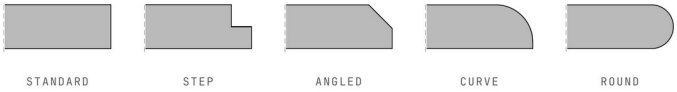
LOAVES BAKED DIRECTLY ON THE HEARTH

THE PANEL

Cut to the oven. Five edge profiles. Three surfaces.



PANEL · THICKNESS H · WIDTH A · LENGTH B

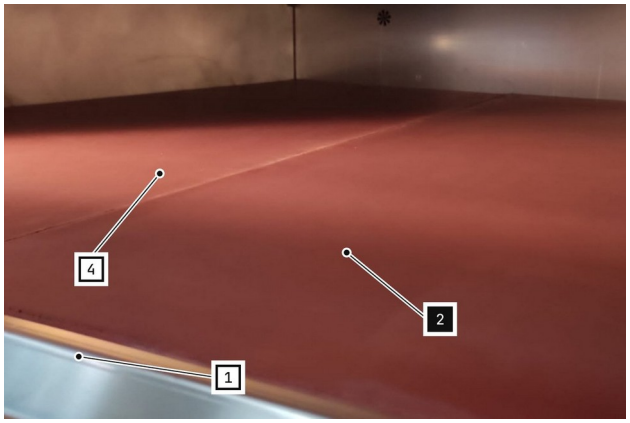


STANDARD EDGE PROFILES

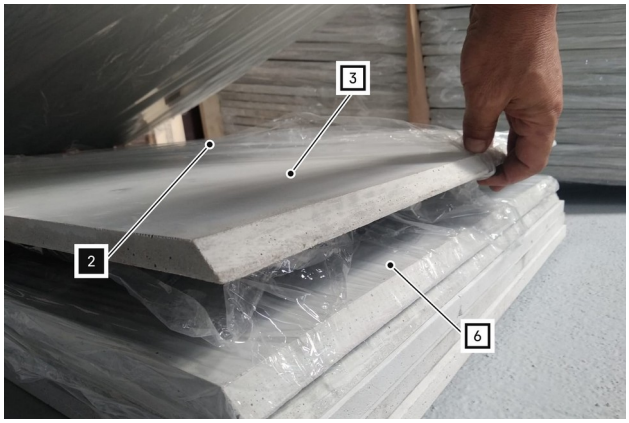
Formats. Thicknesses 15, 20 and 30 mm (BP-15, BP-20, BP-30); width up to 1,250 mm, length up to 2,500 mm; tolerance ± 2 mm on length and width, ± 1 mm on thickness. Panels are cut to the drawing of the oven — including round and curved hearths for tube ovens.

Edge profiles. Standard, Step, Angled, Curve and Round. Stepped and angled edges let panels be laid as a continuous hearth without gaps; a rounded front edge resists wear and impact where peels and trays enter the oven.

Surfaces. Red, grey or patterned non-stick. The pattern reduces the contact area under the dough, so products release cleanly; the smooth surfaces suit flour-dusted and tray-baked products. All surfaces are cleaned with water only.



RED PANELS AS THE HEARTH OF A DECK OVEN



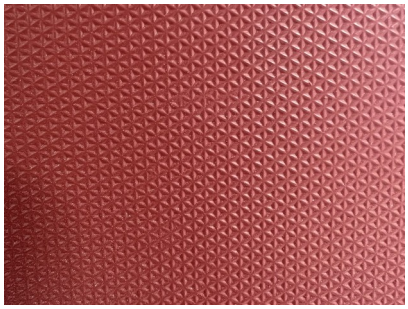
DELIVERY · PANELS STACKED WITH PROTECTIVE SHEETS

COMPONENTS

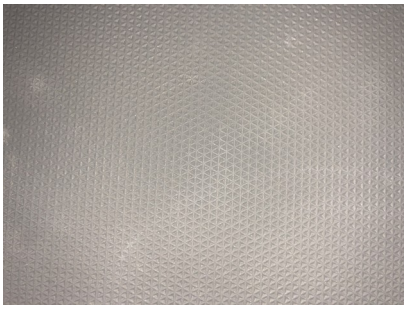
1	Oven deck / hearth support (by the oven manufacturer)
2	**FEBENG Baking Panel**
3	Edge profile
4	Panel-to-panel joint
5	Baking surface — patterned or smooth
6	Protective sheet (delivery)

SURFACES & APPLICATIONS

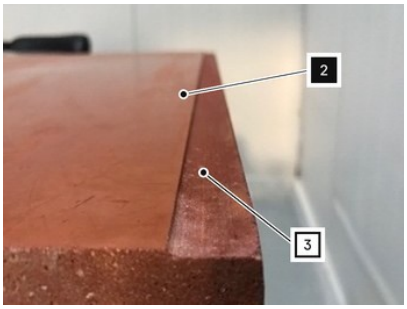
From deck oven to tunnel oven.



SURFACE · RED, PATTERNED NON-STICK



SURFACE · GREY, SMOOTH



EDGE · 20 MM PANEL, STANDARD PROFILE

APPLICATIONS

Deck ovens Hearth floor for bread, pastry and pizza — electric, gas and wood-fired.

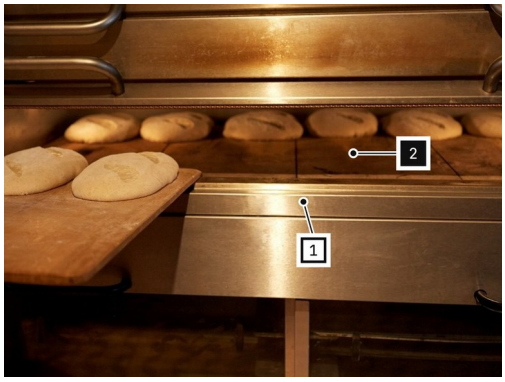
Tube (steam-tube) ovens Pre-cut hearth stones, including curved formats.

Conveyor and tunnel ovens Liners where standard refractories chip or warp under cyclic loading.

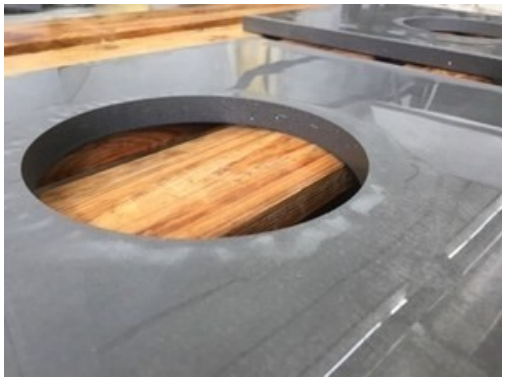
Pizza ovens Fast heat recovery and a non-stick surface for baking directly on the stone.

Side and back panels Of stone ovens, in the same material as the hearth.

Replacement hearths For legacy ovens with cracked or worn original stones, in the original format.



MULTI-DECK OVEN · PANELS AS ORIGINAL EQUIPMENT



ROUND HEARTH · CUT TO DRAWING



PIZZA · BAKED DIRECTLY ON THE PANEL

TECHNICAL DATA

Technical data.

MATERIAL	
Composition	Cement-bound mineral composite, alkali-resistant glass-fibre reinforced
Colour / surface	Red · Grey · Patterned (non-stick options on request)
PHYSICAL & MECHANICAL	
Density	≈ 2,200 kg/m³
Compressive strength	≥ 40 N/mm² (before first heating)
Flexural strength	≥ 12 N/mm² (before first heating)
THERMAL	
Thermal conductivity	≈ 0.8 W/(m·K)
Coefficient of thermal expansion	1.0 × 10^{-5} /°C
Maximum service temperature	350 °C (continuous operating range 300 – 350 °C)
Dimensional stability	Stable up to 350 °C; no thermal-shock micro-cracking
Radiant heat	Infrared emission 4 – 14 µm
FIRE & FOOD SAFETY	
Reaction to fire	Class A1 (EN 13501-1) — non-combustible
pH in water after stabilisation	7.2 – 8.0
Release to water / to hot food	None detected
Lead (Pb) / cadmium (Cd)	Not detected (WD-XRF, ISO 6486-2 limits, October 2025)
Food-contact regulation	Regulation (EC) No 1935/2004 — declaration on request
SIZES	
Thickness (h)	15 · 20 · 30 mm (others on request)
Width (A) / length (B)	up to 1,250 mm / up to 2,500 mm
Tolerances	Length / width ± 2 mm · thickness ± 1 mm
Product codes	BP-15 · BP-20 · BP-30

Values are typical values from production control unless stated otherwise; see the Technical Data Sheet for the full specification and test references.

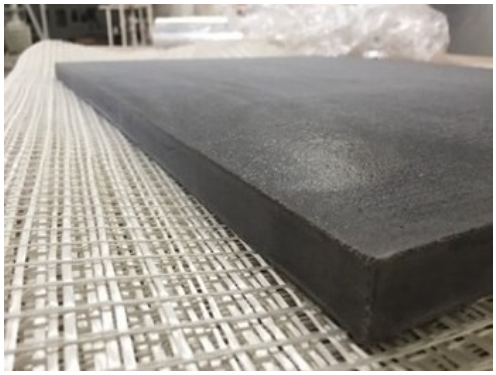
FIRST HEATING

Dry it slowly, once.

Every panel carries residual moisture from production and storage. It must be driven off slowly at first use: 1 cm³ of water becomes roughly 1,000 cm³ of steam, and a fast heat-up can crack even the strongest mineral panel. Insert the panels into an oven below 50 °C and follow the programme — and repeat it every time panels are replaced.

STEP	15 MM	20 / 30 MM
1	100 °C · 1 h	100 °C · 2 h
2	150 °C · 2 h	150 °C · 2 h
3	200 °C · 1 h	200 °C · 1 h
4	250 °C · 1 h	250 °C · 1 h
5	Ramp to working temperature	Ramp to working temperature

- Heat-up rate: first 60 min at approx. +2 °C/min, then approx. +1 °C/min.
- Acclimatise panels for 48 h in the installation environment; allow 28 days from production before first heating.
- Keep panels lightly weighted during curing. Never pour water onto a hot panel.



GREY PANEL · 30 MM

BAKED ON FEBENG

Bread, pastry and pizza — the same every day.

From artisan sourdough to rye, rolls and pizza: a hearth that stores heat and releases it evenly gives good oven spring and a consistent crust, bake after bake.



LOAVES ON THE HEARTH



ROUND LOAF · SMOOTH HEARTH



SOURDOUGH · PATTERNED SURFACE



SEEDED RYE · DECK OVEN

QUALITY & DOCUMENTATION

Tested, certified, documented.

Reaction to fire	Class A1 to EN 13501-1 (EN ISO 1182 and EN ISO 1716)
Factory production control	EN 12467:2012+A2:2018 fibre-cement flat sheets — certificate CPC-UHPC001
Precast GRC	EN 1169:1999 — certificate CPC-UHPC002
Mechanical testing	EN 1170-5 flexural strength · EN 1170-6 water absorption · EN 12667 thermal conductivity
Food safety	Pb and Cd not detected (WD-XRF, ISO 6486-2 limits, October 2025) · Regulation (EC) No 1935/2004 declaration on request
Handling & delivery	Panels over 25 kg or 2,000 mm carried by two people, on edge · delivered on edge on pallets with protective sheets · store dry indoors · not for open grills or direct flame
Documentation	Technical data sheet, safety data sheet, declaration of conformity, first-heating and cleaning guidance — EN · NL · DE · IT · TR

SALES & DISTRIBUTION

Supplied from the Netherlands. Sold across Europe.

FEBENG Baking Panels are supplied by Carbonfib BV from Amstelveen and distributed throughout the European Union by Kredas, our exclusive sales and distribution partner. Oven manufacturers, bakery-equipment dealers and bakeries receive one point of contact for samples, technical support, pricing and logistics.

Custom sizes, edge profiles and surfaces are produced to drawing. Ask us for a sample panel, a project quotation or a technical consultation — or for the first-heating programme for your oven model.



BREAD ROLLS · BAKED ON THE PANEL

HOW TO ORDER

1. Send the oven drawing, or the format of the existing hearth stone.
2. Choose thickness (15 / 20 / 30 mm), surface and edge profile.
3. Receive a quotation and, on request, a sample panel.
4. Delivery on pallets, panels on edge — first-heating programme included.

CONTACT

febeng
engineering solutions

ENGINEERED MINERAL PANELS · WWW.FEBENG.COM

ADDRESS

FEBENG — Carbonfib BV
Veilmeesterweg 22
1187 ZW Amstelveen
The Netherlands
info@febeng.com · www.febeng.com

SALES & DISTRIBUTION (EU)

Kredas
Breda Business Park
Verlengde Poolseweg 16
4818 CL Breda
The Netherlands
+31 6 42 78 76 05
kredas@kredastrade.com

ALSO FROM FEBENG

FEBENG Brick Board — a channelled, glass-fibre reinforced concrete carrier board for brick-slip façades. Ask for the separate Brick Board brochure.

FEB-BRO-BP-01 · REV. 02 · OCTOBER 2026