

mortar for concrete structural repairs

- Thixotropic: high thickness without sagging.
- High mechanical performance.
- Reinforced with fibres.
- High adherence.
- Waterproof.
- Compressive strength: Class R4.

Product description

weber.tec hormiplus is a single-component mortar with high mechanical performance and particularly suitable for structural repair of concrete. It is a cement-based product, containing synthetic resins, silica fume and it is reinforced with glass fibres. This product meets UNE-EN 1504-3 requirements for class R4.

Applications

- Repair of concrete degraded by corrosion of reinforcements or carbonation.
- Repair of pillars, columns, beams, balconies, overhangs and walls.
- Repair of concrete pavements.
- In walls, ceilings and floors.
- In exposed or buried concrete.
- Indoor and outdoor.

Substrates

Cement-based substrates such as concrete, high resistance cement mortars or standard concrete block.

Associated coatings

Minerals coatings, acrylic mortars, paints, anti-carbonation coatings or ceramic tiles.

Usage recommendations

- For large angles and edges or for very high application thicknesses perform a proper formwork with rulers or clean and smooth plates.
- In cold weather (below 12 °C), it is recommended to mix the product with warm water (25 °C) if a fast setting is desired.
- In case of hot or windy weather, protect the repair made with a curing product, or with a plastic.
- Application temperature: from 5 °C to 35 °C.

Chemical composition	Hydraulic binders, polymeric resins, silica aggregates and carbonates, and organic and inorganic additives.
Observations	- Do not apply weber.tec hormiplus on plaster or painted surfaces. - Do not apply the product with thicknesses over 10 cm per application.
Substrate preparation	- The substrate must be clean, sound, consistent and rugged. - Inspect the surface with a hammer to detect poorly adhered areas. Cut the pavement with a radial saw leaving a minimum distance of 2 cm to the area to be repaired in a square or rectangular shape. Chop the area, leaving straight edges. - Clean the substrate removing as much as possible any dust or dirt. - Uncover any rusty armatures and replace those that are badly damaged. - Always remove rust from armatures with a wire brush or by sandblasting. Then remove all dust produced. - Wet the substrate surfaces before applying weber.tec hormiplus. <u>Reinforcement protection:</u> On steel, apply a thick layer of anti-rust primer weber FR with a brush, avoiding staining the concrete. Let dry weber FR completely (minimum 1 hour). <u>Concrete:</u> - If the concrete is very smooth use weber FX primer as bonding agent. - On very absorbent surfaces, apply a first coat of weber.tec hormiplus slurry as bonding agent before applying weber.tec hormiplus. - If the concrete is very porous, moisten it thoroughly or apply a sealer primer.

Application



Mix **weber.tec hormiplus** with 3 to 3.5 litres of clean water per bag, with a slow electrical mixer (500 rpm) for about 2 minutes until a plastic consistency is obtained, but without sagging.



Apply **weber.tec hormiplus** with a small trowel, filling and compacting the area to be repaired, in successive layers of 1-5 cm, with a maximum thickness of 10 cm per application. The layer must have begun to harden before applying the next.



The finish is obtained by trowelling **weber.tec hormiplus** with an appropriate tool (plastic float, wood, porex ...) or smoothing the surface with a trowel.

Technical specifications	General usage specifications	
	Classification	Class R4 according to the European Standard EN 1504-3
	Particle size	<2.5 mm
	Powder density	1400 ± 100 kg/m ³
	Coverage	17.4 kg of powder per cm of thickness and m ²
	Usage specifications	
	Application temperature	5 to 35°C
	Mixing water	3-3.5 l/bag
	Rest time after mixing	2 minutes
	Pot life	45 minutes
	Initial setting time	>3 hours
	Final setting time	<6 hours
	Application thickness per layer	1 a 5 cm
	Maximum thickness	10 cm
	Mass density	2000 ± 100 kg/m ³
	Density of the hardened product	2000 ± 100 kg/m ³
	Final product performance	
	Adherence on concrete	>2.0 MPa
	Dynamic modulus of elasticity	≥20 GPa
	Capillarity	≤0.5 kg·m ² ·h ^{0.5}
	Hazardous substances	According to 5.4
	Shrinkage	≤1.2 mm/m
	Chloride ion content (minimum requirement <0.05%)	0.01%
	Reaction to fire	Euro-class A1/A1 _n
	Thermal compatibility part 1	≥1.5 MPa
	Bond strength after controlled shrinkage/expansion test	≥1.5 MPa
	Resistance to carbonation	d _k ≤ control concrete type MC (0,45)
	Compressive strength	~ 9 MPa (24 hours) ~ 37 MPa (7 days) ~ 47 MPa (28 days)
	Flexural strength	~ 3.5 MPa (24 hours) ~ 6.5 MPa (7 days) ~ 8.5 MPa (28 days)
These results have been obtained from tests carried out in standard conditions, and may vary depending on the conditions in use.		

Product presentation



Presentation

25 kg bags with anti-moisture plastic laminate.
600 kg pallets (24 bags).

Coverage

17.4 kg/m² per 2 cm thickness.

Colours

Dark grey.

Storage instructions

12 months from the date of manufacture, in the original sealed packaging and protected from moisture.

Certifications

Suitable for contact with drinking water: in accordance to the Ministerial Decree 174/2004 with proper report issued by the provincial section of ARPA Regio Emilia.



EN 1504-3 Product for structural repair of concrete with PCC mortar (polymerized based hydraulic cement)

ISO 9001 certified
quality
management
system



Legal notes

- These indications have been prepared according to our best knowledge and understanding, but do not exempt customers from making their own examination of the product and ensuring it is suitable for the proposed purpose.
- **Saint-Gobain Weber** is not responsible for errors committed during application of the product in environments other than those specified in the document, or errors derived from incorrect application conditions or omission of the usage recommendations.