PRODUCT DATA
SHEET

FARBY ■ TYNKI ■ DOCIEPLENIA ■ HYDROIZOLACJE

PromaCret RM F

Ready-to-use PCC (cement and resin) mortar for patching concrete surface.

Intended use:	• For filling cracks and cavities (honeycombing) up to a depth of 5 mm as part of the **PromaCret** concrete and reinforced concrete repair system; • For levelling surfaces of concrete, reinforced concrete, face concrete, screeds and cement screeds; • As a final, smooth-trowelled or felted cement flooring or paint substrate.
Product description:	Mineral, ready-to-use, hydraulically binding, 1-component cement-resin mortar for mixing with water, containing fillers from quartz aggregates with the grain size up to 0.5 mm, improving additives and internal dispersed reinforcement made of synthetic microfibres. For interior and exterior use.
Performance characteristics:	• Resistant to atmospheric influences, freezing cycles, shrinkage and scalding; • Optimal working properties, open time, no tendency to run off, easy to apply; • High resistance to surface peeling and adhesion to existing concrete, reprofiling mortars and cement screeds.
Technical properties:	Bulk density of dry mortar: ca. 1600 kg/m^3, Bulk density of mixed mortar: ca. 1900 kg/m^3, Bulk density of hardened mortar: ca. 1750 kg/m^3, Adhesion (as per EN 1504-3: 2005): $\geq$ 1.8 MPa, Compressive strength (as per above): Class R2 ($\geq$ 40 MPa), Capillary absorption (as per above): $\leq$ 0.15 kg/m^{2}h^{0,5}, Thermal compatibility (freezing and thawing (as per above)): $\geq$ 1.8 MPa, Resistance to carbonation (as per above): conforms.
Dry mortar consumption:	Approx. 1.7 kg/m^2 for 1 mm layer thickness. The final material consumption depends on local conditions and should be established based on the tests carried out on a representative substrate.
Colour:	Grey.
Packaging:	25 kg paper bags.
Storage and life:	Store in dry, ventilated area, in original packaging, up to 12 months from the date of production.
Recycling:	In line with applicable regulations for typical construction wastes.
Safety instructions:	This product contains cement. Has strong alkaline reactions with water. If skin and eye contact occurs, rinse with copious amount of clean and cold water. If swallowed or if contact with eyes occurs, seek doctor's advice.
Formal and legal documents:	Awarded with the PZH Hygienic Certificate.

APPLICATION:

Weather conditions:	During application, settling and drying, it is important to ensure minimum material, air and substrate temperature: + 5˚C. Do not work under the direct action of sunlight, rain and wind as well as in temperatures higher than 25˚C.
Protective measures:	Shield (cover) elements prone to be stained with the product. If necessary, use protective scaffolds (grids).
Preparation of substrates for application:	All substrates must be load-bearing, stable, clean and free from substances that reduce adhesion. Use a suitable method (mechanically, pressurized water, etc.) to remove loose or protruding substrate elements (corroded concrete, mortar residues, flaking coatings, etc.). In particular: • New mineral substrates – clean, slightly moisten with water; • Absorbent surfaces – clean, moisten with water to a matt form; • Highly absorbing or crumbling surfaces – to be primed with a proper impregnating agent (such as **PromaSol**, **PromaGrunt NANO**).
Manual material mixing:	For manual material mixing use free-fall concrete mixers and low-speed mixers for mortars (up to approx. 400 rpm). Pour the dry material slowly into the container with the quantity of tap water measured according to the below requirement, stirring until a homogeneous mortar is obtained. Wait about 2 to 5 minutes, then mix it again, finally adjusting the working consistency with a small amount of water if necessary. Do not mix more material than can be used within 45 minutes. When applying, avoid thickening of the material, mixing it frequently. NOTE: During application, the consistency of the thickening material must not be “improved” by adding water.
Water consumption:	Approx. 5.3 l per a 25 kg bag. The final working consistency depends on such factors as weather conditions, temperature, use of the mortar or contractor's preferences. It is recommended to determine it by testing and maintain unchanged on isolated surfaces. The homogeneity of consistency affects the uniformity of the structure and surface of the material being applied.
Mechanical material mixing:	Both free-standing flow mixers and under-silos mixers (e.g. the “SILOMIX” system) can be used for mechanical material mixing. The devices require power supply and a source of water with parameters specified by their producers. After connecting the machine, set the water supply valve to the position that ensures the desired consistency. Make a test sample, wait about 5 minutes and after re-mixing manually, check the consistency and adjust if necessary.
Material application:	Apply the material with a steel trowel to the prepared, freshly moistened substrate, while carefully filling in unevenness and pores by scraping. Following the “wet in wet” principle, immediately apply the next layer of material, spreading it and compacting it thoroughly to obtain the final layer with a thickness of 1.5 ÷ 5 mm. Trowel or felt the final surface. Protect the freshly applied material from drying too quickly.
Tool cleaning:	With clean, cold water immediately after use.
Further work is possible:	As soon as the applied material has reached the parameters appropriate for the technology envisaged subsequently (mainly binding and drying), further work can be

	started.
Drying time:	Binding and drying consists in hydration of cement and evaporation of the remaining water part. In average conditions, a drying time of 1 day per millimetre of layer thickness is assumed to be necessary. This is an approximate value and refers to a microclimate with a temperature of 20ºC and 50% relative humidity. In cold and humid seasons, this process can be significantly prolonged.
PromaCret System:	**PromaCret ZH/MK** – bonded bridge; **PromaCret RM 20** – reprofiling mortar; **PromaCret RM F** – topping putty.