

# Restoration MULTIFINISH

Fibre-reinforced, thixotropic, cementitious mineral mortar for repairing and finishing various types of surfaces, up to 10 mm thickness.



- Excellent workability
- Excellent thixotropic properties
- Excellent quality of finish
- High breathability
- Low capillary absorption
- White colour
- Application thicknesses up to 10 mm



## **APPLICATION AREAS**

• Rendering, plastering and levelling of uneven absorbent and non-absorbent substrates, such as concrete, cement- and lime-based plasters/renders, textured coatings/renders, cellular concrete. For internal or external use.

- Restoration of painted façades in a poor condition, if the paintwork is strong and well anchored to the substrate.
- Finishing breathable systems/plasters/renders.
- Rendering, plastering and levelling old glass and ceramic mosaic claddings.
- Plastering and levelling lasterboard, once joints between panels have been primed with Tile Primer.
- Repairing old cracked external wall insulation coatings (textured coating/render and paints).

# **TYPES OF SUBSTRATE**

- Hardened cement screeds
- Concrete walls
- Cementitious or cement-lime-sand renders/plasters
- Renovating, damp-proofing and/or macroporous renders/plasters
- Cellular concrete block internal walls.
- Old external wall insulation coatings: textured coating/render and paints

- Old glass and ceramic mosaic claddings
- Plasterboard

### MAXIMUM ATTAINABLE THICKNESSES

10 mm

## FEATURES

Single component, fibre-reinforced, thixotropic, cementitious mineral mortar for repairing and finishing various types of surfaces. Formulated with special hydraulic binders for rendering, plastering and levelling to a maximum thickness of 10 mm. Classified as C, MC and IR principles according to EN 1504-2, and as GP CS IV-W1 according to EN 998-1. For internal and external use. Its special formulation delivers excellent adhesive strength and compatibility with a whole range of different substrates: concrete, cementitious, cement-lime-sand and lime render/plaster, old wall paint – provided it is strong and perfectly attached to the substrate – old external wall insulation textured coatings/renders, cellular concrete blocks, plasterboard. Once mixed with water, the resulting mortar offers excellent workability, excellent thixotropic properties and high adhesive strength. Good freeze-thaw cycle resistance. The product awarded the EC 1 Plus label by the GEV association for very low emissions of volatile organic compounds.

## WARNINGS

Do not apply Multifinish when temperatures are below +5 °C or over +35 °C. Never mix with other binders, such as cement, hydraulic lime, plaster, etc. Do not use the mixture again or add more water once it is no longer workable. Make sure the batch of product prepared each time is small enough to be applied within its workable life. Do not render or plaster when temperatures are too high or there is a strong breeze; protect from direct sunlight; mix with cold water. For application on plasterboard surfaces, joins between panels must be primed first with Tile Primer. If in any doubt regarding this type of application, please seek the advice of our Technical Department.

# **INSTRUCTIONS FOR USE**

#### Preparation

Substrates must be clean and sound, free from oil and grease, dust, crumbling material and dirt in general. Any remaining traces of formwork release agents must be removed thoroughly. Old wall paint or textured renders must be sound and not coming away from the substrate. Mechanically remove any loose, crumbling or unsound material back to a strong, sound substrate. Water blast the whole surface to be treated to remove all traces of dust or other loose material.

#### Mixing the product

Mix Multifinish with 24-26 % clean water (equivalent to 6,0- 6,5 litres per 25 kg bag) as follows: pour almost all the water needed into a suitable container, then add the powder product slowly, mixing the mortar at the same time using a power drill on low speed with a suitable propeller paddle attached. Once you have finished adding all the powder, pour in the remaining water and mix to an even, lump-free mixture, making sure you scrape lumps of material that has not been properly mixed in away from the walls and bottom of the container. Allow to sit for approx. 5 minutes and then give it a quick remix. The resulting mixture has a pot life of approx. 5 hours under normal conditions (at 20 °C); higher temperatures will shorten the pot life, while lower temperatures will extend it. When dealing with absorbent substrates, before Multifinish can be applied, thoroughly soak the substrate with water until it is saturated and allow excess water to evaporate or remove it with a sponge. Substrates consisting of old paintwork, textured coatings/renders, old glass or ceramic mosaic claddings and plasterboard must instead be perfectly dry.

#### Application

Apply the product with a plasterer's float for finer finishing or using a trowel and/or mortar spreader for higher builds (never exceed a total of 10 mm). The product can also be applied using a suitable mortar spraying machine. For thicknesses in excess of 5 mm, and more generally speaking when dealing with particularly uneven and/or cracked surfaces, it is advisable to apply the product in two consecutive coats, embedding alkali-resistant fibreglass reinforcement mesh and/or galvanized metal lathing in the first coat before applying the next. Once the product applied has been allowed to set properly (taking between 20 and 30 minutes under normal conditions), finish with a trowel or with a sponge float, depending on the desired finish. After 12/24 hours, the surface can be further optimized/scratched, where necessary, with a suitable plaster scraper. Once Multifinish plaster/render coatings have been applied and finished, they must be shaded from direct sunlight, and protected from rain for at least 24 hours. Tools used for application should be cleaned with water before the mortar is allowed to harden, after which only mechanical cleaning will be effective in removing the product.

# WAITING TIMES

Time between coats: approx. 45-60 minutes. Under normal conditions (20 °C), Multifinish can be coated and/or finished with additional treatments, or painted with water-based paints or other finishes, 7 days after application.

TECHNICAL SPECIFICATIONS	
MEASURED ON POWDER PRODUCT	
Consistency	powder
Apparent denisty	1,310 kg/litre
Particle size (EN 12192-1)	0 – 0,7 mm
Dangerous substances (EN 1504-3)	Complies with point 5,4
MEASURED ON FRESH MIX	
Mixing water addition	24 – 26 % (6,0 – 6,5 litres per 25 kg bag)
Fresh mortar consistency (visual)	Thixotropic
Fresh mortar pH	> 12
Fresh wet density (EN 1015-6)	1,620 kg/litre
Workable life of fresh mortar (EN 13395)	approx. 5 hours
Setting times: Initial set (EN 196-3)	9 hours
Setting times: Final set (EN 196-3)	11 hours
Coverage	approx. 1,3 kg/m <sup>2</sup> per mm of thickness
Service temperature	-20 °C to +90 °C

PARAMETER AND TEST METHOD	EN 1504-2 REQUIREMENT	PRODUCT PERFORMANCE
Bond strength on concrete (EN 1542)	For rigid systems non- trafficked: ≥ 1,0 MPa	≥ 1,0 N/mm <sup>2</sup>
Bond strength on concrete (EN 1542)	For rigid systems trafficked: ≥ 2,0 MPa	≥ 1,0 N/mm <sup>2</sup>
Liquid water transmission rate (EN 1062- 3)	W < 0,1 kg/(m <sup>2</sup> ·h <sup>0</sup> , <sup>5</sup> )	W < 0,1 Class III
Water vapour permeability (Equivalent air thickness SD) (EN ISO 7783-1)	Class I SD < 5m; Class II 5m ≼ SD ≼ 50m; Class III SD ≥ 50m	SD < 0,2 m Class I (water vapour permeability)
Product classification (EN 1504-2)		C – MC – IR
PARAMETER AND TEST METHOD	EN 998-1 REQUIREMENT	PRODUCT Performance
Dry bulk density of hardened mortar (EN 1015-10)	Declared value	1,490 kg/m <sup>3</sup>
Flexural strength at 28 days (EN 1015-11)		4,5 N/mm <sup>2</sup>
Compressive strength at 28 days (EN 1015-11)	≥ 60 MPa for CS class IV	10,0 N/mm <sup>2</sup>
Compressive/Flexural strength ratio (EN 1015-11)		2,3

Bond strength on concrete (EN 1015-12)	Declared value and fracture pattern	1,4 N/mm <sup>2</sup> Fracture pattern (FP) = B
Capillary water absorption coefficient (EN 1015-18)	W 0 (not specified); W 1 (≼0,40); W 2 (≼0,20)	0,25 – Category W 1
Water vapour permeability coefficient (µ) (EN 1015-19)	Declared value	11
Thermal conductivity (λ10,dry) (W/m·K) (EN 1745)	Tabulated value	0,47 (P=50 %)
Reaction to fire (EN 13501-1)	Euroclass	F
Product classification (EN 998-1)		GP CS IV-W1
Packaging	bag	
Pallet	40 cardboards, 50 bags	
Color	Grey, White	
Packaging size	4x5 kg, 25 kg	

## CONSUMPTION

Multifinish has a coverage rate of approx. 1,3 kg/m<sup>2</sup> per mm of thickness.

# STORAGE

Multifinish must be kept in a dry, sheltered place. The product has a shelf life of at least 12 months when stored in the original, unopened bags. DO NOT EXPOSE TO MOISTURE.

## CERTIFICATIONS

Product classified as C coating according to EN 1504-2 and as GP CS IV-W1 according to EN 998-1. The declarations of performance (DoP) are available upon request.

The information contained in this document is reported on the basis of our experience and knowledge; therefore, any recommendations and suggestions made are without any guarantee and must be verified before using the product by those who intend to use it, who assume all responsibility that may result from its use since the conditions of use are not under our direct control. In case of doubt, it is always advisable to make preliminary tests and/or ask for the intervention of our technicians. Torggler reserves the right to modify, replace and/or delete the items, as well as to change the product data in this document without prior notice; in this case the indications given here may no longer be valid. Always refer to the latest version of the data sheet, available at www.torggler.com. Version 15.07.2021.