

# Exzellent STP 540

Preparatory and levelling render in the Exzellent STP system Hand- and machine-applied render grey



## PRODUCT PROPERTIES

- One-component
- Salt Transport Plaster and moisture regulation render
- Moisture regulating, fungal-retarding
- Water- and salt-conveying due to special pore geometry
- Non-hydrophobized, open to water vapour diffusion
- Sustainable, no sacrificial render
- High layer thickness, low dead load
- Low shrinkage
- Resistant to weathering, high-water and splash water
- Non-flammable according to EN 13501-1-building material class A1

## AREAS OF APPLICATION

- Suitable as a bonding coat for rough substrates
- Levelling and jointing of rough or uneven render substrates prior to application of Exzellent final coats
- Interior, exterior and base areas, permanent moisture regulation for all types of brickwork at old and new buildings - without extensive drying measures
- Suitable for highly saline and moist brickwork with a moisture content up to 95 %

## APPLICATION ADVICE

**Substrate preparation:** See leaflet "General Application Advice Exzellent STP system".

**Application / Pre-wetting:** Prior to application of Exzellent STP 540 the substrate must be pre-wetted thoroughly. A closed water film must be avoided. When starting application the substrate should be slightly damp.

**Mixing:** Exzellent STP 540 is added to the prepared water under constant stirring and mixed until homogeneous and lump-free. The consistency is adjusted by adding powder, extra water must not be added. Double mixers must be used for mixing. Mixing by hand is not permitted. Mixing takes 2 minutes. Following a waiting time of at least 1 minute the material is stirred again for 30 seconds.

**Render build-up:** Exzellent STP 540 is a preparatory and levelling render and part of the Exzellent rendering system. Drying times and maximum layer thicknesses must be observed. For detailed information on render build-up please request our special advice.

**Application:** Exzellent STP 540 may be applied in one or more layers, either by hand or using standard fine render feed pumps including remixer. Please request our special advice or the equipment planner for machine-applied render systems.

**Surface finish:** See leaflet "General Application Advice Exzellent STP system". If applied as preparatory render, Exzellent STP 540 is applied continuously onto the brickwork. For levelling the still fresh material is spread using an h-shaped plasterer's float and afterwards trowelled horizontally using a tooth trowel with 8 mm toothing. This horizontal tooth provides the mechanical bond to subsequently applied layers. Following a sufficient drying time the surface is overcoated with an Exzellent STP final coat.

**Curing:** Exzellent STP 540 must be prevented from drying out too rapidly and protected from direct sun and wind exposure.

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Maximum grain size	mm	2.2	
Dry bulk density	kg/dm <sup>3</sup>	approx. 1.3	
Mixing ratio	kg/l		
As preparatory render		25 : 6 - 6.5	powder component : liquid component
As a levelling plaster		25 : 5.2 - 5.8	powder component : liquid component
Air void content of the fresh mortar	%	≥ 18	
Working time	minutes	approx. 30	at 20°C
Application conditions	°C	≥ 5 ≤ 30	air, substrate and material temperatures
Consumption	kg/m <sup>2</sup>		
As preparatory render		approx. 10	with full-area pre-spraying
As a levelling plaster	kg/m <sup>2</sup> /mm	approx. 1.25	dry mortar
Layer thickness	mm	10	minimum layer thickness per pass/operation
		10	minimum total layer thickness
		30	maximum layer thickness per pass/operation
Overworkable after	hours	24	pre-spray plaster / top plaster coat
	days	4	Levelling / Finishing plaster coat
Thermal conductivity λ	W/m·K	0.47	
Resistance to water vapour diffusion S <sub>d</sub>	m	< 0.05	at 2 cm layer thickness
Total porosity (solid mortar)	Vol.-%	≥ 35	Total porosity
		≥ 15	Macroporosity fraction
		≥ 15	Microporosity fraction
All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.			
Colour shade	grey		
Delivery form	Sack goods @ 25 kg		
Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs.		
Packaging disposal	Make sure single-use containers are completely empty.		

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2200008890]