



## TECHNICAL DATA

TYPE			TW1/20
Grain size		mm	0-2
Amount of water	max.	%	16
Processing time approx.	20 °C	min	30
Consumption (10 mm layer thickness) approx.		kg/(m <sup>2</sup> · mm)	1.8
Fresh mortar raw density approx.		kg/m <sup>3</sup>	2,100
Layer thickness (in total, 2 layers)		mm	10-30
Compressive strength*	1 d	N/mm <sup>2</sup>	≥ 15
	7 d	N/mm <sup>2</sup>	≥ 35
	28 d	N/mm <sup>2</sup>	≥ 50
Bending tensile strength*	1 d	N/mm <sup>2</sup>	≥ 3.0
	7 d	N/mm <sup>2</sup>	≥ 5.0
	28 d	N/mm <sup>2</sup>	≥ 6.5
Adhesive pull strength	7 d	N/mm <sup>2</sup>	≥ 1.5
E-Module (static)	28 d	N/mm <sup>2</sup>	≥ 20,000

\* Testing of bending tensile and compressive strength in accordance with DIN EN 196-1

**Note:** The surface properties and their visual appearance are affected by the addition of the water during mixing, by the way it is applied and finished. It is therefore possible that colour deviations may occur.

**TW1/20 MORTAR FOR DRINKING WATER APPLICATIONS**  
Type 1 is no decorative coating. We do not accept any liability for any partial discolourations and efflorescences caused through adverse influences such as weather, water and chemicals.

<b>Storage:</b>	12 months. Cool, dry, free from frost. Unopened in its original container.
<b>Delivery form:</b>	25-kg bag, Euro pallet 1,000 kg
<b>Hazard class:</b>	Non-hazardous material, observe information on packaging.
<b>GISCODE:</b>	ZP1

### PAGEL PRODUCT COMPOSITION:

Cement:	acc. to DIN EN 197-1
Aggregate:	acc. to DIN EN 12620
Additions:	acc. to DIN EN 450, general building inspection approval (abZ), DIN EN 13263 (fly ash, microsilica, etc.)

## APPLICATION

### SUBSTRATE PREPARATION:

Remove loose and unsound material such as cement slurry and dirt etc. using suitable methods, e.g. shot-blasting or similar until the underlying solid grain structure has been exposed. A sufficient average tear strength (1.5 N/mm<sup>2</sup>, KEW 1.0 N/mm<sup>2</sup>) must be ensured.

### Prewetting:

Prewet the concrete substrate to capillary saturation for approx. 6-24 hours.

### Reinforcing steel:

Blast all rust off exposed reinforcement bars until the underlying metal has been exposed acc. to purity grade SA 2 ½ in accordance with DIN EN ISO 12944-4.

### BONDING LAYER:

No bonding layer is required for the application in the MAWO PAGEL DENSE PHASE WET SPRAYING APPLICATION METHOD.

### MIXING:

The dry mortar is supplied ready to use and only needs to be mixed with water. Fill the specified amount of water apart from a residual amount into a clean and suitable mixing device (e.g. compulsory mixer). Add the dry mortar and mix for at least 3 minutes. Add the remaining water and mix for at least another 2 minutes until it forms a homogeneous mass.

### APPLICATION:

#### MECHANICAL APPLICATION:

**TW1/20 MORTAR FOR DRINKING WATER APPLICATIONS** Type 1 in the MAWO-PAGEL DENSE PHASE WET SPRAYING APPLICATION METHOD:

The spraying of the mortar can be carried out with conventional screw feed pumps with a variable speed drive suitable for this application. Hold the nozzle preferably at a right angle with a distance of approx. 50 cm to the area to be coated. The first layer of spray mortar is sprayed on with a high compressed air flow to support the bonding layer. The application of the additional spray layers is carried out with a conveying speed correspondingly adapted to the position of the respective structural component and adapted compressed air support. The follow-up treatment and the smoothing of the surfaces can be carried out immediately after the completion of the spray works.

<b>Air compressor:</b>	5 m <sup>3</sup> /min, 5 bar
<b>Conveying hose:</b>	- Delivery cross section: DN 35 - End reduction: 5 - 6 m DN 25 - Conveying distance: max. 40 m
<b>Temperature range:</b>	+ 5 °C bis + 35 °C
<b>Mixing water:</b>	Drinking water quality

### FOLLOW-UP TREATMENT:

Fresh mortar areas must be protected from premature water evaporation (from wind, draughts, direct exposure to sun, etc.) immediately on completion of the work for a period of 3-5 days.

The information provided in this leaflet, application instructions and other recommendations are based on extensive research and experience. They are, however, not binding, in particular with regard to third party proprietary rights, and do not relieve the customer of his responsibility to verify that the products and processes are suitable for the intended application. The indicated test data are mean values and average analyses. Deviations are possible when delivery takes place. Recommendations that differ from those provided in this leaflet require written confirmation. Planners and operators are responsible for ensuring that this leaflet is the latest edition and for obtaining information on the latest technological developments. Our customer service staff will be happy to answer your questions at any time. Many thanks for your interest in our products. This technical data sheet supersedes all previously issued product information. Please visit our website for the latest valid version of this brochure at [www.pagel.com](http://www.pagel.com).

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