

# Prince Color® Z 301 Standard Extra

Special frost-resisting adhesive for water-absorbing tiles and pavements

## Extent of use

- For indoor and outdoor use
- For walls and floors
- For  $\geq 3\%$  water-absorbing tiles and pavements, (non-absorbing tiles only into indoor) ceramic mosaics, terrazzo and brick tiles, concrete pavers and vitrified claywares
- For cement screeds, concrete, render, air concrete and unrendered masonry, grinding anhydrite event. gypsum floating screeds, plaster, gypsum wood fibre and cement wood fibre boards

## Product attributes

- Test Certificates for adhesives C1TE according ČSN EN 12004 standard
- Frost-resisting
- Good adhesion without substrate priming on concrete and cement, other substrates must be primed.
- Walkable and grouted after 24 hours.
- High reliability of adhesive process due to extra long open time (bonding).

## Substrate preparation

- Minimum age of the substrate
  - Rapidly curing bonded concrete screeds 1-2 days
  - Plasters approx. 7 days
  - Concrete screeds approx. 28 days
  - Structural concrete approx. 90 days
- The substrate must be solid, clean and load bearing. It can be moist but not wet. Oil stains, remains of form removal oils and other residues must be thoroughly removed.
- Floors can be easily levelled by self – levelling screed Prince Color® range.
- Plasters and absorbent substrates are to be primed with Prince Color® Multigrund PGM. High water-absorbing substrates must be primed until they absorb (avoid glossy surface creation), smooth or less absorbing substrates will be treated with special coat Prince Color® Multigrund PPB. Keep standard recommended gauging ratio and followed technology interval to let primer dry.
- Cement screeds may have got maximum 4% of residual moisture content, anhydrite or gypsum screeds maximum 0,5% of residual moisture content (measured with CM meter).

## Technical Data

Material Basis	cement and soft additives.	
Bulk density	approx. 1,5 kg/dm <sup>3</sup>	
Volume density of wet mortar (temperature)	1,55 kg/dm <sup>3</sup>	
Gauging water for	potable water or water according ČSN EN 1008	
- 1 kg powder	0,24 l	
- 25 kg bag	6,0 l	
Adhesive bed thickness	1 to 8 mm	
Working time*	approx.90 minutes	
Open time*	approx.30 minutes	
Initial tensile strength	$\geq 0,5$ N/mm <sup>2</sup>	
Tensile strength after immersion	$\geq 0,5$ N/mm <sup>2</sup>	
Tensile strength after thermal action	$\geq 0,5$ N/mm <sup>2</sup>	
Tensile strength after freeze/thaw cycling	$\geq 0,5$ N/mm <sup>2</sup>	
Setting time: tensile strength (no less then 30 minutes)	$\geq 0,5$ N/mm <sup>2</sup>	
Working temperature (substrate temperature)	+ 5°C to +25 °C	
Temperature resistance	- 20°C to + 80 °C	
Curing times*		
- walkable after	approx. 24 hours	
- grouted after	approx. 24 hours	
- able to bear weight after	approx. 14 days	
Consumption / type of tiles	required notch size	consumption
Small mosaic	3-4 mm	approx.2,5-3,0 kg/ m <sup>2</sup>
Ceramic Tile 15x15	5-6 mm	approx.3,5-4,0 kg/ m <sup>2</sup>
Coarse Ceramics	8-10 mm	approx.4,0-5,0 kg/ m <sup>2</sup>

\*At + 23 °C and 50 % relative humidity. Higher temperatures speed up and lower temperatures increase mentioned times.



## Application

1/ Gauging water is poured into a clean vessel. Add the powder and mix the mortar until a plastic, lump-free consistency is achieved. For mixing the adhesive mortar is recommended to use a suitable stirrer mounted on an electric drill (max. 500 r.p.m.). Adhesive mortar is allowed to slake for about 5 minutes then is remixed briefly.

## Laying tiles

2/ A thin bond coat is applied to the substrate with a smooth edge of the stainless trowel.

3/ A mortar is applied by notched trowel. The adhesive bed is combed if possible in one direction. It is necessary to mix only as much mortar as it is possible to use during the open time (approx. 30 minutes). The open time is checked by finger test.

4/ Tiles are positioned into adhesive bed by gentle shifts and smoothed.

## Grouting

For grouting are used following grouts:

- Cement grouting material  
Prince Color® FM (joint width 1- 8 mm)
- Flexible cement hydrophobised grouting material  
Prince Color® FM-FX (joint width 1- 12 mm)
- Flexible cement water repellent hydrophobised grouting material Prince Color® FM-FX Plus (joint width 1- 12 mm)
- Neutral silicone grouting material  
Prince Color® FM-S

## Packaging and storage

Packaging 25 kg bag with PE liner, delivery on wrapped EURO pallets.

Shelf life in dry warehouse is 12 month from the date of production.

## Please note

- Do not apply at substrate and weather temperatures under +5°C and above +25°C.
- For application on old tiles the bonding layer use flexible adhesive Prince Color® Z 301 FX Profi, Prince Color® Z 301 FX Forfe or Prince Color® Z 301 CL Profi. For adhesive of tiles on non-absorbing and smooth substrate, on balconies, outdoor terraces and heating floors it is necessary to use flexible adhesive Prince Color® Z 301 FX Profi, Prince Color® Z 301 FX Forfe or Prince Color® Z 301 CL Profi eventually Prince Color® Z 301 Speciál.
- Adhesive Prince Color® Z 301 Standard Extra does not level the irregularities on substrate. At this case it is useful to apply selflevelling slurries from Prince Color® range (Prince Color® NC 515, Prince Color® NC 510 or Prince Color® NA 420).
- The open time is reduced in case of absorbent substrates (recommendation: priming with Prince Color® Multigrund PGM prime coat).
- For correct function of ceramic tiles and pavements it is necessary to have sufficient cover of reverse side of tile.
- Consumption depends on quality of substrate, back profile of the ceramic, used tools and on application method

- Partly cured mortar is not recommended to dilute with water or mix with fresh one.
- Tools should be washed with water immediately after use; cured residues can be removed by mechanical means.
- Do not add any additional materials

## Safety instruction

Mixture can irritate skin and mucus membrane. There is risk of allergic reaction in case of skin contact. During work avoid contact with skin and eyes. Do not inhale. Do not eat and drink during application. Keep out of reach of children. Wear suitable protective clothing and gloves.

## Information for architects and engineers

Consultations on the building sites, additional information, tests and samples descriptions are available at our technical specialists or directly at headquarters.

## Disposal information

Product is to be disposed in accordance with particular rules valid in country of use.

Do not allow product to reach ground water, water bodies and sewage systems.

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