

ZNR™ GRANIBOND GREY

Granite, Natural Stone Adhesive

Product Description	Cement-based, one-component, high-quality, flexible adhesive mortar used for attaching granites, marbles, natural stones, tiles, ceramics and glass mosaics onto cement based surfaces such as concrete, plaster, screed, etc.																																								
Product Number	704																																								
Areas of Application	<ul style="list-style-type: none"> For strongly attaching marbles, tiles, ceramics, glazed tiles, decorative bricks, glass mosaics, cast and natural stones. For strongly attaching ceramic coatings with low absorption capacity, Wet areas such as kitchen, balcony, terrace, swimming pools and water reservoirs. Concrete-mortar, brick, gypsum (using primer), plaster board, pre-fabricated light concrete construction elements, anhydride surfaces (using primer), underfloor heating systems, surfaces with existing ceramic coating, Underground heating and industrial grounds, all surfaces vulnerable to warping or thermal movements, Surfaces with low absorption capacity where primer is not preferred, For vertical and horizontal applications of internal and external parts of buildings, 																																								
Characteristics /Advantages	<ul style="list-style-type: none"> Due to its high flexibility, the product can be used outdoors conveniently. Perfectly adheres to many different surfaces. (Concrete, cement mortar, brick, natural stone, existing coatings, etc.) Can be safely applied on horizontal or vertical surfaces. Resistant to water and frost after curing. Impact and vibration resistant, highly adhesive. Perfectly adheres to different surface types such as concretes, cement mortars, stones, briquette, etc. 																																								
Reference Standard	<p>C2TE as per TS EN 12004</p> <p>C2 : Cement based, high quality</p> <p>T : Decreased Sliding Feature</p> <p>E : Extended working time</p>																																								
Technical Data	<table border="1"> <tr> <td>Powder Color</td><td>Grey</td></tr> <tr> <td>Package</td><td>25 kg kraft bags</td></tr> <tr> <td>Density (Fresh Mortar)</td><td>~ 1.75 kg/m³ (at +23°C)</td></tr> <tr> <td>Tensile Adhesion Strength</td><td> <table> <tr> <td>Initial</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>After Immersing into Water</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>After Aging with Heat</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>After Freezing-Thawing Conversions</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>Exposed Waiting Time (after 20 minutes)</td><td>≥0.5 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>Sliding</td><td>≤ 0.5 mm</td></tr> </table> </td></tr> <tr> <td>Reaction to Fire Class</td><td>A1</td></tr> <tr> <td>Surface and Ambient Temperature</td><td>+5°C / +35°C</td></tr> <tr> <td>Temperature Strength</td><td>-15°C / +80°C</td></tr> <tr> <td>Exposure</td><td>45 minutes</td></tr> <tr> <td>Pot Life</td><td>Approximately 180 minutes (at +23 °C)</td></tr> <tr> <td>Application Tool</td><td>Notched trowel suitable for ceramic size</td></tr> <tr> <td>Consumption</td><td>~3.00-7,00kg/m² Consumption values may vary depending on the condition and roughness of the surface, size of the adhered material, and placing technique (application of the adhesive on the single or double side).</td></tr> <tr> <td>Opening for Pedestrian Traffic</td><td>24 hours</td></tr> <tr> <td>Starting with Joint Gap Application</td><td>24-48 hours (depends whether on wall or on ground)</td></tr> <tr> <td>Storage</td><td>Shelf life is approximately 12 months. Products should be stacked in a cool and dry place, with maximum 10 bags on each other.</td></tr> </table>	Powder Color	Grey	Package	25 kg kraft bags	Density (Fresh Mortar)	~ 1.75 kg/m ³ (at +23°C)	Tensile Adhesion Strength	<table> <tr> <td>Initial</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>After Immersing into Water</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>After Aging with Heat</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>After Freezing-Thawing Conversions</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>Exposed Waiting Time (after 20 minutes)</td><td>≥0.5 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>Sliding</td><td>≤ 0.5 mm</td></tr> </table>	Initial	≥1.0 N/mm ² ~1.5 N/mm ²	After Immersing into Water	≥1.0 N/mm ² ~1.5 N/mm ²	After Aging with Heat	≥1.0 N/mm ² ~1.5 N/mm ²	After Freezing-Thawing Conversions	≥1.0 N/mm ² ~1.5 N/mm ²	Exposed Waiting Time (after 20 minutes)	≥0.5 N/mm ² ~1.5 N/mm ²	Sliding	≤ 0.5 mm	Reaction to Fire Class	A1	Surface and Ambient Temperature	+5°C / +35°C	Temperature Strength	-15°C / +80°C	Exposure	45 minutes	Pot Life	Approximately 180 minutes (at +23 °C)	Application Tool	Notched trowel suitable for ceramic size	Consumption	~3.00-7,00kg/m ² Consumption values may vary depending on the condition and roughness of the surface, size of the adhered material, and placing technique (application of the adhesive on the single or double side).	Opening for Pedestrian Traffic	24 hours	Starting with Joint Gap Application	24-48 hours (depends whether on wall or on ground)	Storage	Shelf life is approximately 12 months. Products should be stacked in a cool and dry place, with maximum 10 bags on each other.
Powder Color	Grey																																								
Package	25 kg kraft bags																																								
Density (Fresh Mortar)	~ 1.75 kg/m ³ (at +23°C)																																								
Tensile Adhesion Strength	<table> <tr> <td>Initial</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>After Immersing into Water</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>After Aging with Heat</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>After Freezing-Thawing Conversions</td><td>≥1.0 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>Exposed Waiting Time (after 20 minutes)</td><td>≥0.5 N/mm² ~1.5 N/mm²</td></tr> <tr> <td>Sliding</td><td>≤ 0.5 mm</td></tr> </table>	Initial	≥1.0 N/mm ² ~1.5 N/mm ²	After Immersing into Water	≥1.0 N/mm ² ~1.5 N/mm ²	After Aging with Heat	≥1.0 N/mm ² ~1.5 N/mm ²	After Freezing-Thawing Conversions	≥1.0 N/mm ² ~1.5 N/mm ²	Exposed Waiting Time (after 20 minutes)	≥0.5 N/mm ² ~1.5 N/mm ²	Sliding	≤ 0.5 mm																												
Initial	≥1.0 N/mm ² ~1.5 N/mm ²																																								
After Immersing into Water	≥1.0 N/mm ² ~1.5 N/mm ²																																								
After Aging with Heat	≥1.0 N/mm ² ~1.5 N/mm ²																																								
After Freezing-Thawing Conversions	≥1.0 N/mm ² ~1.5 N/mm ²																																								
Exposed Waiting Time (after 20 minutes)	≥0.5 N/mm ² ~1.5 N/mm ²																																								
Sliding	≤ 0.5 mm																																								
Reaction to Fire Class	A1																																								
Surface and Ambient Temperature	+5°C / +35°C																																								
Temperature Strength	-15°C / +80°C																																								
Exposure	45 minutes																																								
Pot Life	Approximately 180 minutes (at +23 °C)																																								
Application Tool	Notched trowel suitable for ceramic size																																								
Consumption	~3.00-7,00kg/m ² Consumption values may vary depending on the condition and roughness of the surface, size of the adhered material, and placing technique (application of the adhesive on the single or double side).																																								
Opening for Pedestrian Traffic	24 hours																																								
Starting with Joint Gap Application	24-48 hours (depends whether on wall or on ground)																																								
Storage	Shelf life is approximately 12 months. Products should be stacked in a cool and dry place, with maximum 10 bags on each other.																																								

	<p>These values were obtained as a result of experiments in laboratory environment at $23 \pm 2^\circ\text{C}$ and $50\% \pm 5$ relative humidity. The values given in the table may vary depending on surface and ambient conditions.</p>
Surface Preparation	Remove loose parts, grease and other chemicals from the application area and repair the defects on the surface using ZNR REPAIR mortar. If the surface temperature of the application area is over 25°C , moisten and saturate the surface. Primer use is not necessary under normal conditions. In case of hard adherence conditions, use suitable ZNR PRIMER depending on the surface.
Preparation Instructions	Pour ZNR GRANIBOND GREY powder (25 kg) into 6.0-6.0 lt (variable, depending on air temperature) clean and cool mixing water (do not add water into the powder) and mix with a proper low-speed mixer for 3-4 minutes to obtain a homogenous and smooth mixture.
Application	After resting the mixture for 3-5 minutes, mix again and propagate on the surface by applying uni-directionally using a notched trowel suitable for the ceramic size. Attach the ceramics on the notched mortar within 35 minutes under normal temperature and humidity conditions. Exposed waiting time is approximately 35 minutes under normal temperature and humidity conditions. Adherence time may be shorter depending on the ambient conditions. Leave the desired joint spacing between the ceramics during application and, in order to ensure complete contact of the mortar on the surface with the ceramic, gently compress and ensure that the ceramic completely surrounded by the mortar. Joint mortaring should be performed after approximately 12 hours for wall applications and approximately 24 hours for ground applications. It is recommended to use a suitable ZNR Joint Sealant for the joints.
Considerations	<ul style="list-style-type: none"> Never use expired or encrusting mortars. Do not add water into the mortar that has already hardened. Do not use more water than recommended. Do not moisten the applied adhesive for prolonging exposed waiting time since it will affect adherence performance. Apply only on firm and prepared surfaces. Moisten the coatings in advance. Do not apply thicker than recommended. Manufacture of cement surfaces should be completed at least 28 days prior the application. Gypsum surfaces should have minimum 10 mm of thickness and maximum 5% moisture content. Protect the applications from rain, frost, wind, sunlight and high temperatures for the first 24 hours.
General Matters	Abovementioned product data and descriptions are prepared for guiding purposes as a result of our experiences and diligent studies. We, individually, can not control or affect the variety of the related materials and various construction and working conditions. Warranty is limited to only quality of the purchased material for the applications that are not under our control. No warranty is committed for application, but only for product manufacturing. This technical flyer overrides former flyers. Quality of the work may vary depending on how professionally the product is used. In case of hesitation, please perform a small test or ask for technical help.
Disposal	Empty packings can be disposed to collection bins according to regional/local regulations or recycling rules. Dispose used waste materials as construction waste materials after drying and hardening. It is <u>dangerous to dispose by burning the product remnants</u> .
Safety Information	Keep the products out of reach of children. Keep the lids of the products closed. It is recommended to use gloves and goggles during application. In case of contact with skin, wash immediately with soap. In case of contact with eyes, immediately consult a doctor. For more information, please refer to the material safety data sheet.