

ZNR™ GROUT C 60

Non-Shrink, High Strength Grout Mortar

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| Product Description | Cement-based, non-shrinking, ready-to-use, high strength self-compacting repair and anchorage mortar. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Product Number | 300 – 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Areas of Application | <ul style="list-style-type: none"> Machinery foundations, connections of pre-fabricated concrete elements, Anchorage spaces of steel constructions, assembly of tank and silo columns, For concrete jacketing, curtain and column heads, fastening of rail beds, For filling the spaces and holes on concretes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Characteristics /Advantages | <ul style="list-style-type: none"> Economic. Easy-to-use. Water-resistant. Highly flowable. Adjustable consistency. Fast setting time and reaches high strength values at a short time. Perfectly adheres to concrete and steel surfaces. No corrosive effect for concrete structures, non-toxic. Highly resistant against impacts and vibrations. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reference Standard | EN 1504-3/R4 and EN 1504-6 ASTM C1107 Type B and Type C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Technical Data | <table border="1"> <tr> <td>Color</td><td>Gray</td></tr> <tr> <td>Packaging</td><td>25 kg craft bags</td></tr> <tr> <td>Density</td><td>2,2-2,3 kg/m³ (fresh mortar)</td></tr> <tr> <td>Application Temperature</td><td>+10°C / +30°C</td></tr> <tr> <td>Pot Life</td><td>Approximately 30 minutes</td></tr> <tr> <td>Service Time</td><td>~24 hours (+23°C)</td></tr> <tr> <td>Compressive Strength (TSE-EN 196)</td><td>1st day ≥ 30 N/mm² 7th day ≥ 60 N/mm² 28th day ≥ 65 N/mm²</td></tr> <tr> <td>Flexural Strength TSE-EN 196</td><td>≥ 10 N/mm²</td></tr> <tr> <td>Adhesive Bond (TS-EN 1542)</td><td>≥ 2,0 N/mm²</td></tr> <tr> <td>Modulus of Elasticity (TS-EN 13412)</td><td>> 32 GPa</td></tr> <tr> <td>Capillary Absorption (TS-EN 13057)</td><td><0,5 kg. m⁻² saat^{-0,5}</td></tr> <tr> <td>Water Ratio</td><td>% 11</td></tr> <tr> <td>Application Thickness</td><td>Min. 10 mm Maks. 80 mm</td></tr> <tr> <td>Consumption</td><td>~ 2,1 kg powder for 1 mm thickness</td></tr> <tr> <td>Loading</td><td>24 hours</td></tr> <tr> <td>Completion of Curing</td><td>28 days</td></tr> <tr> <td>Storage</td><td>Shelf life is approximately 12 months dependent on storage conditions. Keep products in a cool dry area.</td></tr> </table> | Color | Gray | Packaging | 25 kg craft bags | Density | 2,2-2,3 kg/m ³ (fresh mortar) | Application Temperature | +10°C / +30°C | Pot Life | Approximately 30 minutes | Service Time | ~24 hours (+23°C) | Compressive Strength (TSE-EN 196) | 1 st day ≥ 30 N/mm ² 7 th day ≥ 60 N/mm ² 28 th day ≥ 65 N/mm ² | Flexural Strength TSE-EN 196 | ≥ 10 N/mm ² | Adhesive Bond (TS-EN 1542) | ≥ 2,0 N/mm ² | Modulus of Elasticity (TS-EN 13412) | > 32 GPa | Capillary Absorption (TS-EN 13057) | <0,5 kg. m ⁻² saat ^{-0,5} | Water Ratio | % 11 | Application Thickness | Min. 10 mm Maks. 80 mm | Consumption | ~ 2,1 kg powder for 1 mm thickness | Loading | 24 hours | Completion of Curing | 28 days | Storage | Shelf life is approximately 12 months dependent on storage conditions. Keep products in a cool dry area. |
| Color | Gray | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Packaging | 25 kg craft bags | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Density | 2,2-2,3 kg/m ³ (fresh mortar) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Application Temperature | +10°C / +30°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pot Life | Approximately 30 minutes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Service Time | ~24 hours (+23°C) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Compressive Strength (TSE-EN 196) | 1 st day ≥ 30 N/mm ² 7 th day ≥ 60 N/mm ² 28 th day ≥ 65 N/mm ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flexural Strength TSE-EN 196 | ≥ 10 N/mm ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adhesive Bond (TS-EN 1542) | ≥ 2,0 N/mm ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modulus of Elasticity (TS-EN 13412) | > 32 GPa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capillary Absorption (TS-EN 13057) | <0,5 kg. m ⁻² saat ^{-0,5} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water Ratio | % 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Application Thickness | Min. 10 mm Maks. 80 mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Consumption | ~ 2,1 kg powder for 1 mm thickness | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Loading | 24 hours | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Completion of Curing | 28 days | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Storage | Shelf life is approximately 12 months dependent on storage conditions. Keep products in a cool dry area. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surface Preparation | The application surface should be cleaned from loose parts, grease and other chemicals, metal surfaces should be cleaned from rust, burr, grease, etc. and the surfaces should be dry and clean. Saturate the concrete surface with water and wet the form work in advance. Wetting process should be done 24 hours before the application and the surface should be humid just before the application and free of water puddles. Water puddles should be removed from the surface. Surface concrete quality should be at least 25 MPa. It is necessary to calculate the pouring point well in order to provide fluidity in sub-basic applications, this will provide comfortable placement of the material. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation Instructions | Depending on the desired consistency depending on weathering and from about 2,7 to 3,0 lt. range of clean, cool mixing water into (25 kg) into a powder and low-speed (up to 450 r / min) single-stranded or double lump-free homogenous mixture is provided in the mixer for 4 minutes with a pulse or constant sleeves. No water should be added to the powder material. Do not add more water than the specified amount. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| Application | Pour flowable ZNR Grout C 60 mortar from one side only; never pour from double sides oppositely. During filling process, air can be discharged using a flexible steel wire. It should be noted that there are no air bubbles inside the mortar. The mixed mortar should be applied as soon as possible. Apply it to the place that needs to be poured within 10 minutes to get the most out of the expansion feature. Application thickness should be between 10-80 mm for each layer. |
| Considerations | <ul style="list-style-type: none"> After application, water the surface frequently for minimum 48 hours and keep the surface humid by covering with a material such as wet sack, etc. Never make application below +5°C. Do not use vibrator. Ambient conditions and application methods can change product performance. The above values were obtained as a result of tests under controlled ambient conditions made in laboratory conditions. Product properties, desired strength development and workability time may vary depending on the ambient temperature. When working at higher temperatures than recommended for product use, the processability time is shortened. Likewise, the rate of increase in strength slows down at lower temperatures. If necessary, hot water should be used to maintain a temperature between 15-20 °C. |
| General Matters | Abovementioned product data and descriptions are prepared for guiding purposes as a result of our experiences and diligent studies. We, individually, cannot 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 dangerous to dispose by burning the product remnants. |
| 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. |