

ZNR™ GROUT C 70

Non-Shrink, Flowable Cast Mortar

Product Description	ZNR Grout C70 is a cement-based, non-shrinking, ready-to-use, high-strength flowable mortar. Despite its high fluidity, it resists shrinkage thanks to its expansion properties, ensuring dimensional stability and excellent performance in demanding applications.																						
Product Number	302																						
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"> • Water-resistant with high flowability and adjustable consistency • Fast setting with rapid strength gain • Excellent adhesion to concrete and steel surfaces • Non-corrosive to reinforcement and non-toxic • High resistance to impact and vibration 																						
Reference Standard	TS EN 1504-3																						
Technical Data	<table border="1"> <tr> <td>Powder Color</td><td>Grey</td></tr> <tr> <td>Package</td><td>20 kg kraft bags</td></tr> <tr> <td>Fresh wet density</td><td>2100 kg/m³</td></tr> <tr> <td>Application Temperature</td><td>+5°C / +30°C</td></tr> <tr> <td>D_{max}</td><td>3 mm</td></tr> <tr> <td>Pot life</td><td>Approximately 30 minutes</td></tr> <tr> <td>Opening for service</td><td>~24 hours (+23°C)</td></tr> <tr> <td>Compressive Strength</td><td>1st day ≥ 30 N/mm² 7th days ≥ 60 N/mm² 28th days ≥ 75 N/mm²</td></tr> <tr> <td>Water Amount</td><td>2.7-2.8 liters of water for one bag (20 kg) of powder material</td></tr> <tr> <td>Consumption</td><td>~2.0 kg powder is used for 1 mm of mortar thickness</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	20 kg kraft bags	Fresh wet density	2100 kg/m ³	Application Temperature	+5°C / +30°C	D _{max}	3 mm	Pot life	Approximately 30 minutes	Opening for service	~24 hours (+23°C)	Compressive Strength	1 st day ≥ 30 N/mm ² 7 th days ≥ 60 N/mm ² 28 th days ≥ 75 N/mm ²	Water Amount	2.7-2.8 liters of water for one bag (20 kg) of powder material	Consumption	~2.0 kg powder is used for 1 mm of mortar thickness	Storage	Shelf life is approximately 12 months. Products should be stacked in a cool and dry place, with maximum 10 bags on each other.
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Surface Preparation	<p>All application surfaces must be thoroughly cleaned of loose particles, oil, grease, and other contaminants. Metal surfaces should be free of rust, burrs, and grease. All surfaces must be clean and dry. Prior to application, saturate the concrete surface with water and pre-wet any absorbent formwork. The wetting process should be completed 24 hours before application. Just before application, ensure the surface remains damp (humid), and remove any standing water.</p> <p>The compressive strength of the surface concrete must be at least 25 MPa. To ensure proper flow and ease of placement, especially in sub-base applications, the pouring point must be carefully calculated.</p>																						
Preparation Instructions	Depending on the desired consistency and ambient conditions, approximately 2.6 to 3.0 kg of clean, cool mixing water should be added to 20 kg of powder. Using a low-speed mixer (maximum 450 rpm) with a single or double paddle, mix the components for 3–4 minutes until a smooth, lump-free, homogeneous mixture is achieved. Do not add water directly into the powder. Do not exceed the recommended amount of mixing water.																						
Application	Pour flowable ZNR Grout C70 mortar from one side only—never pour from opposite sides simultaneously. During the filling process, use a flexible steel wire to help release trapped air and ensure that no air bubbles remain within the mortar. The mixed mortar should be applied immediately after mixing. For optimal expansion performance, apply the mortar within 10 minutes. The recommended application thickness per layer is between 10 mm and 150 mm.																						
Considerations	<ul style="list-style-type: none"> • After application, keep the surface moist for at least 48 hours by watering frequently or covering it with a damp material such as wet burlap or cloth. • Do not apply the product at temperatures below +5°C. • Do not use mechanical vibrators during placement. • Ambient conditions and application methods can significantly affect product performance. The values provided are based on tests conducted under controlled laboratory conditions. • Product properties such as strength development and workability time may vary with ambient temperature. At higher temperatures, the working time is reduced, while at lower temperatures, strength gain is slower. If necessary, use warm water to maintain the mixture temperature between 15–20°C. 																						

General Matters	The product information and guidelines provided above are based on our knowledge, experience, and thorough studies, and are intended for general guidance. However, as we have no control over the variety of materials used, on-site conditions, or application methods, our responsibility is limited solely to the quality of the product itself. No warranty is given for the application process—only for the manufacturing quality of the product. This technical document supersedes all previous editions. The quality and performance of the final work depend on the professionalism of the application. In case of uncertainty, it is strongly recommended to carry out a preliminary test or consult our technical support team.
Disposal	Empty packaging should be disposed of in designated collection bins in accordance with local or regional regulations and recycling guidelines. Used and leftover material must be treated as construction waste after it has fully dried and hardened. Do not burn product remnants , as this poses serious health and environmental risks.
Safety Information	Keep the product out of reach of children. Always keep containers tightly closed when not in use. It is recommended to wear protective gloves and safety goggles during application. In case of skin contact, wash immediately with soap and water. In case of eye contact, seek medical attention without delay. For detailed safety information, please consult the Material Safety Data Sheet (MSDS).