

PRODUCT DATA SHEET

DINGO HIGH EARLY STRENGTH GROUT



Dingo High Early Strength Grout is a Class C, cementitious construction grout that's been formulated to achieve high early strength for applications that require a speedy return to service with its rapid setting properties. Dingo HES Grout has been designed to allow for an adjustable consistency, giving the ability to be poured, pumped or dry packed based on the application required.

Product Uses:

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| <ul style="list-style-type: none"> Grouting or pouring concrete in large volumes as well as filling joints between tilt slabs and precast panels | <ul style="list-style-type: none"> Securing anchor bolts |
| <ul style="list-style-type: none"> Filling of voids within hollow brick constructions | <ul style="list-style-type: none"> Creating columns in precast construction projects |
| <ul style="list-style-type: none"> Constructing foundations for machinery | <ul style="list-style-type: none"> Installing pads for bridges to rest on |

Product Advantages:

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| <ul style="list-style-type: none"> Boasts excellent flow properties. | <ul style="list-style-type: none"> Exhibits strong initial strength and reaches maximum MPa at 28 days. |
| <ul style="list-style-type: none"> Compensates for shrinkage effectively | <ul style="list-style-type: none"> Free from chlorides; won't induce rust, seep, or damage metal upon contact |
| <p>Viscosity of product mix can be adjusted to suit a pouring application or a pumping application</p> | <ul style="list-style-type: none"> Doesn't cause corrosion in steel or iron. |
| <ul style="list-style-type: none"> Exhibits strong initial strength and reaches maximum MPa at 28 days. | <ul style="list-style-type: none"> Demonstrates good resistance to impacts and temperature variations |



Product Data:

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| Form/Colour | Powder / Grey |
| Available in | 10 kg bags |
| Product mix | Special cement, selected aggregates, and additives |
| Shelf life | 12 months if stored properly in unopened, original packaging |
| Storage requirements | Dry, cool, shaded place |
| Mixing ratio | 1.6 – 1.75L of clean water per 10kgs bag |
| Yield | 10 kg of powder yields approximately 5.25L of grout |
| Consumption | Approximately 190 bags per 1m ³ |
| Density | 1.60 kg/ltr (bulk density of powder) 2.20 kg/ltr (density of fresh grout) |
| Application depth | 10mm Min – 150mm Max (100mm max in one pass) |
| Pot Life | 15 minutes at 20°C |
| Initial Set Time | 15 minutes at 20°C |
| Final Set Time | 20 minutes at 20°C |

Technical Data:

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| Compressive strength | 2 hours ≥ 15 MPa 4 hours ≥ 24 MPa 1 day ≥ 30 MPa 28 days ≥ 70 MPa |
| Electrical resistivity | 7 days - 17,000 Ω.cm 28 days - 21,000 Ω.cm 56 days - 24,000 Ω.cm |
| Flowability | 300 - 350mm (Flow table spread) |
| Application temperature | 5 °C Min - 35 °C Max |
| Surface temperature | 5 °C Min - 35 °C Max |
| Grain Size | Dmax: 2.0 mm |



Application Instructions:

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| <p>Surface Preparation Instructions</p> | <p>Removal of damaged, weak or deteriorated concrete is essential to creating a sound foundation and should be done so using suitable methods. Concrete must be free of all contaminants such as dust, loose particles or any substances that might impede bonding or hinder the ability to absorb repair materials.</p> <p>For optimal results, pre-soak the surface a few hours prior to grouting to reduce the absorption of the substrate. Remove any freestanding water that may be left on the surface before grouting.</p> <p>For steel reinforcement applications, remove all materials that could reduce the bonding process or cause further corrosion, such as concrete and mortar remanence, scale and rust. Utilizing high-pressure water-blasting or sandblasting techniques for removal will provide the strongest bond possible.</p> |
| <p>Mixing Instructions</p> | <p>Gradually add the powder to the pre-measured water (starting with the minimum water amount) to achieve the desired consistency. Mechanically blend the mixture at a slow pace for a minimum of 3 minutes using a low-speed electric drill (maximum 500 revolutions per minute) with a disc agitator attached, until it reaches a smooth texture. Alternately, you can use mixing equipment like a two-armed mixer or a forced-action basket/pan-type mixer. It's important to note that this product should NOT be mixed by hand. If the mixture isn't to the desired consistency, additional water can be added but be sure not to overwater the mixture. Only add the max amount of water that is recommended.</p> <p>Note: It is recommended to mix a small test batch to confirm the optimal mix ratio for working consistency based on current environmental conditions, particularly temperature. Warmer conditions will cause the mix to harden quicker than in cooler conditions.</p> |
| <p>Application Instructions</p> | <p>In either application listed below, avoiding aeration is key to the product's end performance and integrity. Before applying Dingo HES Grout, temporarily shut down any nearby machinery or equipment that will cause vibration to the area until it reaches initial set.</p> <p>For pouring applications: Dingo HES Grout should be poured into watertight, leakproof framework with a suitable header box to maintain a continuous flow of grout and maintain as little force as possible into the mixture.</p> <p>For pumping applications: When using a pump to apply Dingo HES Grout, you'll need to determine the pump is suitable for grout that can handle aggregates or grain sizes of up to 4mm in the mix.</p> |

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| | <p>Another consideration to make is the distance and height that the pump will need to reach. It is recommended to use a positive displacement pump for the best results. Always start pumping into the section that is the furthest away and fill gradually from left to right, bottom to top, avoiding air entrapment as much as possible.</p> <p>To accommodate pours exceeding a depth of 100mm, you can include 10mm washed coarse aggregate in Dingo HES Grout to lower the amount of heat generated whilst curing. Ensure that you do not exceed adding more than 10kg of aggregate per each 10kg bag of Dingo HES Grout.</p> |
| Curing Instructions | Ensure that the surface remains visible and protect the area from drying out at a rapid rate. Keep it moist, cover it with damp hessian, periodically spray it with water or use a curing compound as needed. |
| Clean-Up Instructions | Immediately remove all wet material from mixing vessels and tools using clean water before product hardens. |