



**For the Builders
of a Better World™**

DURAGROUT HF

DURAGROUT HF is a non-shrink, non-ferrous, excellent flowability, high-strength structural grout which can be adjusted to 3 different flowability allows ease of placement. DURAGROUT HF contains premixed blend of graded siliceous aggregates, polymer cementitious binder, flow improving and a shrinkage compensating additives which produces a volume balance structural grout.

DURAGROUT HF produces high early and ultimate strengths without intermediate or latent shrinkage. DURAGROUT HF remains stable without failure from compressive loading, impact, lateral thrusts, high heat or continuous vibration. It is scientifically proportioned and is ready for use at varied consistencies from plastic to fluid.



FEATURES/BENEFITS

- Extended work time.
- Easy placement
- High strength
- Can be mixed at a varying range of consistencies
- Dynamic load stability

USES

DURAGROUT HF is used to fill voids where non-shrink, high-strength, structural, durable grout is required such as: precise machine bases, pump and equipment bases, structural columns, machineries, compressors, grouting voids and anchor bolts.

MANUFACTURER/DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd
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STANDARDS/CERTIFICATIONS

- ASTM C942
- ASTM C940

Packaging

25 kg bag

Approximate Coverage

2.20 kg/m² per mm thickness, 88 x 25kg per m³.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year* if stored off the ground in a dry area, at temperatures $\geq 0^{\circ}\text{C}$ to $\leq 40^{\circ}\text{C}$.

* High humidity will reduce the shelf life of bagged product.

Limitations

- Avoid DURAGROUT HF placement when temperatures are, or will be, below 5°C within 24 hours
- Do not over-vibrate fluid consistency grout
- Follow ACI recommended practices
- Do not add plasticizer accelerators or additional cement to DURAGROUT HF.
- For Professional Use only

Cautions

- Consult SDS for more safety information
- Protect finished work until fully cured
- Contains portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children

TECHNICAL DATA

Physical and Working Properties

Performance Properties			
Performance Test	Flowability		
	Plastic	Flowable	Fluid
Compressive strength after 7 days ASTM C942	$>55\text{N/mm}^2$	$>55\text{N/mm}^2$	$>45\text{N/mm}^2$
Compressive Strength after 28 days ASTM C942	$>65\text{N/mm}^2$	$>65\text{N/mm}^2$	$>55\text{N/mm}^2$
Expansion/Shrinkage ASTM C940	$<0.4\%$ expansion at 28 days 0% shrinkage at 28days		
Initial setting time	5 - 6 hours		
Final Setting Time	7 - 9 hours		

Technical data shown in product data sheets are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance and test results will depend on installation methods and site conditions. Field test results will vary due to critical job site factors. All recommendations, statements and technical data contained in this data sheet are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind. Satisfactory results depend upon many factors beyond the control of LATICRETE International, Inc. User shall rely on their own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from their direct use, indirect use or consequential to their use of the product. LATICRETE shall not be liable to the buyer or any third

party for any injury, loss or damage directly or indirectly resulting from use or inability to use the product.

INSTALLATION

Surface preparation

All surfaces should be between 5°C and 40°C , clean surface of oil, grease, dirt, laitance and loose material, down to sound concrete. Metal surfaces are to be free of rust or other foreign material. Clean bolt holes, bolts and the underside of base plates. After roughening the concrete surfaces, pre-soak with water to the surfaces and bolt holes prior to placing of grout.

Formwork

Construct a rigid, watertight formwork around the bearing plate or structures to be grouted. Form elevation should be approximately one (1) vertical inch or 25mm higher than the finish level of the grout. On large pours a form sloped at a 45° angle or pouring "head box" should be incorporated to the formwork to facilitate placement. Side and end formwork should be positioned at least 1" (25 mm) from the bearing plate or equipment base. Placement side form should be at least 2" (50 mm) from the object to be grouted. Do not place grout in large, unsupported open areas.

Mixing instructions

Flowability	Approximate Water Mixing Ratio
Plastic	4.1ℓ - 4.3ℓ
Flowable	4.3ℓ - 4.5ℓ
Fluid	4.5ℓ - 5ℓ

The amount of clean water required to be mixed with the pre-weighted grout varying depends on the desire consistency to achieve optimum performance. Mix the grout to a doughy state, being careful not to overload the mixer to the point of stalling. After all lumps have disappeared, add remaining water. Continue to mix for a total of 3 to 5 minutes or to uniform consistency.

Placing

Prior to placement of grout, remove all stagnant water from the surface of the concrete substrate leaving only a damp surface. Whenever possible, place grout in bolt holes first. Grout should be placed from one direction only in order to reduce the amount of voids under the plate. Grout should be placed without stopping until the forms are overflowing and entrapped air can no longer be seen in the grout as it flows from under the plate and over the forms. DURAGROUT HF, when mixed to a flowable/fluid consistency, it can be placed by either pumping or gravity flowing. If the pumping method is to be used, the discharge end of the pump hose should be placed at the most distant point to be grouted. The pump hose should be withdrawn as the grouting process continues. If the gravity flowing method is used, a slanted form at a 45° angle to the horizontal, or a funnel, should be mounted at the point at which the grout is introduced into the form. The height of the slanted form (or funnel) should be approximately 6-8" (150-200 mm) higher than the highest point to be grouted. The grout should be poured across the slant form, or through the funnel, until the grout has completely filled the formed area and is overflowing the forms.

Curing instructions

Exposed DURAGROUT HF must be protected and cured immediately after placement. Cover with polyethylene sheet, damp clean rags or burlap for a period of 72 hours. Do not let the rags or burlap dry out during the curing period.

AVAILABILITY AND COST**Availability**

LATICRETE® materials are available worldwide. For distributor information, call:

Telephone: (65) 6515-3028

Fax: (65) 6515-3037

For on-line distributor information, visit LATICRETE at se.laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

WARRANTY

Subject to the conditions and limitations stated below, LATICRETE South East Asia Pte Ltd warrants that its products will be free from manufacturing defects and will not break down or deteriorate under normal usage for a period of one (1) year from the date of purchase when installed in accordance with the written specifications of LATICRETE and industry standard guidelines.

MAINTENANCE

Non-finish LATICRETE and LATAPOXY installation materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

TECHNICAL SERVICES/ CONTACT**Technical Assistance**

Information is available by calling:

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Technical and safety literature

To acquire technical and safety literature, please visit our website at se.laticrete.com

Disclaimer

LATICRETE is not responsible for product use beyond its intended application. Liability is limited to replacing defective materials. We are not responsible for any loss or damage resulting from improper use. Product specifications are subject to change without notice. For the most up-to-date information, please visit our website at se.laticrete.com.