T. +961.1.796030 | T. +961.1.787931
info@rif-design.com | www.rif-design.com
Verdun | Corniche Canale 7 | Beirut | LEBANON

Repair | Grout

One Part Modified
Overhead Repair

Repair* | *Grout is a single component, micro silica and latex modified, non-sag repair mortar. This cement based product is designed for trowel applied vertical and overhead repairs requiring a performance oriented material.

Primary Applications

- Resurfacing damaged or deteriorated concrete
- Vertical and overhead repairs
- Parking and bridge structures
- Parapet walls
- Marine structures
- Tunnels and dams
- Above and below grade applications

Features | Benefits

- One component for easy mixing and handling
- High bond strength provides excellent adhesion
- Normal setting times increase workability and reduce waste
- Micro-silica and latex modified for high in place performance
- Contains no chlorides
- Highly impermeable repair mortar prevents the ingress of carbon di-oxide, chlorides which causes the corrosion of reinforcement

Specifications | Compliance

Repair* | *Grout attains a bond strength meeting the requirements of ASTM C 1059-86, Type II systems.

Packaging | Yield

Repair* | *Grout is packaged in 25 kg bags. Yield is 0.013 m3 per bag when mixed with 4.75 l of water. Note: This product requires curing compound which must be ordered separately.

Coverage

Repair* | *Grout will cover approximately 1.0 m2 when placed at an average depth of 13 mm. ***Repair* | *Grout*** may be placed at thicknesses ranging from 6 mm to 50 mm.

Technical Information

Typical Engineering Data

Compressive Strength
ASTM C 109 modified, 50 mm cubes

1 days	17.2 MPa
7 days	31.0 MPa
28 days	37.9 MPa

Bond Strength ASTM C 882 modified Slurry Coat

1 day	7.5 MPa
7 days	13.8 MPa
28 days	15.2 MPa

Flexural Strength ASTM C 348

1 day	3.4 MPa
28 days	6.2 MPa

Tensile Strength ASTM C496

1 day	1.6 MPa
7 days	2.7 MPa
28 days	4.2 MPa

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Working Time: 30 minutes
Initial Set: 1 hour
Final Set: 2 1/2 hours
Water absorption:
ASTM C 642 2%
Co-efficient of Thermal Expansion:
8 to 12 X 10-6 °C.
Alkali Content
2.8 kg x m3 approx.
Chemical Resistance: ***Repair | Grout*** exhibits excellent resistance against: Chloride Ions, Water, Acid gases

Directions for use:

Surface Preparation - The concrete must be clean and rough. All oil, dirt, debris, paint and unsound concrete must be removed. The surface must be prepared mechanically using a bush-hammer, sandblaster or jackhammer which will give a surface profile of a minimum 3.2 mm and expose the coarse aggregate of the concrete. The final step in cleaning should be the complete removal of all residues with a vacuum cleaner or pressure washing.
Exposed Reinforcing Steel - Exposed rebar may be treated with an anti-corrosion coating. Remove all loose rust and scaling, preferably by sandblasting to white metal prior to coating the rebar.
Bonding - After the surface has been prepared, all areas must be primed with a slurry coat of ***Repair | Grout***. Produce a slurry coat of this product by mixing the material as indicated below and then add 0.48 liter of water to the mix.
Mixing - Product is normally mixed with a drill and "jiffy" type mixer. Use a paddle type mortar mixer for large placements. Note: Do not mix more material than can be placed within 20 minutes. Add the appropriate amount of water for the batch size and then add the dry product. Mix for a minimum of 5 minutes. The mixed product should be quickly transported to the repair area and placed immediately.
Placement - Product should be placed in lifts 6 to 25 mm thickness. Trowel into place and allow to stiffen before the next lift. Multiple lifts may be placed as long as the total recommended depth is not exceeded. If additional lifts will be placed after the product has hardened, cross hatch the surface of the previous lift to provide for a secure bond for the next lift.
Finishing- Finish the repair material to the desired texture and/or to match the surrounding concrete. Do not add water to the surface during the finishing operation.
Curing and Sealing - Proper curing procedures are important to ensure the durability and quality of the repair. To prevent surface cracking, cure the repair mortar with a high solids curing compound. **NOTE**: Solvent based curing compounds are not recommended to use on this product. In hot, windy or direct sunlight situations, apply a second coat of curing compound after the initial coat is dry. If a curing compound is not desired, cover with polyethylene sheeting for a minimum of three (3) days. Followed by normal concrete curing procedures.

Clean-up

Clean tools and equipment with water before the material hardens.

Precautions | Limitations

- In adverse temperatures, follow ACI recommendations for hot/cold weather concreting practices.
- Use only potable water for mixing.
- Minimum application thickness 6 mm
- Minimum surface and ambient temperature 7°C and rising at a time of application.
- Store product in a dry place.