

FloroCrete RT Rake/Trowel Resinous Broadcast Urethane Mortar

Product Description:

FloroCrete RT is a solvent free, low odour, Rake/Trowel resinous broadcast heavy-duty system that is designed for the most strenuous uses and activity. It is specially formulated for areas where thermal shock, heavy impact and chemical attack are issues. It can be applied from 5.5mm to 6.5 mm when installed with aggregate broadcasts and sealer coats.

Typical Uses, Applications:

FloroCrete RT may be used as a part of the Florock FloroProof moisture mitigation system (contact your Florock representative for details) and is also ideally suited for commercial, industrial and institutional applications, such as:

- Commercial kitchens
- Abattoirs
- Food processing plants
- Breweries, wineries & dairies
- Coolers & freezers
- Bottling lines
- Laboratories
- Exterior surfaces
- Chemical processing
- Sanitise/wash areas

Product Advantages:

- Contains FloroSeptic anti-microbial additive
- Thermal shock resistant
- High chemical & solvent resistance
- High acid & alkali resistance
- Low odour/solvent free installation
- Quick curing formula
- Meets USDA, FDA & OSHA requirements
- Slip Resistant
- Tolerates dampness

| Physical Properties | | |
|-------------------------------------|---------------|-------------------------------|
| Property | Test Method | Results |
| Compressive Strength | ASTM C579 | 62 N/mm ² |
| Tensile Strength | ASTM D638 | 17.24 N/mm ² |
| Flexural Strength | ASTM D790 | 35.16 N/mm ² |
| Hardness, Shore D | ASTM D2240 | 85 |
| Bond Strength | ASTM D4541 | >3 N/mm ² |
| Co-Efficient of Friction | ASTM D-2047 | Passes ADA recommendations |
| Co-Efficient of Thermal Expansion | ASTM C531 | 1.1x10 ⁻² mm/mm/°C |
| Impact Resistance | ASTM D2794 | 184 kg cm |
| Flammability | ASTM E-648 | Class I |
| Abrasion Resistance | ASTM D4060 | 5 mg loss |
| Indoor Air Quality | | Compliant to CA 01350 |
| Water Absorption | ASTM C413 | <0.1% |
| Resistance to Fungi Growth | ASTM G21 | Passes |
| VOC | EPA Method 24 | 0 |
| Service Temperature | | -45°C to 114°C |
| *Workable life, 1 Mixed kit | | 15 min. |
| **Cure time at 21° C@ 50% RH | | |
| Set to Touch | | 8-10 hours |
| Foot Traffic | | 12-16 hours |
| Full Service | | 24-48 hours |
| Clean-up Solvent | | MEK |

Packaging: FloroCrete RT is packaged and sold by the component. Each batch consists of:

- Part A – Polyol component
- Part B – Isocyanate component
- Part C – FloroCrete RT filler

(Broadcast aggregates are sold separately)

Colours: FloroCrete RT is available in Grey, Tile Red and Neutral.

Storage: All containers should be stored at 7°C-29°C and be kept tightly sealed and out of direct sunlight.

**After blending the components, immediately empty from mixing bucket onto the floor.*

***Cooler temperatures require longer cure time and the addition of Flow Additive.*

Coverage:

Apply FloroCrete RT @ 2.65 m² per batch for 4.5 mm, with the aluminium oxide or quartz aggregate broadcast and sealer coats the final thickness will be 5.5mm - 6.5mm.

Limitations: FloroCrete RT is not to be applied in temperatures below 7°C or above 29°C, or when relative humidity is >85%. Apply only to dry, properly prepared, uncoated, reinforced concrete floor slabs that have a moisture content of <10%. Do not apply if air temperature and/or surface temperature is at or below dew point. During application, protect substrate from exposure to water leakage or condensation from pipes. Do not feather-edge, do not hand-mix material, and do not apply to cracked or unsound substrates. Product is for horizontal use on dry concrete surfaces only.

Substrate Preparation: Mechanically prepare concrete surface by abrasive blast cleaning, diamond grinding or other approved method. Ensure that all surface contaminants are removed. Determine that concrete is sound, with appropriate compressive strength. A Schmidt hammer can be used for this purpose. If concrete has strength of less than 3 N/mm², do not install FloroCrete RT until concrete has been replaced. FloroCrete RT is not intended for use over existing coatings.

Expansion Joints: In addition to standard slab expansion joint construction, place joints wherever FloroCrete RT is adjacent to dissimilar materials. Isolate areas subject to movement, vibration, thermal stress, load-bearing columns, and vessel sealing rings. Rout-out cracks and fill with FloroCrete HD or FloroCrete RT prior to floor system installation. Treat very large cracks as expansion joints and fill with FloroFlex 6500 JS elastomeric sealant (see System 6500 tech data).

| Chemical Resistance of Mortar | |
|-------------------------------|---------|
| Reagent | Results |
| Hydrochloric Acid 37% | R |
| Hydrofluoric Acid 4% | R |
| Hydrofluoric Acid 6% | R |
| Nitric Acid 30% | R |
| Phosphoric Acid 85% | R |
| Sulfuric Acid 39% | R |
| Sulfuric Acid 45% | R |
| Acetic Acid 10% | R |
| Acetic Acid 60% | L |
| Acetic Acid, Glacial 100% | L |
| Acetic Anhydride 98% | L |
| Citric Acid 40% | R |
| Formic Acid 10% | R |
| Lactic Acid 85% | R |
| Dibutylamine 100% | R |
| Ammonium Hydroxide 30% | R |
| Potassium Hydroxide 50% | R |
| Sodium Hydroxide 50% | R |
| Ammonium Chloride (sat'd) | R |
| Ammonium Sulphate (sat'd) | R |
| Ammonium Nitrate 50% | R |
| Ammonium Aqueous 30% | R |
| Zinc Chloride 50% | R |
| Ferric Chloride 50% | R |
| Hydrogen Peroxide 3% | R |
| Potassium Carbonate (sat'd) | R |
| Potassium Chloride (sat'd) | R |
| Sodium Carbonate (sat') | R |
| Sodium Chloride (sat'd) | R |
| Sodium Nitrate (sat'd) | R |
| Sodium Sulphate (sat'd) | R |
| Sodium Hydro chlorite 10% | R |
| Diacetone Alcohol 100% | R |
| Acetone 100% | L |
| Benzyl Alcohol 100% | R |
| n-Butyl Alcohol | R |
| Ethyl Alcohol 100% | R |
| Glycol Ether Acetone 100% | R |
| Hexane 100% | R |
| Is-o-Octane 100% | R |
| 2-Propanol | R |
| Methyl Alcohol 100% | R |
| Methylene Chloride 100% | L |

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Coving: Prime the area to receive coving with FloroCrete P and scatter the surface using 46 grit silica aggregate. This is a wet on wet application, proceed with cove. For FloroCrete RT coving, mix 1 complete kit of FloroCrete RT with 3 x11.34kg bags of FloroCrete coving aggregate. This mix will cover 25 lin/m of 150mm cove and 38 lin/m of 150mm cove).

FloroCrete RT Application:

1. Primer: Priming is usually not required. If concrete is very porous, prime with FloroCrete P Primer to prevent “out gassing”. Apply primer @ 125-250 microns dft. See FloroCrete P Technical Data Sheet and consult your Florock Representative for details.

2. Florocrete RT Mortar: Premix FloroCrete RT component A and add component C (dry material). Blend together with a forced action mixer for 30 seconds making sure aggregate is thoroughly wetted out. Scrape down sides and bottom of container with a flat or straight edge trowel to assure complete mixing. Add Part B to A & C and mix again for 60 seconds. Then, immediately dump mix onto floor for application. Be sure to MIX FULL KITS. As temperature will affect mixing, mix when air temperature is between 10°-21° C.

Note: Flash setting may occur if material remains in bucket too long (10 minutes is max.) or if left in a heap on floor.

Note: Best results are achieved when floor to be coated is divided into areas of 2.4 -3m of wet edge per operative. Begin working away from or alongside a wall. Trowel a small area and measure thickness. Use this initial area as a standard and proceed.

Application: Pour material onto the floor and spread to the desired thickness using a screed rake or trowel. Spread a newly mixed batch across the transition of the previously applied materials before it begins to set. Immediately loop roll or spike roll. Ensure that the surface is level, then proceed with broadcasting aggregates to rejection while FloroCrete RT is wet. grit silica,

| Chemical Resistance of Mortar (Continued from page 2) | |
|----------------------------------------------------------|---------|
| Reagent | Results |
| Mineral Spirits 100& | R |
| Pentane 100% | R |
| Petroleum Ether 100% | R |
| Boric Acid 100% | R |
| Muriatic Acid 80% | R |
| Ethylene Glycol 100% | R |
| Copper Sulfate (in solution) | R |
| Benzoic Acid 100% | R |
| Diesel Fuel 100% | R |
| Stearic Acid | R |
| Amyl Acetone | R |
| Fatty Acid 100% | R |
| Toluene 100% | R |
| Xylene 100% | R |
| Antifreeze 100% | R |
| Glycol Ether PM 100% | R |
| Transmission Fluid 100% | R |
| Freon 100% | R |
| Glycerin 96% | R |
| Oleic Acid | R |
| 100 Solvent 100% | R |
| Kerosene 100% | R |
| Mineral Oil 100% | R |
| Brake Fluid 100% | R |
| Sugar Solution (sat'd) | R |
| Motor Oil 100% | R |
| Water | R |
| MEK & MIBK | L |

Key:

R - Resistance. Appropriate for long term spills and secondary containment.

L - Limited resistance. Appropriate for splashing and spills that are not promptly cleaned up.

F - Not Recommended.

Use 24-46 aluminium oxide or coloured quartz and broadcast to rejection. Apply at approx 1.25kg/m². Let aggregates fall vertically, DO NOT broadcast up to the transition line of new mixes, stay 0.6-0.9m beyond the wet edge. Allow aggregate surface to cure, remove excess by sweeping or vacuuming until surface is dust free.

3. Topcoats: Use FloroWear 7100, FloroSpartic or other Florock recommended topcoats. Consult your Florock Representative for details.

Note: Do not use with Epoxy topcoats

Cure Time: The chemical curing of FloroCrete RT is affected by temperature. At 21°C curing temperature, expect to walk on the floor in 12 hours, with full traffic after 24 hours. At 7° C curing temperature, allowing foot traffic may take 48 hours or longer; therefore, it is imperative that air and substrate temperatures be kept above 21°C for best cure.

Technical Notes:

FloroCrete Flow Additive - Add up to 0.5ltr to a kit of FloroCrete HD, RT or SLX to improve the flow in cold or warm conditions.

FloroCrete Catalyst – May be added to shorten cure time. Contact your Florock Representative for details.

Maintenance: FloroCrete RT System floors can be maintained by using a stiff mechanical brush and/or hot pressure washer or steam cleaner. Surfactant-type detergents or degreasers may be used. However, avoid products containing Phenol, as this may damage colour. Though FloroCrete is highly chemical resistant, a test patch is recommended prior to using any harsh cleaners.

Please read material safety data before using product.

Disclaimer:

All statements and recommendations are based on experience we believe to be reliable. The use or the application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer make any warranty, expressed or implied, as to results or hazard from its use. The suitability, risk and liability of a product for an intended use shall be solely up to the User.