



Urethane Concrete Mortar System

DESCRIPTION

Morriscite UC 1015 M is a three component, trowel applied novel water-based urethane cementitious system. It is engineered to provide superior high impact resistance, thermal shock stability, chemical resistance, abrasion and hot oil resistance.

The system is typically installed at 1/4 to 3/8 in. Morriscite UC1015 M has a textural aggregate surface for increased moderate slip resistance. Morriscite UC 1015 M can be applied to green concrete.

TYPICAL USES

- Food processing plants
- Dairies, milk process areas
- Meat, fish, poultry packing plants
- Commercial kitchens
- Freezers & coolers
- Chemical processing / refineries
- Locker & shower rooms
- Pharmaceutical manufacturing
- Pulp & paper processing
- Warehouses

ADVANTAGES

- Easy to apply
- Long term durability
- Economical
- Rapid cure
- Hot cooking oil and steam resistant
- Abrasion & impact resistant
- No joints to harbor bacteria
- Stress relieving
- Faster installation
- Chemical resistant
- Easy to clean

TYPICAL PHYSICAL PROPERTIES

| | | |
|----------------------------------|----------------------------|-------------------------------------|
| Color: | Light Gray, Dark Gray, Red | |
| Cure Time @77°F +/- 2°F: | Working time | 15-20 minutes |
| | mixed @77°F | |
| | Foot Traffic | 4-5 hours |
| | Full Cure | 24 hours |
| Tensile strength: | ASTM C307 | >500 psi |
| Compression strength: | ASTM C579 | >6,000 psi |
| Flexural strength: | ASTM C580 | >1,000 psi |
| Impact resistance: | MIL-D-2794 | Pass |
| Abrasion Resistance | ASTM D 4060 CS-17 wheel | 1000 cycles |
| | ASTM C413 | < 0.1 % |
| Anti-Fungal Growth: | ASTM G21 | Passes |
| Coefficient of thermal expansion | ASTM C531 | 1.1 x 10 ⁻⁵ / in/ in/ °F |
| Water Absorption | ASTM CH13 | 0.25-0.30°F |
| Serviel Temperature | | |
| @ 3/8" Application | | -50°F-240°F |

PACKAGING

| | |
|--------------|---------------------------|
| Component A: | 8.53 lb (3.78L) |
| Component B: | 7.33 lb. (2.64L) |
| Component C | 45 lbs. in a bag (powder) |

SURFACE PREPARATION

Concrete surfaces must be clean and sound. Remove all dust, dirt, existing paint films, efflorescence, exudates, laitance, form oils, hydraulic or fuel oils, brake fluid, grease, fungus, mildew, biological residues or any other contaminants which may prohibit good bond. Prepare the surface by any appropriate mechanical means in order to achieve a profile equivalent of ICRI-CSP 3. The compressive strength of the concrete substrate should be at least 3,625 psi (25 MPa) at 28 days and a minimum of 218 psi (1.5 MPa) in tension at the time of application. Contact MTT Technical Sale for a recommendation.

MIXING AND APPLICATION

Components A: B: C:

- **MIX FULL UNIT ONLY, DO NOT MIX PARTIAL UNITS.**
- Pre-mix Morricite UC 1015 M A (resin). Add Morricite UC 1015 M B (hardener) into a clear mixing bucket Mix with low speed drill and jiffy mixer for 30 – 35 seconds. Add Morricite UC 1015 M C (powder) slowly over a period of 25 seconds. Allow component C to blend well for at least 2 – 3 minutes. Blend material until no lumps remain. Immediately pour mixed material on the substrate at 5/16" to achieve a total thickness of 1/4" floor. Apply at 1/2" to achieve a finished thickness of 3/8" using a screed box.
- Allow a wet edge of between 8-10 linear feet per installer. Divide up work area accordingly. Compact and smooth the mixed material using a normal steel trowel.

LIMITATIONS

Prior to application, measure and confirm Substrate Moisture Content, Ambient Relative Humidity, Ambient and Surface Temperature and Dew Point. During installation, confirm and record above values at least once every 3 hours, or more frequently whenever conditions change (e.g. Ambient Temperature rises/falls, Relative Humidity increases/decreases, etc).

Material Temperature: Precondition material for at least 24 hours between 65° to 75°F (18° to 24°C).

IMPORTANT: Product must be protected from freezing. If frozen, discard.

Ambient Temperature: Minimum/Maximum 50° / 85°F (10° / 30°C).

Substrate Temperature: Minimum/Maximum 50° / 85°F (10° / 30°C). Substrate temperature must be at least 5°F (3°C) above measured Dew Point.

Mixing and Application attempted at Material, Ambient and / or Substrate Temperature conditions less than 65°F (18°C) will result in a decreased product workability and a slower cure rate.

Relative Ambient Humidity:

Minimum ambient humidity 30%.

Maximum ambient humidity 85% (during application and curing).

WARRANTY INFORMATION

Values stated herein are typical values based on periodic testing and product experience. MTT DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THOSE OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. Where customer demonstrates non-conformance of product to typical values stated herein, MTT will, supply replacement product or, at its discretion, credit customer's account for the purchase price of non-conforming product. Recommendations herein as to the surface preparation, application, maintenance, and other matters involving storage, handling, or use of product are based on the best information available. Because MTT has no control over such matters, or over substrate or other conditions that may affect ultimate performance, customer has the obligation to determine suitability of product for the intended purpose. MTT SHALL HAVE NO RESPONSIBILITY FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES BUT ONLY FOR THE REPLACEMENT OR CREDIT MENTIONED ABOVE. All claims for replacement or credit must be made within one year from date of shipment. The sale and purchase of product from MTT are subject in each case to MTT's terms and conditions of purchase.

Master Terrazzo Technologies / PO Box 226 / Bristol, PA 19007
8000 Bristol Pike / Levittown, PA 19057 / www.masterterrazzo.com
215.949.1474 / Fax 215.949.9422 / Email: office@masterterrazzo.com