



**MASTER  
TERRAZZO**  
TECHNOLOGIES

## Urethane Concrete Mortar System

### DESCRIPTION

Morrците UC 10151 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. Morrците UC1015 M has a textural aggregate surface for increased moderate slip resistance. Morrците 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

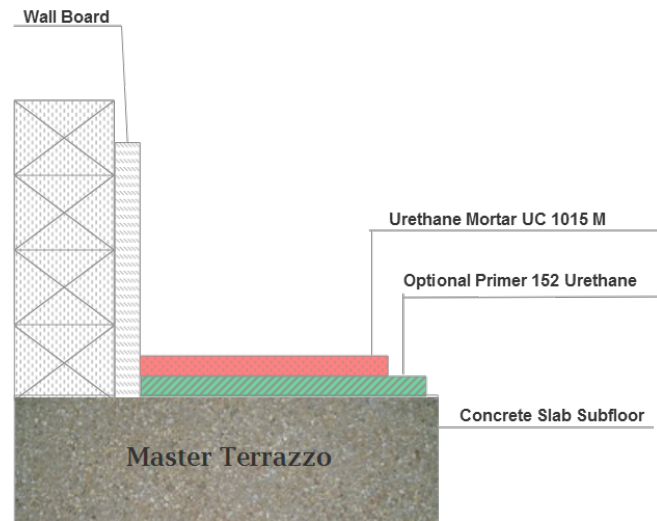
### TYPICAL PHYSICAL PROPERTIES

Color:	Light Gray, Dark Gray, Red	
Cure Time @77°F +/- 2°F:	Working time 77F	15-20 minutes
	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 <sup>-5</sup> / in/ in/ °F
Water Absorption	ASTM CH13	0.25-0.30°F
Serviel Temperature		
@ 3/8" Application	-50°F-240°F	

### PACKAGING

Component A:	Pre-Measured Unit
Component B:	Pre-Measured Unit
Component C	45 lbs. in a bag (powder)

Installation Diagram  
UC 10151



## U 10151

### SURFACE PREPARATION

## PRODUCT SYSTEM DATA

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.

**U 10151 M System** is a three component, trowel applied novel water-based urethane cementitious system. This total system provides a strongly bonded monolithic floor with excellent physical and mechanical properties. **U 10151** is only intended for interior applications and consists of the following components.

**Optional Primer to avoid outgassing:** 142 Morricite WB Primer/Sealer The prepared concrete surface is primed with Do not allow primer to puddle. Apply @ 3-5 mils.

**Bodycoat: UC 1015 with aggregate** will provide an impact resistant floor and develops a cured strength that is many times that of concrete, therefore, providing exceptional durability and prolonging the life of the concrete substrate.

**OPTIONAL: UC 1012 Urethane Topcoat:** offers more chemical resistance and beauty.

### COLORS

Available in standard or custom color colors.

\*Chemical resistant information is available on our website or sales binder.

\*\*PLEASE CONTACT YOUR MTT REPRESENTATIVE FOR ADDITIONAL PRODUCT OPTIONS

### MIXING AND APPLICATION

#### 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.