



**MASTER
TERRAZZO**
TECHNOLOGIES

UCS Sand Broadcast Urethane Slurry 3/8" and 1/4"

DESCRIPTION

Morrците UCS Urethane Slurry System is a cementitious, urethane cement, self-leveling slurry to be applied at 3/16" thickness and broadcast to yield a 1/4"-3/8" finished system. It is engineered to provide superior high-impact resistance, thermal shock stability, chemical resistance, abrasion and hot oil resistance. It can be applied with a pin rake, screed rate or flat trowel.

TYPICAL USES

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

ADVANTAGES

- Easy to apply & long term durability
- Can be applied to "green" concrete
- 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

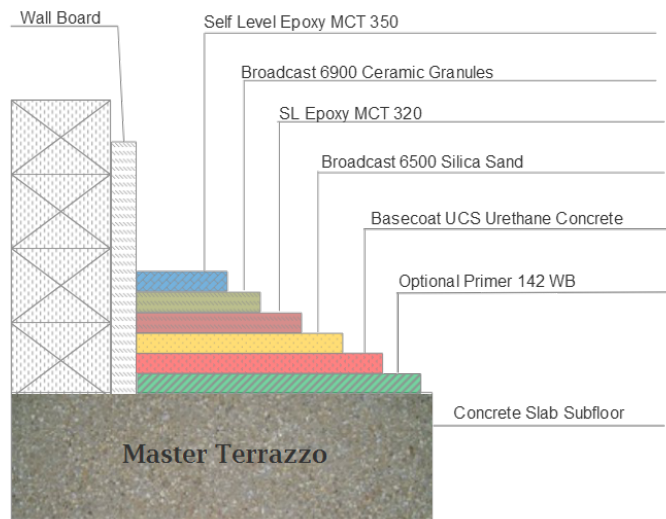
TYPICAL PHYSICAL PROPERTIES

Color:	Red, light gray or neutral
Cure Time @77°F +/- 2°F:	Recoat 6-8 hours
Foot Traffic 10-12 hours	Light Traffic 4 days
	Full Cure 7 days
Hardener, Shore D	ASTM D2240 75-85
Tensile strength:	ASTM C307 600-700 psi
Compression strength:	ASTM C579 5,500 psi
Flexural strength:	ASTM C580 2,200 psi
Impact resistance:	MIL-D-3134 16ft lbs without cracking
Adhesion:	ACI 503R >300 psi concrete failure
Water absorption:	ASTM C413 <0.1%
Resistance-Fungi Growth:	ASTM G21 Passes
Coefficient of thermal expansion:	ASTM C531 1.1 x10 ⁻⁵ °F
Coefficient of friction:	ASTM D1894-61T Steel 0.3 Rubber 0.5

PACKAGING

Component A:	Pre-measured Unit (resin)
Component B:	Pre-measured Unit (hardener)
Component C:	44 lbs. in a bag (powder)

Installation Diagram
UCS Urethane Slurry System
3/8" and 1/4"



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 to 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 Representative for a recommendation.

UCS Self-leveling Urethane System Components

Morrquite UCS Urethane Slurry System is a cementitious, urethane cement, self-leveling slurry. This total system provides a strongly bonded monolithic floor with excellent physical and mechanical properties. **UCS** is only intended for interior applications and consists of the following components.

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

Basecoat: Morrquite UCS with 6500 Silica Sand 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.

Second Broadcast: MCT 320 Self leveling Epoxy, followed by Ceramic Granules,

Glaze Coat: MCT 320

Optional Topcoat: P 1050 Polyaspartic for durability 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 **Morrquite UCS A** (resin). Add to **Morrquite UCS B** (hardener) in a clear mixing bucket. Mix with low speed drill and jiffy mixer for 30 – 35 seconds. Add Morrquite UC 1010 C (powder) slowly over a period of 25 seconds. Allow component C to blend well for at least 2 – 2 1/2 minutes. Blend material until no lumps remain. Immediately pour mixed material into substrate and pull out using a pin rake, screed rake or flat trowel. Place all materials within 15 minutes. Back roll with a loop roller to assist leveling. Allow material to self-level.

Broadcast silica sand and/or ceramic color quartz sand to saturation (about 400 lbs. per 1,000 square feet) for a unique decorative finish. Allow to cure for a minimum of 5-6 hours before sweeping excess. Allow more time in temperatures below 55°F.

After the above cure time, install MCT 320 Self leveling Epoxy according to technical data sheet, followed by Ceramic Granules, followed by a glaze coat of MCT 320 Self leveling epoxy.

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 decreased product workability and slower cure rates.

Relative Ambient Humidity: Minimum ambient humidity 30%.

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

LIMITED WARRANTY

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 A PARTICULAR PURPOSE. Where customer demonstrates non-conformance of product to typical values stated herein, MTT will supply replacement product or, at its option, credit customer's account for the purchase price of non-conforming product. Recommendations herein as to the surface preparation, application, maintenance, and other matters involved in storage, handling, or use of product are based on best information reasonably available to MTT. 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 CREDITING REMEDY ABOVE. All claims for replacement or crediting 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.