

# MasterTop® 1234

## Epoxy floor system

FORMERLY SELBATWEDE™ 41

### YIELD

First receiving coat: 200 ft<sup>2</sup>/gallon  
(4 m<sup>2</sup>/L)

Second receiving coat: 36 ft<sup>2</sup>/gallon  
(0.9 m<sup>2</sup>/L)

Grout coat: 80 – 100 ft<sup>2</sup>/gallon  
(2 – 2.5 m<sup>2</sup>/L)

### Top coats:

MasterTop GP 500 – 200 ft<sup>2</sup>/gallon  
(5 m<sup>2</sup>/L)

MasterTop TC 565 – 250 ft<sup>2</sup>/gallon  
(6.25 m<sup>2</sup>/L)

MasterTop TC 421 UHW - (450-550) ft<sup>2</sup>/gallon  
(6.25 m<sup>2</sup>/L)

MasterTop TC 693 – 300 ft<sup>2</sup>/gallon  
(7.5 m<sup>2</sup>/L)

All coverage rates are approximate.  
Coverage rates will vary with the desired texture  
and the porosity of the concrete.

### PACKAGING

#### Epoxy coatings:

5 gallon (18.95 L) pails

55 gallon (208 L) drums; available by  
special order

Aggregate: sold in bags

MasterTop TC 421 UHW polyurethane

topcoat: 5 gallon (18.95 L) pails

MasterTop TC 693 polyaspartic topcoat:

5 gallon (18.95 L) pails

### COLOR

12 standard quartz blends\* Custom  
blends are available on request; custom  
orders have minimum quantities and  
increased manufacturing lead times.  
Refer to the minimum quantities and  
increased manufacturing lead times.  
for more information.

\*Color blends exhibit normal industry variations.

### VOC CONTENT

See MasterTop 1234 LEED Letter

### DESCRIPTION

MasterTop 1234 consists of a two-component 100% solids epoxy-resin binder with colored quartz aggregate. The colored quartz imparts a slip-resistant surface that can be varied by the applicator. It is applied over properly prepared surfaces to a thickness of 5/64" (2 mm) to 1/8" (3 mm).

### PRODUCT HIGHLIGHTS

- Broadcast system designed for ease of application
- Temperature in-service range of 0–170 °F (-18–76 °C) ideal for hot and cold environments
- 100% solids epoxy, VOC compliant and low odor
- Broadcast finish as texture can be varied to meet customer's needs
- Colored quartz finish available in standard and custom blends
- Epoxy resins for good chemical resistance

### SHELF LIFE

Epoxy Resins: 2 years when properly stored.  
MasterTop TC 421 UHW and MasterTop TC 693  
topcoats: 1 year when properly stored.

### STORAGE

Store and transport in unopened  
containers in a clean, dry environment.  
Protect from freezing.

### APPLICATIONS

- Light- to medium-duty traffic areas
- Commercial applications
- Corridors
- Restrooms and showers
- Locker rooms
- Auditoriums
- Cafeterias
- Laboratories

### LOCATION

- Interior

### SUBSTRATE

- Apply over new and existing concrete and toppings

**TECHNICAL DATA**

**COMPOSITION**

MasterTop 1234 is a 100% solids epoxy-resin binder with colored quartz aggregate.

**TYPICAL PROPERTIES**

PROPERTY	VALUE
<b>Weight</b> , lbs/ft <sup>2</sup> (kg/m <sup>2</sup> ) At 1/8" (3 mm)	4.98 (24.3)

**TEST DATA**

PROPERTY	RESULTS >160	TEST METHODS
<b>Impact strength</b> , in-lbs	60	ASTM D 2794
<b>Compressive strength</b> , psi (MPa)		
System	12,900 (88.9)	ASTM C 579
Resin	12,000 (82.7)	ASTM D 695
System	10,200 (70.3)	ASTM C 109
<b>Tensile strength</b> , psi (MPa)		ASTM D 638
System	1,160 (8.0)	
Resin	7,960 (54.8)	
<b>Tensile elongation</b> , %	3.2	ASTM D 638
<b>Flexural strength</b> , psi (MPa)		ASTM D 790
System	4,600(31.7)	
Polymer	14,100(97.1)	
<b>Flexural modulus</b> (resin)	398,000	ASTM D 790
<b>Surface flammability</b>		ASTM E 162
Flame spread index	9.29	
Smoke deposit, mg/ms	0.1	
NBS Class	1	
<b>Rate of burning</b>	Self extinguishing	ASTM D 635
<b>Abrasion resistance</b> , mg loss; CS-17 Wheel, 1,000 g load 1,000 cycles	0.078	ASTM D 4060
<b>Indentation</b> , in		MIL-D-24613
Initial	0.0016	
24 hr. residual	0.0008	
<b>Impact resistance</b>	No chipping, cracking, or delamination	MIL-D-24613
<b>Fire resistance</b>	Fire retardant	MIL-D-24613
<b>Adhesive strength</b> , psi (MPa)	> 500 (> 3.4) 100% concrete failure	ASTM D 4541
<b>Coefficient of friction</b>		ASTM D 2047
Dry	> 0.7	
Wet	> 1.20	
<b>Oil absorption</b>	Nil	MIL-D-24613
<b>Water absorption</b>	Nil	MIL-D-24613
<b>Thermal stability</b>	No de-bonding modified	ASTM C 844

Unless otherwise noted, test samples were cured 7 days at 73 °F (23 °C) and 50% relative humidity. Test Results are typical values obtained under laboratory conditions. Reasonable variations can be expected.

## CHEMICAL RESISTANCE

In accordance with ASTM D 1308, MasterTop 1234 with the standard MasterTop GP 500 finish coat will withstand exposure for up to 7 days at 70 °F (22 °C) for the following chemicals.

- Dilute mineral acids, including hydrochloric (< 30%), phosphoric (< 20%), and sulfuric (< 30%)
- Alkalis, including potassium hydroxide to a 50% concentration
- Some dilute organic acids such as acetic (30%), formic, citric, and uric
- Fats, oils, and sugars
- Mineral oils, diesel fuel, kerosene, and gasoline
- Some organic solvents, including aliphatic hydrocarbons

Full chemical resistance is achieved after curing for 7 days. For resistance to a specific chemical compound, consult the Master Builders Solutions Chemical Resistance Guide.

## HOW TO APPLY

### SURFACE PREPARATION

1. Floors must be structurally sound and fully cured a minimum of 28 days. Test floor for vapor drive in accordance with ASTM D 4263, ASTM F 2170 or ASTM F 2420.
2. Repair concrete as necessary.
3. Use a commercial degreaser to clean floors of oil, grease and other bond-inhibiting materials.
4. Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions.
5. Mechanical surface profiling is the method of surface preparation for both new and existing floors. Mechanically profile the floor to CSP 3 (approximating medium-grit sandpaper) as described by the International Concrete Repair Institute. Do not use acid etching for surface preparation. Do not use any method that will fracture the concrete.
6. Apply a 25 ft<sup>2</sup> (2.35 m<sup>2</sup>) test in an inconspicuous area that meets the owner's expectations for appearance, slip resistance and performance.

## MIXING

1. Mix the components for this product in the following ratios:

### TYPICAL PROPERTIES

APPLICATION COMPONENTS	MIX RATIO BY VOLUME
<b>Primer</b> MasterTop GP 500 Part A / Part B	2 to 1
<b>Receiving Coat</b> MasterTop GP 500 Part A / Part B Broadcast Aggregate	2 to 1
<b>Grout Coat</b> MasterTop GP 500 Part A / Part B	2 to 1
<b>Optional Top Coat</b> MasterTop GP 500 Part A / Part B or MasterTop TC 421 UHW Part A / Part B or MasterTop TC 693 Part A / Part B	2 to 1 4 to 1 (Optional part C) 1 to 1

2. Properly mix each component separately before mixing together to ensure a uniform consistency.
3. Combine Parts A and B in a suitably sized container. Use the proper ratios of A and B; scrape the sides of the containers to ensure a complete reaction.
4. Mix properly for 3 minutes with a slow-speed drill and Jiffy-style mixing paddle at 350 rpms. Keep the paddle below the surface to avoid entrapping air. Do not mix by hand.

## APPLICATION

1. Install the cove base as required.
2. Apply primer coat of epoxy resin at approximately 200 ft<sup>2</sup>/gallon (3.75 m<sup>2</sup>/L).
3. Apply the receiving coat of epoxy at approximately 36 ft<sup>2</sup>/gallon (2.5 m<sup>2</sup>/L).
4. Broadcast the MasterTop DE 42CQ colored aggregate by hand or by mechanical blower into the wet receiving coat. Broadcast to refusal. Make certain the entire floor is saturated with aggregate, exhibiting a dry appearance.
5. Allow to cure. Once cured, sweep, stone, and vacuum the excess aggregate.
6. Apply the clear grout coat at 80–100 ft<sup>2</sup>/gallon (2–2.5 m<sup>2</sup>/L) by squeegee. Lightly back-roll with a thick-nap roller. Allow to cure at least 8–10 hours.
7. Apply the optional clear finish coat at 250–300 ft<sup>2</sup>/gallon (6.25–7.5 m<sup>2</sup>/L) to achieve the desired texture or smoothness. For increased abrasion resistance and UV stability, substitute MasterTop TC 421 UHW or MasterTop TC 693 for the finish coat.
8. Various curing agents can be used to achieve desired application properties; refer to the MasterTop GP 500 product

### MAINTENANCE

Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance, and reduce any tendency to retain dirt. Refer to the MasterTop Cleaning and Maintenance Guide for more information.

### FOR BEST PERFORMANCE

- Do not expose to chemicals until fully cured (7 days).
- Precondition this product to 70 °F (21 °C) for 24 hours before using.
- Do not exceed the recommended recoat window of 24 hours; if in doubt, contact your Master Builders Solutions flooring specialist.
- Use an effective moisture barrier for substrates on or below grade; if not present, call your local Master Builders Solutions representative or flooring specialist for options.
- Install these products at a substrate temperature of 50 to 85 °F (10 to 30 °C).
- The in-service temperature range is 0 to 170 °F (-18 to 76 °C).
- MasterTop 1234 will follow the contour of the substrate. Where this may be a concern, consider using MasterTop 1254 or MasterTop 1244.
- The architect and owner should address joint details with the contractor before the job starts.
- Master Builders Solutions representatives and flooring specialists can help you select the proper flooring system. Call 1-800-433-6739 for in-house and field technical assistance.
- Make certain the most current versions of product data sheet and SDS are being used; visit [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us) to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

### HEALTH, SAFETY AND ENVIRONMENTAL

Health, Safety and Environmental Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us), e-mailing your request to [mbsbscst@mbcc-group.com](mailto:mbsbscst@mbcc-group.com) or calling 1(800)433-9517. Use only as directed.

**IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.**

### LIMITED WARRANTY NOTICE

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