# Technical Data Guide





# MasterTop® 1235SL

Self-leveling epoxy flooring system

FORMERLY SELBACLAD™ SL / SLB

#### YIELD

 $\label{eq:primer: 100 - 200 ft²/gallon} (2.5 - 5 m²/L) \\ \underline{\text{Base coat: 60 ft²/batch (5.6 m²/batch)}} \\ \underline{\text{Top coat: approximately 80 - 125 ft²/gallon (2 - 3.12 m²/L)}.} \\ \text{All coverage rates are approximate.} \\ \text{Coverage rates will vary with the desired texture and the porosity of the concrete.} \\$ 

### PACKAGING

5 gallon (18.95 L) pails 55 gallon (208 L) drums <u>Pigments:</u> 1 Pint (0.5 L) Can <u>Aggregate:</u> 50 lb (22.5 kg) bags

# COLOR

MasterTop 1235 SL is available in 11 standard colors. Custom colors are subject to minimum quantities and increased manufacturing lead-times. See the Master Builders Solutions Performance Flooring Color Guide for additional information.

# SHELF LIFE

 $\underline{\text{MasterTop Epoxy Resins:}} \ 2 \ \text{years when} \\ \text{properly stored.}$ 

#### STORAGE

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

#### VOC CONTENT

See MasterTop 1235SL LEED Letter

#### DESCRIPTION

MasterTop 1235SL is composed of 100% solids, tinted epoxy resins and specially graded aggregates. It is installed at a thickness from 1/16 – 1/8" (1.5 – 3 mm) or greater. MasterTop 1235SL will handle foot and light wheeled traffic in a variety of industrial and commercial buildings. MasterTop 1235SL can also incorporate a broadcast aggregate for added slip resistance.

# PRODUCT HIGHLIGHTS

- Excellent flow and self-leveling properties that are designed for rapid and efficient installation
- Available in smooth and textured finishes that allows slip resistance to be adjusted
- Durable surface coat is easy to clean and maintain
- Epoxy technology provides good chemical resistance
- Wide temperature in-service range makes it ideal for hot or cold environments
- 100% solids epoxy formulation is VOC compliant in all regions and low in odor

# **APPLICATIONS**

- Where abrasion and chemical resistance are required
- Pneumatic palette-jack areas
- Warehouses
- · Food-and-beverage preparation areas
- Clean rooms
- Restrooms
- Locker rooms

# **LOCATION**

Interior applications

# SUBSTRATE

 Over new and existing concrete surfaces or toppings



# TECHNICAL DATA COMPOSITION

MasterTop 1235 SL is composed of 100% solids, tinted epoxyresin components and specially graded aggregates.

# **TYPICAL PROPERTIES (CURED)**

PROPERTY	VALUE
Weight, lb/ft2 (kg/m2),	5.86
at 1/8" (3 mm)	(28.6)

# TEST DATA (CURED)

TEOT DATA (OURLD)		
PROPERTY	RESULTS	TEST METHODS
Compressive strength, psi (MPa)	13,100 (92)	ASTM C 579
Tensile strength, psi (MPa)	9,700 (68)	ASTM D 638
Flexural strength, psi (MPa)	4,990 (34)	ASTM D 790
Surface flammability		ASTM E 162
Flame spread index	9.29	
Smoke deposit, mg/ms	0.1	
NBS Class	1	
Rate of burning	Self-extinguishing	ASTM D 635
<b>Abrasion resistance</b> , CS-17 wheel, 1,000 cycles, 1,000 gram load	0.070 gram loss	ASTM D 4060
Hardness, Shore D	75 – 85	ASTM D 2240
Indentation, inches		MIL-D-3134
Initial	0.007 (0.6%)	
24 hr residual	0.0 (0%)	
Impact resistance	No chipping, cracking or delaminating	MIL-D-3134
Fire resistance	Fire retardant	MIL-D-3134
Adhesive strength, psi (MPa) (100% concrete failure)	350 (2.5)	ASTM D 4541
Slip-resistant properties	Min. 0.8 (exceeds ADA requirements)	MIL-D-3134
Oil absorption	Nil	MIL-D-3134
Water absorption	Nil	MIL-D-3134
Heat resistance	No flow, slip or softening at 158 °F (70 °C) for 5 hours	MIL-D-3134

Unless otherwise noted, test samples were cured 7 days at 70 °F (23 °C)

# CHEMICAL RESISTANCE

Full chemical resistance is achieved after curing for 7 days. For resistance to specific chemicals, consult the MasterTop Chemical Resistance Guide.

# **HOW TO APPLY**

SURFACE PREPARATION

- Concrete 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 recommended method of surface preparation for both new and existing floors. Mechanically profile the floor to CSP 3 4 (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 ft² (2.35 m²) 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 MasterTop PGM 1000 pigment	B+
Base Coat MasterTop GP500 Part A/ Part E MasterTop PGM 1000 pigment	} +
Granusil 7020 aggregate by volu	ime 1 to 1
Optional Topcoat MasterTop TC 683	1 to 1
MasterTop TC 421 UHW	4 to 1 (Optional Part C)

Consult the Master Builders Solutions Performance Flooring

2. If you are using the MasterTop PGM 1000 use the mixing ratio in the table.3. If additional slip resistance is required, broadcast the aggregate into the coating the mixing ratio in the table.

PRODUCT DESCRIPTION	PIGMENT LOADS
MasTop PGM 1000 White 1,932KG IP31	4 oz/ gallon
MasterTop PGM 1000 Lt Gry 1,842KG IP31	4 oz/ gallon
MasterTop PGM 1000 Md Gry 1,95KG IP31	4 oz/ gallon
MasterTop PGM 1000 Btshp Gr 1,733KG IP31	2 oz/ gallon
MasterTop PGM 1000 Tan 1,896KG IP31	1 oz/ gallon
MasterTop PGM 1000 Charcoal 1,501KG IP31	1 oz/ gallon
MasterTop PGM 1000 Deep Blue 1,102KG IP31	1/1.5 oz/gal
MasterTop PGM 1000 Black 0,907KG IP31	2 oz/ gallon
MasterTop PGM 1000 Bright Green 1,687KG IP31	4 oz/ gallon
MasterTop PGM 1000 Safety Red 0,957KG IP31	6 oz/ gallon
MasterTop PGM 1000 Safety Yellow 0,907KG IP31 *	8 oz/ gallon

- \* Apply over white
- Properly mix each component separately before mixing together to ensure uniform consistency.
- 4. 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.
- 5. 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**

- Install the appropriate prime coat in a manner suited to the substrate and its profile. Apply at 50 – 200 ft²/gallon (1.25 – 5 m²/L). Allow to cure.
- 2. Apply the tinted base-coat mixture at a rate of 60 ft²/batch (5.6 m²/batch). Spread with a 1/4" V-notched trowel. Back roll with a loop or spiked roller. Allow the material to self-level and cure.

- B. If additional slip resistance is required, broadcast the aggregate into the coating to the point of rejection. Allow to cure, then sweep, stone, and vacuum the excess aggregate. If slip resistant finish is not required, omit this broadcast step.
- 4. Apply the pigmented finish coat or lock coat. Spread the material by squeegee or trowel and back roll to achieve the desired texture (if used as a topcoat). The total system thickness should be a minimum of 1/16 – 1/8" (1.5 – 3 mm), depending on the specification. Allow to cure.
- 5. Apply an optional finish coat of pigmented MasterTop TC 421 UHW or MasterTop TC 693, if additional UV or abrasion resistance is required. Note: Various curing agents can be used to achieve desired application properties. Refer to the MasterTop GP 500 product data sheet for more information.

# DRYING TIME

Primer: 12 – 24 hours
Base coat: 12 – 24 hours
Topcoat: refer to individual top coat product data guides
Drying times assume 70 °F (21 °C) and 50% relative humidity.

# 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 Master-Top Cleaning and Maintenance Guide for more information.

# FOR BEST PERFORMANCE

- 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.
- Boxing batches is recommended to ensure color consistency.
- For applications over substrates other than concrete, contact Master Builders Solutions Technical Service.
- Do not expose the MasterTop 1235SL flooring systems to any chemicals until fully cured (7 days).

- Use an effective moisture-vapor barrier for substrates on or below grade. If not present, contact your Master Builders Solutions representative for options.
- Do not install over pitched floors.
- MasterTop 1235SL system is not suitable for areas requiring high impact resistance.
- Install these products at a substrate temperature from 50 to 85 °F (10 to 30 °C).
- Consult the appropriate chemical resistance data for information on resistance to specific chemicals.
- The maximum service temperature is 170 °F (76 °C).
- Rapid thermal cycling can lead to premature failure of this product.
- Master Builders Solutions representatives and flooring specialists are available to assist you in the selection of the proper flooring system.
   Call 1-800-243-6739 for in-house and field technical assistance.
- Apply a finish coat of pigmented MasterTop TC 421 UHW or MasterTop TC 693 for increased abrasion resistance, color retention, or stability.
- Make certain the most current versions of product data sheet and SDS are being used; visit 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, e-mailing your request to 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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