Technical Data Guide





MasterTop® 1217CR

100% solids pure Novolac epoxy flooring system

FORMERLY SELBACHEM™ 6711

YIELD

Primer: 200 ft²/gallon (5 m²/L) Base coat: 80 ft²/gallon (2 m²/L) Topcoat: 80 ft²/gallon (2 m²/L) (or dependent on texture)

PACKAGING

1 gallon (3.79 L) cans 5 gallon (18.95 L) pails

COLOR

Standard MasterTop Epoxy colors.
Refer to the Master Builders Solutions
Performance Flooring Color Chart for
more information. Custom colors are
available on request; custom orders
are subject to minimum quantities and
increased manufacturing lead times.

SHELF LIFE

2 years when properly stored

STORAGE

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

VOC CONTENT

See MasterTop 1217CR LEED Letter

DESCRIPTION

MasterTop 1217CR system is a 100% solids, non-reinforced topping with resistance to 98% sulfuric acid. It consists of two 15 - 20 mil Novolac topcoats, resulting in a total system thickness of 30 - 40 mils. The finish can be adjusted to provide various slip resistant textures.

PRODUCT HIGHLIGHTS

- Provides the highest level of chemical resistance for exposure to the harshest industrial environments
- 100% solids epoxy formulation is VOC compliant in all regions and low in odor
- Creates a hard surface that is easy to clean and maintain
- Available in various textures to customize slip resistance according to facility needs

APPLICATIONS

- Where harsh chemicals are used or stored
- · Industrial plants
- Petrochemical facilities
- Battery manufacturing and storage areas
- · Pulp and paper industries
- Food processing plants
- · Waste areas
- Kitchens
- · Electroplating operations
- · Acid-etching environments

LOCATION

Interior

SUBSTRATE

New and existing concrete surfaces and toppings



TECHNICAL DATA

COMPOSITION

MasterTop 1217CR is a 100% solids pure Novolac epoxy.

TYPICAL PROPERTIES

PROPERTY	VALUE
Tack free time, hrs	4 – 6
Initial cure, hrs	24

TEST DATA

PROPERTY	RESULTS	TEST METHODS
Mixed viscosity, cps	4,500	ASTM D 2393
Pot life, min	40	ASTM D 2471
Bond strength, psi (MPa)	2,600 (18) 100% concrete failure	ASTM C 882
Compressive strength, psi (MPa)	14,300 (99.3)	ASTM D 695
Tensile strength, psi (MPa)	5,700 (39.58)	ASTM D 638
Tensile elongation, %	3.7 ±0.3	ASTM D 638
Hardness, Shore D	80 ±2	ASTM D 2240

Unless otherwise noted, test samples were cured for 28 days at 73° F (23° C).

CHEMICAL RESISTANCE

CHEMICAL	RESISTANCE
Sulfuric acid, 98%	Excellent
MEK	Very good
Acetic acid, 20%	Very good

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

HOW TO APPLY

SURFACE PREPARATION

- 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.
- 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 ft² (2.35 m²) test in an inconspicuous area that meets the owner's expectations for appearance, slip resistance, and performance.

MIXING

 Mix the components for this product in the following ratios.

TYPICAL PROPERTIES

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APPLICATION COMPONENTS	MIX RATIO BY VOLUME
Primer MasterTop GP 500 Part A / Part B	2 to 1
Base Coat MasterTop TC 570CR Part A / Part B	2 to 1
Topcoat MasterTop TC 570CR Part A / Part B	2 to 1

- 2. Properly mix each component separately before mixing together to ensure 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 rpm. Keep the paddle below the surface to avoid entrapping air. Do not mix by hand.

PRIMING

Prime the properly prepared concrete with MasterTop GP 500 epoxy. Apply the primer at approximately 200 ft²/gal (5 m²/L). Allow to cure.

APPLICATION

BASE COAT

- 1. Mix MasterTop TC 570CR as described under Mixing. Apply the mixed material on primed concrete by squeegee or trowel at a maximum coverage rate of 80 ft²/gallon (2 m²/L). Allow it to level. Care should be taken when back rolling the material;it may cause a frothing or whitening of the surface.
- 2. Broadcast aggregate, if desired, into the wet base coat for a slip-resistant surface. Allow to cure. Then sweep, stone, and vacuum the excess aggregate.

TOPCOAT

- 1. Apply the properly mixed MasterTop TC 570CR to the base coat by squeegee or trowel at a maximum coverage rate of 80 ft²/gallon (2 m²/L). Allow it to level. Care should be taken when back rolling the material; it may cause a frothing or whitening of the surface.
- 2. For textured surfaces, apply the material at a rate that will achieve the desired finish.

DRYING TIME

Tack free: 4 – 6 hours

Accepts light traffic: 24 hours

Full cure for chemical resistance: 7 days

Recoat window: 12 – 24 hours

Drying times are based on 73° F (23° C) and 50% relative humidity. Lower temperatures will extend the cure times significantly.

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.
- Use an effective moisture barrier for substrates on or below grade; if not present, call your local Master Builders Solutions representative for options.
- Install this product at a substrate temperature between 50 to 85° F (10 to 30° C).
- After priming and before each additional coat, examine the surface for an amine blush (an oily film that all epoxies may exhibit). If present, the blush must be removed before application of subsequent coats.
- Excessive back rolling may cause frothing or whitening of the surface.
- Because of the highly chemical resistant nature of this material, the application characteristics of this product will vary with temperature and with age. For best results, purchase and use all containers within a similar time frame.
- Do not use for primary containment or constant water immersion.
- 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 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

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.

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