# Technical Data Guide





# MasterTop® 1841 SRS CF

Methacrylate-based, self-leveling, flexible flooring system with decorative flake broadcast.

#### FORMERLY DEGAFLEX™ CF

#### YIELD

Primer: MasterTop SRS 41P with MasterTop SRS 103IN - 100 ft² (9.3 m²)/batch
Self-Leveling Body Coat:
MasterTop SRS 40TC - 40 ft² (3.71 m²)
batch @ 1/8" (3.2 mm)
Top Coat: MasterTop SRS 71TC
100 ft² (93 m²) / batch
Flake Blend: MasterTop DE 111FK
6.54 ft² / pound (1.34 m²/kg)
All coverage rates are approximate.
Coverage rates will vary with the desired texture and porosity of substrate.

#### PACKAGING

MasterTop SRS 41P: 4.5 gallon (17 L) pail, 49 gallon (185 L) drum
MasterTop SRS 40TC: 4.5 gallon (17 L) pail, 53.5 gallon (202.5 L) drum
MasterTop SRS 71TC: 4.5 gallon (17 L) pail, 47.5 gallon (179.8 L) drum
MasterTop SRS 103IN:
4.5 gallon (17 L) pail
MasterTop SRS 100SL:
40 pound (18.1 kg) bag
MasterTop SRS 100HD / Powder
Hardener:
2.5 pound (1.1 kg) bottle, 50 pound box
MasterTop PGM 155 Pigment:
10 pound (4.5 kg) pail
MasterTop DE 111FK Flake Blend:

#### COLOR

55 pound (25 kg) box

See Performance Flooring Color Guide for pigment and flake blend color offerings.

#### SHELF LIFE

Resins: 2 years when properly stored

#### STORAGE

Keep stored in cool, dry environment, and out of direct sunlight.

#### VOC CONTENT

See MasterTop SRS LEED Letter

#### DESCRIPTION

MasterTop 1841 SRS CF is a methyl-methacrylate (MMA), self-leveling flexible flooring system for use in areas that require a quick curing, decorative floor. The quick installation process makes this flooring system ideal for research facilities, laboratories, public assembly facilities or office buildings where minimal downtime is required. MasterTop 1841 SRS CF is an impervious, seamless flooring system, where dirt and spills will remain on the surface and are easily removed by most regular cleaning procedures. Additionally, MasterTop 1841 SRS CF is a flexible flooring system able to withstand environments with temperature swings or exterior applications. The unique chemistry of the MasterTop 1841 SRS CF system provides a full cure in one hour or less for each component and provides a permanent chemical bond between each coat.

#### PRODUCT HIGHLIGHTS

- Fully cures in one hour, reducing downtime for a quick return to service
- Seamless, impervious floor that is easy to sanitize, clean and maintain
- UV resistance providing long term color performance
- Decorative flake broadcast provides an aesthetic texture that hides visible dirt
- Excellent chemical resistance for a wide range of applications
- Flexible flooring system able to withstand temperature swings

#### **APPLICATIONS**

- Used to resurface and coat concrete floors
- · Use where aesthetics are a concern
- · Exterior environments subject to freeze/thaw
- Pharmaceutical processing and research areas
- · Over de-glazed quarry tile
- Grocery stores
- Food processing facilities
- · Public assembly facilities and stadiums

### LOCATION

- · Interior and exterior applications
- Applications subject to the freeze/thaw from exterior environments.

#### **SUBSTRATE**

 Over new or existing concrete surfaces. When applying over other substrates, such as metal or tile, contact Master Builders Solutions Technical Service.



# TECHNICAL DATA TEST DATA

## **MASTERTOP SRS 41P**

PROPERTY	RESULTS	TEST METHODS
Percentage Reactive Resin	100%	
Percentage Solids	100%	
Water Absorption, (%/24 hours)	0.06	ASTM D570
Tensile Strength Elongation @ Break Tensile Modulus	3,550 psi (24.5 MPa) 1.3% 2.1 x 10 <sup>5</sup> psi	ASTM D638 ASTM D638 ASTM D638
Hardness (Shore D)	75	ASTM D2240
Viscosity	15 – 25 cps	ASTM D2393
Electrical Resistivity	Vol: 2.5 x 10 <sup>15</sup> ohm/cm Surf: 8 x 10 <sup>12</sup> ohm	ASTM D257 ASTM D257

# MASTERTOP SRS 40TC

PROPERTY	RESULTS	TEST METHODS
Percentage Reactive Resin	100%	
Percentage Solids	100%	
Water Absorption, (%/24 hours)	<0.1%	ASTM D570
Tensile Strength	1,350 psi (9.3 MPa)	ASTM D638
Elongation @ Break	140%	ASTM D638
Hardness (Shore D)	61	ASTM D2240
Viscosity	450 – 550 cps	ASTM D2393

# MASTERTOP SRS 71TC

PROPERTY	RESULTS	TEST METHODS
Percentage Reactive Resin	100%	
Percentage Solids	100%	
Water Absorption, (%/24 hours)	0.04	ASTM D570
Tensile Strength Elongation @ Rupture	3,555 psi (24.51 MPa) 4%	ASTM D638 ASTM D638
Hardness (Shore D)	80	ASTM D2240
Viscosity	45 – 70 cps	ASTM D2393
Taber Abrasion Resistance (mg. Loss, 1000 cycles, CS17 Wheel)	54	ASTM D4060
Electrical Resistivity	Vol: 7.5 x 10 <sup>13</sup> ohm/cm Surf: 6.5 x 10 <sup>12</sup> ohm	ASTM D257 ASTM D257

Chemical Resistance: Please refer to Master Builders Solutions Performance Flooring Chemical Resistance Guide

#### **HOW TO APPLY**

Every MasterTop SRS flooring system is a multiple component system that utilizes a methyl-methacrylate (MMA) resin. It is critical that the instructions listed in the Safety Data Sheet and on the product label for every component of the system be read, understood and followed. MMA resins are flammable liquids in their uncured state. Smoking, open flames or sparks should not be permitted during the handling of the product. Explosion safe ventilation must be used during the application to minimize vapor collection in the installation area and to improve overall air quality for the crew. All foodstuffs must be removed during installation of the flooring system.

MasterTop SRS flooring systems are installed by approved contracting firms. The following is only a summary of the installation techniques used by SRS MasterTop SRS approved contractors.

#### 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 1869.
- 2.Repair concrete as necessary. If any patching is required, MasterTop 1817 SRS PC should be mixed and placed according to the MasterTop SRS Installation Guide.
- 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 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-4 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. Bond tests should be performed once a small area has been mechanically profiled, so any adjustments can be made to the surface preparation process. Bond tests should be repeated every 500 – 1,000 ft² (46.5 - 93 m²). Please refer to Bond Test Instruction Guide for further information.
- 7. Cracks wider than 1/16" (1.6 mm) should be "chased out" and opened during surface preparation. Any existing joints should be treated according to project specifications. Please refer to Joint Repair Guide for further information.
- 8. Areas around drains and other floor fixtures need to be ground and/or chipped to a depth between 1/2" – 3/4" (12.7 - 19 mm) and tapered back 3" – 6" (7.6 - 15.2 cm) away from drain (Refer to MasterTop SRS Detail Drawing 3.1).
- Termination points should be saw cut to a depth of 1/4" (6.4 mm) and tapered back (Refer to MasterTop SRS Detail Drawing 3.2).

#### MIXING

(Refer to SRS MasterTop SRS Mixing Chart for exact batch sizes and measurements)

# MASTERTOP SRS 41P PRIMER

Measure resin and MasterTop SRS 103IN into pail and add proper amount of powder hardener. Mix with drill mixer for 15 – 30 seconds or until the powder hardener is completely dissolved.

MASTERTOP SRS 40TC SL OVERLAY
Measure resin and pigment into a 5 gallon
pail. Add 1 bag of MasterTop SRS 100SL
powder and mix using a spiral mixing blade
for 40 – 50 seconds, until a homogenous
mixture is obtained. Add proper amount of
powder hardener and mix for an additional
20 seconds.

MASTERTOP SRS 71TC TOP COAT

Measure resin into pail and add proper
amount of powder hardener. If desired, you
can mix in the proper amount of pigment.

Mix with drill mixer for 15 – 30 seconds or until the powder hardener is completely dissolved.

NOTE: After mixing, apply immediately. There will be 7 to 15 minutes of working time, dependent on temperature.

#### APPLICATION

**PRIMER** 

Apply the properly mixed MasterTop SRS 41P resin to the properly repaired concrete or properly prepared aged coating at approximately 100 ft<sup>2</sup> (9.3 m<sup>2</sup>) per batch. Allow primer to cure tack-free to an even, satin-like gloss and re-prime any dry spots.

#### **COVE BASE**

If a cove base is to be installed, mix and apply according to the SRS MasterTop SRS "Cove Base Application Guide". Install cove base prior to installation of overlay coat.

#### SCRATCH COAT

Any rough areas or depressions less than 1/4" (6.4 mm) should receive a scratch coat of MasterTop SRS 40TC SL to smooth and level these areas. Any drips or ridges over 1/8" (3.2 mm) should be ground or sanded smooth. Allow to cure.

# OVERLAY COAT

Apply the properly mixed MasterTop SRS 40TC SL overlay coat at 40 ft<sup>2</sup> (3.71 m<sup>2</sup>) per batch, at 1/8" (3.2 mm) thickness.

#### AGGREGATE BROADCAST

Immediately following overlay coat installation, flake broadcast into wet material. Even broadcast is best achieved by throwing handfuls of broadcast media towards ceiling and letting it "rain down" on surface. Broadcast until no wet spots are apparent on floor. Allow overlay coat material to cure. Remove excess by sweeping with a medium stiff broom. Follow with a thorough vacuum or blow down to remove all remaining excess flake.

#### TOP COAT (1ST COAT)

Apply the properly mixed MasterTop SRS 71TC topcoat at approximately 80 – 100 ft<sup>2</sup> (7.4 - 9.3 m<sup>2</sup>) per batch. Allow to cure.

#### TOP COAT (2ND COAT)

Apply second coat of properly mixed MasterTop SRS 71TC at approximately 100 – 120 ft<sup>2</sup> (9.3 – 11.1 m<sup>2</sup>) per batch. Allow to cure.

#### DRYING TIME

All components of the MasterTop 1841 SRS CF flooring system fully cure within one hour.

#### **CLEAN UP**

Clean tools as needed with inhibited MMA, acetone, ethyl acetate or similar solvents. Collect and dispose of all site wastes.

#### MAINTENANCE

Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance and reduce any tendency to retain dirt. Follow the Master Builders Solutions Performance Flooring Protection and Maintenance Guide to maximize the life of the floor.

#### FOR BEST PERFORMANCE

- Not for use at application temperatures over 90° F (32° C).
- Not for use in areas exposed to strong solvents (consult Master Builders Solutions Technical Service).
- Install at recommended thickness to ensure proper curing and leveling.
- Topcoat must be back-rolled immediately to ensure uniform finish.
- Each application must be completely cured prior to the next application.
- Protect or remove food items prior to application to avoid any possible contamination.
- Use clean pails when mixing to avoid the possibility of improper curing.
- Proper air flow is critical to curing MMA materials. The use of fans is mandatory where air flow is restricted.
- Apply a bond test every 500 1,000 ft<sup>2</sup> prior to floor installation.
- Master Builders Solutions 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.

- 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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