

# MASTERTOP® APS® 2011

Clear floor coating or topcoat floor system

## DESCRIPTION:

The MASTERTOP® APS® 2011 floor system is a unique hybrid polymer blend of rapid curing resins. It is specially formulated for installation as a standalone coating for concrete or as the topcoat for MASTERTOP APS 2045 or MASTERTOP APS 2046 flooring. The MASTERTOP APS 2011 system has good chemical resistance, cures quickly and has minimal odor during placement and/or curing.

The hybrid polymer used in the MASTERTOP APS 2011 system provides unique curing capabilities that can significantly reduce customer downtime and contractor labor costs. The system is designed for commercial, industrial and high traffic area floors that are prone to abrasion and liquid spills. The MASTERTOP APS 2011 system contains no solvents, has zero volatile organic compounds (VOCs) and is non-flammable, non-combustible and non-corrosive according to Department of Transportation (DOT) specifications.

## RECOMMENDED FOR:

- Warehousing & commercial storage facilities
- Manufacturing & assembly facilities
- Food & beverages facilities
- Waste industry
- Quick installation in new or repair applications
- The topcoat system for the MASTERTOP APS 2045 or MASTERTOP APS 2046 trowel applied system

## FEATURES/BENEFITS:

- Fast cure rates
- Low odor allows installation in occupied facilities
- Non-flammable (*per DOT*)
- Non-combustible (*per DOT*)
- Non-corrosive (*per DOT*)
- Solvent free / 100% solids
- Fast installation rates
- Variable surface textures can be achieved

## TECHNICAL DATA:

<b>Volatile Organic Compounds (VOC)</b>	0 lbs/gal (0 gm/litre)
<b>Tensile Strength</b> <i>ASTM D 638</i>	5,000 to 8,000 psi (34 to 54 MPa)
<b>Flexural Strength</b> <i>ASTM D 790</i>	16,500 to 17,500 psi (114 MPa to 121 MPa)
<b>Water Absorption</b> <i>ASTM C 413</i>	.41%
<b>Tensile Elongation</b> <i>ASTM D 638</i>	5.8%
<b>Impact Resistance</b> <i>Gardner Direct</i>	Greater than 160 in/lb

## Hardness, Shore D

*ASTM D 2240* 70 to 80 (after 7 days)

## Compressive Strength

*ASTM C 109* 1 Day: 8,000 psi; 7 Days: 10,000 psi  
(55 MPa) (69 MPa)

## Bond Adhesion Strength

>350 psi (4,000 psi concrete)

## Coefficient of Thermal Expansion

*ASTM C 531-90*  $8.76 \times 10^{-5}$  in/in/ °F

## Abrasion Resistance

*ASTM D 4060;*  
*Taber Method, 1000 cycles* 39 mg Weight Loss

## Chemical Resistance

Consult your local Master Builders representative.

## Shelf Life

6 months if stored in original unopened container at 50°F to 70°F (10°C to 21°C).

## GENERAL INFORMATION:

### MASTERTOP APS 2011 COMPONENTS

- Part A: Hybrid Polymer #2
- Part B: Activator #1

## COLORS

MASTERTOP APS 2011 is available in clear only.

## MIXED MATERIAL @ 72°F (22°C)

**Working time:** 15 to 20 minutes  
**Cure time for foot traffic:** 4 to 6 hours  
**Cure time for vehicle traffic:** 24 hours

NOTE: Working time decreases with increasing temperature.

## ESTIMATING:

### MASTERTOP APS 2001 PRIMER

Primer is necessary only when MASTERTOP APS 2011 System is used as a stand-alone coating.

MASTERTOP APS Hybrid Polymer #2/Part A

Part A: .62 gal (2.35 litre)  
Packaging: Short filled 2.6 gal (9.85 litre) plastic can

MASTERTOP APS Activator #2/Part B

Part B: .31 gal (1.17 litre)  
Packaging: .5 gal (1.9 litre) plastic bottle

### MASTERTOP APS 2011 UNIT

MASTERTOP APS Hybrid Polymer #2/Part A

Part A: .62 gal (2.35 litre)  
Packaging: Short filled 2.6 gal (9.85 litre) plastic can

MASTERTOP APS Activator #2/Part B

Part B: .31 gal (1.17 litre)  
Packaging: .5 gal (1.9 litre) plastic bottle

### COVERAGE RATES (Approximate)

- 1 gal of MASTERTOP APS 2011 primer unit:  
125 to 175 ft<sup>2</sup>/unit (11.6 to 16.3 m<sup>2</sup>/unit)
- 1 gal of MASTERTOP APS 2011 primer unit:  
80 ft<sup>2</sup>/unit @ 20 mils (7.5 m<sup>2</sup>/unit @ .05 mm)

### SURFACE PREPARATION PROCEDURES:

Concrete must be thoroughly cured, free of oils, grease, dust, dirt, curing compounds and mold release agents. Grit blast, scarify or mechanically abrade substrate to remove laitance, loose material and surface contamination. Concrete substrate surface must be dry at time of application and throughout curing to ensure proper bond.

### PRODUCT USAGE INSTRUCTIONS:

#### COATING APPLICATIONS (OVER CONCRETE)

**Prime:** Mix MASTERTOP APS 2001 hybrid polymer and MASTERTOP APS 2001 activator separately prior to blending.

Mechanically mix MASTERTOP APS 2001 Activator into MASTERTOP APS 2001 Hybrid Polymer for 60 seconds and immediately pour all material onto concrete surface and spread using spring steel trowel, roller and/or squeegee. Material should be placed evenly at thicknesses of approximately 5 to 7 mils (0.125 to 0.175 mm) and lightly seeded with 10 lbs per 100 ft<sup>2</sup> (4.5 kg per 9.3 m<sup>2</sup>) of aggregate. Allow material to cure 30 to 60 minutes and vacuum away loose particles of aggregate.

#### BODYCOAT APPLICATIONS (OVER CONCRETE):

Stir MASTERTOP APS 2011 hybrid polymer and MASTERTOP APS 2011 activator separately prior to blending.

Mechanically mix MASTERTOP APS 2011 activator into MASTERTOP APS 2011 hybrid polymer and blend for 60 seconds. Immediately pour all material onto concrete surface and spread evenly using a spring steel trowel or squeegee. Back roll material to minimize visible ridge marks. A second coat of material may be placed once the first coat is tack free [4 to 6 hours @ 72°F (22°C)]. Rollers should have a 3/16" or 1/4" (4.8 or 6.4 mm) nap. Final surface texture can be varied to specific project requirements. Contact your Master Builders representative for details.

#### Topcoat Applications (over MASTERTOP APS 2045 or MASTERTOP APS 2046)

Stir MASTERTOP APS 2011 hybrid polymer and MASTERTOP APS 2011 activator separately prior to blending.

Mechanically mix 2.2 pounds (1 kg) of dry, washed 100 to 125 mesh sand into the MASTERTOP APS 2011 hybrid polymer. Blend sand and hybrid polymer solution for 60 seconds. Add to this solution the MASTERTOP APS 2011 activator and again mix for 60 seconds. Immediately pour all material onto cured MASTERTOP APS 2045 or MASTERTOP APS 2046 and spread evenly using a spring steel trowel or squeegee. Pull material tightly and minimize visible ridge marks. **DO NOT** back roll first coat of MASTERTOP APS 2011. A second coat of material may be placed once the first coat is tack free [4 to 6 hours @ 72°F (22°C)]. The second coat should be mixed and placed similarly to the first but **CAN BE** back rolled with a 3/16" or 1/4" (4.8 or 6.4 mm) nap roller. The addition of the sand component should be done for both the first and second coats.

**Note:** This is a fast curing product that will react quicker in mass than in thin film. To maximize the working time of the material, it is recommended that once mixed all of the material be poured onto the floor as quickly as possible. The "dip and roll" application method used in other polymer floor applications is **NOT** recommended for MASTERTOP APS 2011. Pour all of the mixed material from the bucket in thin "ribbons" and then spread evenly on the surface using a spring steel trowel or squeegee. Do not leave mixed material in bulk in the pail.

### CLEAN UP:

Hand tools and power equipment can be cleaned with solvent-based cleaners.

### LIMITATIONS:

- Surface and air temperature must be at least 50°F (10°C) during installation and initial cure.
- Material must be stored in a cool, dry area [50°F to 70°F (10°C to 21°C)], away from direct sunlight, flame or other hazards.
- Movement of sub-floor cracks may transmit through flooring.
- An effective vapor barrier is required beneath substrates in contact with ground.
- Adequate ventilation must be ensured (according to OSHA standards).

### SAFETY PRECAUTIONS:

This product should only be used by qualified personnel for recommended applications in accordance with current, published installation guidelines. Please review MSDS sheets prior to placing any material and/or for specific product information.

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