

MASTERTOP® APS® 2010

Pigmented floor coating or topcoat

DESCRIPTION:

The MASTERTOP® APS® 2010 system is a unique hybrid polymer blend of rapid curing resins. It is formulated to be a standalone coating for concrete, or as the topcoat for MASTERTOP APS 2040 or MASTERTOP APS 2041 flooring. The MASTERTOP APS 2010 system has good chemical resistance, cures quickly, and has minimal odor during placement and/or curing.

The hybrid polymer used in the MASTERTOP APS 2010 system provides unique curing capabilities that can significantly reduce customer downtime and contractor labor costs. The system is designed for commercial, light industrial and institutional floors that are prone to traffic abuse and liquid spills. MASTERTOP APS 2010 system contains no solvents, has zero volatile organic compounds (VOCs), is non-flammable, non-combustible and non-corrosive according to Department of Transportation (DOT) specifications.

RECOMMENDED FOR:

- Warehousing & commercial storage facilities
- Light manufacturing & assembly facilities
- Food & beverage facilities
- Retail & showroom areas
- Hospitals & educational facilities
- Quick installation in new or repair applications
- The topcoat system for MASTERTOP APS 2040 or MASTERTOP APS 2041 trowel applied systems

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
- Various surface textures can be achieved

TECHNICAL DATA:

| | |
|---|------------------------------------|
| Volatile Organic Compounds (VOC) | 0 lbs/gal (0 gm/litre) |
| Tensile Strength <i>ASTM D 638</i> | 6,000 to 8,000 psi (34 to 54 MPa) |
| Tensile Elongation <i>ASTM D 638</i> | 5.8% |
| Impact Resistance <i>Gardner Direct</i> | Greater than 160 in/lb |
| Hardness, Shore D <i>ASTM D 2240</i> | 70 to 80 (after 7 days) |
| Compressive Strength | 8,000 to 10,000 psi (55 to 69 MPa) |

Bond Adhesion Strength 350 psi concrete failure
(4,000 psi concrete)

Water Absorption
ASTM C 413 .41%

Flexural Strength
ASTM D 790 16,500 to 17,500 psi
(114 to 121 MPa)

Coefficient of Thermal Expansion
ASTM C 531 8.76×10^{-5} in/in/ °F

Abrasion Resistance
ASTM D 4060; Taber Method 39 mg Weight Loss (1,000 cycles)

Chemical Resistance
Consult your local Master Builders representative.

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

GENERAL INFORMATION:

MASTERTOP APS 2010 COMPONENTS

Part A: Hybrid Polymer, Pigmented Liquid
Part B: Activator, Amber Liquid

COLORS

The MASTERTOP APS 2010 system is available in the following standard colors:

| | |
|-------------------|---------------------|
| (1246) Light Grey | (1245) Medium Grey |
| (1211) Dark Grey | (1231) Tile Red |
| (1248) Beige | (1242) Country Blue |

Contact your Master Builders representative for information about custom colors.

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 2001PRIMER - Primer is necessary only when Mastertop APS 2010 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 2010 Coating

MASTERTOP APS Hybrid Polymer #1/Part A

Part A: .68 gal (2.58 litre)

Packaging: Short filled 2.6 gal (9.85 litre) plastic can

MASTERTOP APS Activator #1/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 2001PRIMER unit:
125 to 175 ft²/unit (11.6 to 16.3 m²/unit)
- 1 gal of MASTERTOP APS 2010 unit:
80 ft²/unit @ 20 mils (7.5 m²/unit @ 0.5 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 well cured to ensure proper bond. If the prepared concrete surface is porous or rough, a coat of MASTERTOP APS 2001 PRIMER is recommended.

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 ft² (4.5 kg per 9.3 m²) of aggregate. Allow material to cure 30 to 60 minutes and vacuum away loose particles of aggregate.

BODYCOAT APPLICATIONS (OVER CONCRETE):

Stir MASTERTOP APS 2010 hybrid polymer and MASTERTOP APS 2010 activator separately prior to blending.

Mechanically mix MASTERTOP APS 2010 activator into MASTERTOP APS 2010 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 2040 or MASTERTOP APS 2041)

Stir MASTERTOP APS 2010 hybrid polymer and MASTERTOP APS 2010 activator separately prior to blending.

Mechanically mix 2.2 pounds (1 kg) of dry, washed 100 to 125 mesh sand into the MASTERTOP APS 2010 hybrid polymer. Blend sand and hybrid polymer solution for 60 seconds. Add to this solution the MASTERTOP APS 2010 activator and again mix for 60 seconds. Immediately pour all material onto cured MASTERTOP APS 2040 or MASTERTOP APS 2041 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 2010. 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 2010. 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 a solvent-based cleaner.

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.

For additional information, contact your local Master Builders representative.

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