

MASTERTOP® APS® 2046

Heavy-duty, trowel-applied floor system (metallic aggregate)

DESCRIPTION:

The MASTERTOP® APS® 2046 floor system is a unique hybrid polymer blend of rapid-curing resins. It combines with a metallic aggregate blend for installation as a seamless 1/4" to 1-1/2" (6.4 to 38 mm) flooring system. The MASTERTOP APS 2046 system has good chemical resistance, **cures quickly from 40°F to 85°F (5°C to 30°C)**, contains no solvents and is composed of 100% solids.

The MASTERTOP APS 2046 system provides excellent abrasion resistance, high impact tolerance and handling properties that can significantly reduce labor and installation steps. The system is designed for heavy industrial and manufacturing facilities, waste collection and transfer stations, and other areas that are prone to traffic and abuse.

The MASTERTOP APS 2046 system is non-flammable, non-combustible, non-corrosive - according to the Department of Transportation (DOT) specifications - and has been developed for both hand trowel and power trowel application.

RECOMMENDED FOR:

- Areas of high impact & abrasion
- Heavy manufacturing & industrial areas
- Waste collection & transfer stations
- Heavy equipment maintenance facilities
- High usage mechanical & shop floors
- Loading docks & staging areas
- Aisleways & other high traffic areas
- Areas where quick installation is necessary

FEATURES/BENEFITS:

- Fast cure rates
- Excellent bond to concrete
- High abrasion resistance
- Greater toughness - energy absorbing capacity is significantly greater than concrete and typical high strength toppings
- Good chemical resistance
- Non-flammable (*per DOT*)
- Non-combustible (*per DOT*)
- Non-corrosive (*per DOT*)
- Solvent-free / 100% solids
- Excellent handling characteristics
- Fast installation rates

TECHNICAL DATA:

All properties are 7 day results unless listed otherwise.

Volatile Organic Compounds (VOC)

0 lbs/gal (0 gm/litre)

| | <u>1 Day</u> | <u>7 Days</u> |
|--|-----------------------|------------------------|
| Compressive Strength <i>ASTM C 109</i> | 8,000 psi (55 MPa) | 12,000 psi (83 MPa) |
| Tensile Strength <i>ASTM C 307</i> | 520 psi (4 MPa) | 750 psi (5 MPa) |
| Flexural Strength <i>ASTM C 348</i> | 850 psi (6 MPa) | 1,400 psi (10 MPa) |

Impact Resistance

Gardner Direct > 240 in/lb

Toughness

LA Rattler Test; 2,000 cycles 35% weight loss

Bond Adhesion Strength

> 350 psi (4,000 psi concrete)

NBS Abrasion Resistance

ASTM C 779 0.007 inches, 60 minutes

Chemical Resistance

Consult your local Master Builders representative.

Shelf Life

6 months if stored in original, unopened containers and stored between 50° to 70°F (10° to 21°C).

GENERAL INFORMATION:

COLORS

MASTERTOP APS 2046 is available in charcoal grey.

MIXED MATERIAL @ 72°F (22°C)

- Working Time
 - Primer: 15 to 20 minutes
 - Body Coat: 20 to 30 minutes
- Cure Time
- Foot Traffic: 2 to 4 hours
- Vehicle Traffic & Chemical Exposure: 24 to 48 hours

ESTIMATING:

MASTERTOP APS 2001 Primer

- 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 2046 Body Coat

- 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 Metallic Aggregate
Two 40 lb (18.12 kg) bags.

MASTERTOP APS 2011 Topcoat* (Optional)

- 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 #1/Part B
Part B: .31 gal (1.17 litre)
Packaging: .5 gal (1.9 litre) plastic bottle.

*Mandatory for waste transfer station and related environments.

COVERAGE RATES (Approximate)

- MASTERTOP APS 2001 Primer:
Approximately 125 to 175 ft²/unit (11.6 to 16.3 m²/unit), depending upon concrete substrate.
- MASTERTOP APS 2046 Body Coat:

| | | | |
|--------------------------|----------------------------|--------|-----------|
| 26 ft ² /unit | (2.6 m ² /unit) | @ 1/4" | (6.4 mm) |
| 13 ft ² /unit | (1.3 m ² /unit) | @ 1/2" | (12.7 mm) |
| 7 ft ² /unit | (0.7 m ² /unit) | @ 1" | (25.4 mm) |
- MASTERTOP APS 2011 Topcoat:
Approximately 100 to 140 ft²/unit (9.3 to 13 m²/unit) @ 10 mils

SURFACE PREPARATION PROCEDURES:

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

PRODUCT USAGE INSTRUCTIONS:

For complete application instructions, please refer to the MASTERTOP APS 2046 Installation Bulletin.

CLEAN UP:

Hand tools and power equipment can be cleaned with a solvent or industrial cleaner prior to material hardening.

LIMITATIONS:

- 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 during material placement and subsequent joint sawing (according to OSHA standards).
- Heat resistance limit is 160°F (71°C) continuous, and 212°F (100°C) intermittent.

SAFETY PRECAUTIONS:

This product should only be used by qualified personnel for recommended applications in accordance with current MASTERTOP APS 2046 Installation Bulletin procedures. Please review MSDS sheets prior to placing any material and/or for specific product information.

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