

3 | 03 53 16 Iron-Aggregated Concrete Topping

MasterTop® 1282MA

Heavy duty epoxy and metallic aggregate floor topping

FORMERLY MASTERTOP® 1182

YIELD

Primer: MasterTop GP 500
200 to 250 ft²/gallon (5 - 6.25 m²/L)
Base Coat: MasterTop GP 500
with metallic aggregate
25 to 30 ft²/batch (2.3 - 2.8 m²),
troweled at 1/4" thickness (6.4 mm)
Finish Coat: MasterTop GP 500 – 150
to 180 ft²/gallon (4.5 m²/L)
All coverage rates are approximate and
may vary dramatically with concrete
porosity and application methods.

PACKAGING

Epoxy Resins:
5 gallon (18.95 L) pails
55 gallon (208 L) drums
Metallic Aggregate: 50 lb (22.6 kg) bags
Pigment: 1 pint (.47 L) can

COLOR

Black color imparted by the aggregate.
Can be pigmented with 7 standard
MasterTop PGM 500 pigment pack
colors. Refer to the Master Builders
Solutions Performance Flooring Color
Guide for more information.

SHELF LIFE

MasterTop Epoxy resins:
2 years when properly stored.
MasterTop MA 1282F aggregate:
2 years when properly stored.
MasterTop PGM 500 pigments:
2 years when properly stored.

STORAGE

Store in unopened containers at 60 –
80 °F (16 – 27 °C) in clean, dry conditions

VOC CONTENT

See MasterTop 1282MA LEED Letter

DESCRIPTION

MasterTop 1282MA is a heavy duty epoxy and metallic aggregate floor topping. This system is designed for heavy duty industrial environments and other areas exposed to traffic and abuse. MasterTop 1282MA can be trowel applied at 1/4 – 1" (6 – 25 mm) in thickness per lift.

PRODUCT HIGHLIGHTS

- Uniquely processed metallic aggregate provides the highest level of impact tolerance and abrasion resistance
- Excellent working characteristics for ease of application
- Superior adhesion to properly prepared concrete to enhance durability
- High abrasion resistance to withstand repeated, heavy traffic
- Tougher than concrete to provide long-lasting, durable floors
- Specially treated metallic aggregate resists oxidation
- 100% solids epoxy technology provides good chemical resistance
- Solvent free, non-flammable and non-combustible for safer installations

APPLICATIONS

- Areas exposed to high abrasion and impact
- Where quick turnaround installations are desired compared to concrete-based toppings
- High-traffic areas
- Industrial, distribution, and manufacturing environments
- Heavy-equipment manufacturing and maintenance facilities
- Waste collection and transfer stations
- Loading docks and staging areas

LOCATION

- Interior floors

SUBSTRATE

- Over new and existing concrete substrates and toppings

TECHNICAL DATA

COMPOSITION

MasterTop 1282MA is an epoxy and metallic-aggregate flooring material.

TYPICAL PROPERTIES

PROPERTY
Maximum in-service temperature, 180 (83) °F (°C)
Drying Time
Primer: 12 – 24 hours
Base coat: 12 – 24 hours
Topcoat: 24 hours

PROPERTY	RESULTS	TEST METHODS
Compressive strength, psi (MPa) 7 day	12,000 (82)	ASTM D 695
Tensile Strength, psi (MPa)	7,960 (54.8)	ASTM D 638
Tensile Elongation, %	3.2	
Flexural strength, psi (MPa)	14,100 (97.1)	ASTM D 790
Abrasion resistance, in (mm), 60 min, 14 day cure	0.005 (0.13)	ASTM C 779
Impact resistance, psi (mm-kg)	> 240 (> 2,760)	ASTM D 5420
Hardness, Shore D	85 – 90	ASTM D 2240

Test results are averages obtained under laboratory conditions. Expect reasonable variations. Unless otherwise noted, test samples were cured 7 days at 70 °F (23 °C) and 50% relative humidity.

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.
- Repair concrete as necessary.
- Use a commercial degreaser to clean floors of oil, grease, and other bond-inhibiting materials.
- Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions.
- Mechanical surface profiling is the preferred method of surface preparation for both new and existing floors. It is the only acceptable method of preparation where warranties will be issued. Mechanically profile the floor to a minimum 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.
- Apply a 2.5 ft² (2.35 m²) test in an inconspicuous area that meet the owner's expectations for appearance, slip resistance, and performance.

MIXING

- Mix the components for this product in the following ratios:

TYPICAL PROPERTIES

APPLICATION COMPONENTS	MIX RATIO BY VOLUME
Primer MasterTop GP 500 Part A / Part B	2 to 1
Base Coat MasterTop GP 500 Part A / Part B + Pigment Pack + MasterTop MA 1282F aggregate	2 to 1
Topcoat MasterTop GP 500 Part A / Part B + Pigment Pack	2 to 1

*Add 1 pigment pack for every 3 mixed gallons (11.3 L) of MasterTop GP 500. Note: Some colors will require 2 pigment packs for every 3 mixed gallons. Consult the Master Builders Solutions Performance Flooring Color Guide for more information)

- Properly mix each component separately before mixing together to ensure a uniform consistency.
- 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.
- Mix properly for 3 minutes with a slow-speed drill and Jiffy-style mixing paddle at 350 rpms. Keep the paddle below the surface to avoid entrapping air. Do not mix by hand. For larger projects use an appropriately sized mechanical mixer.

PRIMING

Apply the mixed primer to the properly prepared concrete at approximately 200 – 250 ft²/gallon (5 - 6.25 m²/L). The base coat can be applied over the wet primer coat.

APPLICATION OF BASE AND FINISH COATS

- Add 100 lbs (45 kg) of MasterTop 1282 MA metallic aggregate to each 1-1/2 gallon (5.6 L) batch of mixed Part A and B.
- Use a trowel to install the body coat at approximately 25 – 30 ft²/batch (2.3 - 2.8 m²) to a 1/4" (6 mm) nominal thickness or to the specified depth. Allow to cure 12 – 24 hours.
- Apply the finish coat at 150 – 180 ft²/gallon 3.7 - 4.5 m²/L). Spread the coating by squeegee or trowel and backroll. The total thickness should be a minimum of 1/4" (6 mm), depending on the specification.
- Allow 24 hours to cure. Do not expose the finished floor to chemicals until it has cured a minimum of 7 days.

FOR BEST PERFORMANCE

- Precondition all components to 70 °F for 24 hours before using.
- Verify the correct components on the jobsite before beginning mixing and application.
- Carry all expansion and control joints through the final topcoat.
- Rapid thermal cycling will lead to premature failure of this product.

