



The Chemical Company

Technical Data Guide

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Resinous
Flooring

MasterTop® 1215 AHS

Epoxy and polyurethane flooring system for aircraft hangars

FORMERLY AIRCRAFT HANGAR FLOOR SYSTEM

YIELD

Primer: 200 ft²/gallon (5 m²/L)

Base coat: 120 ft²/batch (3 m²/L)

First topcoat:

275 – 375 ft²/gallon (6.9 – 9.4 m²/L)

Second topcoat:

275 – 375 ft²/gallon (6.9 – 9.4 m²/L)

All coverage rates are approximate.

Coverage rates will vary with the desired texture and the porosity of the concrete.

PACKAGING

5 gallon (18.95 L) pails

55 gallon (208 L) drums

Pigment: 1 Pint Can

COLOR

Clear and 7 standard colors.

Custom colors are available on request.

Custom colors are subject to minimum quantities, increased manufacturing lead-times, and premium pricing. Refer to the BASF Performance Flooring Color Guide for more information.

SHELF LIFE

MasterTop Epoxy coatings: 2 years when properly stored.

MasterTop TC 493 Polyurethane topcoat: 1 year when properly stored.

MasterTop TC 683 Polyaspartic topcoat: 1 year when properly stored.

STORAGE

Store and transport in unopened containers in a clean, dry area. Protect from freezing.

VOC CONTENT

See MasterTop 1215 AHS LEED Letter

DESCRIPTION

MasterTop 1215 AHS aircraft hangar floor system is a specially formulated epoxy and polyurethane or polyaspartic coating system. It forms a tough, UV-stable, abrasion-resistant flooring system specifically for use in aircraft hangars.

PRODUCT HIGHLIGHTS

- Excellent abrasion resistance, ideal for wheeled traffic
- Chemical and stain resistant for easy maintenance
- Glossy, light reflecting finish for increased visibility and a safer work environments

APPLICATIONS

- Where resistance to aircraft fuels, hydraulic fluids, and rubber tires is required

TECHNICAL DATA

COMPOSITION

Specially formulated products consisting of epoxy primer and base coats and polyurethane topcoats.

TEST DATA

PROPERTY	RESULTS	TEST METHODS
Adhesion , pli	> 30	ASTM D 903
Hardness	H pencil hardness	ASTM D 3363
Salt spray , after 1,000 hours	No effect	ASTM B 117
Accelerated weathering , after 2,000 hours	No effect	ASTM D 822
Moisture vapor , perm inches	0.01	ASTM E 96
Coefficient of friction		ASTM D 2047
Dry	0.74	
Wet	0.73	
Taber abrasion , g loss; 1,000 cycles, CS-17 wheel	0.038	ASTM D 4060

Unless otherwise noted, test samples were cured 7 days at 73° F (23° C). Properties listed represent the complete system. For properties of individual coatings, refer to the appropriate technical data sheet.

CHEMICAL RESISTANCE

Full chemical resistance is achieved after curing for 7 days. For resistance to a specific chemical compound, consult the MasterTop Chemical Resistance Guide.

HOW TO APPLY

SURFACE PREPARATION

- Concrete 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 method of surface preparation for both new and existing floors. Mechanically profile the floor to CSP 3 – 4 (approximating medium-grit sandpaper) as described by the International Concrete Repair Institute. Do not use acid etching for

surface preparation. Do not use any method that could fracture the concrete

- Apply a 25 ft² (2.35 m²) test in an inconspicuous area that meets 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	2 to 1
Base Coat MasterTop GP Part A / Part B + MasterTop PGM 500 pigment pack	2 to 1
Topcoat MasterTop TC 493 Part A / Part B or MasterTop TC 683 Part A / Part B	3 to 1 1 to 1

*Add 1 pigment pack every 3 mixed gallons of MasterTop GP 500. (note: Some colors will require 2 pigment packs for every 3 mixed gallons. Consult the MasterTop Pigment Pack color chart for more information.)

- Properly mix each component separately before mixing together to ensure 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.

PRIMING

Apply the mixed primer at 200 ft²/gallon (5 m²/L). Allow to cure.

APPLICATION

- Add 1/3 gallon (1.26 L) of 200 mesh silica flour to each batch of mixed MasterTop GP 500 (2 gallons of part A, 1 gallon of part B and 1 pigment pack). Apply at a rate of 120 ft² (11.15 m²) / batch. Allow to cure.

2. Apply the mixed topcoat at 275 – 375 ft²/gallon (25.5 – 34.8 m²). Allow to cure.
3. Apply a second topcoat, if required. The floor can be opened to traffic in 24 hours.

DRYING TIMES

Primer: 12 – 24 hours

Base coat: 12 – 24 hours

Polyurethane top coat: 18 – 24 hours

Polyaspartic top coat: 4 – 8 hours

Drying times assume 70° F (21° C) and 50% relative humidity.

MAINTENANCE

Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance, and reduce any tendency to retain dirt. Refer to the MasterTop cleaning and maintenance guide for more information.

PRIMING

- An effective moisture vapor barrier is required for substrates on or below grade; if not present, contact your BASF representative for options.
 - AHFS should be installed at a substrate temperature from 50 to 85° F (10 to 30° C).
 - Do not expose MasterTop AHFS to any chemicals until fully cured (7 days).
 - Boxing batches is recommended to ensure color consistency
 - The architect and owner should address joint details with the flooring contractor before the job starts.
 - BASF representatives and 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.
 - Use pads under vehicle wheels to reduce the possibility of tire-plasticizer migration.
 - Precondition this product to 70° F (21° C) for 24 hours before using.
 - Do not exceed the recommended recoat window of 24 hours; if in doubt, contact your BASF flooring specialist.
- Make certain the most current versions of product data sheet and SDS are being used; visit www.master-builders-solutions.BASF.us to verify the most current versions.
 - Proper application is the responsibility of the user. Field visits by BASF 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.basf.us, e-mailing your request to basfbscst@basf.com or calling 1(800)433-9517. Use only as directed. **For medical emergencies only, call ChemTrec 1(800)424-9300.**

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