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Technical Data Guide

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Traffic Coatings

MasterSeal® Traffic 2575

High-solids polyurethane waterproofing, traffic bearing membrane systems for vehicular and pedestrian areas

PACKAGING
– MasterSeal P 255: 3.4 gal (12.9 L) kits
– MasterSeal M 265: 4.66 gal (17.6 L) kits
– MasterSeal TC 275: 4.78 gal (18.1 L) kits
– MasterSeal TC 295: 5.25 gal (19.8 L) kit

YIELD
Please consult system application for product coverage information

COLORS
Gray, Charcoal

STORAGE
Store unopened containers in cool, clean, dry area

SHELF LIFE
MasterSeal P 255, M 265, TC 275, TC 295: 1 year when properly stored

DESCRIPTION
MasterSeal Traffic 2575 is a fluid-applied polyurethane waterproofing system. MasterSeal Traffic 2575 uses a fast-setting two-component reactive curing mechanism. It has a very low odor and is VOC compliant. MasterSeal Traffic 2575 is composed of:

- MasterSeal P 255—a two-component polyurethane-based adhesive primer.
- MasterSeal M 265—a two-component fast-curing polyurethane base coat with outstanding mechanical properties, including excellent elongation.
- MasterSeal TC 275—a two-component fast-curing aromatic polyurethane topcoat with outstanding mechanical properties, including high tensile strength and excellent tear and abrasion resistance.
- MasterSeal TC 295 (exterior applications)—a high performance, two-component aliphatic, high solids urethane waterproofing membrane designed as a topcoat for the MasterSeal Traffic 2575.

PRODUCT HIGHLIGHTS

- MasterSeal 941DR aggregate is free of respirable crystalline silica
- Provides skid resistance to increase safety and offers excellent durability and superior abrasion resistance
- Two-component system provides faster setting times, even in cooler climates, to help reduce facility downtime
- Low odor/high solids allow MasterSeal Traffic 2575 to be used near inhabited structures; Non-flammable and solvent-free
- Seamless waterproof membrane helps protect concrete from freeze/thaw damage; protects occupied spaces below from water damage and has no seams that may result in leaks
- Excellent chloride resistance to protect against chloride intrusion, extending the life of reinforcing steel
- Excellent chemical resistance helps protect against common parking deck chemicals including gasoline, diesel fuel, oil, alcohol, ethylene glycol, de-icing salt, bleach and cleaning agents

VOC CONTENT

- MasterSeal P 255 Part A: 10 g/L less water and exempt solvents, when components are mixed
- MasterSeal P 255 Part B: 10 g/L less water and exempt solvents, when components are mixed
- MasterSeal M 265 Part A: 4 g/L less water and exempt solvents, when components are mixed
- MasterSeal M 265 Part B: 5 g/L less water and exempt solvents, when components are mixed
- MasterSeal TC 275 Part A: 71 g/L less water and exempt solvents, when components are mixed
- MasterSeal TC 275 Part B: 13 g/L less water and exempt solvents, when components are mixed
- MasterSeal TC 295 Part A: 0 g/L less water and exempt solvents when components are mixed
- MasterSeal TC 295 Part B: 5 g/L less water and exempt solvents when components are mixed

Technical Data

Composition

MasterSeal Traffic 2575 is a two-component polyurethane membrane.

Compliances

- CSA S413
- ASTM C 957

Typical Properties

PROPERTY	VALUE
Solids content, %	
MasterSeal P 255	99
MasterSeal M 265	99
MasterSeal TC 275	99
MasterSeal TC 295	90
Viscosity, cps*	
MasterSeal P 255	630
MasterSeal M 265	3,400
MasterSeal TC 275	1,600
MasterSeal TC 295	2,500–4,000
Working Time, min*	
MasterSeal P 255	30 ± 10
MasterSeal M 265	20 ± 5
MasterSeal TC 275	20 ± 5
MasterSeal TC 295	30 ± 10
Initial cure, hrs	
MasterSeal P 255	2–3
MasterSeal M 265	3–4
MasterSeal TC 275	3–4
MasterSeal TC 295	4–8

*Tested at 73 °F (23 °C) and 50% relative humidity. Warm temperatures will shorten pot life. Cold temperatures will increase viscosity. Plan work accordingly.

APPLICATIONS

- Interior or exterior, above grade
- Mechanical rooms
- Balconies
- Plaza decks
- Elevated concrete slabs
- Decks/balconies

INDUSTRIES/SECTORS

- Stadiums
- Parking Garages
- Commercial Construction
- Building and Restoration

Test Data

PROPERTY	RESULTS	SPECIFICATIONS	TEST METHOD
Crack bridging, MasterSeal M 265	Passes	No cracking	ASTM C 957
Adhesion peel, pli, Primer and Base Coat			ASTM C 957
Plywood	25	3	
Concrete	14	5	
Adhesion (Pull-off), psi MasterSeal P 255 / MasterSeal M 265	400	—	ASTM D 4541
Tensile strength, psi (MPa),			ASTM D 412
Base Coat	3,400 (23.4)	Control	
MasterSeal TC 275	3,000 (20.7)	Control	
MasterSeal TC 295	2,980 (20.6)	Control	
Elongation, %,			ASTM D 412
Base Coat	900	Control	
MasterSeal TC 275	30	Control	
MasterSeal TC 295	250	Control	
Hardness, Shore A			ASTM D 2240
MasterSeal TC 275	70	—	
MasterSeal TC 295	92	—	
Taber abrasion resistance, mgms; CS-17 Wheel, 1,000 g load, 1,000 cycles, MasterSeal P 255 / M 265 / TC275	100	—	ASTM D 4060
Taber abrasion resistance, mgms; CS-17 Wheel, 1,000 g load, 1,000 cycles, MasterSeal P 255 / M 265 / TC 275 / TC 295	47	—	ASTM D 4060

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

SEALANT • WATERPROOFING & RESTORATION INSTITUTE

Issued to: BASF Corporation
Product: MasterSeal Traffic 2575

ASTM D 412: Tensile Strength of Top Coat
MasterSeal TC 295 Top Coat: Tensile Strength: 3,200 psi; Elongation: 410%
Pass ✔

ASTM D 4541: Adhesion of Base Coat
MasterSeal M 265 Base Coat w/ Primer P 255
Pull-off Adhesion: 526 psi +
Pass ✔

ASTM D 4060: Abrasion Resistance of Top Coat
MasterSeal TC 295 Top Coat: Abrasion Resistance: 57 mgms loss – mgms loss/1,000 cycles
Pass ✔

Validation Date: 3/1/18-2/28/23

No. 318MST223

DECK COATING VALIDATION
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HOW TO APPLY

SURFACE PREPARATION

CONCRETE

1. Concrete must be fully cured (28 days), structurally sound, clean and dry (ASTM D 4263). All concrete surfaces (new and old) must be shot blasted to remove previous coatings, laitance and all miscellaneous surface contamination and to provide profile for proper adhesion. Abrasive shot blasting must occur after concrete repair has taken place. Acid-etching is not permitted. Proper profile should be a minimum of ICRI CSP-3 achieved by shotblasting (as described in ICRI document 03732).
2. Repair voids and delaminated areas with BASF branded cementicious and epoxy patching materials. For application when fast-turn repairs are required, MasterSeal 350 can be used to repair patches up to 1.5" in depth when used in aggregate slurry mix. Please refer to the MasterSeal 350 Technical Data Guide for proper application techniques.
3. All units must be applied within the specified pot life.

SURFACE PRE-STRIPING AND DETAILING

1. Pre-stripe with MasterSeal P 255 1" (25 mm) beyond all surfaces that require detail work, using a short-nap roller. Just before application of MasterSeal P 255, remove all dust, dirt and contaminants. Allow MasterSeal P 255 to dry tack-free. On the same day, coat primed surfaces with 25–30 wet mils (0.63–0.77 mm) of MasterSeal M 265. Feather the edges.
2. For non-moving joints and cracks less than 1/16" (1.6 mm) wide, apply 25–30" wet mils (0.63–0.77 mm) pre-striping of MasterSeal M 265 over cured MasterSeal P 255. Apply the Base Coat to fill and overlap the joint or crack 3" (76 mm) on each side. Feather the edges.
3. Dynamic cracks and joints over 1/16" (1.6 mm) wide must be routed to a minimum of ¼ by ¼" (6 by 6 mm) and cleaned. Install bond breaker tape to prevent adhesion to bottom of joint. Prime joint faces only with MasterSeal P 173 and fill with MasterSeal SL 1™, SL 2™, NP1™ or NP2™. For joints deeper than ¼" (6 mm), use appropriate backer rod. For cracks, sealant should be flush with the adjacent surface. For expansion joints, sealant should be slightly concave. After the sealant has cured, prime the deck on either side of the sealant with MasterSeal P 255. After the P 255 primer is tack free, apply 25–30 wet mils (0.63–0.77 mm) of MasterSeal M 265 pre-stripping over the cured sealant and MasterSeal P 255, overlap the joint 3" (76 mm) on each side.
4. Sealed joints 1" (25 mm) wide or less can be coated over with the MasterSeal Traffic system. Expansion joints exceeding 1" (25 mm) wide, including the primary wide expansion-joint system, are not to be coated so they can perform independently of the deck coating system.
5. Form a sealant cant into the corner at the junction of all horizontal and vertical surfaces (wall sections, curbs, columns) by priming with MasterSeal P 173 and applying a 1" (25 mm) wide bead of MasterSeal NP 1 or MasterSeal NP 2. Tool to form a 45° cant. Apply masking tape to the vertical surfaces 4–5" (102–127 mm) above the sealant cant to provide a clean termination of the vertical detail coat. After the sealant has cured, prime the deck on either side of the sealant with MasterSeal P 255. Apply 25 wet mils (0.63 mm) of MasterSeal M 265 over the cured cant up to the masking tape and 4" (102 mm) onto deck surface.
6. Where the coating system will be terminated and no wall, joint, or other appropriate break exists, cut a ¼ by ¼" (6 by 6 mm) keyway into the concrete. Fill and coat keyway during application of MasterSeal M 265.

UNCOATED METAL SURFACES

Remove dust, debris and any other contaminants from vent, drain pipe, and post penetrations,reglets and other metal surfaces. Clean surfaces to near white per SSPC-NACE2 and prime immediately with MasterSeal P 173. Provide appropriate cant with MasterSeal NP 1 or MasterSeal NP 2 sealants to eliminate 90° angles.

MIXING AND APPLICATION

PRIMER (MasterSeal P 255)

1. Before mixing, precondition both components to a temperature of approximately 70 °F (21 °C).
2. Add entire contents of Part B to Part A. Mix both components with a slow-speed drill for a minimum of 3 minutes. Scrape down sides and bottom of mixing vessel, then mix again for 2 minutes. Keep the mixing paddle submerged during mixing to avoid adding air into the mixture.
3. Apply with paint roller or squeegee at a rate of 200–300 ft^2/gal.
4. Apply primer only to those areas that will be coated within 12 hours with MasterSeal M 265.
5. Minimum curing temperature is 40 °F (4 °C). Protect primed areas from rain and moisture.
6. Base coat may be applied over primer in 2–4 hours depending on temperature and humidity. However, it is important that the primer is tack-free prior to application of base coat.
7. Working time is approximately 30 minutes at 70 °F (21 °C). Higher temperatures will shorten working time.

BASE COAT (MasterSeal M 265)

1. Precondition both A and B components to a temperature of approximately 70 °F (21 °C).
2. Add entire contents of Part A to Part B. Mix components with a slow-speed drill for a minimum of 3 minutes. Scrape down sides and bottom of mixing vessel, then mix again for 2 minutes. Keep the mixing paddle submerged during mixing to avoid adding air into the mixture.
3. Apply at a rate of 25 wet mils (0.63 mm) 55–60 ft^2/gal (1.35–1.47 m^2/L) using a proper notched squeegee and backroll.
4. Apply Base Coat only to those areas that can be recoated within 24 hours with top coat. Allow base coat to cure 3–4 hours before applying intermediate coats.
5. Working time is approximately 20 minutes at 70 °F (21 °C). Higher temperatures will shorten working time.

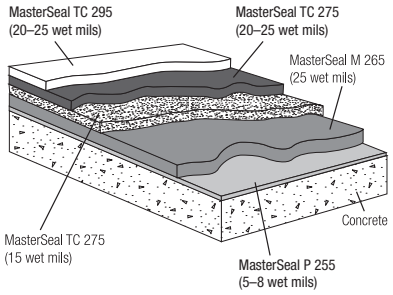
INTERMEDIATE COATS (MasterSeal TC 275)

1. Precondition both A and B components to a temperature of approximately 70 °F (21 °C).
2. Add entire contents of Part A into Part B. Mix components with a slow-speed drill (400–600) rpm, for a minimum of 3 minutes. Scrape down sides and bottom of mixing vessel, then mix again for 2 minutes. Keep the mixing paddle submerged during mixing to avoid adding air into the mixture.

TOPCOATS (MasterSeal TC 295)

1. Precondition both A and B components to a temperature of approximately 70 °F (21 °C).
2. Add entire contents of Part A into Part B. Mix components with a slow-speed drill (400–600) rpm, for a minimum of 3 minutes. Scrape down sides and bottom of mixing vessel, then mix again for 2 minutes. Keep the mixing paddle submerged during mixing to avoid adding air into the mixture.

MASTERSEAL 2575 TRAFFIC SYSTEM



MASTERSEAL 2575 TRAFFIC SYSTEM

1. Apply MasterSeal P 255 with paint roller or squeegee at a rate of 200–300 ft²/gal.
2. Apply 25 wet mils (0.63 mm) of MasterSeal M 265 with a proper notched squeegee at the rate of approximately 55–60 ft²/gal (1.35–1.47 m²/L). Immediately backroll to level base coat. Allow base coat to cure 3–4 hours.
3. Apply 15–20 wet mils (0.38–0.51 mm) of MasterSeal TC 275 intermediate top coat using a properly notched squeegee at the rate of approximately 80–100 ft²/gal (1.96-2.45 m²/L). Immediately backroll to evenly level topcoat. Utilize the aggregate to refusal method described in step #4A next.

4A. AGGREGATE TO REFUSAL METHOD
Immediately broadcast MasterSeal 941/941DR or equivalent 16–30 mesh, rounded silica sand into the wet coating at the rate of 20–35 lbs/100 ft² (1.0–1.75 kg/m²). Immediately after the aggregate broadcast and while the coating is still wet, blow any excess aggregate via a portable blower forward into the wet coating. Do not over apply aggregate; it is acceptable to have localized wet spots in the aggregate surface after completion of this method. This process requires coordination between all members in the work crew. The blower operator, wearing clean spiked shoes, should blow the excess aggregate forward towards the freshly applied and backrolled topcoat. In this method, the coating should not accept additional sand, minimal excess aggregate is on the surface, less aggregate is used and the textured appearance should be fairly uniform.

4B. BROADCAST AND BACKROLL METHOD
Immediately broadcast MasterSeal 941/941DR or equivalent 16–30 mesh rounded silica sand into the wet coating and backroll to encapsulate the aggregate. Evenly broadcast aggregate at the rate of 15–25 lbs/100 ft²/gal (0.75–1.25 kg/m²).

5. Remove all excess or loose aggregate by sweeping or vacuuming.
6. Ensure there is no moisture on the surface of the aggregate/membrane before application of next coat.
7. Apply the second intermediate coat of MasterSeal TC 275 at 20–25 wet mils (0.51–0.63 mm) at the rate of 60–80 ft²/gal (1.96–2.45 m²/L) repeating steps 3 through 6. The next step, #4, can utilize either method described in 4A or 4B.
8. Apply 20–25 wet mils (0.51–0.63 mm) of MasterSeal 295 at a rate of 60–80 ft²/gal (1.96–2.45 m²/L) using a flat squeegee.
9. Immediately backroll to evenly level topcoat.
10. Immediately broadcast MasterSeal 941/941DR or equivalent at the rate of 3–5 lbs/100 ft² (0.15–0.25 kg/m²). Lightly backroll into top coat.
11. Allow minimum curing time of 24–48 hours before allowing vehicular traffic onto the coating. Existing environmental conditions effect the allowable time period.

IMPORTANT NOTE: All coverage rates are approximate and may vary due to the application technique used. Coverage rates are affected by substrate texture, choice and distribution of aggregate, intermediate aggregate load and environmental conditions and application methods and are not under the control of BASF. Ensure that an adequate amount of aggregate is utilized to achieve required slip resistance. Exterior applications must utilize MasterSeal TC 295 at the specified coverage rate of 15–25 wet mils.

MOCKUP

1. Provide mockup of at least 100 ft² (9.3 m²) to include surface profile, sealant joint, crack, flashing and juncture details and allow for evaluation of slip resistance and appearance of MasterSeal Traffic 2575.
2. Install mockup with specified coating types and with other components noted.
3. Locate where directed by architect.
4. Mockup may remain as part of work if acceptable to architect.

CLEAN UP

Clean all tools and equipment immediately after use with MasterSeal 990 or xylene. Cured material must be removed mechanically.

FOR BEST PERFORMANCE

- MasterSeal NP 100 and MasterSeal NP150 should not be used in conjunction with this urethane deck coating system due to potential for curing issues.
- If vapor drive is present or suspected, please consult with your local BASF representative prior to system application.
- MasterSeal TC 275, TC 295, M 265, and P 255 have very short working times. Once the material has been mixed, the coating must be poured onto the surface and applied immediately.
- MasterSeal TC 275 will discolor if exposed to UV light.
- Minimum application temperature is 40 °F (4 °C). Contact technical support when temperatures are above 90 °F (32 °C).
- If areas of inadequate slip resistance exist, an additional top coat backrolled with aggregate is required.
- Do not apply to concrete that is outgassing.
- Warm temperatures will shorten working time; plan work accordingly.
- Concrete should have a minimum compressive strength of 3,000 psi (21 MPa) and be cured for a minimum of 28 days.
- Do not apply MasterSeal Traffic 2575 to concrete slabs on grade, unvented metal pan decks and split slab applications with a membrane between slabs.
- Select the proper type and amount of aggregate to achieve desired slip resistance.
- The best method to ensure the proper wet film thickness is the use of a grid system. Divide the surface to be coated into grids and calculate the square footage of each. Refer to the coverage chart to determine the quantity of coating needed for each grid to arrive at the required mil thicknesses. For example, one pail of MasterSeal M265 should cover approximately 255–280 ft² or a minimum grid of 16 x 16 ft at 25 wet mils. Verify via site mockup.
- Avoid application of MasterSeal Traffic 2575 traffic deck coatings when inclement weather is

present or imminent.

- Do not apply MasterSeal Traffic 2575 to damp, wet or contaminated surfaces.
- Substrate temperature must be more than 5 °F above dew point during application and cure.
- MasterSeal Traffic 2575 is not suitable for use where chained or metal-studded tires will be used.
- 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.
- On steep ramps in excess of 15%, contact your local BASF representative. Do not use self-leveling grade product on slopes greater than 15%.

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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