

MasterSeal® Vehicular Traffic 2575 Primerless

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

PACKAGING

- MasterSeal M 270
- 4.66-gallon (17.64 L) pail
- MasterSeal TC 275
- 4.78-gallon (18.1 L) unitized kit
- MasterSeal TC 295
- Part A: 1.75 gallons (6.62 L) in 6-gallon (22.71 L) pail
- Part B: 3.5-gallon (13.25 L) pail
- MasterSeal 941 Aggregate
- 50-lb (22.68 KG) bag
- MasterSeal 941DR Aggregate
- 50-lb (22.72 KG) bag

SHELF LIFE

| | |
|--------------------|------------|
| MasterSeal M 270: | 1 year |
| MasterSeal TC 275: | 1.25 years |
| MasterSeal TC 295: | 1 year |
| MasterSeal 941: | 5 years |
| MasterSeal 941DR: | 5 years |

STORAGE

Store in unopened containers in a cool, clean, dry area

YIELD

See preferred MasterSeal Deck Coating Solution for total system yield.

COLOR

TC 275: Grey, Charcoal & Black
TC 295: Grey, Charcoal & Tint Base

DESCRIPTION

MasterSeal Vehicular Traffic 2575 Primerless is a fluid-applied polyurethane waterproofing system using fast-setting, two-component reactive curing mechanisms. It has very low odor and is VOC compliant.

MasterSeal Vehicular Traffic 2575 Primerless is composed of:

- MasterSeal M 270 NP, a two-component, fast-curing polyurethane base coat
- MasterSeal TC 275 – a two-component fast curing aromatic polyurethane top coat
- MasterSeal TC 295 – a high performance, two-component, aliphatic, polyaspartic-modified, high solids, polyurethane waterproofing coating

For projects requiring aggregate, two options are available:

- MasterSeal 941, a hard-wearing, angular aggregate
- MasterSeal 941DR, an aggregate free of respirable crystalline silica

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 Primerless to be used over or 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 chemical and chloride resistance helps protect against common parking deck chemicals including gasoline, diesel fuel, oil, alcohol, ethylene glycol, de-icing salt, bleach and cleaning agents as well as chloride intrusion

INDUSTRIES/APPLICATIONS

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

VOC CONTENT

When components are mixed, MasterSeal components have the following g/L VOC contents less water and exempt solvents:

- MasterSeal M 270 Part A: 4 g/L
- MasterSeal M 270 Part B: 5 g/L
- MasterSeal TC 275 Part A: 71 g/L
- MasterSeal TC 275 Part B: 13 g/L
- MasterSeal TC 295 Part A: 20 g/L
- MasterSeal TC 295 Part B: 174 g/L

Technical Data

Composition

MasterSeal Vehicular Traffic 2575 Primerless is a two-component polyurethane membrane.

Compliances

- CSA S413
- ASTM C 957

Test Data

| PROPERTY | M 270 NP | RESULTS TC 275 | TC 295 | TEST METHOD |
|-----------------------|----------|-------------------|-------------|-------------|
| Solids | | | | ASTM D 1259 |
| By weight, % | 99 | 99 | 90 | |
| Viscosity, cps | 3,400 | 1,600 | 2,500–4,000 | ASTM D 2393 |

*Uncured material

Test Data

| PROPERTY | RESULTS | SPECIFICATIONS | TEST METHOD |
|---|--------------|----------------|-------------|
| Crack bridging , MasterSeal M 270 NP | Passes | No cracking | ASTM C 957 |
| Adhesion (Pull-off), psi MasterSeal M 270 NP | 400 | — | ASTM D 4541 |
| Tensile strength , psi (MPa), Base Coat | 3,000 (20.7) | Control | ASTM D 412 |
| MasterSeal TC 275 | 3,000 (20.7) | Control | |
| MasterSeal TC 295 | 3400 (23.4)/ | Control | |
| Pre-Pigmented / Tint Base | 3000 (20.7) | | |
| Elongation , %, Base Coat | 950 | Control | ASTM D 412 |
| MasterSeal TC 275 | 30 | Control | |
| MasterSeal TC 295 | 340/390 | Control | |
| Pre-Pigmented / Tint Base | | | |
| Hardness , Shore A MasterSeal TC 275 | 94 | — | ASTM D 2240 |
| MasterSeal TC 295 | 94/90 | — | |
| Pre-Pigmented / Tint Base | | | |
| Taber abrasion resistance , mgms; CS-17 Wheel, 1,000 g load, 1,000 cycles, MasterSeal M 270 NP / TC 275 / TC 295 | 47 | — | ASTM D 4060 |

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

MasterSeal Aggregates

| PROPERTY | 941 RESULTS | 941 DR RESULTS |
|----------------------|---------------------|----------------|
| Color | Gray | Green to Gray |
| Compressive Strength | 28,000 psi | |
| Hardness | 6–6.5 Mohns | 7 Mohns |
| Specific Gravity | 2.90 g/cc | 3.3 g/cc |
| Bulk Density | 102 pcf | 85 to 105 pcf |
| US SIEVE SIZE | % RETAINED ON SIEVE | |
| #6 | | |
| #12 | 71 | 2–10 |
| #16 | 23 | 10–30 |
| 20 | 2 | 20–35 |
| 30 | 1 | 20–40 |
| 40 | 0 | 7–22 |



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

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DECK COATING VALIDATION
www.swrionline.org

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 CSP3 (as described in ICRI document 03732.) For balconies and other pedestrian areas with limited space or access for shot-blasting, alternative mechanical methods can be used to achieve the recommended surface profile.
2. Repair voids and delaminated areas with BASF branded cementitious 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-STRIPPING AND DETAILING

1. For non-moving joints and cracks less than 1/16" (1.6 mm) wide, apply 25 wet mils (0.6 mm) prestripping of MasterSeal M 270 NP. MasterSeal M 270 NP must be applied to fill and overlap the joint or crack 3" (76 mm) on each side. Feather the edges.
2. Dynamic cracks and joints over 1/16" (1.6 mm) wide must be routed to a minimum of 1/4 by 1/4" (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 1/4" (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, apply 25–30 wet mils (0.64–0.77 mm) of MasterSeal M 270 NP pre-stripping over the cured sealant, overlap the joint 3" (76 mm) on each side.
3. 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.

4. 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, apply 25 wet mils (0.64 mm) of MasterSeal M 270 NP over the cured cant up to the masking tape and 4" (102 mm) onto deck surface.
5. Where the coating system will be terminated and no wall, joint, or other appropriate break exists, cut a 1/4 by 1/4" (6 by 6 mm) keyway into the concrete. Fill and coat keyway during application of MasterSeal M 270 NP.

HOW TO APPLY

COLOR – MasterSeal TC 295 Tint Base

1. All of the 40 standard colors from the MasterSeal Color Portfolio require the use of 2 MasterSeal 900 color packs per 5.25-gallon pail of MasterSeal TC 295 Tint Base.
2. A second aesthetic Top Coat of 10–15 wet mils (0.2–0.4 mm) is required with all Tint Base colors to achieve a uniform appearance.

MIXING – MASTERSEAL M 270 NP

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.

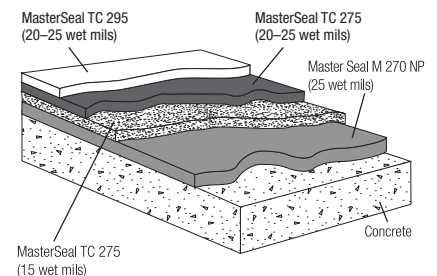
MIXING – MASTERSEAL TC 275 / 295 (PRE-PIGMENTED)

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

MIXING – TC 295 TINT BASE

1. Precondition both A and B components to a temperature of approximately 70 °F (21 °C).
2. Add entire contents of Part B into Part A. Mix components with a slow-speed drill (400–600) rpm, for a minimum of 3 minutes.
3. Transfer entire contents of two (2) pigment cans into MasterSeal TC 295 Tint Base mixed kit. Use a spatula or knife to remove all the pigment from the container. The TC 295 Tint Base Top Coat requires two (2) MasterSeal 900 color paks per 5.25-gallon pail.
4. Scrape down sides and bottom of mixing vessel, then mix again for 2-3 minutes. Keep the mixing paddle submerged during mixing to avoid adding air into the mixture.
5. To ensure consistent color throughout the pail, pour contents into separate container and continue mixing until all Tint Base has dispersed.
6. When using multiple units, all units must be boxed to ensure color consistency.

MASTERSEAL TRAFFIC 2575 PRIMERLESS SYSTEM



MASTERSEAL VEHICULAR TRAFFIC 2575 PRIMERLESS SYSTEM

1. Apply 25 wet mils (0.63 mm) of MasterSeal M 270 NP 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.
2. 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 #3A or broadcast and backroll method in #3B next.

3A. 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.

3B. 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).

- Remove all excess or loose aggregate by sweeping or vacuuming.
- Ensure there is no moisture on the surface of the aggregate/membrane before application of next coat.
- 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, #3, can utilize either method described in 3A or 3B.
- 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.
- Immediately backroll to evenly level topcoat.
- Immediately broadcast MasterSeal 941/941 DR or equivalent at the rate of 3–5 lbs/100 ft² (0.15–0.25 kg/m²). Lightly backroll into top coat.
- 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 15–20 wet mils.

MOCKUP

- 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.
- Install mockup with specified coating types and with other components noted.
- Locate where directed by architect.
- 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.

CURING TIME

Allow curing time of 72 hours before vehicular use and 48 hours before pedestrian use. Extend the curing time in cool-weather conditions. To reduce the time period in which MasterSeal Vehicular Traffic 2575 might be vulnerable to inclement weather or to reduce the time between coats, use MasterSeal 914.

MAINTENANCE

See MasterSeal Traffic maintenance technical bulletin.

FOR BEST PERFORMANCE

- MasterSeal NP 100 and MasterSeal NP150 should not be used in conjunction with these 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 350, MasterSeal M 270 NP, and MasterSeal TC 295 have very short working times. Once the material has been mixed, the

coating must be poured onto the surface and applied immediately

- Minimum application temperature is 40 °F (4 °C). Contact technical support when temperatures are above 90 °F (32 °C)
- 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 and be cured for a minimum of 28 days
- Do not apply the MasterSeal Vehicular Traffic 2530 Primerless system to concrete slabs on grade, splits slabs with a sandwiched waterproofing membrane, unvented metal pan decks or plywood decks.
- Do not apply the MasterSeal Vehicular Traffic 2575 Primerless system to a concrete deck that has deflection exceeding L/480.
- MasterSeal 350 is a rigid epoxy material and may crack due to substrate flex and movement under the membrane system. Do not install MasterSeal 350 over moving sealant joints.
- 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.
- Avoid application of MasterSeal Vehicular Traffic 2575 Primerless traffic deck coatings when inclement weather is present or imminent.
- Do not apply MasterSeal Vehicular Traffic 2575 Primerless to damp, wet or contaminated surfaces
- Terminate MasterSeal 350 at the base of vertical wall areas with a sealant cant bead. It may be required to cover the sealant cant bead and up the wall with either MasterSeal Vehicular Traffic 2500 or MasterSeal TC 225.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the sole 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%.

FOR BEST PERFORMANCE: TC 295 TINT BASE ONLY

- Avoid whipping air into Tint Base.
- Mix pigment cans thoroughly into Tint Base.
- Always do a test area to assure acceptable color appearance and slip resistance.
- Do not apply MasterSeal TC 295 Tint Base heavier than the recommended 15–20 mil (0.38–0.51 mm) application.
- Colors exposed to direct sunlight may fade over a period of time. Darker colors potentially fade at an increased rate.
- Aggregate and substrate conditions may affect color and appearance.

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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