

THOROcoat® 200

Water-based, 100% acrylic
smooth waterproof coating

PRODUCT DATA

9 09980

**Coatings for Concrete
and Masonry**

Description

Thorocoat® 200 is a 100% acrylic, smooth waterproof coating designed for airless spray application.

Yield

Estimated film thicknesses are listed on page 3. Actual coverage will vary depending on substrate texture and porosity.

Packaging

5 gallon (18.9 L) pails

30 gallon (114 L) drums (for factory tinted material only)

Color

Thorocoat® 200 is available in 4 bases (pastel, medium, ultra, and neutral) and 48 standard colors through the Elements color program. Color formulations are available through the Thoro® Tint Program Manual (Form No. 1019056) and Thoro® Tint Program Floppy Disk (Form No. 1019054). Custom colors are available upon request. For further information, please consult your local Degussa distributor or representative.

Texture

Smooth

Shelf Life

1 year when properly stored

Features

- Airless spray application
- High light reflectivity (white only)
- 100% acrylic
- Excellent color retention

Storage

Store in unopened containers in a clean, dry area protected from freezing.

Where to Use

APPLICATION

- Residential and commercial buildings
- Parking garages

LOCATION

- Vertical and overhead
- Interior or exterior
- Above grade

SUBSTRATE

- Stucco and cement plaster
- Concrete and masonry
- EIFS finishes

Benefits

- Speeds production; saves labor
- Suitable for parking garage interiors and tunnels
- Protects and beautifies commercial and residential buildings
- Maintains bright colors without fading over time

How to Apply

Surface Preparation

1. All surfaces must be sound, clean, and free of all dust, dirt, oils, grease, laitance, efflorescence, mildew, fungus, or any biological residues or chemical contaminants that may prevent good adhesion.
2. Use high-pressure waterblasting with or without abrasives added to the water stream to achieve a surface texture similar to 100 grit sandpaper.
3. Some stains and surface contaminants may require chemical removal. When chemical cleaners are used, be sure to neutralize the compounds and fully rinse the surface with clean water.
4. Allow surface to dry before proceeding.

CONCRETE

1. New concrete must be cured a minimum of 28 days before application begins.
2. In addition to laitance and all contaminants, all form-release agents or previously applied sealers must also be removed.
3. Remove all form tie wires and repair holes, small voids, and spalls using the appropriate Thoro® repair product.
4. Abrasive-blast very slick, dense concrete surfaces or prime with Thoro® Primer 2K (see Form No. 1019090) or Thoro® CM Primer (see Form No. 1019088).
5. To check for proper adhesion, a test area is recommended.



Technical Data

Composition

Thorocoat® 200 contains water, acrylic emulsion, fillers, and other proprietary ingredients.

Test Data

PROPERTY	RESULTS	TEST METHODS
Density , lbs/gal (kg/L)	11.3 – 12.3 (1.35 – 1.47)	ASTM D 1475
Solids , %		ASTM D 5201
By weight	56.3	
By volume	39	
Viscosity , KU	102 – 103	ASTM D 562 (Stormer)
VOC content , lbs/gal (g/L)	0.76 – 0.77 (91 – 92)	ASTM D 3960
Light reflectance , %	> 91	ASTM E 1347
Gloss	3.0	ASTM D 523
Resistance to wind-driven rain	Meets requirement – no water penetration	TT-C-555B
Artificial weathering and UV resistance , Xenon Arc, Type B; 5,000 hrs	Passed	ASTM G 26 Passed,
Freeze/thaw resistance , 50 cycles	Passed	ICBO Method
Water-vapor permeance , perms	25	ASTM E 96
Salt spray (fog) resistance , 300 hrs	Passed	ASTM B 117
Flexibility , 1" mandrel	No cracking	ASTM D 1737
Impact resistance , in-lbs		ASTM D 2794
Direct	82	
Reverse	78	
Fungus resistance	No growth; meets requirement	ASTM D 3273
Surface burning characteristics		ASTM E 84
Flame Spread	0	
Smoke	5	
Flash Point , ° F (° C)	> 200 (93)	ASTM D 56 Tag Closed Tester

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

Yield

RATE, FT ² /GAL (M ² /L)	WET FILM, MILS (MICRONS)	DRY FILM, MILS (MICRONS)
125 (3.0)	13 (330)	5 (127)
75 (1.8)	22 (559)	8 (203)

CONCRETE MASONRY UNITS (CMU)

1. All new CMU should be laid true and fully cured to full load-bearing capacity.
2. Remove all mortar splatter and excess mortar before application of the coating.
3. Repoint or fill all voids with the appropriate Thoro® patching product.
4. For best results, CMU should have a base coat of Thoro® Block Filler (see Form No. 1019087) or Thoro® Intermix (see Form No. 1019078).

STUCCO AND CEMENT PLASTER

1. Clean the surface and remove all debonded or delaminated plaster or stucco.
2. Repair with Thoroseal® Plaster Mix (see Form No. 1019908) with Acryl 60® (see Form No. 1019073).
3. Allow new plaster or stucco to cure a minimum of 7 days at 70° F (21° C) and 50% relative humidity. Allow longer cure times if temperatures are lower or relative humidity is higher.
4. After cleaning and profiling, prime chalky surfaces with Thoro® Primer 2K and allow primer to dry.

GUNITE OR SHOTCRETE

New gunite or shotcrete must be fully cured and free of all rebound or poorly bonded aggregates.

EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)

1. Refasten or re-adhere any delaminated or loose expanded polystyrene (EPS) insulation according to the manufacturer's approved methods.
2. Replace or patch any missing or damaged EPS to its original condition.
3. Finish with a trowel acrylic finish to match and blend with existing texture.
4. Allow repaired areas to fully cure.
5. Refer to the EIFS manufacturer's product data sheets for appropriate repair and procedures.
6. Prime chalky surfaces with Thoro® Primer 2K.

BRICK AND POROUS STONE MASONRY

1. After surface cleaning, remove or rake out all soft, loose, unbonded, friable mortar.
2. Repoint or regrout the joints with Dryjoint® (see Form No.1019075).
3. Allow new mortar to fully cure.

EXISTING ACRYLIC COATINGS

1. Sand or grind the edges of the remaining coating to ensure adhesion and a smooth transition of the new material. Sand the edges of the area to a featheredge.
2. Wash down and allow to completely dry.
3. Prime chalky surfaces with Thoro® Primer 2K.

CRACKS

1. Locate and identify all cracks.
2. Clean and detail static hairline cracks caused by plastic or drying shrinkage and fill by a brush coat of Thorocoat® Smooth and allow to dry.
3. Clean static cracks greater than 1/32" (0.8 mm) in width and fill with Thorolastic® Knife Grade or Brush Grade elastomeric patching material (see Form No. 1019113).
4. Treat cracks greater than 1/4 by 1/4" (6 by 6 mm) as standard sealant joints according to a reputable sealant manufacturer's instructions. Contact Degussa Technical Service for recommendations.

Mixing

1. Mix Thorocoat® 200 at slow speed with a drill and mixing paddle to ensure uniform color and to minimize air entrapment.
2. In multi-pail applications, mix the contents of each new pail into the partially used pail to ensure color consistency and smooth transitions from pail to pail.

Application

1. Apply Thorocoat® 200 by brush, spray, roller, or spray-and-backroll.
2. Proper uniform wet-film thickness (WFT) must be maintained during application to ensure the performance characteristics desired (see yield chart).
3. Always work to a natural break and maintain a wet edge during application.
4. For uniformity of color and texture, application techniques must be consistent throughout the project. Inconsistent application techniques will produce texture or color variations.

ROLLER

1. Use a quality 1/2 – 1-1/4" nap roller cover (lamb's wool preferred).
2. Completely saturate the roller and keep it loaded with the coating to build the required mils. Never dry roll.
3. Roll the coating in a consistent fanlike pattern to achieve uniform mil thickness.
4. Cross roll to achieve uniform thickness and maintain a wet edge. Backroll in one direction as stroke variations may result in uneven color and texture.

BRUSH

1. Application by brush is recommended only for small inaccessible areas, e.g., on touch-ups.
2. Use a nylon brush only.

SPRAY

1. Use common airless spray equipment.
2. Spray application may require backrolling to achieve a consistent appearance; work the material tight to the substrate for pinhole-free applications.

Clean Up

Clean all tools and equipment immediately with water. Cured material may be removed by mechanical means.

Drying Time

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

To touch: 1 – 2 hours

To recoat: 2 – 4 hours

To full cure: 5 days

Lower surface or air temperatures and higher relative humidity will extend the drying time.

For Best Performance

- THOROcoat® 200 MUST BE APPLIED IN 2 COATS TO PROVIDE WATERPROOFING.
- Protect from freezing. If partially frozen, place containers in heated area and allow to warm up. Do not apply heat directly to containers.
- Do not apply when the temperature (substrate or ambient) is 4° C (40° F) or below or is expected to fall below 4° C (40° F) within 24 hours after application.
- Do not apply if rain is expected within 24 hours of application.
- Not for immersion service.
- Do not apply Thorocoat® 200 to frozen or frost-covered substrates.
- Do not apply Thorocoat® 200 to horizontal surfaces.
- Do not apply or use in enclosed areas (such as tunnels or below-grade parking structures) without adequate high-volume air ventilation sustained until coating is fully dried.
- Do not use solvents or thinners to reduce the material.
- Do not apply over moving cracks, control joints, or expansion joints.
- Do not apply to existing coatings that are not compatible. Perform appropriate adhesion test.

- Apply a 4 by 4 ft (1.2 by 1.2 m) test area to verify acceptable color and adhesion before proceeding with any project. The test method for measuring adhesion is ASTM D 3359, Measuring Adhesion by Tape, Method A. On the 0 – 5 scale, a minimum adhesion rating of 4A is required.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by Degussa personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety

THOROcoat® 200

Warning

Thorocoat® 200 contains ethylene glycol, precipitated silica, mica, calcium carbonate, titanium dioxide, and aluminum hydroxide.

Risks

May cause skin, eye and respiratory irritation. Ingestion may cause irritation. Repeated ingestion may cause kidney damage.

Precautions

KEEP OUT OF REACH OF CHILDREN. Keep container closed. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing vapors. DO NOT take internally. Use imperious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65

This product contains materials listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

VOC Content

0.76 – 0.77 lbs/gal or 91 – 92 g/L, less water and exempt solvents.

**For medical emergencies only,
call ChemTrec (1-800-424-9300).**

Degussa Building Systems

889 Valley Park Drive
Shakopee, MN, 55379

www.degussabuildingsystems.com

Customer Service 800-433-9517

Technical Service 800-243-6739

LIMITED WARRANTY NOTICE Every reasonable effort is made to apply Degussa exacting standards both in the manufacture of our products and in the information which we issue concerning these products and their use. We warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, Degussa MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and Degussa shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the Degussa Technical Manager.

This information and all further technical advice are based on Degussa's present knowledge and experience. However, Degussa assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights. In particular, Degussa disclaims all WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. DEGUSSA SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND. Degussa reserves the right to make any changes according to technological progress or further developments. It is the customer's responsibility and obligation to carefully inspect and test any incoming goods. Performance of the product(s) described herein should be verified by testing and carried out only by qualified experts. It is the sole responsibility of the customer to carry out and arrange for any such testing. Reference to trade names used by other companies is neither a recommendation, nor an endorsement of any product and does not imply that similar products could not be used.

For professional use only. Not for sale to or use by the general public.

Form No. 1019101 9/03 (Replaces 1/02)
Printed on recycled paper including 10% post-consumer fiber.

© 2003 Degussa
Printed in U.S.A.