



TECHNICAL DATA SHEET

STUCCOAT ONE-COAT

Complete Stucco Assemblies for Above-Grade Walls, Soffits and Ceilings
DS986

PRODUCT DESCRIPTION

The StucCoat One-Coat Systems are complete code complaint cement plaster stucco assemblies incorporating a proprietary fluid applied air/water-resistive barrier and installed on various approved sheathing substrate surfaces for above grade exterior walls, soffits and ceilings. StucCoat One-Coat System assemblies provide higher R-value and improved energy efficiency when combined with an approved continuous insulation board component. StucCoat One-Coat is a concentrate sanded cement plaster base which may be installed as a 1-coat application at a minimum 3/8 inch thickness or a 2-coat scratch and brown conventional application at a minimum 7/8 inch thickness complying with ASTM C926.

StucCoat One-Coat Systems are impact resistant and can be further enhanced with a reinforced crack isolation membrane layer for additional stress crack resistance. Fire resistant assemblies are available. Consult with Dryvit / Tremco CPG Inc. technical services department for further details.



BASIC USES

The StucCoat One-Coat Systems are complete code complaint cement plaster stucco assemblies for on residential, multi-family, and commercial buildings and include options for air/-water-resistive barriers, continuous insulation, crack isolation membrane and a variety of Dryvit standard and specialty textures, and performance enhancements in a full Spectrem of colors.

StucCoat One-Coat System assembly solutions can be configured based on desired Warranty term as follows:

- **10-year** – Dryvit Backstop NTX or Tremco Enviro-Dri air/water-resistive barrier with any Dryvit textured finish coat including Dryvit Stuccoat textured finish. Continuous insulation and crack isolation membrane are optional. Primer is required without crack isolation membrane and with Stuccoat textured finish.
- **15-year** – Tremco ExoAir 230 air/water-resistive barrier with any Dryvit textured finish coat excluding Dryvit Stuccoat textured finish. Continuous insulation and crack isolation membrane are optional. Primer is required without crack isolation membrane.
- **18-year** – Tremco ExoAir 430 Sheathing Panel with factory fluid applied air/water-resistive barrier. Crack isolation membrane and Dryvit Weatherlastic textured finish coat are required. Continuous insulation is an option. Primer is recommended.
- *An additional 2-year Warranty term extension is available with the use of Tremco Joinery and Sealants*

MATERIALS

General:

- All materials incorporated into StucCoat One-Coat systems shall be approved for exterior application.
- Refer to StucCoat One-Coat System reference specifications, details and application instructions for further information.
- Materials noted as (by others) are Products covered by the Dryvit / Tremco CPG Inc. Limited Warranty.

Air/Water-Resistive Barrier: Dryvit / Tremco CPG Inc. fluid applied air/water-resistive barrier as selected and compatible with approved sheathing substrate surface. Select from Tremco Enviro-Dri, Dryvit Backstop NTX, ExoAir 230 or ExoAir 430 Sheathing Panel with factory fluid applied air/water-resistive barrier.

Accessory Materials: Compatible accessory materials with selected air/water-resistive barrier for treating sheathing board joints, fastener heads, penetrations, rough openings, material transitions and flashing integration to produce a complete watertight air barrier assembly.

Continuous Insulation Board (by others): As specified, expanded (EPS), or extruded (XPS) polystyrene foam plastic insulation boards minimum 1/2 inch-thick (12.5 mm) to maximum 1.0 inch-thick (25 mm) with minimum 1/4 inch-wide x 1/8 inch-deep grooves spaced 12" on center oriented vertical.

Paper Backing (by others): Minimum Type 1, Grade D, Style 2, asphalt saturated felt paper, complying with Federal Specification UUB790A.

Metal Plaster Base (by others): As specified or selected, complying with ASTM C847, G60 galvanized coating complying with and installed in accordance with ASTM C1063. Provide with Paper Backing. Provide self-furring when attached direct to substrate. Select type based on specific project requirements.

Accessory Trim (by others): Casing Bead, Corner Bead, Control Joint or other formed from minimum 26-gauge G60 galvanized roll-formed sheet steel complying with ASTM C1063. Depth of accessories (grounds) shall be sized for the plaster thickness. Provide PVC complying with ASTM D1784 / D4216 or Zinc complying with ASTM B69 in corrosive environments. Coordinate with specified or selected Metal Plaster Base.

Fasteners (by others): Provide fasteners for Sheathing Panel, Insulation Board, Metal Plaster Base and Accessory Trims which are corrosion resistant / galvanized, appropriate for underlying framing type with proper size, type, style, length and penetration and complying with ASTM C1063.

StucCoat One-Coat Base Coat – Sanded: A factory prepared, dry blended, fiber-reinforced, modified Portland cement plaster when mixed with proper type and amount of water forms a stucco plaster paste. Dryvit "StucCoat One-Coat".

Crack Isolation Membrane: As specified- or required, provide fiberglass mesh reinforced base coat lamina layer applied over minimum 7-day cured Plaster Material surface.

Primer Coating: As selected or required, a water-based, pigmented acrylic primer as specified or required to improve adhesion and provide a more uniform appearance. Dryvit "Color Prime".

Textured Finish Coating: As specified or selected, water-based, acrylic finish coating with integral color as selected from Dryvit's complete standard and specialty textured finish offering including options for performance enhancements and color. Colorant shall be Dryvit "StratoTone" high performance.

Joinery and Sealant: As specified or required, non-sag, non-staining, neutral-curing silicone or one component hybrid polyurethane joint sealant as specified or required. Tremco Dymonic FC polyurethane or Spectrem Silicone (2-year warranty extension).

Portland Cement: For mixing with Base Coat, Type I or II, complying with ASTM C 150, white or gray in color, fresh and free of lumps:

Water: Clean, fresh, potable, and free of mineral or organic matter, which can affect plaster.

STORAGE

Store all materials and accessories in dry, ventilated space off of the ground and protect from soiling, rusting, and damage.

PROPERTIES

Drying Time: StucCoat One-Coat must cure for a minimum of 48 hours. Cure time is dependent on the air temperature and relative humidity.

Job Conditions: Contractor shall have reasonable and safe access to the jobsite for delivery, staging, storing, mixing and application of materials required for the specified and detailed scope of work. Apply StucCoat One-Coat cement plaster when substrate and ambient air temperature is 40 °F and rising for a minimum of 24 hours and in accordance with PCA Portland Cement Plaster Stucco Manual. Alternatively, provide for sand and mixing water to be heated to 70 °F and provide temporary protection to maintain minimum 40° F or above in application areas for 24 hours minimum after cement plaster has been applied and set has been initiated.. Do not use frozen materials in mixes and do not apply materials to frozen bases.

Protection: Protect all work and surface layers from damage or disfiguration. Protect fixtures, frames, inserts, and other adjacent work from rusting, soiling, or clogging dur to plastering. Protect finished surface installed prior to plastering by covering with suitable drop cloths. When application of cement plaster is to interior spaces, screen openings with plastic film when building is subject to hot, dry winds, or when temperature differentials between interior and exterior spaces of more than 20 °F are present.

SURFACE PREPARATION

1. Verify substrate surface(s) to receive Air/Weather-Resistant Barrier and Accessory Materials and application surfaces to receive, Cement Plaster, Crack Isolation Membrane (as specified), Primer Coating (as required or as specified), and Textured Finish Coating are free of dust, loose particles, oil and other conditions that would affect the adhesion, installation or performance of Cement Plaster System individual layers.

APPLICATION

General: Installation of all materials selected and coordinated into the scope of work shall comply with all applicable industry and ASTM standards; local building code and IAMPO Evaluation Report #382 requirements; respective manufacturer's data sheets, specifications, details, and application instructions and in accordance with Contract Documents.

Air/Weather-Resistant Barrier (AWRB), Accessory Materials, Continuous Insulation Board as specified and Flashings

1. Install or coordinate with the proper install of factory fluid applied air/weather-resistant barrier sheathing panel, fluid applied air/water-resistive barrier and accessory materials as specified.

2. Install or coordinate with the proper install for preparation and/or flashing of rough openings, doors, windows, louvers, decks, tie-in to AWRB for flashings by others and any other openings, penetrations and related components.
3. Install or coordinate with the proper install of Continuous Insulation Board in type as specified or selected, with proper fastening and over Air / Weather-Resistant Barrier and Accessory Materials on solid backing.
4. Install or coordinate with the proper install of metal head flashing (by others) with end dams over all door, window and louver penetrations and tie into air/water-resistive barrier surface with proper accessory materials.
5. Install or coordinate with the proper install of all metal accessories and roof flashings (by others) in a configuration and manner to properly divert water away from or flowing behind the StucCoat One-Coat System and tie into air/water-resistive barrier surface.

Accessory Trim and Metal Plaster Base

1. Install corresponding Accessory Trim(s) including corner beads, corner aids, control and expansion joints, casing beads, weep screeds, etc. (by others) of proper type, size and material with proper Fasteners that are properly positioned including gaps at edge terminations for sealants and fastened as required in accordance with ASTM C1063 for Metal Plaster Base as specified or selected.
 - a. Install casing beads as specified or selected and where indicated on drawings or where plaster terminations are exposed. Align and butt ends. Install level, plumb, and true to line and secure firmly in place.
 - b. Control or expansion joints shall be specified by the designer, builder, or stucco manufacturer in that order. As a rule, stucco panels should be as square as possible and not more than 144 ft² as outlined in ASTM C1063.
 - c. Control and expansion joints shall be installed at all areas where movement may be anticipated such as: wall penetrations, structural plate lines, between dissimilar materials, at columns, and cantilevered areas. Cement Plaster System wall panel areas shall be designed to be no longer than 20ft without the use of a control joint and shall not exceed a 3:1 ratio.
 - d. Install 3/8" horizontal and vertical control joints as specified and where located on drawings. Install over continuous lath. Vertical joints shall be continuous. Abut horizontal joints to vertical joints. Intersections and end-to-end terminations shall be embedded in sealant. Install level, plumb, and true to line to secure firmly in place.
 - e. Fasten all Accessory Trims in strict accordance with ATM C1063. Attachment to gypsum Sheathing Panel is not permissible.
2. Install Metal Plaster Base as selected with proper Fasteners that are properly positioned and fastened into underlying framing required in accordance with ASTM C1063.
 - a. Soffits shall require metal lath complying with ASTM C1063 and IAMPO Evaluation Report #382.

StucCoat One-Coat Cement Plaster Base

1. Mixing, Application and Curing of StucCoat One-Coat Base Coat – Sanded shall comply with all applicable industry standards and local building code requirements, respective manufacturer's specifications, details, application instructions and be in strict accordance with ASTM C926, IAMPO Evaluation Report #382 and Contract Documents.
2. Mixing
 - a. StucCoat One-Coat Base Coat – Sanded shall be prepared in a mechanical mixer using sufficient water to produce a workable consistency and uniform color. Mixer and blade shall be rust free.
 - b. Each 80 lb. bag of sanded base coat product shall be mixed with no more than 1-1/2 gallons (5 L) of clean, potable water.
 - i. Place 1.25 gallons (4.7 L) of water shall be added to the mixer before the addition of each bag of sanded blend product.
 - ii. With mixer running, add one (1) bag of–sanded blend product.
 - iii. Add the additional 0.25 gallon (0.3 L) as the sanded blend product is mixing.
 - c. Mixing time shall be two (2) to three (3) minutes per bag.
 - d. Care shall be taken when continuous batching, that each bag is allowed the minimum mixing time.
 - e. Do not add any additional ingredients of any kind during mixing.
3. Coverage
 - a. For one-coat applications at minimum required 3/8" inch thickness will provide approximately 16.5 ft² (1.5 m²).
 - b. For two-coat scratch and brown applications at minimum required 7/8 inch thickness will provide approximately 9.4 ft². (0.9 m²).
4. Application
 - a. Each Plaster coat shall be applied by hand or machine pump to an entire wall or ceiling panel area without interruptions to avoid cold joints and abrupt changes in the uniform appearance of succeeding coats. Wet Plaster shall abut set plaster at naturally occurring interruptions in the plane of the plaster, such as corner angles, rustifications, opening, and control joints where possible.
 - b. For one-coat (brown coat) applications, properly mixed StucCoat One-Coat Base Coat – Sanded shall be applied to a 3/8 inch minimum thickness Plaster base coat without cold joints.

- i. The brown coat shall be applied with sufficient material and pressure to form full keys through and into Metal Plaster Base and be hard floated to promote densification of the coat.
 - ii. Cut brown coat through full depth with trowel at intersection of plastered walls and plastered soffit.
 - iii. Brown coat shall be moist cured for a minimum of 48 hours following application.
 - iv. Brown coat surface shall be completely dry and cured for a minimum of 7 days and completely dry prior to application of Primer and Textured Finish Coatings.
- c. For two-coat scratch and brown applications, apply properly mixed StucCoat One-Coat Base Coat – Sanded as a first coat (scratch coat) followed by a second coat (brown coat) layers to a combined 7/8 inch minimum thickness total Plaster base coat or as specified in ASTM C926 and without cold joints.
 - i. The scratch coat shall be applied with sufficient material and pressure to form full keys through and into Metal Plaster Base as selected of sufficient thickness of material over the Metal Plaster Base to allow for scoring the surface.
 - ii. Cut scratch coat through full depth with trowel at intersection of plastered walls and plastered soffit. And be hard floated to promote densification of the coat.
 - iii. Once the scratch coat becomes firm, the entire surface shall be scored in one direction horizontally only.
 - iv. Scratch coat shall become sufficiently rigid to support the application of the brown coat without damage to the monolithic continuity of the scratch coat or its keys.
 - v. Brown coat shall be applied with sufficient material and pressure to ensure tight contact with the scratch coat and to bring the combined thickness of the Plaster base to a nominal thickness shown in Table
 - vi. Brown coat shall be brought to a true, even plane with a rod or straightedge, filling surface defects in plane with brown coat. Dry rodding the surface of the brown coat shall be permitted.
 - vii. Brown coat surface shall be floated uniformly to promote densification of the coat and to provide a surface receptive to bonding of the Primer and Textured Finish Coatings.

5. Curing

- a. StucCoat One-Coat Base Coat – Sanded must be hydrated for the first 48 hours after application to ensure proper curing. Environmental conditions will determine the schedule and volume of hydration. Hot, windy, or dry conditions may dictate curing for an extended period.
- b. Sufficient time between coats shall be allowed to permit each coat to cure or develop enough rigidity to resist cracking or other physical damage when the next coat is applied.

Crack Isolation Membrane, Primer Coating, and Textured Finish Coating

1. Application of Crack Isolation Membrane, Primer Coating and Textured Finish Coating as specified, selected, and coordinated into the work shall be mixed and installed in strict accordance with manufacturer's data sheets, specifications, details for the respective products as they apply.
2. Reference Documentation for Crack Isolation Membrane, Primer Coating and Textured Finish Coating can be found at www.dryvit.com:
 - a. StucCoat Crack Isolation Membrane - DS996
 - b. Reinforcing Mesh Data Sheet – DS413
 - c. Color Prime Data Sheet – DS410
 - d. StucCoat One-Coat System Details – DS989, DS993, DS994, and DS995
 - e. Applicable Sections of Dryvit Outsulation Plus MD EIF System Application Instructions – DS901 for Reinforced Base Coat, Primer Coating and Textured Finish Coating

Joinery and Sealants

1. Application of Joinery and Sealants as specified, selected, and coordinated into the work shall be installed in strict accordance with manufacturer's data sheets, specifications, application instructions for the respective products as they apply and Contract Documents.
2. Sealant Joints: Joints formed where the Cement Plaster System abuts dissimilar materials such as at windows, doors, and other penetrations shall be properly sealed with closed cell backer rod and sealant to prevent water from penetrating behind the Cement Plaster System.
 - a. Reference Documentation for Joinery and Sealants found at www.tremcosealants.com.
 - i. Data Sheet
 - ii. Specifications
 - iii. Application Instructions

CAUTIONS & LIMITATIONS

- All components must be acceptable for exterior applications and installed per code requirements.
- Wood-based sheathing shall be gapped 1/4" to allow for expansion.
- Substrates shall be structurally sound, free of loose materials, voids, projections, or other conditions that may interfere with the installation of the components.
- Substrates shall be dry, clean, free of oils, grease, efflorescence, or other liquid or solid debris.
- There are no projections or planar irregularities greater than 1/4" within any 4" radius in the substrate.
- Masonry or concrete surfaces shall be sealed or prepared with a bonding agent prior to the application of any basecoat.
- All penetrations and openings shall be properly flashed.
- All components shall be stored above ground under optimal conditions, or if stored outdoors, shall be adequately covered to keep dry.
- Dryvit / Tremco Products shall be installed as instructed by Dryvit / Tremco
- Components by others must be in compliance with the latest cement plaster Evaluation Report references.
- Do not apply to surfaces that are contaminated with bond breakers, oils or other matter that may affect the performance of the product
- Components shall not be installed when surface or ambient temperatures are at or below 40 °F (4.4 °C) or above 100 °F (34 °C).
- StucCoat One-Coat requires a minimum of 48 hours moist curing. Environmental conditions such as heat, wind and low humidity will require additional curing.
- Protect all installed components from freezing and inclement weather until dry.
- Consult the latest existing codes & regulations prior to the installation of any Dryvit System assembly.

TECHNICAL AND FIELD SERVICES

Available upon request.

WARRANTY

A repair or replacement warranty is available on all Dryvit products. Visit <https://www.tremcosealants.com/warranties/> for details.

Please refer to our website at www.dryvit.com for the most up-to-date Product Data Sheets.

NOTE: All Dryvit Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

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Tremco Construction Products Group (CPG) brings together Tremco CPG Inc. and its Dryvit and Nudura brands; Willseal; Prebuck LLC; Tremco Barrier Solutions, Inc.; Weatherproofing Technologies, Inc. and its Pure Air Control Services and Canam Building Envelope Specialists offerings; and Weatherproofing Technologies Canada, Inc.



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