Dryvit Finish System For Exterior Soffits

DS173

100% Acrylic Architectural Coatings
For Use on Exterior Soffits

Dryvit Finish System For Exterior Soffits Specifications

DRYVIT SYSTEMS, INC.
MANUFACTURER SPECIFICATION
SECTION 09960
DRYVIT FINISH SYSTEM FOR EXTERIOR SOFFITS

PART I GENERAL

1.01 SUMMARY:

A. This document contains all the Manufacturer's requirements for the proper design, use, and installation of the Dryvit Finish System for Exterior Soffits.
B. SECTION INCLUDES
   1. Finish System for Exterior Soffits.
C. RELATED SECTIONS
   1. Unit Masonry – Section _____.
   2. Concrete – Section _____.
   3. Sheathing – Section _____.
   4. Vapor Barriers – Section _____.
   5. Sealants – Section _____.
   6. Gypsum Board Systems – Section _____.

1.02 REFERENCES

A. ASTM B117 (Federal Test Standard 141A Method 6061) Test Method of Salt Spray (Fog) Testing.
B. ASTM C150 Specification for Portland Cement.
C. ASTM C297 Test Method for Tensile Strength of Flat Sandwich Constructions in Flatwise Plane.
D. ASTM D968 (Federal Test Standard 141A Method 6191) Test Method for Abrasion Resistance of Organic Coatings by Falling Abrasive.
E. ASTM D3273 Test Method for Resistance to Growth of Mold on Surfaces.
F. ASTM E84 Test Method for Surface Burning Characteristics of Building Materials.
G. ASTM E96 Test Methods for Water Vapor Transmission of Materials.
H. ASTM G23 (Federal Test Standard 141A Method 6151) Recommended Practice for Operating Exposure Apparatus (Carbon-Arc Type) With and Without Water, for Exposure of Nonmetallic Materials.
I. DS152 Dryvit Cleaning and Recoating.
J. DS153 Dryvit Expansion Joints and Sealants.
K. DS159 Dryvit Water Vapor Transmission Data Sheet.

1.03 DEFINITIONS

A. Reinforced Base Coat: The layer consisting of fiberglass reinforcing mesh fully embedded in the base coat material applied to the outside surface of the sheathing.
B. Contractor: The Contractor that applies materials to the substrate.
C. Dryvit: Dryvit Systems, Inc., the manufacturer of the coating materials, a Rhode Island corporation.
D. Lamina: The layer consisting of the reinforced base coat and finish materials.
E. Finish: An acrylic based coating, available in a variety of textures and colors, which is applied to the outside surface of the base coat.
F. Reinforcing Mesh: Glass fiber mesh used to reinforce the base coat and to provide impact resistance.
G. Sheathing: A substrate in sheet form.
H. Soffit: Exterior ceiling areas.
I. Substrate: The material to which the Dryvit coatings are applied.

1.04 SYSTEM DESCRIPTION

A. General: The Dryvit Finish System consists of base coat, reinforcing mesh and finish.
B. Design Requirements
   1. Acceptable sheathing substrates for the Dryvit Finish System for Exterior Soffits include:
      a. Dens-Glass® Gold by Georgia-Pacific® Corp.
      b. Eterspan® by Eternit
      c. Harditex® or Hardiflex® by James Hardie Building Products
      d. Durock® by U. S. Gypsum Co.
      e. Exterior Gypsum Ceiling Board by U. S. Gypsum Co.
      f. PermaBase® Sheathing By National Gypsum Co.
   2. This application is acceptable for soffits only. Application of the Dryvit lamina directly to these substrates is not intended for exterior vertical walls.
   3. Deflection of substrate systems shall not exceed L/240.

4. Vapor Retarders: Use and location of vapor retarders within a wall assembly is the responsibility of the project designer and shall be noted on the project drawings and specifications.
5. Venting: Unheated soffit areas may require venting and needs to be detailed by the project design professional.
6. Expansion Joints: Expansion Joints shall be located by the project design professional at locations where substrate movement is expected but shall not exceed 6 m (20 ft) in any direction.

C. Performance Requirements: As a minimum, the Dryvit materials shall be tested as follows:
1. Mildew/Fungus Resistance: ASTM D3273 - Passed
2. Salt Spray Resistance: ASTM B117 - Passed
3. Accelerated Weathering: ASTM G23 – 2000 hrs. - Passed
4. Salt Spray Resistance: ASTM B117 – 300 hrs. - Passed
5. Abrasion Resistance: ASTM D968 – Passed
6. Absorption, Freeze/Thaw: ASTM C67 – 60 Cycles - Passed
7. Water Penetration: ASTM E331 – Passed
8. Wind Driven Rain: FED SPEC TT-C-555B: Passed
9. Flame Spread: ASTM E84 – Flame Spread less than 25, Smoke Developed less than 250.

1.05 SUBMITTALS

A. Product Data – The Contractor shall submit to the owner/architect manufacturer's product data sheets describing products, which will be used on this project.

B. Samples – The Contractor shall submit to the owner/architect two samples of each finish, texture, and color to be used on the project. The same tools and techniques proposed for the actual installation shall be used to prepare the samples. Samples shall be of sufficient size to accurately represent each color and texture to be utilized on the project.

1.06 QUALITY ASSURANCE

A. Qualifications
1. System Manufacturer: Shall be Dryvit Systems, Inc. All materials shall be manufactured or sold by Dryvit and shall be purchased from Dryvit or its authorized distributor.
   a. Materials shall be manufactured at a facility covered by a current ISO 9001:2000 certification. Certification of the facility shall be done by a registrar accredited by the American National Standards Institute, Registrar Accreditation Board (ANSI-RAB).
2. Contractor*: Shall be knowledgeable in the proper installation of the Dryvit materials and shall be experienced and competent in the installation of the Direct Finish System for Exterior Soffits. Additionally the contractor shall possess a current trained contractor certificate from Dryvit for any of its Exterior Insulation and Finish Systems.

1.07 DELIVERY, STORAGE, AND HANDLING

A. All Dryvit materials shall be delivered to the job site in the original, unopened packages with labels intact.

B. Upon arrival, materials shall be inspected for physical damage, freezing, or overheating. Questionable materials shall not be used.

C. Materials shall be stored at the job site in a cool, dry location, out of direct sunlight, protected from weather and other damage. Minimum storage temperature shall be 7 °C (45 °F) for Color Prime™, 10 °C (50 °F) for Ameristone, 2 °C (35 °F) for Rapidry, and 4 °C (40 °F) for all other liquid products.

1.08 PROJECT CONDITIONS

A. Environmental Requirements
1. Application of wet materials shall not take place during inclement weather unless appropriate protection is provided. Protect materials from inclement weather until they are dry.
2. At the time of application, the air and wall surface temperatures shall be minimum 7 °C (45 °F) for Color Prime, 10 °C (50 °F) for Ameristone, 2 °C (35 °F) for Rapidry, and 4 °C (40 °F) for all other products. These temperatures shall be maintained for a minimum of 24 hours thereafter, or until the products are dry.

B. Existing Conditions – The Contractor shall have access to electric power, clean water, and a clean work area at the location where the Dryvit materials are to be applied.

1.09 SEQUENCING AND SCHEDULING

A. Installation of the Dryvit Finish System for Exterior Soffits shall be coordinated with other construction trades.

B. Sufficient manpower and equipment shall be employed to ensure a continuous operation, free of cold joints, scaffold lines, texture variations, etc.

1.10 LIMITED MATERIALS WARRANTY

A. Dryvit Systems, Inc. shall provide a written, standard three (3) year limited warranty against defective materials, upon written request. Dryvit shall have no liability for the application of the materials. Dryvit shall make no other warranties, expressed or implied. Dryvit is not liable for incidental or consequential damages.

1.11 DESIGN RESPONSIBILITY

A. It is the responsibility of both the specifier and the purchaser to determine if a product is suitable for their intended use. The designer selected by the purchaser shall be responsible for all decisions pertaining to design, detail, structural capability, attachment details, shop drawings, and the like. Dryvit has prepared guidelines in the form of specifications and product sheets to facilitate the design process only. Dryvit is not liable for any errors or omissions in design, detail, structural capability, attachment details, shop drawings, or the like, whether based upon the information prepared by Dryvit or otherwise, or for any changes which purchasers, specifiers, designers, or their appointed representatives may make to Dryvit's published comments.

1.12 MAINTENANCE

A. Maintenance and repair shall follow the procedures noted in Dryvit Outsulation System Application Instructions, DS204.

B. All Dryvit products are designed to minimize maintenance. However, as with all building products, depending on location, some cleaning may be required. See Dryvit publication DS152 on Cleaning and Recoating.

C. Sealants and flashings should be inspected on a regular basis, and repairs made as necessary.

PART II PRODUCT

2.01 MANUFACTURER

A. All components of the Dryvit Finish System for Exterior Soffits shall be obtained from Dryvit or its authorized distributors.

2.02 MATERIALS

A. Portland Cement: Shall be Type I, I-II or II, meeting ASTM C150, white or gray in color, fresh and free of lumps.

B. Water: Shall be clean and free of foreign matter.

2.03 COMPONENTS

A. Base Coat: Shall be compatible with the sheathing and reinforcing mesh(es).
   1. Cementitious: A liquid polymer based material, which is field mixed with Portland Cement.
      a. Shall be Genesis® or Primus®.
   2. Non-cementitious: A factory mixed, fully formulated, water based product.
      a. Shall be NCB™.
   3. Ready mixed: A dry blend cementitious, co-polymer based product, field mixed with water.
      a. Shall be Primus DM™, Genesis DM™, Rapidry DM™ 50-75, or Rapidry DM™ 35-50.

B. Reinforcing Mesh: Shall be a balanced open weave, glass fiber fabric treated for compatibility with other System materials.
   1. Shall be Dryvit Standard™ mesh weighing 146 g/m^2 (4.3 oz/yd^2).

C. Finishes: Shall be the type, color, and texture as selected by the owner/architect and shall be one or more of the following:
   1. Standard DPR (Dirt Pickup Resistance): Water based, acrylic coatings with integral color and texture, and formulated with DPR (Dirt Pickup Resistance) chemistry:
      a. Quarzputz®: Coarse texture.
      b. Sandblast®, Sandblast NTX: Medium texture.
      c. Freestyle®, Freestyle Smooth, Freestyle Fine: Fine texture.
      d. Sandpebble®, Sandpebble NT: Coarse pebble texture.
      e. Sandpebble Fine™, Sandpebble Fine NT: Fine pebble texture.
      f. Sandpebble Course™: Very heavy pebble texture.
   2. Elastomeric DPR (Dirt Pickup Resistance): Water based elastomeric acrylic coatings with integral color and texture, and formulated with DPR chemistry:
      a. Weatherlastic™ Quarzputz: Coarse texture.
      b. Weatherlastic Sandpebble: Rough pebble texture.
      c. Weatherlastic Sandpebble Fine: Fine pebble texture.
      d. Weatherlastic Adobe™: Fine texture.
   3. Medallion Series PMR™ (Proven Mildew Resistance): Water based acrylic coatings with integral color and texture, and formulated with PMR (Proven Mildew Resistance) chemistry:

a. Quarzputz PMR: Coarse texture.
b. Sandblast PMR: Medium texture.
c. Freestyle PMR: Fine texture.
d. Sandpebble PMR, Sandpebble NT PMR: Rough pebble texture.
e. Sandpebble Fine PMR, Sandpebble Fine NT PMR : Fine pebble texture.

4. Specialty Finishes: Factory mixed, water based acrylic:
   a. Ameristone™: Multi colored quartz aggregate with a flamed granite appearance.
   b. Stone Mist®: Ceramically colored quartz aggregate.
   c. TerraNeo™: Large mica chips and multi-colored quartz aggregate.
   d. Custom Brick™: A template system resulting in a brick, stone or tile appearance.
   e. Lymestone™: Simulates appearance of limestone.
5. Primers (when specified):
   a. Color Prime™: Pigmented acrylic based primer used to improve adhesion and uniformity of finish color.
   b. Primer with Sand: Pigmented acrylic based primer with a slight sand texture to improve adhesion and uniformity of finish color and application of trowel applied finishes.

PART III EXECUTION

3.01 EXAMINATION

A. Prior to installation of the Dryvit Finish System for Exterior Soffits, the Contractor shall ensure that the substrate:
   1. Is of a type listed in section 1.04.B.1.
   2. Is flat within 6.4 mm (1/4 in) in a 1.2 m (4 ft) radius.
   3. Is sound, dry, connections are tight, has no surface voids, projections, or other conditions that may interfere with the installation.

B. Prior to the installation of the Dryvit Finish System for Exterior Soffits, the Architect or General Contractor shall insure that all needed flashings and other waterproofing details have been completed, if such completion is required prior to the application.

C. The Contractor shall notify the General Contractor and/or Architect and/or Owner of all discrepancies. Work shall not proceed until discrepancies have been corrected.

3.02 SURFACE PREPARATION

A. The substrate shall be prepared as to be free of foreign materials such as oil, dust, dirt, form-release agents, efflorescence, paint, wax, water repellents, moisture, frost and any other materials that inhibit adhesion.

3.03 INSTALLATION

A. The Dryvit materials shall be mixed and applied in accordance with Dryvit's published Outsulation System Installation Instructions, DS204.

B. The overall minimum base coat thickness shall be sufficient to fully embed the mesh. The recommended method is to apply the base coat in two (2) passes.

C. Dryvit base coat surfaces in contact with sealant shall be coated with Color Prime™ or Demandit™. Sealant shall not be applied directly to textured finishes or base coat surfaces.

D. The Dryvit base coat shall be allowed to dry for a minimum of 24 hours. Drying of the base coat is dependent on the air temperature and relative humidity.

E. For soffit surfaces, which exceed 20 linear feet or soffit areas, which exceed 200 square feet, the use of control joints such as Plastic Components Inc. PL093 or 22027-16 is recommended.

3.04 FIELD QUALITY CONTROL

A. The Contractor shall be responsible for the proper application of the Dryvit materials.

B. Dryvit assumes no responsibility for on-site inspections or application of its products.

3.05 CLEANING

A. All excess Dryvit materials shall be removed from the job site by the Contractor in accordance with contract provisions.

B. All surrounding areas, where Dryvit Finish System for Exterior Soffits has been installed, shall be left free of debris and foreign substances resulting from the Contractor's work.

3.06 PROTECTION

A. The Dryvit Finish System for Exterior Soffits, and the project shall be protected from weather and other damage until permanent protection in the form of flashings, sealants, etc. are installed.

DISCLAIMER

Information contained in this specification conforms to standard detail and product recommendations for the installation of the Dryvit Finish System for Exterior Soffits as of the date of publication of this document and is presented in good faith. Dryvit Systems, Inc. assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To ensure that you are using the latest, most complete information, contact:

Dryvit Systems, Inc.
P. O. Box 1014
One Energy Way
West Warwick, RI 02893
(401) 822-4100

*The Trained Contractor Certificate indicates certain employees of the company have been instructed in the proper application of Dryvit products and have received copies of Dryvit's Application Instructions and Specifications. The Trained Contractor Program is not an apprenticeship. Each trained contractor is an independent company experienced in the trade and bears responsibility for its own workmanship. Dryvit System's, Inc. assumes no liability for the workmanship of a trained contractor.