

Custom Brick Finish Polymer System Specifications
for use on vertical walls

DRYVIT® SYSTEMS CANADA
MANUFACTURER'S SPECIFICATION
SECTION 09800
CUSTOM BRICK POLYMER FINISH SYSTEM
FOR USE ON VERTICAL WALLS

PART I - GENERAL

1.01 Scope

- A. Provide all labor, materials and equipment necessary to apply the Custom Brick Finish over vertical walls of exterior insulation and finish systems (EIFS), exterior concrete, masonry, stucco, interior drywall or plaster surfaces.

1.02 Related Sections

- A. Concrete 03300
- B. Unit Masonry 04200
- C. Exterior Insulation and Finish Systems 07240
- D. Sealants 07900

1.03 References

- A. ASTM E96 - Tests for Water Vapor Transmission of Materials
- B. ASTM C297 Tensile Bond
- C. ASTM D968 - Test Method for Abrasion Resistance of Organic Coatings by the Falling Abrasive Tester
- D. ASTM G23 - Recommended Practice for Operating Light and Water Exposure Apparatus (Carbon-Arc Type) for Exposure of Non-Metallic Materials
- E. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials

1.04 Description

- A. Custom Brick Finish Polymer System is for use on vertical wall surfaces and consists of patented templates, NCB™ Grout, and a 100% acrylic-based finish. Many template designs are available that simulate popular brick and stone patterns. The brick surface can be applied in a variety of textured effects. It can also be shaded to create a wide range of colors and color highlights that simulate the appearance of weathered brick and stone.

1.05 Submittals

- A. Samples
 - 1. The contractor shall make and submit two (2) .61 m x 1.2 m (2 ft x 4 ft) samples of the proposed finish to the architect and/or owner for approval.
- B. Mock-Up
 - 1. A minimum 2.4 m x 2.4 m (8 ft x 8 ft) mock-up wall shall be coated by the applicator/contractor with the Custom Brick Finish materials to establish a standard of acceptance by the owner, architect or project manager.
- C. Manufacturer's Information
 - 1. Submit manufacturer's product information and specifications.

1.06 Quality Assurance

- A. Qualifications
 - 1. Manufacturer shall be Dryvit Systems Canada.
 - 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. The applicator/contractor shall be listed with Dryvit Systems Canada as a trained* contractor and shall possess a current Dryvit trained contractor certificate.
- B. Substrates
 - 1. Application of Dryvit Custom Brick shall be to vertical walls of the following substrates when prepared in accordance with this specification.
 - a. Exterior uses:
 - 1) Dryvit Exterior Insulation and Finish Systems.
 - 2) Sound, clean, concrete, masonry, or stucco.

- b. Interior uses:
 - 1) Sound, clean, drywall, plaster, concrete, or masonry
 - 2. The applicator/contractor shall verify that the proposed substrate is acceptable prior to application of the Custom Brick materials.
- C. Performance Requirements
 - 1. Water Vapor Transmission (ASTM E96) – Vapor Permeable
 - 2. Tensile Bond (ASTM C297) – 15 psi min.
 - 3. Abrasion Resistance (ASTM D968) – 500 liter; no deleterious effects.
 - 4. Accelerated Weathering (ASTM G23) – 2000 hour exposure; no deleterious effects.
 - 5. Surface Burning (ASTM E84) – Flame Spread Index less than 25.
 - 6. Salt Spray Exposure (ASTM B117) – 300 hours; no deleterious effects.

1.07 Delivery, Storage and Handling

- A. All materials shall be delivered to the job site in the original, unopened packages with labels intact. Upon arrival, materials shall be inspected for physical damage or freezing. Questionable materials shall not be used.
- B. Minimum storage temperature shall be 4 °C (40 °F). Maximum storage temperature shall be 38 °C (100 °F). All materials shall be stored in a cool, dry location, out of direct sunlight and protected from weather and other damage. **Note: Exposure to temperatures over 32 °C (90 °F) may result in increased viscosity and skinning and shall be inspected prior to use.**

1.08 Job Conditions

- A. Existing Conditions: The applicator shall have access to electric power, clean potable water and a clean work area at the location where the Custom Brick Finish materials are to be applied.
- B. Environmental Conditions:
 - 1. The ambient air and surface temperature for application of Custom Brick Finish materials shall be between 13 °C (55 °F) and 38 °C (100 °F) and shall remain so for at least 24 hours or until dry. Note: The preferred wall surface temperature range for application of Custom Brick Finish materials is between 16 °C (60 °F) and 33 °C (90 °F). Jobsite exposure to temperatures over 32 °C (90 °F) shall be minimized and may result in increased viscosity and skinning and shall be inspected prior to use.
- C. Protection
 - 1. Adjacent areas and materials shall be protected from damage, drops and spills.
 - 2. The Custom Brick Finish materials, including Custom Brick Templates, shall be protected by permanent or temporary means from weather and other damage, prior to, during and immediately after application. Care must be taken to prevent condensation and/or heat build up when using a tarp or plastic as protection. **Caution: Extended protection times may be required when temperatures are below 23 °C (70 °F) and also when 70 point templates are used.**
- D. Sequencing and Scheduling:
 - 1. Application shall be coordinated with other construction trades.
 - 2. Sufficient labor and equipment shall be employed to ensure a continuous operation.

1.09 Warranty

- A. Dryvit Systems Canada shall offer a written Limited Materials Warranty upon receipt of a properly executed warranty request form. Contact Dryvit's Warranty Service's Department for complete details.

1.10 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 etc. Dryvit has prepared guidelines in the form of specifications, application details 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, etc., 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.

1.11 Maintenance

- A. Maintenance and repair procedures shall be followed in accordance with the Application Instructions for the specific Dryvit system utilized.
- 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 DSC152 for proper procedures.
- C. Sealants and flashing should be inspected on a regular basis and repairs made as necessary.

PART II – PRODUCTS

2.01 General

- A. All products shall be supplied by Dryvit Systems Canada or its authorized distributors. Substitutions or additions of other materials will void the warranty.

2.02 Components

- A. Primers (when specified)
 - 1. Color Prime™: A water-based pigmented acrylic primer.
 - 2. Primer With Sand™: A pigmented water-based acrylic primer containing fine sand.
- B. Grout
 - 1. NCB™ Grout: A fully formulated, water-based product available in our standard colors. Custom colors are available upon request.
- C. Custom Brick Templates: Available in a wide variety of patterns. Custom templates are available upon request. **Note: Maximum template thickness shall not exceed 1.8 mm (.070 in).**
- D. Custom Brick Finish: A specially formulated 100% acrylic-based finish with Dirt Pick-up Resistant (DPR) technology.
- E. Demandit™ Shading Mixture: A 100% acrylic coating available in any of Dryvit's standard colors, as well as custom colors.

2.03 Materials

- A. Water: Shall be clean and potable.

2.04 Mixing

- A. Materials shall be mixed with a clean Wind-lock B-M1 mixing blade or equivalent powered by a 12.7 mm (1/2 in) variable speed drill capable of producing 1000 RPM's.

2.05 Equipment

- A. Tools associated with the plastering trade.
 - 1. Refer to the Custom Brick Polymer Finish System Application Instructions, DSC154, for a complete list of recommended tools.

PART III – EXECUTION

3.01 Inspection

- A. Examination of Substrate
 - 1. Ensure that the substrate is of a type listed in Section 1.06B.1.a and b.

3.02 Substrate Preparation

- A. General
 - 1. Substrates shall be prepared in accordance with Custom Brick Polymer Finish System Application Instructions, DSC154 and as follows:
- B. Dryvit Exterior Insulation and Finish Systems
 - 1. The reinforcing mesh shall be completely embedded in the EIFS base coat.
 - 2. The base coat shall be fully dried (a minimum of 24 hours, or longer, depending on weather conditions).
 - 3. The base coat shall be free of any imperfections prior to applying the NCB Grout and Custom Brick Templates. The NCB Grout coat is only applied as a thin, even coat and is not intended to level non-planar substrate surfaces.
 - 4. All walls shall be free of surface contaminants such as dust, dirt, efflorescence, etc., which may impair the adhesion of the NCB Grout.

C. Concrete, Masonry, Stucco

1. Concrete walls shall have cured a minimum of 28 days prior to application of the NCB grout. Stucco walls shall cure a minimum of 28 days prior to application of Genesis™, Genesis DM, or NCB grout.
2. All walls shall be free of surface contaminants, such as dust, dirt, peeling paints, sealers, efflorescence, etc., which may impair the adhesion of the NCB grout.
3. All rough surfaces shall be skimmed with the Dryvit Genesis or Genesis DM mixture to provide a surface that is sufficiently planar and smooth to allow 100% contact of the Custom Brick Templates. See Application Instructions, Section IV, for application technique.

D. Interior Surfaces

1. Drywall shall be installed and prepared in conformance with the minimum requirements set forth in ASTM C840 Standard Specification for Application and Finishing of Gypsum Board and applicable local building codes. Drywall shall have joints taped and fasteners spotted with joint compound to conform with the requirements of a Level-4 Finish, as described in ASTM C840, Section X8 Levels of Finish. Dryvit Color Prime or Dryvit Primer with Sand may be used to equalize absorption differences between the paper facing and joint compound.
2. Interior plaster shall be finished smooth. Prime with Color Prime or Dryvit Primer with Sand. All sanding dust shall be removed prior to applying the NCB grout coat.
3. All concrete or masonry surfaces must be skimmed with Dryvit Genesis or Dryvit Genesis DM to provide a smooth, flat, level base. See Application Instructions, Section IV, for application technique. Sealed or painted interior concrete or masonry must be cleaned to remove any surface contaminants such as dust, chalk, dirt, waxes, efflorescence, etc., which may impair the adhesion of the NCB grout. Glossy surfaces must be dulled prior to application of NCB grout. NCB will not adhere to concrete or masonry coated with most types of form release agents, water repellents or curing compounds. These materials must be removed and the surface coated with Dryvit Genesis or Genesis DM prior to the grout coat being applied.

3.03 Application

A. General

1. Custom Brick Polymer Finish System materials shall be applied in accordance with current Custom Brick Polymer Finish System Application Instructions, DSC154.

B. Grout

1. NCB
 - a. Mix the NCB Grout with a clean Wind-lock B-M1 mixing blade or equivalent.
 - b. Apply the NCB grout with a stainless steel trowel completely covering the underlying substrate.
 - c. Allow the NCB grout to dry a minimum of 24 hours prior to adhering the Custom Brick Templates.

D. Custom Brick Template Application

1. Refer to Custom Brick Polymer Finish System Application Instructions, DSC154.

E. Custom Brick Finish

1. Mix the Custom Brick Finish material with a clean Wind-lock B-M1 mixing blade or equivalent (use a contrasting color from Grout).
2. Apply the Custom Brick Finish with a stainless steel trowel using the template as a screed.
3. Allow the Custom Brick Finish to completely dry prior to shading, if applicable, and template removal. **Caution: When using 70-point templates, the finish thickness shall not be greater than the template thickness and preferably applied with an inverted texture to aid drying.**

F. Demandit (optional shading procedure.)

1. Refer to Custom Brick Polymer Finish System Application Instructions, DSC154.

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.

3.05 Cleaning

- A. All excess Custom Brick Finish materials shall be removed from the job site by the contractor in accordance with contract provisions.
- B. All surrounding areas, where the Custom Brick Finish materials have been applied, shall be left free of debris and foreign substances resulting from the contractor's work.

3.06 Protection

- A. The Custom Brick Finish materials shall be protected from weather and other damage until permanent protection in the form of flashings, sealants, etc. are installed.
- B. The Custom Brick Finish materials, including Custom Brick Templates, shall be protected by permanent or temporary means from weather and other damage, prior to, during and immediately after application. Care must be taken to prevent condensation and/or heat build up when using a tarp or plastic as protection. Caution: Extended protection times may be required when temperatures are below 23 °C (70 °F) and also when 70 point templates are used.

Disclaimer

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

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The Trained Contractor Certificate indicates certain employees of the company have been instructed in the proper application of Dryvit and Custom Brick Finish 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 plastering trade and bears responsibility for its own workmanship. Dryvit Systems Canada assumes no liability for the workmanship of a trained contractor.