

100% ACRYLIC TEXTURED COATINGS



**Insulating Concrete Form (ICF)
Texture Finish**

**MANUFACTURER SPECIFICATION
SECTION 09960**

CARRARA ICF TEXTURE FINISH

PART I – GENERAL

1.01 SUMMARY

- A. This document contains all the Manufacturer's requirements for the proper design, use, and installation of the Carrara ICF Finish over Insulating Concrete Forms (ICF). Refer to Carrara Master Guide Specifications for additional information.

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 Flat wise 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 Method for Water Vapor Transmission of Materials.
H. ASTM G155 (ASTM G23 or G26) Recommended Practice for Operating Exposure Apparatus (Carbon-Arc Type) With and Without Water, for Exposure of Nonmetallic Materials.

1.03 DEFINITIONS

- A. Contractor: The contractor that applies materials to the substrate.
B. Carrara ICF: Global Coatings, Inc., the producer of the ICF Finish materials.
C. Lamina: The layer consisting of the reinforced base coat and finish materials.
D. Finish: An acrylic based coating, available in a variety of textures and colors, which is applied to the prepared wall surface.
E. Reinforced Base Coat: The layer consisting of fiberglass reinforcing mesh fully embedded in the base coat material applied to the outside surface of the substrate.
F. Reinforcing Mesh: Glass fiber mesh used to reinforce the base coat.
G. Substrate: The ICF to which the Carrara base coat is applied.

1.04 DESCRIPTION

- A. General: Carrara ICF Coatings and Finish is an Acrylic Textured Coating (ATC) consisting of waterproofing components, a base coat, reinforcing mesh, elastomeric primer and a textured finish.
B. Design Requirements: ATC Acceptable surfaces for the Carrara ICF Coatings and Finish include ICF consisting of molded EPS manufactured with buried webs. Contact Global Coatings, Inc., for recommendations regarding other products.
2. Vapor Retarders: Use, type 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.
3. Projecting surfaces shall have a minimum slope of 6:12 and maximum length of 305 mm (12 in).
4. The substrate shall be flat and smooth.
5. The specified ICF shall comply with all applicable code requirements for the construction type (combustible or non-combustible). Details shall conform with proper termination requirements for combustible or non-combustible construction (refer to published details).
C. Performance Requirements: As a minimum the Carrara materials shall be tested as follows:
1. Mildew/Fungus Resistance: ASTM D3273; Passed
2. Accelerated Weathering: ASTM G155 - 1000 hrs.; Passed
3. Salt Spray Resistance: ASTM B117 – 1300 hrs.; Passed
4. Abrasion Resistance: ASTM D968; Passed
5. Absorption, Freeze/Thaw: ASTM C67 – 60 Cycles; Passed
6. Water Penetration: ASTM E331; Passed
7. Flame Spread: ASTM E84 – Flame Spread Index less than 25, Smoke Developed less than 450.
8. Water Vapor Transmission: ASTM E96 – Vapor Permeable

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. Producer shall be Global Coatings, Inc. All materials shall be produced or sold by Global Coatings and shall be purchased from Global Coatings 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 installation of Carrara materials and shall be experienced and competent in the application of ATC.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. All Carrara 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) and rising for all Carrara 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) and rising for all Carrara products. These temperatures shall be maintained, with adequate air ventilation and circulation, 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 Carrara materials are to be applied.

1.09 SEQUENCING AND SCHEDULING

- A. Installation of the Carrara ICF Coatings and Finish shall be coordinated with other construction trades.
- B. Coordinate installation of Carrara Wall coatings with related work specified in other sections to ensure that the wall assembly is protected to prevent water from getting behind the wall. The cap flashing shall be installed as soon as possible after the finish coat has been applied. When this is not possible, temporary protection shall be provided immediately in this area.
- C. 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. Global Coatings, Inc., shall provide a written limited warranty against defective materials, upon written request. Global Coatings, Inc., shall have no liability for the application of the materials. Global Coatings shall make no other warranties, expressed or implied. Global Coatings is not liable for incidental or consequential damages. Contact Global Coatings, Inc. for complete details.

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. Global Coatings has prepared guidelines in the form of specifications and details to facilitate the design process only. Global Coatings 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 Global Coatings or otherwise, or for any changes which purchasers, specifiers, designers, or their appointed representatives may make to Global Coatings published comments.

1.12 MAINTENANCE

- A. Maintenance and repair shall follow the procedures noted in Carrara Master Guide Specifications.
- B. All Carrara products are designed to minimize maintenance. However, as with all building products, depending on location, some cleaning may be required.
- C. Sealant and flashings shall be inspected on a regular basis and repairs made as necessary.

PART II PRODUCT**2.01 MANUFACTURER**

A. All components of the Carrara ICF Coatings and Finish shall be obtained from Global Coatings 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. Waterproofing (at openings and penetrations).
1. Carrara AcraCream™: An Acrylic Rubber Joint Sealant, non-cementitious, water based material.
2. Carrara Joint Tape: A 10 cm (4") wide, Polyester Scrim reinforced, polyester mesh tape.
- B. Base Coat/Adhesive
1. Cementitious: A liquid polymer based material, which is field-mixed in a 1:1 ratio by weight with Portland Cement.
a. AcraBond® Poly-Based Leveling & Base Coat .
2. Ready mixed: A dry blend cementitious, co-polymer based product, field mixed with water.
a. Shall be AcraBond™ Bag Mix.
- C. Reinforcing Mesh(s): Shall be a balanced open weave, glass fiber fabric treated for compatibility with other wall materials and shall be as noted in Paragraph 1.04.C.8 above.
- D. Finishes: Shall be the type, color, and texture as selected by the owner/architect and shall be one or more of the following:
1. Carrara Texture: Water based, acrylic coatings with integral color and texture, and formulated with 100% Acrylic, water-based chemistry; mold & mildew resistant.
a. Sonora Sand Texture®: Free style very fine sand texture.
b. Carrara Fine Texture®: Fine texture.
c. Carrara Medium Texture: Medium texture.
d. Carrara Worm Texture®: Medium swirl texture.
- E. Coatings, Primers and Sealers:
1. ColorFlex™, Fill-N-Build™, AcraCream™, MicroSeal™, ColorSeal™.

PART III EXAMINATION**3.01 Examination of Substrate**

- A. Prior to application of the Carrara ICF Coatings and Finish, the Contractor shall ensure that the substrate is as listed in Section 1.04.B.1.
- B. Prior to the installation of the Carrara ICF Coatings and Finish, the Architect or General Contractor shall insure that all needed flashing and other waterproofing details have been completed, if such completion is required.
1. When wood framed construction is used, sill pans with three sided end dams shall be installed prior to window frame installation and designed to collect and direct water to the exterior of the reinforced base and finish coat.
2. Metal flashing shall be installed at heads of openings.
3. Continuous metal flashing shall be installed at heads of ganged windows.
4. Flashing shall be installed at roof-lines in a manner to prevent any intrusion of water behind any panels or structural details. This shall include the use of roof kick-out flashing at roof terminations.
5. When added details are applied to the chimney, a chimney cricket shall be installed.
6. Wooden decks must be flashed before Carrara Coatings and Finish is installed.
- 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 free of foreign materials such as dust, dirt, moisture, frost and any other materials that inhibit adhesion.
1. The ICF shall be manufactured with buried webs or exposed webs (additional layer of EPS required) and consist of molded EPS. Extruded ICF must include a layer of EPS attached to the ICF.
2. The surface of the ICF or EPS layer shall be prepared as to be flat and smooth.
3. The entire surface of the ICF or EPS layer shall be rasped to remove any UV degradation and provide a smooth planar surface.
4. All voids and gaps greater than 1.6 mm (1/16 in) in the ICF or EPS layer shall be slivered and filled using additional pieces of insulation. Note: base coat material shall not be used for leveling. The wall surface must be brought into plane prior to applying coatings.
5. Where required, provision shall be made for termite control and inspections along the base of the wall. Consult ICF manufacturer regarding proper treatment at grade.

3.03 INSTALLATION

- A. Expansion Joints: Continuous expansion shall be installed at the following locations:
1. At building expansion joints.
 2. At ICF wall expansion joints.
 3. Where Carrara coatings abut other materials.
 4. Where significant structural movement occurs, such as at changes in building shape and/or structure.
 5. Where substrate changes.
- B. The Carrara materials shall be mixed and applied in accordance with current Carrara Master Guide Specifications.
1. Install additional layer of EPS insulation board when specified:
 - a. To face of molded ICF (if applicable) use AcraCream™ Acrylic-Rubber Joint Sealant or use mechanical fasteners anchored in attachment strips in the ICF to satisfy structural requirements.
 - b. To face of extruded ICF (required) using mechanical fasteners anchored in attachment strips in the ICF to satisfy structural requirements.
 2. Apply edge wrap using detail reinforcing mesh embedded in base coat at all ICF and EPS terminations.
 3. Install all EPS trim by adhering to the existing ICF using AcraCream™, Joint Sealant and allow to dry.
 4. Apply AcraCream™ Acrylic-Rubber Joint Sealant with imbedded joint tape to waterproof all windows, doors, joints, seams and other building penetrations in accordance with product data installations.
 5. Apply a layer of the specified reinforcing mesh embedded in wet base coat mixture over the entire wall surface area, trowel smooth and allow to dry to the touch. Lap mesh 2 1/2" (64mm) minimum on all sides. Apply a second layer of base coat to achieve a total base coat thickness of 1/8 inch (3.1mm). Refer to AcraBond™ printed product tech data.
 6. Reinforcing Mesh shall be continuous through all interior and exterior corners extending beyond the corner a minimum of 12" from both directions creating a minimum of two layers of standard reinforcing mesh on all interior and exterior corners.
 7. Allow the base coat mixture to cure a minimum of 24 hours until completely dry. Cool, humid conditions may require longer cure times.
 8. Apply ColorFlex Elastomeric primer to the dry base coat. ColorFlex shall be tinted the same color as the Texture finish that's applied over the ColorFlex primer. Allow to dry 4-6 hours before applying Carrara Texture finish coat.
 9. Apply the specified Carrara Texture finish in accordance with Carrara's printed installation instructions.

3.04 FIELD QUALITY CONTROL

- A. The Contractor shall be responsible for the proper application of the Carrara materials.
- B. Global Coatings, Inc, assumes no responsibility for on-site inspections or application of its products.

3.05 CLEANING

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

3.06 PROTECTION

- A. The Carrara coatings and the project shall be protected from water, freezing temperature, damage and exposure to dust and other contaminants until dry.

DISCLAIMER: 307

Information contained in this specification conforms to standard detail and product recommendations for the installation of the Carrara ICF Coatings and Finish as of the date of publication of this document and is presented in good faith. Global Coatings, 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:

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