Decoplast® Direct-Applied Finish System (DAFS) Over ICF Specification

SECTION 07 24 23 DIRECT-APPLIED FINISH SYSTEMS

System Description Architect's Guide

Decoplast DAFS-ICF is a reinforced acrylic finish system designed specifically for application over insulated concrete form construction. The system combines the thermal performance and resilience of ICF wall assemblies with the aesthetic versatility of Decoplast acrylic finishes. The assembly consists of a Decoplast reinforced base coat, alkali-resistant reinforcing mesh, optional primer, and a durable acrylic finish applied directly to the EPS face of the ICF substrate.

SECTION 07 24 23 DIRECT APPLIED FINISH SYSTEMS
DECOPLAST ACRYLIC PLASTER FINISH FOR INSULATED CONCRETE FORM (ICF) CONSTRUCTION GUIDELINE SPECIFICATION

PART 1 - GENERAL
1.01 SUMMARY

A. Provide Decoplast Direct-Applied Finish System (DAFS) over vertical above-grade exterior insulated concrete form (ICF) wall construction.
B. Work includes:
    1. Surface preparation.
    2. Reinforced base coat.
    3. Reinforcing mesh.
    4. Primer.
    5. Decorative finish coating.
C. Related Sections
    1. Section 03 11 19 Insulated Concrete Form Construction.
    2. Section 07 27 00 Air Barrier Systems.
    3. Section 07 60 00 Flashing and Sheet Metal.
    4. Section 07 92 00 Joint Sealants.

1.02 DESIGN REQUIREMENTS

A. This specification covers direct application of the Decoplast DAFS System over code-compliant ICF wall assemblies.
B. This specification does not address:
    1. Structural wall design.
    2. Air barrier design.

3. Flashing design.
4. Moisture management.
5. Thermal calculations.
6. Fire-resistance design.

C. Compliance of the completed wall assembly with applicable building codes shall be the responsibility of the design professional.
D. Projecting surfaces shall slope not less than 6:12.
E. Horizontal projections shall be protected from water intrusion.

1.03 SUBMITTALS

A. Product Data

1. Submit manufacturer's current technical literature for:
   A. Base coat.
   B. Reinforcing mesh.
   C. Primer.
   D. Finish.
2. Samples: Submit finish samples showing:
   A. Color.
   B. Texture.
   C. Pattern.
3. Shop Drawings
   A. Indicate:
      1. Movement joints.
      2. Sealant joints.
      3. Perimeters.
      4. Penetrations.
      5. Terminations.

1.04 REFERENCES

A. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation
B. ASTM C920 - Standard Specification for Elastomeric Joint Sealants
C. ASTM C1382 - Standard Method for Determining Tensile Adhesion Properties of Sealants When Use in Exterior Insulation and Finish Systems
D. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials

1.05 QUALITY ASSURANCE

A. Manufacturer
   1. Minimum ten years documented experience manufacturing architectural coatings and wall systems.

B. Contractor
   1. Minimum five years experience installing EIFS, stucco, acrylic finishes, or equivalent reinforced wall systems.
C. Mock-Up
   1. Provide mock-up when requested by Architect.
   2. Approved mock-up shall establish standard for color, texture, and workmanship.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver products in manufacturer's original unopened packaging.
B. Store materials: Store products in a dry area with temperature maintained between 50 and 85 degrees F (10 and 29 degrees C). Protect from direct sunlight. Protect from freezing. Protect from extreme heat (>90 degrees F [32 degrees C].

1.07 WARRANTY

A. Provide manufacturer's standard limited warranty.

PART 2 - PRODUCTS

2.01 MANUFACTURER

Greenmaker Industries LLC
697 Oakwood Ave., West Hartford, CT 06110
860-761-2830
www.decoplast.com

2.02 MATERIALS

A. ICF Substrate
   1. Building code compliant ICF made with EPS (expanded polystyrene) in conformance with ASTM C 578 Type I, II, or IV requirements, with embedded form ties (no plates, discs, or ribs on the surface of the EPS).

B. Base Coat (select one)
   1. Decoplast Premium Dry – one component polymer modified Portland cement base coat.
   2. Decoplast Liquid Base Coat – one component polymer modified Portland cement base coat
   3. Decoplast Groundcoat Waterproof Base Coat - two component acrylic-based additive with pre-proportioned Portland cement

NOTE: Use waterproof base coat with Decoplast Mesh embedded for special conditions such as projecting foam trim or similar features over the standard base coat and mesh application to waterproof these surfaces.

C. Reinforcing Mesh

1. Decoplast Standard Mesh nominal 4.5 oz/sq.yd. (153 g/sq.m.) glass fiber reinforcing mesh treated for compatibility with Decoplast materials
2. High Impact Mesh where indicated.

D. Primer

1. Deco Prime – acrylic based primer
2. Deco PrimerTex 1000 – alkali resistant “hot primer”

E. Finish

1. Deco Finish.
2. Deco DPR Finish.
3. Deco Silicone Finish.
4. Color and texture as selected by Architect.

F. Accessories

1. Backer rod.
2. Sealants.
3. Expansion joint accessories.
4. PVC trims where indicated.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify substrate is:

1. Dry.
2. Sound.
3. Clean.
4. Free of contaminants.
5. Surface irregularities shall not exceed: 1/8 inch in 10 feet.

3.02 INSTALLATION

A. The ICF must be constructed in conformance with the applicable building code, manufacturer’s written installation instructions, and installed in courses with a running bond pattern and inside and outside corners interlocked. ICF units shall not exceed 2 x 4 ft. (1.6 x 3.2 m) in dimension with the long dimension oriented horizontally on the wall surface. ICF joints shall be tightly abutted without concrete in the joints or concrete protrusions. ICF wall surface shall be free of blow-outs, or other surface defects and shall not have planar irregularities in excess of 1/16 inch (1.6 mm). ICF must be clean, dry, and free of surface contamination.

NOTE: Where the ICF wall surface is highly irregular or out of plane or fails to conform dimensionally witt the requirements of Section 3.1A the application of Decoplast DDARS ci may be an acceptable means of correcting the ICF wall surface condition, as determined by the design professional, owner, or owner’s

representative/quality assurance agent.

3.03 PREPARATION

A. Rasp ICF surface to:
   1. Remove UV degradation.
   2. Eliminate high spots.
   3. Improve surface uniformity.

B. Remove dirt, dust, and foreign materials.

3.04 REINFORCED BASE COAT

A. Apply Decoplast Base Coat directly to ICF surface.
   1. Nominal thickness 1/8 inch (3 mm).

C. Immediately embed reinforcing mesh.
   1. Overlap standard mesh: Minimum 2-1/2 inches (64 mm).
   2. Double wrap inside and outside corners.
   3. Fully encapsulate mesh

3.05 PRIMER APPLICATION

A. Apply Decoplast Primer after base coat curing.
B. Allow primer to dry completely.

3.06 FINISH APPLICATION

A. Apply selected Decoplast Finish in accordance
B. with manufacturer's published instructions.
C. Maintain uniform color and texture.
D. Terminate applications only at natural breaks.

3.07 PROTECTION

A. Protect completed work from:
   1. Rain.
   2. Freezing.
   3. Damage.
   4. Excessive humidity.

A. Protect wall assembly from water intrusion during construction.
B. Provide flashing, sealants, and terminations
C. necessary to maintain weather resistance.

END OF SECTION 09 24 23

IMPORTANT GENERAL PRODUCT USE NOTE

Products referenced in this Section are intended for use by qualified professional contractors as components of a larger construction assembly designed by a qualified design professional, general contractor, or builder. Install products in accordance with the Contract Documents and the manufacturer's written instructions.

Greenmaker Industries disclaims responsibility for on-site inspections; for products installed improperly or by unqualified persons or entities; for use within assemblies that are improperly designed or constructed; for failures of adjacent components or assemblies; or for any construction activities beyond the manufacturer's control. Improper use of these products, or use within an improperly designed or constructed assembly, may result in damage to the products and to the building or its components.

The Greenmaker Industries disclaims all warranties, express or implied, except for limited written warranties issued to and accepted by building owners under the manufacturer's current warranty programs. For the most current information regarding installation requirements, mixing, application, cleanup, specifications, cautions, and warranty provisions, refer to www.decoplast.com website.