

# HULK SYSTEMS 2025

## — ICF POOL SYSTEM APPLICATION GUIDE

**A COMPREHENSIVE SET OF INSTRUCTIONS,  
FOR ACHIEVING A SUCCESSFUL INSTALLATION  
OF YOUR NEXT HULK SYSTEMS ICF INTERIOR  
FINISHING SYSTEM.**



**AS FEATURED ON THE  
BUILD WITH ICF PODCAST  
WITH TREVOR & HEATHER BROWN**

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# HULK SYSTEMS

## 1. DESCRIPTION AND ADVANTAGES

The Hulk ICF Pool System is an interior pool finish featuring a liquid-applied liner. Unlike most competitive systems, our ICF Pool System was designed not only for adhesion to EPS, but to endure the water's outward forces (hydro-static outward pressure), during filling, draining, and freezing in subzero temperatures. The anti-fracture design allows an appropriate amount of flexibility, where rigid systems give way if compression occurs in the foam substrate. The liquid liner is part of the system, not a separately sourced component from the trowel-grade reinforcing cement or plaster barrier, so you can find comfort in knowing that all parts are designed and tested to work in tandem, by the same manufacturer. The system is constructed from the following components:

1. Penetration sealant
2. High-built cement coating with embedded glass fiber reinforcing mesh
3. Secondary or topcoat of cement coating
4. Finishing liner coat(s) with customizable finishes and colors

*Optional Component:* Moisture-resistant XPS board with a precoated, mesh-embedded finish that sits behind finish coatings.

This system offers distinct advantages over alternative pool finishes:

- Superior resistance to structural loads
- High resilience against expansion and contraction
- Excellent resistance to chemical degradation
- Seamless surface coverage
- Reduced installation cost
- Extensive aesthetic versatility
- Minimal maintenance requirements

Designed to provide moisture protection at the interior surface, the Hulk ICF Pool System is suitable for applications such as pool lining, tank lining, and vessel lining. When combined with submersion-compatible sealants, reinforcing webbing, and coatings, it effectively prevents moisture penetration during active use. For exterior waterproofing of ICF pools, Hulk Systems recommends its composite waterproofing system.

## 2. PURPOSE OF THIS GUIDE

Hulk Systems, a manufacturer of advanced construction materials, provides this guide to ensure proper installation of the Hulk ICF Pool System (Tile Clad, Solid Color, and Additive Enhanced variants). Developed with contributions from technical experts and experienced applicators, it delivers concise, essential instructions. Installer feedback is valued so please contact Hulk headquarters in Calgary, Alberta, to submit suggestions.

## 3. PROJECT PREPARATION

Complete the following tasks before installation:

- Protect the work area from windblown or falling debris that may interfere with coating curing.
- Apply masking tape or plastic coverings to shield sensitive accessories as Hulk materials exhibit strong adhesion and are difficult to remove once cured.
- Verify that all required materials are on-site and stored according to specifications.
- Precut lengths of Hulk SRT textile to expedite installation.
- Review all relevant product technical data sheets and safety data sheets before commencing work.

## 4. MATERIAL STORAGE AND HANDLING

- Pail Products: Store and apply at temperatures above 40°F (4°C), away from direct sunlight to prevent flashing of cementitious products. Do not apply to frozen surfaces.
- Bag Products: Store off the ground in a dry, temperate environment. Avoid exposure to high humidity.
- Hulk SRT Textile: Store flat in a dry location, protected from dirt and debris.

## 5. SUBSTRATES

The system is compatible with the following substrates:

- Sound masonry, concrete, or Portland cement plaster
- EPS foam block (e.g., ICF)
- Glass mat-faced gypsum sheathing (ASTM C1177)
- Water-resistant fiber-reinforced gypsum sheathing (ASTM C1278)

### 5(a) Surface Preparation

Substrates, including concrete, mortar, masonry, EPS, or XPS, must be clean, dry, and structurally sound. Preparation includes:

- Removal of deteriorated concrete, dirt, dust, oil, grease, and other bond-inhibiting materials.
- For EPS (ICF) surfaces exhibiting yellow residue, lightly sand with high-grit sandpaper to avoid full rasping to preserve surface strength.
- Repair damaged areas with substrate-appropriate materials.
- Mechanically prepare rigid substrates using grinding, blast cleaning, water blasting, or a combination thereof.
- Achieve a Saturated Surface Dry (SSD) condition with clean water before application, ensuring no standing water remains.

Execution Details: Ensure a clean, sound surface free of contaminants (dust, laitance, grease, oils, curing compounds, form release agents). An open-textured, sandpaper-like finish is ideal. Surfaces may be lightly dampened with water or liquid coating (Part A) to enhance adhesion. Avoid application in direct sunlight when temperatures exceed 77°F (25°C).

### 5(b) Surface Repair

- Defects Exceeding ¼": Apply a recommended repair coating to address honeycombing, air pockets, gaps greater than ¼", and damaged areas in cement or foam.
- Uneven Surfaces: Chip away misaligned concrete and patch smooth; rasp uneven ICF block and mend with repair material if significant rasping occurs.
- Corners:
  - ICF Applications: Construct 2" x 2" minimum corner coves using Hulk Semi-Flexible Mastic.
  - Concrete Applications: Use overhead or vertical structural repair mortar for 2" x 2" minimum coves.

Recommended Materials:

- Concrete/Brick: Cement or mortar with additives (e.g., polymer, bentonite clay, aggregates). Rigid mastic for cracks, flexible mastics or sealants for control joints.
- EPS/XPS Foam: 100% solids flexible mastics or manufacturer-recommended polyurethane spray foam.
- Magnesium Sheathing: Exterior-grade polyurethane sealants or flexible mastics.

Replace defective sheathing. Prepare concrete by removing contaminants and establishing a profile (e.g., detergent wash, water-blasting, sandblasting, grinding, or shot-blasting for horizontal slabs). Remove efflorescence from masonry with wire brushing. Inadequate preparation may lead to delamination. Limit mechanical fasteners to surfaces with unreliable adhesion (e.g., painted), as they may introduce thermal bridges or water intrusion points and become visible.

## 6. COMPONENTS

- Hulk Semi-Flexible Mastic: Two-component, trowel- or tool-applied sealant for fixtures, penetrations, joints, openings, corners, and coves.
- Insulation Boards: Hulk XPS boards, ½" (13 mm) to 4" (100 mm) thick, maximum 2" x 4" (610 mm x 1,219 mm), pre-treated with a cementitious coating and embedded mesh (1-hour burn rating).
- Quality Assurance: Hulk-labeled, undamaged, 80% bead fusion, fire-retardant, no pentane gas. Store flat, dry, away from sunlight.
- Cutting: Use a sharp knife at a 30° angle, table saw, or hot wire machine.
- Hulk Cementitious: Mix 3.5 gallons (13.25 L) liquid per 45 lb (20.4 kg) bag. Apply with 5/8" x 5/8" (16 x 16 mm) square-notched trowel or ½" x ½" (13 x 13 mm) U-notched trowel for scratch coat, or flat trowel for brown/skim coat (maximum thickness of 3/16" per coat).
- Hulk SRT Quartz/Fiberglass Anti-Fracture Webbing: 40" wide mesh embedded in the initial Hulk Cementitious coat, extending 18" onto the vertical slab below the cove bottom edge.
- Hulk Hydrostatic Resistant Epoxy Membrane: 2:1 component mix designed to resist negative-side pressure. Apply with an epoxy roller (silicone hair) on vertical surfaces or squeegee with back-rolling on horizontal slabs; plural-component, solvent-friendly spray equipment is optional.
- Hulk Flexible Pool Epoxy: 1:1 component mix for submersion in high-pH, chlorine, and saltwater environments. Optional broadcast additives (e.g., quartz, acrylic flakes, fluorescent flakes). Apply with an epoxy roller on vertical surfaces, squeegee with back-rolling on slabs, or plural-component spray equipment.
- Hulk Topcoat with Aggregate: 1:1 component polyaspartic with high UV tolerance, designed for submersion. Optional clear aggregates for anti-slip properties. Apply with an epoxy roller on vertical surfaces, squeegee with back-rolling on slabs, or plural-component spray equipment.

## 7. APPLICATION OF SYSTEM

### 7(a) Hulk Semi-Flexible Mastic – Joint and Penetration Treatment

Secondary Preparation:

- ICF/ Pools: Ensure seams, cold joints, and penetrations (e.g., pipes, conduits) are clean, dry, and free of contaminants.
- Concrete Walls: Verify structural integrity and remove dust and foreign materials.
- Concrete Floors: Clean via acid etching or shot blasting; remove curing compounds.
- Wood: Sand to bare wood, removing loose fibers and paint.
- Steel: Degrease and mechanically abraded to a clean, bright surface.
- Plastics: Abrade and degrease thoroughly.

Mixing and Application:

- Mix equal parts of Component A and Component B using a slow-speed drill until uniform.
- Apply with a plastic putty knife or silicone coving tool, ensuring consistent coverage.
- Plural sealant guns are permissible.
- Allow a minimum of 6 hours for curing before applying additional coatings.
- Thin with Xylene if necessary but avoid thinning for foam or plastic substrates.

### 7(b) Hulk Cementitious – Adhesive Cement Application

Mixing:

- Use a low-speed drill (400-600 rpm) with a paddle in a white mixing container to reflect heat. Add approximately ½ of Component A, then slowly incorporate all of Component B while mixing until lump-free. Scrape container sides, add remaining Component A, and mix until uniform.

Application:

- Apply with a specified notched trowel at a 30° angle for horizontal ribbons. Maintain a minimum 1/16" (1.6 mm) gap from substrate joints. Embed full sheets of Hulk SRT webbing with a minimum 2" overlap.
- Methods:
  - Brush: Apply first coat horizontally, embed textile, smooth with a trowel, cure 24 hours, then apply second coat vertically.
  - Trowel: Apply the first coat with a notched trowel, embed textile, smooth, cure for 2-4 hours, then apply a second coat with a flat trowel.
  - Roller: Use a magic trowel to spread, embed textile, flatten, and back-roll the second coat for texture.
  - Spray: Apply first coat with a hopper gun, embed textile, cure 2-4 hours, then apply a second coat and back-roll optionally.
- Continue application without interruption, stopping only at edges, corners, or joints. Apply wet-on-wet at a 45° angle to the edges.
- For block or masonry, allow the first coat to cure for 2 days before the second. Cure 3-5 days before water immersion.

**7(c) Hulk Insulation Board Application (OPTIONAL STEP - If ICF is severely damaged, and/or the installer deems it better to reinforce the wall(s))**

- Install boards with tight joints, staggered vertically, and interlocked at corners (6" or 152-mm sheathing offset). Cut around openings, avoiding alignment with corners or substrate joints. Apply pressure with shims for adhesive adhesion.
- Filling Voids: Use spray foam for gaps exceeding 1/16" (1.6 mm) to prevent thermal breaks and cracking.
- Rasping & Shimming: Do not rasp; shim boards to the desired profile during mounting.

**7(d) Hulk Secondary (Brown) Cementitious Coat Application**

- Apply a thick coat (maximum 3/16" or 4.8 mm), embedding secondary mesh at wrapping junctures with a 2½" (64 mm) overlap.
- Details: Install diagonal mesh at openings or as tile backing reinforcement.
- Corners: Double-wrap 8" (204 mm) or overlap with detail mesh; rigid corner bead with mesh is recommended for stairs.
- Ensure full drying before proceeding (refer to Hulk Cementitious Adhesive Cement Application above for additional guidance).

**7(e) Hulk Cementitious Aggregate Coat Application**

- Apply a subsequent cementitious coat with coarse aluminide aggregate, up to 3/16" (4.8 mm) thick, to enhance strength and impact resistance (e.g., lower 3 feet of walls). Use a trowel or aggregate-rated hopper/texture sprayer (not single-component sprayers). Water cleanup. Refer to Hulk Cementitious Adhesive Cement Application above for further instructions.

**7(f) IMPORTANT STEP: Final Sealant Application**

- After curing, apply a bead of Hulk Semi-Flexible Mastic around pool lights, scuppers, plumbing, drains, and termination points or material transitions.

**7(g) Hulk Liquid Liner Primer Application**

Mixing and Application:

- Pre-mix Part A to eliminate settlement, add Part B, and mix for 2 minutes with a slow-speed drill and coil mixer. Scrape sides for uniformity. For porous concrete, add 2% xylene or acetone to the initial coat.
- Spread with a flat squeegee and back-roll with a lint-free 6 mm nap roller. Apply subsequent coats within 12-16 hours. Use a resin/epoxy roller on vertical surfaces; back-roll with a 20 mm nap roller if needed. Avoid application below 50°F (10°C) or in exterior conditions.
- Limitations: Not suitable for submersion without additional coats or on substrates below recommended temperatures.

### 7(h) Hulk Liquid Broadcast Coat Application (Optional)

- Required only for broadcast additives (e.g., flakes, quartz, glitter). Pre-mix Component A of Hulk Flexible Epoxy, add all of Component B, and mix for 2 minutes with a slow-speed drill and paddle mixing blade. Pour onto edges, spread with a flat squeegee, and back-roll with a lint-free 6 mm nap roller at a minimum of 10 mils. Avoid over-rolling to prevent air entrapment.
- Limitations: Do not apply below 10 mils to avoid orange peel; do not leave mixed material in the container, as it will harden and generate heat; avoid application over tacky primer.

### 7(i) Hulk Protective Top-Coat Application

- Provides protection against chemicals, UV exposure, and wear. Mix Part A and Part B at the specified ratio using a low-speed drill. Apply with an epoxy roller or squeegee, using multiple layers on ICF vertical walls for enhanced waterproofing. Broadcast anti-slip micro-aggregates immediately if desired. Cure for at least 24 hours before water exposure or heavy use.

## 8. HULK PRODUCT DESCRIPTIONS

- Hulk Semi-Flexible Mastic: Sealant for gaps and joints
- Hulk Mesh: Fiberglass anti-fracture webbing
- Hulk Insulation Board: Moisture- and fire-rated XPS
- Hulk Cementitious: Cement-based adhesive/base coat
- Hulk Epoxy Membrane: Hydrostatic-resistant primer coat
- Hulk Flexible Epoxy: Inter-coat for broadcast mediums
- Hulk Polyaspartic: UV- and abrasion-resistant topcoat

## 9. AVERAGE COVERAGES FOR HULK SYNTHETIC STUCCO PRODUCTS

PRODUCT	PACKAGE	SQUARE FOOTAGE
Hulk Cementitious	5-gal pail	125 ft <sup>2</sup> (scratch), 105 f <sup>2</sup> (brown)
Hulk Membrane	15-gal kit	2,700 ft <sup>2</sup> , 180 ft <sup>2</sup> /gal @ 9 mils
Hulk Flexible Epoxy	10-gal kit	2,000 ft <sup>2</sup> , 200 ft <sup>2</sup> /gal @ 8 mils
Hulk Polyaspartic	10-gal kit	4,000 ft <sup>2</sup> , 400 ft <sup>2</sup> /gal @ 4 mils

#### Average Labor Production (1 Person, 8-Hour Day):

- Hulk Cementitious w/ Textile embedded: 600 sq ft
- Hulk Cementitious subsequent coats: 1,200 sq ft
- Hulk Epoxy Membrane Primer: 2,500 sq ft
- Hulk Flexible Pool Epoxy w/ broadcast medium: 1,500 sq ft
- Hulk Polyaspartic Topcoat: 3,000 sq ft

## 10. RECOMMENDED PORTABLE EQUIPMENT

- Texture Spray Equipment: Hopper, mixer, and pump system for adhesive/base coat application, ensuring consistency and efficiency. Contact the manufacturer for specifications.
- Single or Dual Component Spray Pump: Lightweight pumps for adhesives, base coats, and finishes. Use separate pumps for plural/solvent-based and water-based materials to avoid cross-contamination and equipment failure. Contact the manufacturer for specifications.

## 11. DISCLAIMER

Hulk Systems Inc. guarantees the performance of the Hulk ICF Pool System when applied according to this guide. Liability is limited to product replacement or refund in case of defects. Results may vary based on site conditions and application methods, or warranty terms provided. Adherence to preparation and application instructions is essential for optimal performance.

## 12. CONTACT

For technical support, contact **1-833-485-5797** or visit [www.hulkssystem.com](http://www.hulkssystem.com).





**THANK  
YOU!**