HULK SYSTEMS

Composite Waterproofing

Quick Reference Spec

Cold-Fluid Applied, Fully Reinforced Elastomeric Membrane

1. SYSTEM OVERVIEW

The Hulk Composite Waterproofing System is a seamless, monolithic, Class "A" fire-resistant membrane designed for below-grade and above-grade applications. By combining a highly flexible liquid acrylic membrane with a quartz-resin infused textile, the system functions as a structural "cast" over Concrete, ICF, SIPs, Wood, and Magnesium Board, offering superior impact, puncture, and UV resistance compared to traditional thin-film or peel-and-stick membranes.

2. CORE COMPONENTS

- **Primary Membrane (Hulk WP®):** A water-based, solvent-free, single-component elastomeric acrylic membrane. (Class A Fire Rated, Low VOC $<$ 30g/L).
- **Reinforcement (Hulk SRT®):** E-glass, quartz-resin infused structurally reinforcing fiberglass textile used to create the composite shell.
- **Detailing Mastic (Hulk Semi-Flexible Mastic®):** 2-Part (1:1) epoxy-based mastic for cracks, joints, penetrations, and creating coves.
- **Primer (Hulk Epoxy Membrane Primer®):** Optional/Substrate dependent. Required for Magnesium Board or specific high water-table applications.

3. KEY PERFORMANCE METRICS

Property	Test Standard	Result / Capability
Fire Rating	ASTM E84-01	Class "A" (Suitable for exposed above-grade use; UV Stable)
Elongation	ASTM D412 / D2370	310% to 455% (Maintains flexibility at -40°F/-40°C)
Adhesion	ASTM C-836	Exceeds cohesive strength on concrete and foam substrates
Water Vapor Permeance	ASTM E-96	$<$1.0 perm @ 40-mil DFT (0.1 perm Method BW)
Puncture Resistance	CAN/CGSB 37-GP-56M	Pass (Static & Dynamic Impact)

4. EQUIPMENT & ENVIRONMENTAL REQUIREMENTS

- **Pump Type:** Electric Airless Sprayer (e.g., Graco Ultra Max II 1095, Titan Impact 1040). Minimum 3,000 PSI working pressure.

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- **Spray Tip:** 0.021” orifice or larger with 10”-12” fan spread (e.g., 521 tip or greater).
- **Material Viscosity Handling:** 15,000 - 20,000 PS @ 6 RPM.
- **Storage & Weather:** Store between 50° - 70°F (10° - 21°C). **DO NOT FREEZE.** Do not apply if rain/heavy snow is imminent within 12 hours.
- **Application Temp:** Minimum ambient/substrate temp of 32°F (0°C). Down to 10°F (-12°C) requires specialized heated lines/heat exchangers.

5. FOUR-STEP INSTALLATION PROCESS

Target system thickness with textile is approximately 70-85 wet mils / minimum 40 dry mils.

Step 1: Surface Prep & Detailing
Ensure substrate is sound, clean, and free of dirt, oils, or frost. Pack all through-wall penetrations, non-structural cracks, and inside/outside corners with **Hulk Semi-Flexible Mastic®** (creating a 3/4” fillet in corners).

Step 2: Base Coat (Hulk WP)
Apply the first layer of Hulk Acrylic Waterproofing by airless spray or heavy nap roller at a rate of **35 to 40 wet mils** (approx. 66 sq. ft. / gallon).
Visual indicator: product just begins to sag or drip slightly.

Step 3: Embed Textile (Hulk SRT)
While the base coat is still wet, lay the Hulk SRT textile directly into the membrane. Press firmly to smooth out wrinkles and ensure the wet coating begins to bleed through the fabric. Overlap all seams by a minimum of 2.5 to 3 inches. *(Mandatory for ICF/Foam/Wood; Optional but recommended for poured concrete).*

Step 4: Top Coat (Hulk WP)
Immediately (and no later than 4 hours) apply the second coat of Hulk Acrylic Waterproofing directly over the wet textile at **30 to 40 wet mils**.
Visual indicator: the texture and pattern of the SRT fabric should no longer be visible, resulting in a smooth, monolithic cast.

6. PROTECTION & BACKFILLING

Because of the highly durable composite shell created by the infused SRT, standard backfill can typically proceed once fully cured (24 hours standard). If applied to concrete *without* the SRT textile, an approved extruded drainage or protection board is recommended prior to backfilling.