



# TECHNICAL DATA SHEET

## HORNWELD®

### Redispersible Latex Bonding Agent for Concrete

03300

CAST-IN-PLACE CONCRETE  
CONCRETE

TAMMS INDUSTRIES  
NOVEMBER 2003 (Replaces 1/00)

1. **DESCRIPTION:** HORNWELD is a redispersable liquid bonding agent and polymer modifier for cement mortars.

#### FEATURES AND BENEFITS

- *High build bonding agent or polymer admixture*
- *Increases bond strength*
- *Improves durability*
- *Long open time*
- *Complies with ASTM C1059 Type I*

#### APPLICATIONS

- *Bonds fresh cementitious materials to a variety of substrates including:*  
*Concrete, brick, tile, stone, concrete block, plaster, gypsum board or lath, plywood, hardboard or wood.*
- *Interior and exterior surfaces*
- *Polymer modifier for cement mortars*

2. **COMPOSITION AND MATERIAL:** HORNWELD is a high film build, copolymer or polyvinyl acetate emulsion designed as a bonding agent and polymer modifier for cement mortars.

Material Properties @ 75°F (25°C)	
Weight per gallon	8.9 lbs (approx)
Mixed Viscosity	500 – 1,000 cps
HORNWELD meets the following specification:	
ASTM C-1059, Type I	

3. **SURFACE PREPARATION:** Surface must be clean, dry and structurally sound. The substrate must also be free of all curing compounds, form release agents and any other contaminants, which may prevent the proper penetration of HORNWELD. The preferred method of surface preparation is abrasive blasting. For oil-contaminated surfaces, using steam cleaning in conjunction with a strong emulsifying detergent may be considered. Rinse thoroughly with potable water. Lightly dampen the surface with potable water before applying HORN-

WELD. Portland cement based toppings must be a minimum of 1/2 inch thick (1.27 cm) and must be contained by vertically cut edges.

4. **APPLICATION TECHNIQUES:** Bonding Agent: Stir HORNWELD thoroughly before use. Do not dilute. HORNWELD will dry in approximately one hour depending on the temperature and humidity. Extremely porous surfaces may require two coats of HORNWELD. For hand application, use brushes or rollers before use and shake out excess water. For larger areas or faster application, use airless spray equipment with 0.015 to 0.020 inch (0.38-0.51 mm) orifice size spray tips. Hold spray gun 12 to 18 inches from the surface and apply HORNWELD using a cross coat technique consisting of a horizontal pass followed by a vertical pass. HORNWELD is formulated to provide exceptional bond when first activated by moisture. If more than 7 days pass following application, check several areas to ensure adequate adhesion. Make test applications on questionable surfaces.

**Polymer Modifier:** When using HORNWELD to produce a polymer modified mortar, add approximately 3 gallons of HORNWELD per 100 pounds of cement content in the mortar material. The properties achieved by using HORNWELD as a polymer modifier will vary depending on the composition of the mortar and complete evaluation should be completed prior to using the polymer modified mix.

5. **COVERAGE:** 200 – 250 square feet per gallon on dense surfaces (4.9 – 6.1 square meters per liter). Porous surfaces may require more material. Do not exceed 300 square feet per gallon (7.3 square meters per liter).

6. **CLEAN-UP INSTRUCTIONS:** Clean tools and equipment with detergent and water immediately following use. Clean drips and over-spray with water while still wet. Dried HORNWELD may require mechanical abrasion for removal.

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7. **ENVIRONMENTAL AND SAFETY PRECAUTIONS:** Avoid prolonged contact with the skin. Wash hands immediately after use and before smoking or eating. For contact with eyes, flush immediately with large amounts of water and call a physician immediately. **DO NOT RUB EYES. READ MATERIAL SAFETY DATA SHEET BEFORE USING. MATERIAL IS FOR INDUSTRIAL USE ONLY. KEEP AWAY FROM CHILDREN AND ANIMALS.** EMERGENCY RESPONSE PHONE NUMBERS ARE (800) 862-2667 TAMMS or (800) 424-9300 CHEMTREC.
8. **CAUTIONS:** Do not use HORNWELD where constant moisture or hydrostatic pressure is present (swimming pools, cisterns or other areas that will be immersed). Do not dilute HORNWELD. Keep from freezing. Do not apply to frozen or frost filled surfaces. Do not apply if temperature is below 50°F (10°C). Do not over-trowel, or overwork cement mortars modified with HORNWELD.
9. **PACKAGING:** Cases of 6-1 gallon containers and in 5-gallon pails. Store at temperatures between 50 - 90°F. Protect from freezing. Shelf life is two years in sealed containers and protected storage. Freight Class is 55.
10. **TECHNICAL SERVICE:** For application procedures or surface conditions not specified above, please contact:

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