

## TECHNICAL DATA

# HYDROFIX

## 100% SOLIDS, FLUID-APPLIED WATERPROOFING MEMBRANE

### DESCRIPTION

HydroFix is a 100%-solids, solvent-free, cold fluid-applied, single-component, moisture-reacted, modified elastomeric polymer that cures to form a flexible, monolithic, waterproof membrane on vertical and horizontal surfaces. Due to the moisture-reactive and non-gassing properties of the membrane, it provides an excellent barrier against both water and vapor transmission. Additionally HydroFix forms a tenacious adhesion bond to concrete substrates preventing lateral water migration in both above- and below-grade applications.

HydroFix is a fast curing waterproofing membrane designed to provide a reinforced cold fluid alternative to hot applied rubberized asphalt membrane systems and pre-formed waterproofing sheeting systems. It is applied in a high performance reinforced two-ply system or a standard single ply application. HydroFix cures through reaction with both atmospheric and substrate moisture to provide a "seamless", impervious membrane. HydroFix can even be applied to structural surfaces with moisture present in the substrate i.e. damp or green concrete.

### APPLICATIONS

HydroFix is available in a single viscosity for both horizontal and vertical surfaces. Typical applications are between structural slab and wearing course on parking garages, plaza decks, balconies, roof decks, terraces, mechanical equipment rooms, commercial kitchens and shower stalls. HydroFix is ideally suited for waterproofing below-grade foundation walls, tunnels, planters, protected roof membrane systems, and other areas where a seamless, elastomeric waterproofing is required. It has excellent adhesion to most construction surfaces such as concrete, stone, milled lumber, cement block, and clean metal. Low odor and VOCs make it suitable for use in confined spaces and remedial work in occupied structures. It is an ideal cold applied alternative to hot rub-

berized asphalt membrane applications especially for project areas where it is difficult or restricted to operate a hot applied heating kettle.

HydroFix can be applied in two system types: High Performance Reinforced Systems and Single-Coat Standard Systems. High Performance Reinforced Systems are used for hydrostatic below grade waterproofing conditions or critical roofing applications such as plaza decks, podiums, roof balconies and terraces, or IRMA roof applications. Single-Coat Standard Systems are used for general waterproofing such as non-hydrostatic foundation walls and planter boxes.

### LIMITATIONS

- ▶ Do not apply to wet or contaminated surfaces
- ▶ Not intended for use as an exposed or wearing surfaces
- ▶ If metal pan decking is used for concrete form, the metal pan must be vented
- ▶ Surface temperature must be above 40°F (4°C)
- ▶ Bridge cracks and joints in concrete up to 1/16"
- ▶ HydroFix can not be sprayed. Do not thin material.
- ▶ Do no use under thin set tile.

### APPLICATION STANDARDS

**ASTM C836-06:** HydroFix meets the specification criteria for ASTM C836

**Proposition 65:** This product contains no listed proposition 65 listed materials.

### INSTALLATION

**Surface Preparation:** Acceptable substrates are cast-in-place and precast concrete, masonry block, cementitious board, untreated lumber, plywood and OSB, and most clean metals. New concrete shall be water-cured, trowel-finished, followed by a light, hair broom and in place for 3 days minimum. If curing compounds are required, they

shall be 100% Sodium Silicate and shall be approved by CETCO. Surfaces shall be reasonably smooth, structurally sound, dry, and free of oil, grease, dirt, laitance, curing or release agents and other contamination that may be detrimental to the adhesion of the membrane. Remove splatters, fins, ridges or other projections to provide a smooth, level surface. Fill tie rod holes, honey combs, rock pockets, spalls or other voids and indentations with non-shrink grout. Mortar joints on block walls shall be struck flush with the block surface. HydroFix can be applied to green concrete free of surface water, ice, snow or frost. Allow a minimum of 24 hours for concrete substrate to dry after stopping water cure on decks or removing forms. Lightweight concrete is not an acceptable substrate. Clean metal to expose a bright finish removing any oils and rust. **Note:** Rough surfaces tend to promote air entrapment in the membrane during application, which might result in small blistering in the waterproofing membrane. Rough surfaces also require use of more material. Primer is not typically required for adhesion to non-porous substrates. However, if pinhole and blister problems occur as a result of air and/or moisture vapors emitted from the concrete and environmental conditions, consult CETCO for installation guidelines.

**Detailing:** Prior to membrane installation detail all joints, cracks, expansion joints, drains, penetrations, surface and material substrate transitions in accordance with manufacturer's Guide Specifications and details. Apply a minimum 3/4" (18 mm), 45° angle cant of HydroFix-TG or CETSEAL sealant at the juncture of all vertical and horizontal substrate surface transitions; including detailing pipes and other penetration details.

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Apply a strip coat of HydroFix over sealant cants extending onto the horizontal deck 6" (150 mm) and up the vertical perimeter walls a minimum 8" (200 mm) or to the height specified in the project drawings for termination to tie into flashings or adjacent building envelope material. Apply a minimum 4" (100 mm) wide strip coat of HydroFix membrane over all concrete joints and cracks less than 1/16" (3.2 mm). All strip coat detailing shall be a minimum of 45 mils (1.1 mm) thick and allowed to cure a minimum 4 hours prior to membrane installation.

### MEMBRANE INSTALLATION

HydroFix is a one-component, ready-to-use material that requires no mixing. For ease of application, condition materials at room temperature prior to application. Apply material with a trowel, roller or long-handle notched squeegee. Squeegee applications are preferred for horizontal decks. Typically HydroFix is tack free in 60 minutes and cures to a waterproof seal in 6 to 24 hours in standard temperature and humidity. Environmental conditions and thickness of application will affect actual cure time.

HydroFix can be applied in two system types: Standard Systems and High Performance Reinforced Systems. High Performance reinforced systems consist of two application coats of HydroFix reinforced with Stratabond 100 polyester fabric. High Performance Reinforced Systems are used for hydrostatic below grade waterproofing or critical roofing applications such as plaza decks, podiums, roof balconies and terraces, or IRMA roof applications. Standard Systems consist of a single application coat of HydroFix and are used for general waterproofing such as non-hydrostatic foundation walls and planter boxes. Greenroofs, plaza decks with concrete topping slabs, and cast-in-place concrete on vented metal pan decks require high performance reinforced systems.

#### Horizontal Applications:

**Standard 60-MIL System:** Apply HydroFix at 26 square feet per gallon (2.4 sq m per liter) or as required to obtain a 60-mil (1.5 mm) dry film thickness to the entire area to receive waterproofing; including over all detail coats. Use a roller, notched squeegee, or flat squee-

gee with guide pins to achieve a uniform thickness. Backroll the entire area and allow to cure. Apply membrane up the perimeter walls minimum 8" (200 mm) or to the height specified in the project drawings for termination to tie into flashings or adjacent building envelope material.

#### High Performance 110-MIL Reinforced

**Deck System:** Apply base coat of HydroFix at 29 square feet per gallon (2.7 sq m per liter) or as required to obtain a uniform 55-mil (1.4 mm) thickness to the entire area to receive waterproofing; including over all detail coats. Use a roller, notched squeegee, or flat squeegee with guide pins to achieve a uniform thickness. Immediately install Stratabond 100 polyester reinforcing fabric into the entire surface of uncured HydroFix ensuring full contact. Cut Stratabond 100 fabric to end 1" (25 mm) from all membrane termination edges and around penetrations. Install Stratabond 100 carefully to avoid wrinkles with fabric edges overlapped minimum ¼" (6 mm). In the event of wrinkles or fishmouths, cut the fabric and overlap the excess to avoid trapped air. Apply membrane up the perimeter walls minimum 8" (200 mm) or to the height specified in the project drawings for termination to tie into flashings or adjacent building envelope material. Allow base layer membrane coat to set to a firm consistency, then apply an additional coat of HydroFix at 29 sq. ft. per gallon (1.7 sq m per liter) or as required to obtain a uniform 55-mil (1.4 mm) dry film thickness. Top membrane coat shall extend past the edge of the fabric to completely encapsulate it. Total reinforced system dry film thickness is 110 mils (2.8mm). Install RAP-LW40 protection course into HydroFix before the material surface cures. Overlap protection course edges minimum 2" (50 mm) and seal edges with back roll of HydroFix or Seamtape.

#### Vertical Applications:

**Standard 60-MIL Wall System:** Using a roller or trowel, apply HydroFix in two coats at a rate of 53 square feet per gallon (4.9 sq m per liter) per coat or as required to obtain uniform 30 mils (0.75 mm) per coat for a final dry film thickness of 60 mils (1.5 mm). Apply membrane up the walls to the height specified in the project drawings for termination and to tie into flashings or adjacent building

envelope material. Wait minimum 4 hours between each coat.

#### High Performance 110-MIL Reinforced Wall System:

Using a roller or trowel, apply base coat of HydroFix at a rate of 29 square feet per gallon (2.7 sq m per liter) per coat or as required to obtain uniform 55 mils (1.4 mm) dry film thickness. Immediately install Stratabond 100 polyester reinforcing fabric into the entire surface of uncured HydroFix ensuring full contact. Cut Stratabond 100 fabric to end 1" (25 mm) from all membrane termination edges and around penetrations. Install Stratabond 100 carefully to avoid wrinkles with fabric edges overlapped minimum ¼" (6 mm). In the event of wrinkles or fishmouths, cut the fabric and overlap the excess to avoid trapped air. Allow base layer membrane coat to cure a minimum 4 hours to a firm consistency, then apply an additional coat of HydroFix at 29 sq. ft. per gallon (2.7 sq m per liter) or as required to obtain a uniform 55-mil (1.4 mm) dry film thickness. Top membrane coat shall extend past the edge of the fabric to completely encapsulate it. Total reinforced system dry film thickness is 110 mils (2.8 mm). Apply membrane up the walls to the height specified in the project drawings for termination and to tie into flashings or adjacent building envelope material. Install RAP-LW40 protection course into HydroFix before the material surface cures. Overlap protection course edges minimum 2" (50 mm) and seal edges with back roll of HydroFix or Seamtape.

**Note:** All fluid applied product application rates herein are based on theoretical coverage relative to the percentage of solids in the material. These are minimum application rates to achieve the required dry film thickness for the system and do not account for substrate condition or application technique. Thereby, a thicker application of the product may be necessary then noted herein to achieve the required dry film thickness for the system.

### **Protection and Topping Material Placement:**

Both horizontal and vertical areas should be adequately protected from puncture from further construction activity or backfilling. The RAP-LW40 protection course membrane use may vary with jobsite conditions and vertical or horizontal applications. Backfill or topping material placement operations should not proceed until membrane has cured a minimum 24 hours at 70°F (21°C) or 48 hours in colder conditions.

**Clean Up:** Before material cures, clean adjacent areas to remove stains or spills and clean tools with toluene or xylene. Do not wash off skin with solvents; use waterless hand cleaner for skin. CAUTION: Xylene and toluene are combustible and flammable solvents. Observe all regulations with regards to working with flammable materials. Workmen must wear appropriate protective clothing, eye and skin protection and NIOSH-approved breathing apparatus (organic cartridge recommended).

### **PACKAGING**

5-gallon (18.9 liter) pails

### **SHELF LIFE**

Store in original unopened containers in a cool, dry area at temperatures below 80°F (26°C) for a 12 month shelf life. Protect unopened containers from heat and direct sunlight. Storing at elevated temperatures will reduce shelf life.

### **WARNING AND HAZARDS**

Combustible liquid and vapor. Keep away from heat and flame. Do not heat container or store at temperatures greater than 100°F (38°C). Do not thin. Use only with adequate ventilation. Avoid contact with the eyes or skin, especially open breaks in the skin. In the event of skin contact, remove immediately and wash with warm soapy water. **MAY BE HARMFUL IF SWALLOWED!** If swallowed, do not induce vomiting. CALL PHYSICIAN IMMEDIATELY! Use protective measures to avoid contact with eyes and skin. In case of eye contact, open eyelids wide and flush immediately with plenty of water for at least 15 minutes. GET MEDICAL ATTENTION! **KEEP OUT OF REACH OF CHILDREN.** Refer to MSDS for important warnings and product information.

### **LIMITED WARRANTY**

CETCO warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any CETCO materials prove to contain manufacturing defects that substantially affect their performance, CETCO will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by CETCO with respect to its materials. There are no other warranties, including the implied warranties of merchantability and fitness for a particular purpose. CETCO specifically disclaims liability for any incidental, consequential or other damages, including, but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever. The dollar value of CETCO's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the CETCO material in question.



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TECHNICAL DATA		
PROPERTY	TEST METHOD	TYPICAL VALUE
Composition		Modified Polymer
Color		Black
Setting Time at 77° F (25°C), 50% RH 60 mil Tack-free Set 60 mil Initial Through Set		1 hour 4 hours
Solids Content (Vol.)	ASTM D2697	100%
Low Temperature Flexibility	ASTM C836	No Cracking
Low Temperature Crack Bridging	ASTM C836	No Cracking
Hardness (Shore A)	ASTM C661	10 (+/- 3)
Elongation	ASTM D2370	350%
Tensile Strength	ASTM D2370	95 psi
Water Vapor Transmission Rate	ASTM E96	0.06 perms
Maximum V.O.C. Content		< 40 grams/liter

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IMPORTANT: The information contained herein supersedes all previous printed versions, and is believed to be accurate and reliable. For the most up-to-date information, please visit [www.CETCO.com](http://www.CETCO.com). CETCO accepts no responsibility for the results obtained through application of this product. CETCO reserves the right to update information without notice.



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