

Physical property	Typical value	Test method
Solids Content	100%	ASTM D-2697
Gel Time	4 seconds	-
Elongation	525%	D412
VOC Content	0 g/L	D-2369-81
Tensile Strength	3650 psi	D412
Hardness	50 Shore D	ASTM D-2240
Tear Strength	920 pli	D624-00
Crack Bridging	Pass	C1305-08 (as per C836M-10, C957M-10)

### Description

Henry<sup>®</sup> FX 650 is an elastic, instant setting, spray applied, polyurea, waterproofing membrane for potable water containment.

### Features and benefits

- Instant setting, even at low temperatures, eliminating the requirement for complicated, labor-intensive detailing items
- Spray applied which greatly reduces labor time and cost
- Can be constantly submerged in water
- Low odor, zero VOC, no solvents
- NSF/ANSI Standard 61 Certified – 100 Gal Tank
- Can be applied onto a geotextile when underlying substrate is in poor condition

### Usage

Henry<sup>®</sup> FX 650 is designed to be used a waterproofing membrane for potable water containment applications.

### Application

**Site Conditions:** All surfaces should be prepared as per the approved Henry specification.

The surface temperature must at least 6 °F (-14° C) above the dew point and rising. Use a surface dew point meter.

Air and substrate temperatures must be between 32° F (0° C) and 95° F (35° C). Relative humidity must be less than 80%.

**Surface Prep:** Surfaces to be over-coated must be firm, dry and free of loose particles, such as sand in the primer, and contaminants that would impair adhesion.

If there are any doubts about suitability of a surface, further advice should be sought from a Henry representative and a small trial area should be applied and tested appropriately

#### Product Mixing: Henry FX 650

It is important that all material reaches the required temperature before spraying.

Pre-heat components using drum-pads and blanket heaters until pre-temperature gauge on machine reads 110° F (43° C).

Set pre-heaters at:

ISO = 165° F (74° C).

Polyol = 155° F (68° C) minimum.

Set hoses at 160° F (71° C).

Pre-mix components using an agitator with special drum paddle attachment.

Use recycling block and circulate material back into drums for 30 minutes at the beginning of each day to ensure cold material in lines reaches the required temperature.

## Henry® FX 650

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Part A – Isocyanate is a clear, translucent color  
Part B – Polyol is gray  
When mixed, a homogenous, streak free membrane is formed.

**Mix Ratio: 1 to 1, by volume**

1 Part A – Isocyanate  
1 Part B – Polyol

**Pot Life @ 68° F (20° C):** Not Applicable

**Product Application:** FX 650 is only applied by plural component machinery.  
Protect spray machine and FX 650 drums from inclement weather.  
Use AP52/52 to AP29/29 spray tip.  
Consult the spray machine manufacturer for expert advice.

Always carry out spray trials before work proceeds.  
Keep a small bucket beside spray operative to pre-spray into, ensuring proper mix, before application on substrate.  
Protect hoses from abrasion on sanded primer. Be careful of loose hose protection fragments contaminating deck.

### Application Rate:

- Apply at a rate of approximately 1600 sf/kit. Allow for material wastage due to wind.

**WFT-DFT:** 80 mils on field – 140 mils on details and transitions, minimum.

### Re-coat and Traffic Times after application:

Minimum @ 68° F (20° C) = 1 hour  
Maximum 24 hours. When overlapping membrane after more than 24 hours, wipe with a clean cloth and **Henry FX Activator**.  
If the surface is contaminated or overcoat times exceed 48 hours, lightly abrade, wipe with **FX Activator** and a clean cloth.  
Allow **FX Activator** to evaporate before over coating.

### Product Restrictions and Limitations:

Can be walked on after 10 minutes @ 68 °F (20° C)  
Can be exposed to water after 6 hours @ 68 °F (20° C)

**NOTE:** Before using FX 650, please refer to Safety Data Sheet (SDS).

Always wear suitable, full protective clothing (hooded overalls), butyl rubber or nitrile gloves, durable footwear and safety goggles with side shields during mixing and application.

Ensure the same safe working methods are followed for all persons in the work area.

Follow guidelines in NIOSH alert concerning spraying MDI's, using properly trained operatives.

Provide ventilation in enclosed spaces and wear powered, air purifying respirator with helmet and full-face shield.

When FX 650 is applied, wear NIOSH/MSHA approved (TC23 or TC-21/TC84A) respirators.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

Uncured resins may be toxic. They may cause allergic reactions or hypersensitivity reactions.

Protect adjacent areas from overspray or other system-related contamination. Provide windbreaks where necessary.

Contact with skin – wash immediately with soap and water.

Contact with eyes – rinse immediately with lots of water and seek medical attention.

## Coverage

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Application rates should be adjusted to meet each project's specified requirements.

Coverage rates are theoretical and do not take into account material loss due to project conditions and working methods.

- For Henry System Warranty refer to appropriate approved Henry specification for application and coverage rate requirements.

## Clean-up

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Machine clean up should be done as per manufacturers' instructions.

Clean-up of tools may be accomplished by using Acetone or MEK.

Read and follow all Health and Safety instructions on SDS. Wash body with soap and water. Ensure all materials are mixed and cured before disposal, in accordance with federal, state, and local regulations. Dispose of all packaging in accordance with federal, state, and local regulations.

### Product size/packaging

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FX 650 Part A	52 gal material / 55 gal drum
FX 650 Part B	52 gal material / 55 gal drum

### Storage

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It is important that these guidelines are also followed for drums that are being used while applying material.

In original, unopened containers store between 50° F (10° C) and 80° F (27° C).

Storing the material at a higher temperature may reduce its shelf life.

Store under dry, ventilated conditions and out of direct sunlight. Keep in an upright position and do not over stack.

Do not allow water into drums.

Both Polyol and Isocyanate components are moisture sensitive and will absorb or react with atmospheric or liquid water.

Ensure there is no condensation or water around the top of the drum that may get in when drum bung holes are opened.

After use, partially filled drums should be purged of air using dry nitrogen spray.

This prevents the liquids (especially Part A, Isocyanate) from reacting with water in the air and solidifying.

Materials in machine should be sealed.

Before storing machines, consult machine manufacturer.

For more information, visit [www.henry.com](http://www.henry.com) or for technical assistance call us at 800-486-1278. For more information on the Henry® product warranty and liability disclaimer please visit [www.henry.com/warranty](http://www.henry.com/warranty). Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at [www.henry.com](http://www.henry.com) or by emailing Henry® Product Support at [productsupport@henry.com](mailto:productsupport@henry.com) or by calling 800-486-1278.

Henry is a registered trademark of Henry Company.

Covered by US patent 6,901,712; Canadian patent 2,413,550.

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