



TECHNICAL DATA SHEET  
**Pumadeq<sup>TM</sup> Flex 31MV**  
Cold Fluid-Applied, PUMA, Reinforced, Flashing Membrane

Physical Property	Typical Value	Test Method
Appearance	White	-
Application Temperature (Ambient)	20 °F to 90 °F (-6 °C to 32 °C), can be lower	-
Abrasion Resistance	64mg	ASTM C501-84 (2009) - C17 wheel, 1000 grams, 1000 cycles
Hardness	35, Shore D	ASTM C2240-05 (as per C836M-10)
Solids Content by Volume	100%	ASTM D1644-2001 Method A
Adhesion	> 425 psi, substrate failure	ASTM C1583/ ASTM C1583M-04
Tensile Strength	1680 psi	ASTM D638-08
Elongation	283%	ASTM D638-08
VOC Content (maximum)	0 g/l	ASTM C1250-05

#### Description

**Henry<sup>®</sup> Pumadeq<sup>TM</sup> Flex 31MV** (medium viscosity) is an elastic, viscous, waterproofing membrane based on polyurethane methyl methacrylate (PUMA) technology. Pumadeq technology combines the speed of PMMA technology in its application, with the elasticity of polyurethane technology. PUMA technology exhibits much greater elongation and flexibility than PMMA technology. **Pumadeq Flex 31MV** can be applied to vertical and horizontal surfaces as a flashing membrane.

#### Features

- Cures within 1 hour, including temperatures below 40 °F
- Abrasion, Puncture, and UV Resistant
- Superior Elasticity vs PMMA technology
- Solvent-Free
- No VOC's

#### Usage

**Pumadeq Flex 31MV** forms a waterproofing flashing membrane in the **Henry<sup>®</sup> Pumadeq System**. **Pumadeq System** applications:

- Protected Membrane Roofing
- IRMA
- Plaza Decks
- Green Roofs
- Split Slabs
- Parking Decks
- Balconies and Walkways
- Water Retention

#### Application

**Site conditions:** Provide odor control, including air fans and exhausts.

Seal air intakes, with activated carbon filters, nearby windows and doors.

Ensure a constant supply of "fresh air", required to remove monomers (heavier than air) from the resin surface and allow for cure.

**Surface preparation:** All surfaces should be prepared as per the approved **Pumadeq System** specification.

The surface temperature must be at least 5 °F above the dew point and rising. Use a surface dew point meter.

Air and surface temperatures must be between 20 °F and 90 °F.

For temperatures below 40 °F consult Henry Product Support: 800-486-1278

Any surface or previous application of the **Pumadeq membrane** must be free of dust and contaminants that would impair adhesion

of **Pumadeq Flex 31MV**. If the surface is contaminated or overcoat times between Pumadeq resins exceed 48 hours, wipe with **Pumadeq Cleaning Fluid** and clean cloths. After **Pumadeq Cleaning Fluid** evaporates (15 minutes), apply **Pumadeq Flex 31MV** within 1 hour or re-apply **Pumadeq Cleaning Fluid**.

If there are any doubts about the suitability of a substrate, further advice should be sought from Henry® Product Support and a small trial area applied and tested appropriately.

**Product mixing:** Prior to using **Pumadeq Flex 31MV**, it must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with a clean, spiral, mixing paddle (Jiffy type, sized according to material amount mixed), to achieve a uniform distribution of the catalyst and paraffin contained in the product.

Only catalyze the amount of material that can be applied within the estimated pot life (10-15 minutes). Be aware that temperature conditions vary in areas of project and at different times of day. Adjust catalyst accordingly.

It is recommended to start by catalyzing 1 gallon of **Pumadeq Flex 31MV** to determine pot life.

- 1) Pre-mix **Pumadeq Flex 31MV** for minimum 1 minute
- 2) Then mix resin together with **Henry® Pumadeq Catalyst**, for 1 minute minimum  
A 1 volume oz. scoop is provided with each pail of catalyst
- 3) **Pumadeq Catalyst volume is noted below and is determined by the average of three temperatures: Pumadeq Flex 31MV temperature, ambient temperature, and substrate temperature.**

At temperatures below 40 °F, consult Henry® Product Support: 800-486-1278.

- 40 °F → add 10 volume oz. per gallon
- 50 °F → add 8 volume oz. per gallon
- 60 °F → add 6 volume oz. per gallon
- 70 °F → add 4 volume oz. per gallon
- 80 °F → add 3 volume oz. per gallon
- 90 °F → add 2 volume oz. per gallon

Do not mix new material with old, uncured material as this can significantly reduce work times. Use new pails frequently.

**Pot life:** 10-15 minutes if **Pumadeq Catalyst** mix volumes followed. The working time of all **Pumadeq System** materials will be influenced by the amount of **Pumadeq Catalyst** added, the length of time they are mixed, how quickly they are removed from the mixing pail, and the substrate and ambient temperatures. Apply onto substrate and spread to prolong working time.

**Product application:** For best results, use small batch sizes (start with 1 gallon). After mixing thoroughly, apply onto surface, as soon as possible. **Pumadeq Flex 31MV** is applied evenly by medium nap (1/2") roller and brush.

Do not install **Pumadeq Flex 31MV** beyond cured primer.

Extend **Pumadeq Flex 31MV** one (1) inch beyond anticipated area of fabric reinforcement.

Roll or brush fabric for proper adhesion and removal of voids, folds, and wrinkles.

Lap adjoining fabric edges a minimum of three (3) inches.

Ensure voids at edges of **Henry® Pumadeq Fleece** are filled with **Pumadeq Flex 31MV**.

**Application rate:** Install one (1) layer of **Pumadeq Flex 31MV** at 30 sq.ft./gal.

Back coat N-Fleece with **Pumadeq™ Flex 31MV** before applying on vertical surfaces.

Apply second layer of **Pumadeq Flex 31MV** at 50 sq.ft./gal.

Total rate for two coats = 20 sq.ft./gal.

Allow for saturation of rollers and brushes.

Rates will change depending on surface profile (>CSP 3-4).

**Thickness: Wet and dry film thickness ( WFT- DFT):** 80 mils

**Re-coat and traffic times:** Minimum 1 hour. If the surface is contaminated or overcoat times exceed 48 hours, clean with a clean cloth and **Henry® Pumadeq Cleaning Fluid**. Allow **Pumadeq Cleaning Fluid** to evaporate before over coating.

The new coating must be applied after 15 minutes minimum, 1 hour maximum of **Pumadeq Cleaning Fluid** application or it will have to be re-applied. MEK or Acetone can also be used, following the same procedures.

**Product restrictions and limitations:** If under catalyzed or mixing not thorough, the resin will not cure (remain sticky and smell). It must be completely removed by scrapping and wiping with **Pumadeq Cleaning Fluid**.

**NOTE:** Before using **Pumadeq Flex 31MV**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves, and safety goggles with side shields during mixing and application.

When **Pumadeq Flex 31MV** is applied in enclosed areas without natural ventilation, forced ventilation must be arranged.

Avoid strong concentration of vapor as well as direct contact with skin or eyes.

If concentration exceeds recommended limits in SDS, a NIOSH approved respirator (OSHA 29 CFR 1910.134) is required.

**Pumadeq Flex 31MV** has a low flashpoint; keep away from all sources of ignition and do not smoke.

Uncured polymers, resins and catalyst powder may be toxic. They may cause allergic reactions or hypersensitivity reactions.

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 and Gold Seal Warranty requirements, refer to the appropriate approved Henry® specification for application and coverage rate requirements.

## Clean-up

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Clean-up of tools and equipment may be accomplished by using **Pumadeq Cleaning Fluid**, 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.

## Packaging

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2.5 gallons, in metal pail

5 gallons, in metal pail

## Colors

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White

Gray

## Shelf Life/ Storage

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Six months in unopened containers stored between 50 °F and 75 °F under dry, ventilated conditions and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

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