**TECHNICAL DATA SHEET**

**Pumadeq™ Primer 20**

**PMMA Primer**

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Typical Value</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless, Cloudy</td>
<td>-</td>
</tr>
<tr>
<td>Solids Content by Volume</td>
<td>100%</td>
<td>ASTM D1644-2001 Method A</td>
</tr>
<tr>
<td>Adhesion</td>
<td>&gt; 435 psi, substrate failure</td>
<td>ASTM C1583/ ASTM C1583M-04</td>
</tr>
<tr>
<td>VOC Content (maximum)</td>
<td>0 g/l</td>
<td>ASTM C1250-05</td>
</tr>
</tbody>
</table>

**Description**

**Henry® Pumadeq™ Primer 20** is a primer based on polymethyl methacrylate (PMMA) technology.

**Features**

- Cures within 1 hour, including temperatures below 40 °F
- Can be used on concrete, wood, steel, aluminum, galvanized, stainless copper, and brass metals in addition to plastic pipes
- Solvent-free
- No VOC’s

**Usage**

**Pumadeq Primer 20** is used as a primer for **Pumadeq Systems**. **Pumadeq Systems** are used for:

- Protected Membrane Rooding
- 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.

Substrates to be coated must be firm, dry, and load bearing, free of loose and brittle particles, laitance and contaminants that would impair adhesion. They cannot be frozen. Concrete should cure for a minimum of 28 days or be moisture free when tested to ASTM D4263-83. Moisture content in the concrete or wood must be less than 6% as measured using a Moisture Meter (i.e. Tramex CME 4). Metals and plastic must be mechanically abraded to a clean surface, in accordance with SSPC – SP2, then wiped with **Pumadeq Cleaning Fluid** and clean cloths. After **Pumadeq Cleaning Fluid** evaporates (15 minutes), prime immediately to avoid flash rusting.

Wood must be exterior grade, dry, clean and fixed with exterior deck screws. If there are any doubts about the suitability of a substrate, further advice should be sought from a Henry® representative and a small trial area applied and tested appropriately.
Product mixing: Prior to using Pumadeq Primer 20, it must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with a clean, spiral, mixing paddle (Jiffy type, size 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 any Pumadeq to determine pot life.

1) Pre-mix the resin for minimum 1 minute, longer at colder temperatures
2) Then mix resin together with Pumadeq Catalyst, for 1 minute minimum
   A 1 volume oz. scoop is provided with each pail of catalyst
3) Catalyst blend is added in accordance with an average of resin, ambient and substrate temperatures guidelines:
   At temperatures below 40° F, consult Henry® Product Support: 800-486-1278.
   40 °F → add 10 volume oz. per gallon resin
   50 °F → add 8 volume oz. per gallon resin
   60 °F → add 6 volume oz. per gallon resin
   70 °F → add 4 volume oz. per gallon resin
   80 °F → add 3 volume oz. per gallon resin
   90 °F → add 2 volume oz. per gallon resin

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 are followed. The working time of all Pumadeq 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 substrate, as soon as possible. Pumadeq Primer 20 is applied evenly by medium nap (1/2") roller and brush. Apply slight pressure on brush or roller to ensure all voids and pores in substrate are filled.

Application Rate: Pumadeq Primer 20 is applied @100sf/gallon aprox. Allow for saturation of rollers and brushes.

Rate will change depending on substrate prorosity and profile (>CSP 3-4).

WFT-DFT (Wet and Dry Film Thickness): 15 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 Pumadeq Cleaning Fluid. Allow to evaporate before over coating.

Pumadeq Primer 20 must be applied after 15 minutes minimum, 1 hour maximum of Cleaning Fluid application or Cleaning Fluid 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 Primer 20, 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 Primer 20 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 Primer 20 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

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

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

1 gallon, in metal pail
5 gallons, in metal pail

Colors

Colorless, Clear

Shelf Life/ Storage

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.