

TECHNICAL DATA SHEET

Henry 790-11

Hot Applied Rubberized Asphalt Waterproofing/Roofing Membrane

Physical property	Typical value	Test method
Color	Black	-
Solids Content	100%	-
Application Temp	No limit	
Min. Service Temp	-49 °F (-45 °C)	
Heating Temp	356 °F to 392 °F (180 °C to 200 °C)	
Setting Time	Immediate on cooling	
Low Temperature Flexibility & Adhesion @ -13 °F (-25 °C)	Pass	
Flow – 1/8" Film, 75 deg. angle, 5 hours @ 140 ^o F (60 ^o C)	No Flow	
Penetration (cone) - @77 °F (25 °C) - @122 °F (50 °C)	66 155	ASTM D5329
Water Absorption	+0.10 g	
Flash Point (open cup)	555 °F (291 °C)	
Maximum VOC	0 g/L	
Water Vapor Permeance	0.016 perms (1.0ng/Pa.m ² .s)	ASTM E96
Chemical Resistance	Resist's water, calcium chloride, salt, mild acid and alkaline solutions	
Toughness	16.0 J	
Ratio of Toughness to Peak Load	0.050	
Crack Bridging Capability	Pass	
Heat Stability 5h @ 390 ^o F (198 ^o C) Viscosity @ 390 ^o F	Pass No Loss of adhesion. Meets Flow, Penetration, Low Temp Flex	
Fire Rating	4S Classified by Underwriters Laboratories Inc. [®] for use in Class A Ballasted Systems	
Recycled Content – per ISO 14021 and LEED definitions	11% Recycled Post-Consumer Content	
Specific Gravity	1.23 +/- 0.03	

Description

Henry 790-11 is a hot applied, rubberized asphalt formulated to provide a monolithic fully bonded roofing and waterproofing membrane. It is hot poured in a single or fabric reinforced application. **Henry 790-11** is composed of a specially selected blend of refined asphalts, synthetic rubber, and mineral stabilizers. It is modified with additives to promoted adhesion and improve low temperature flexibility.

Features and benefits

Complies with CAN/CGSB-37.50-M89.

- Seamless application provides monolithic waterproofing
- Bridges non-moving cracks up to 1/16" in width
- Full adhesion to deck restricts lateral water movement
- 100% solids provide immediate cure on cooling

<u>Usage</u>

Henry 790-11 is used as a waterproofing and roofing membrane on horizontal and vertical surfaces. Ideal for highway bridge decks, underground parking, ramps, podium decks, railway bridge decks, parking decks, plaza decks, tunnels, planters, reflective pools, and protected membrane roofing assemblies.

Application

Refer to Henry Waterproofing and Protected Membrane Roofing Guide Specification for detailed application information.

Surface Prep: Acceptable substrates are cast-in-place and precast concrete, CMU, gypsum board and plywood. Joints, cracks, and expansion joints must be treated as per detailed Guide Specifications. Lightweight insulating concrete is not an acceptable substrate. Concrete toppings and cast-in-place concrete on vented metal pan decks require fabric-reinforced systems. Contact **Henry** for detailed specification.

Surfaces to be treated should be reasonably smooth. Concrete should have wood float or broom finish and be cured a minimum of 14 days. Steel float finishes are too smooth. Rough surfaces tend to promote air entrapment in the compound during application, which might result in pin holing through the waterproofing membrane. Such surfaces also require use of more material. Fabric reinforced systems overcome pin holing. Before application of hot rubberized asphalt, the substrate shall be clean and dry, free from surface water, ice, snow or frost, dust, dirt, oil, grease, curing compounds or any other foreign matter detrimental to the adhesion of the hot rubberized asphalt.

Application: Apply **Henry 930-18 Primer** at 200-300 ft²/gal or **Henry 910-01 Primer** at 200-300 ft²/gal according to local VOC regulations and project requirements, avoiding an excessive or over-spraying application. Thinning of primer not permitted by VOC regulations. Puddling of the primer is not permitted. The primer shall be dry before applying the hot rubberized asphalt. Gypsum board and plywood do not require a primer. Apply flashing material to all areas specified such as parapets, expansion joints, drains, etc. following published guide specifications.

Melt **Henry 790-11** in oil-jacketed kettle and bring to a temperature of $356 \,^{\circ}\text{F} - 392 \,^{\circ}\text{F}$ ($180 \,^{\circ}\text{C} - 200 \,^{\circ}\text{C}$). Pour melted material on surface to be covered and spread to an average thickness of 185 mils (4.5mm) and minimum thickness of 125 mils (3mm) using rubber squeegees. Fabric reinforced systems consist of two applications of **790-11** reinforced with **Polyester Fabric.** Apply first application at minimum thickness of 90 mils (2mm); embed fabric immediately, overlapping a maximum of $\frac{1}{4}$ " (6mm) ensuring full contact. Apply second application at a minimum of 125 mils (3mm) thickness.

Protection: Both horizontal and vertical areas must be protected. Henry modifiedPLUS G100s/s is used on horizontal surfaces. Contact Henry Technical Support if asphalt pavement will be installed over Henry 790-11. Additional acceptable protection boards for non-asphalt paving applications include Henry 990-31 Protection Board or Henry Drain Boards.

Rate of Application:

Average 185 mils (4.5 mm), Minimum 125 mils (3 mm) per single layer. 215 mils (5mm) total with fabric reinforcement.

Coverage - approximately 0.73 lbs/ft² at .125"

Limitations

Must be protected by appropriate overlay. Not intended for use as a permanently exposed surface, although it will tolerate foot and incidental, light, rubber-wheeled traffic when set. Contact Henry when using in direct contact with coal-tar pitch derivatives or products containing coal-tar pitch. Do not heat above 419 °F (215 °C). Do not melt in direct fired, single-wall kettles.

NOTE: Contact with hot asphalt or applicator will cause burns. Avoid contact with all parts of body. Wear protective clothing at all times.

Use only with adequate ventilation. Avoid breathing fumes. Asphalt fumes are an irritant and may contain traces of hydrogen sulfide. Fumes may cause irritation to eyes, nose, throat, respiratory track, and skin. If you experience eye watering, headaches, or dizziness leave area or increase fresh air or wear a respirator (NIOSH/MSHA TC 23C or equal)

Keep out of reach of children.

Clean Up

Use waterless hand cleaner on skin. Citrus based cleaners on metal and other construction surfaces.

Product size/packaging

Henry 790-11 is packaged in standard 50 lb (23 kg) poly lined boxes. Poly is designed to dissolve in melter.

Storage

Store under dry, covered, ventilated conditions and out of direct sunlight with temperatures not to exceed 100 °F (38 °C).

Caution

Hot Asphalt after melting! Contact with hot asphalt or applicator will cause burns. Avoid contact with all parts of body. Wear protective clothing at all times.

Use only with adequate ventilation.

Avoid breathings fumes.

Asphalt fumes are an irritant and may contain traces of hydrogen sulfide.

Fumes may cause irritation to eyes, nose, throat, respiratory tract, and skin.

If you experience eye watering, headaches, or dizziness, leave area or increase fresh air or wear a respirator (NIOSH/MSHA TC 23C or equal).

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Henry is a registered trademark of Henry Company. Covered by US patent 6,901,712; Canadian patent 2,413,550.

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