



TECHNICAL DATA SHEET
MiraDRI® 860/861
Sheet-Applied Waterproofing

Physical property	Typical value	Test method
Color	Dark Gray	-
Thickness	60 mils	ASTM D3767
Tensile (Membrane)	325 psi	ASTM D412
Tensile (Film)	5000 psi	ASTM D882
Elongation	350%	ASTM D412
Permeance	0.05 perms	ASTM E96
Low Temp Flexibility	Unaffected	ASTM D1970
Crack Cycling	Unaffected	ASTM C836
Peel Strength	10.0 lb/in	ASTM D903
Lap Adhesion	19.0 lb/in	ASTM D1876
Puncture Resistance	60 lb (min)	ASTM E154
Soil Burial at 16 wks	No effect	GSA-PBS 07121
Water Absorption	0.1% by wt	ASTM D570
Hydrostatic Head	230 ft	ASTM D5385

Approvals and Certifications

- GSA; PBS PCD 07121
- USN; NAVFAC TS-07111
- VA; H-08-1
- LA Research Report #25094L
- Federal Construction Guide Specs; FCGS-07111
- Corps of Engineers; CEGS-07111-3-82
- UL 790; Class A

Description

MiraDRI 860/861 is a self-adhering sheet membrane consisting of 56 mils (1.4 mm) of rubberized asphalt laminated to 4 mils (0.1 mm) of polyethylene to form a minimum 60-mil (1.5 mm) membrane. The combination of these two excellent waterproofing materials provides a high-performance, extremely durable waterproofing barrier. **MiraDRI 860/861** is suitable for installations where the ambient temperature is 40°F (4.4°C) or above. **MiraDRI 860/861** can be used for applications between 25°F (-3.9°C) and 40°F (4.4°C) if the product is stored in a heated area until use and the laps are treated with Henry contact adhesive.

MiraDRI 860/861 membrane is used for vertical and horizontal waterproofing on structural foundation walls and decks. Below-grade foundation walls, tunnels, split slabs, plaza decks and parking decks are all areas where **MiraDRI 860/861** may be applied. **MiraDRI 860/861** also may be used in interior areas such as mechanical rooms, laboratories, kitchens and bathrooms. **MiraDRI 860/861** should be covered with either **Henry 200V/300HV Protection Course**, **Henry Protection Board**, or **Henry MiraDRAIN®** drainage composites.

Features and benefits

- 60 mil thick waterproofing membrane
- Factory controlled thickness
- Resists up to 230 feet of positive-side head pressure
- Fully adhered system

Application

Temperature: Typical installation of **MiraDRI 860/861** can be performed when ambient and substrate temperatures are 40°F and above. Installations below 40°F are best addressed with **Henry Blueskin WP200**. However, installation between 25°F - 40°F may be performed if the **MiraDRI 860/861** is stored in a heated area until use and the laps are treated with **Henry contact adhesive**. Consult your local **Henry Technical Representative** and the **Henry Blueskin WP200** product data sheet for further information.

Preparation: Do not apply **MiraDRI 860/861** to frozen or wet substrates. The membrane should not be left exposed to direct sunlight for longer than 14 days. **MiraDRI 860/861** can be applied to concrete, metal, wood, insulated wall systems or masonry surfaces. All substrates must be clean, dry and free of surface irregularities.

Concrete Substrates: Structural concrete must be cured a minimum of 7 days and lightweight structural concrete must cure a minimum of 14 days before the application of **MiraDRI 860/861**. Repair surfaces that are not structurally sound or have voids, protrusions, rough spalled areas, loose aggregate or exposed course aggregate. Any voids exceeding $\frac{1}{4}$ " in width should be filled with latex Portland cement, concrete or epoxy concrete and troweled smooth to match the existing surface. Protrusions and other rough areas should be broken off and patched as above. **CCW LM 800XL**, **CCW 201**, or **Henry 703V Liqueal** may be used to fill small voids, honeycombs or bug holes.

Masonry Substrate: Apply **MiraDRI 860/861** waterproofing over concrete block with smooth trowel-cut mortar joints or rough surfaces prepared with a parge coat. Allow the parge coat to dry before priming and installing the **MiraDRI 860/861** waterproofing membrane.

Chemical Additives: Concrete shall be cured by water curing method. Any curing compounds must be of the pure sodium silicate type or clear resin-based materials without waxes, oils or pigments and be approved by the Henry representative. Form release agents must not transfer to the concrete. Remove forms as soon as possible from below horizontal slabs to prevent entrapment of excess moisture. Excess moisture may lead to blistering of the membrane. Curing compounds or form release agents that adversely affect the adherence of the **MiraDRI 860/861** waterproofing membrane must be removed from the substrate prior to application.

Priming: All concrete, metal, masonry, wood and sheathing substrates require **Henry Contact Adhesive**. Insulated concrete forms require a water-based **Henry Contact Adhesive**. Henry recommends an adhesion test of the **MiraDRI 860/861** on any bare substrate to verify proper adhesion. Apply the appropriate **Henry Contact Adhesive** at the specified coverage rate. Apply **Contact Adhesive** with a lambswool roller, brush or spray apparatus. Allow **Contact Adhesive** to dry for a minimum of 30 minutes. The **Contact Adhesive** will dry to a tacky finish. Areas primed with a **Contact Adhesive** but not covered with **MiraDRI 860/861** within the same day must be re-primed.

When installing Henry sheet membranes and sheet flashings over gyp- sheathing with glass-mat facers, coverage rates for contact adhesives and primers will depend on the porosity and texture of the sheathing and will vary substantially by gypsum-sheathing brand and manufacturer. To achieve consistent contact adhesive and/or primer coverage with adequate tack, it may be necessary to decrease the coverage rate (i.e. increase the amount applied) of the contact adhesive and/or primer and/ or the application of multiple coats. Henry Contact adhesives and primers shall be allowed to dry completely (lower temperatures will extend drying time) before additional coats are applied or membrane installed. Caution should be taken as contact adhesives and/or primers applied to gyp-sheathings with glass-mat facers will take longer to dry than other substrates. Multiple adhesion tests should be performed randomly to verify proper application of primer and ensure a successful application.

Detailing: All vertical-to-horizontal transitions must have a $\frac{3}{4}$ " (19.05 mm) fillet of **CCW LM-800XL**, **CCW-201 Sealant** or **Henry 703V Liqueal**. Allow **CCW-LM-800XL** to cure 1 hour, **Henry 703V** to cure 4 hours, **CCW-201** to cure 16 hours before covering with the **MiraDRI 860/861** membrane. All inside and outside corners, as well as the vertical-to- horizontal transitions, should have a minimum 9" detail strip of **MiraDRI 860/861** installed prior to the field membrane of **MiraDRI 860/861**. The **MiraDRI 860/861** Membrane Strip should be centered on corners, joints, cracks and transitions. After field membrane is installed, a sealant bead of **CCW LM-800XL**, **CCW-704**, **CCW-201**, or **Henry 703V** should all be placed over all laps at the footing/wall transition extending a minimum of 9" up the wall and 9" out over the footing. Refer to the standard detail drawings for specific detail instructions.

Vertical Installation

Start at the low point and work towards the high point. Remove 6"– 8" (150–200 mm) of the release paper, and then begin applying the membrane. Press and smooth the membrane against the substrate while pulling the release paper free. Roll entire membrane and laps with a hard rubber hand roller. Install membrane with side laps overlapped a minimum of $2\frac{1}{2}$ " (63 mm) and end laps a minimum of 5" (127 mm). Henry recommends that the membrane be rolled in place immediately after its placement to ensure full adhesion to the primed substrate. Apply a bead of **CCW 704**, **CCW LM 800XL**, or **Henry 703V Liqueal** at terminations, cut edges, T-joints, drains, penetrations. **CCW 704 Mastic** should not be installed on the underside of **MiraDRI 860/861**. For walls over 8' (240 cm), the membrane should be placed in lifts. Protect the **MiraDRI 860/861** membrane with the appropriate **Henry MiraDRAIN** drainage composite, or **Henry 200V/300HV Protection Course**.

Horizontal Installation

Start at the low point (establish a starting point with a chalk line if necessary) and work towards the high point in shingle fashion. Remove 2'– 3' (60 – 90 cm) of the release paper and apply the membrane to the substrate. Continue pulling the release paper free while pressing and smoothing the membrane against the substrate. Apply in a straight line avoiding wrinkles and over-correcting. Roll the membrane with a minimum 75-lb. (34 kg) linoleum roller. Install membrane with side laps overlapped a minimum of $2\frac{1}{2}$ " (63 mm) and end laps a minimum of 5" (127 mm). Apply a bead of **CCW-704 Mastic** at all terminations of the membrane and T-joints. Apply a $\frac{3}{4}$ " (19.05 mm) fillet of **CCW LM 800XL**, **CCW 201**, or **Henry 703V Liqueal** in all inside corners of planter boxes, shower stalls and shower pans. Patch inadequately lapped seams and damaged areas with **MiraDRI 860/861** membrane covering the damaged area

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by a minimum of 6" (150 mm). "Fish-mouths" and severe wrinkles should be slit, flaps overlapped and repaired as above. Protect the **MiraDRI 860/861** membrane with the appropriate **Henry MiraDRAIN** drainage composite or **Henry 300HV Protection Course**.

Detail Requirements: For standard installation details follow the **MiraDRI 860/861** details drawings. For non-standard installation instructions contact your local Henry representative.

Limitations: Do not apply where membrane will be subject to continuous exposure to sunlight. The membrane should not be left exposed to direct sunlight for longer than 14 days.

Do not apply primer or membrane to a damp, frosty, frozen, or contaminated surface.

Not recommended as a pond or tank liner except for between-slab applications.

Do not apply over sealants containing coal tar or polysulfides. In the event of existing bitumen-modified materials, consult your Henry representative.

Warnings and Hazards: Henry Contact Adhesives, Mastics and Sealants may contain flammable and combustible solvents. Avoid exposure to open flame or spark. Avoid breathing vapors. Use only in areas with adequate ventilation. Refer to MSDS for important warnings and product information.

Product size/packaging

36" wide x 67' roll (200 ft²)
25 rolls/pallet (5000 ft²)
Weight = 80 lb/roll (approx.)

Storage

Store rolls on end, on original pallets or elevated platform. Protect from weather or store in an enclosed area not subject to heat over 120 °F (49 °C). In cold weather, it is recommended to warm rolls to 50 °F (10 °C) or above prior to application to assure adhesion to substrate.

For more information, visit 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. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at 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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