



Metal Clad[®] 705FR

Burn and UV Resistant Air & Vapor Barrier

FORMERLY Henry[®] Blueskin[®] Metal Clad[®] and CCW Fire Resist[™] 705FR-A

Physical property	Typical value	Test method
Surfacing	Aluminum Foil Laminate	-
Thickness, nominal	40 mils (1.0 mm)	-
Application Temperature, min	40 °F (4.4 °C) standard 25 °F (-3.9 °C) warm product & prime laps	-
Service Temperature	-25 °F to +180 °F (-32 °C to 82 °C)	-
Water Vapor Transmission	0.01 Perm	ASTM E96, Method A & B
Tensile Strength	44 lbf/in (7.7 N/mm)	ASTM D882
Elongation (Rubberized Asphalt)	300%	ASTM D412
Puncture Resistance	80 lbf (356 N)	ASTM E154
Tear Initiation and Propagation	32 lbf (142 N)	ASTM D4073
Air Permeance @ 75Pa (@ 1.57psf)	0.0002 cfm/ft ² (0.001 L/s*m ²)	ASTM E2178
Air Leakage through Assembly	0.0014 CFM/ft ² @ 1.57 PSF (0.007 L/s*m ² @ 75 Pa)	ASTM E2357, penetrated mockup, max after load cycling
Nail Sealability	Pass	ASTM D1970
Water Absorption	0.14%	ASTM D570
Low Temperature Flexibility	Pass @ -20 °F (-29 °C)	ASTM D1970
Peel Strength (primed concrete)	7.5 lbf/in (1.3 N/mm)	ASTM D903
Lap Adhesion	5 lbf/in (0.9 N/mm)	ASTM D1876
Flame Spread Index	15	ASTM E84
Smoke Developed Index	200	ASTM E84
Heat Release by Cone Calorimeter	Peak Heat Release 31.12 kW/m ² Total Heat Release 9.16 MJ/m ² Effective Heat of Combustion 4.79 MJ/kg	ASTM E1354, 50 kW Heat Flux, Horizontal Orientation
Wall Assembly Burn Testing	Compliant in many wall assemblies	NFPA 285, Engineering Evaluations "EEVs"

Codes and Approvals

2021 International Building Code: Chapter 14, Sec 1402.5 Combustible Water Resistive Barriers NFPA 285 Exception 2:

$HRR_{peak} < 150 \text{ W/m}^2$ $THR < 20 \text{ MJ/m}^2$ $EHC < 18 \text{ MJ/kg}$ tested horizontally @ Heat Flux 50 kW/m², ASTM E1354

Flame Spread ≤25 smoke ≤450, ASTM E84

Air Barrier Association of America: Evaluated air barrier material and air barrier assembly

USGBC LEED v4: MR Credit Building Product Disclosure & Optimization; Health Product Declaration "HPD", Environmental Product Declaration EPD 10573 Product-Specific with Cradle to Gate Scope, Issued by NSF Certification LLC

International Living Future Institute: Declare Label LBC Red List Free

Underwriters Laboratories "UL" Certified: FWFO.EWS0060 Pass NFPA 285-23 with ACM and Mineral Wool

Description

Henry[®] Metal Clad[®] 705FR is a self-adhered membrane comprised of a rubberized asphalt adhesive factory-applied to a composite facer of cross-laminated HDPE and aluminum foil. The metallic surfacing affords Metal Clad[®] 705FR excellent weathering and burn resistance when applied in above-grade wall assemblies. This air and vapor barrier membrane is available in various roll widths for both membrane and flashing applications and has a removable release liner for ease of installation.

Features and benefits

- Factory applied thickness and composition – Assured even coverage
- Fully-adhered 35-mils (0.9mm) of adhesive – Bites into rough substrates, seals around penetrating fasteners
- Printed facer and lap lines on 36" width sheets - Provides easy product identification and aids installation
- NFPA 285 compliant, meets IBC 1403.5 exception #2 – Fire safety compliant in many wall assemblies
- Stiffer, boardier facer than plain poly - Affords easier installation
- Can be left exposed for up to 12 months - Allows more schedule flexibility
- Adhesion and compatibility of facer with many sealants and adhesives – Facilitates system tie-ins
- Compatible with other Henry air barrier system components – Enables longer system UV exposure

Usage

Metal Clad® 705FR is designed for use as a self-adhered air, vapor and water resistive barrier. It can also be used as a flashing/transition sheet in conjunction with **Henry® Air-Bloc®** and **Barritech™** fluid applied membranes.

Application

Refer to the **Metal Clad® 705FR** details for depiction of installation in common wall conditions.

Surface Prep: Acceptable substrates include precast and cast-in place concrete, masonry, steel, aluminum, galvanized metal, exterior grade gypsum board, foil or coated-glass faced polyiso foam sheathing, OSB, dimensional lumber and plywood. All surfaces to receive this product must be dry, clean of oil, dust and excess mortar. Masonry: joints shall be free of voids and struck flush or tooled, mortar droppings shall be removed from ties and surfaces. Sheathing boards: shall be sound and fastened securely per sheathing manufacturer requirements. Concrete surfaces shall be smooth and without large voids, spalled areas or sharp protrusions. Concrete must be cured a minimum of 7 days and must be dry before product is applied. Where curing compounds are used, they must be clear resin based, without oil, wax or pigments. All surfaces to receive **Metal Clad® 705FR** shall be prepared with a **Henry®** adhesive/primer and allowed to dry before **Metal Clad® 705FR** is applied. Coated surfaces not covered by membrane during the working day must be recoated. Availability of **Henry®** adhesive/primer may vary by region. **Henry®** adhesive/primers acceptable for use with **Metal Clad® 705FR** are: **Blueskin® Adhesive**, **CCW-702**, **Blueskin® LVC Adhesive**, **Hi-Tac™ Primer**, **CCW-702LV**, **Blueskin® LVC Spray Primer 30#**, **CAV-GRIP™**, **Aquatac™ Primer**, **CCW-702WB**, **Blueskin® Spray Prep** and **Travel Tack**. Consult the **Henry®** adhesive/primer technical data sheet and safety data sheet for application, regulatory and health & safety information.

Apply: Cut membrane to size, position, remove release film and press in place. Install membrane carefully to substrate avoiding wrinkles and bubbles. Install membrane tightly into inside corners and over outside corners without bridging or voids. Lap neighboring pieces of **Metal Clad® 705FR** a minimum of 2" (50 mm). For walls with embedded or pre-applied brick ties, position membrane, press in place and cut and fit around ties. Press membrane field, edges, and laps firmly with a J roller to ensure good adhesion. Seal reverse laps, T joints, terminations, penetrations, cuts, and other membrane interruptions with **Henry® 925 BES™ Sealant**, **Barribond™ HP** or **Henry® Air-Bloc LF®** as shown in **Henry®** architectural details. Tool and feather the sealants for continuity and water shedding.

Limitations: Do not allow adhesive side or edge of membrane to contact flexible PVC or any sealants or membranes except those approved by **Henry®**. Do not install directly under exposed roof membrane. Do not install over un-supported gaps and spans exceeding ½" (12 mm), except over punchouts in vertical steel studs. Wood substrates shall have moisture content below 20%. Keep edge of membrane back ½" (12 mm) minimum from finished surfaces. **Metal Clad® 705FR** becomes less tacky at material temperature below 40°F (4.4°C). For colder installation conditions, use **Metal Clad® 705FR LT**.

Product size/packaging

4" x 100' (10 cm x 30.5m), 6 per box
6" x 100' (15.2 cm x 30.5m), 4 per box
9" x 100' (22.8 cm x 30.5m), 2 per box
12" x 100' (30.5 cm x 30.5m), 2 per box
18" x 100' (45.7 cm x 30.5m), 1 per box
36" x 75' (91.4 cm x 22.9 m), 1 per box

Storage

Store rolls in original packaging until ready to use. Protect from precipitation, high humidity, high heat, and direct sunlight. Store below 110°F (43 °C).

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.

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