

TRI-BUILT Building Wrap HC Comparison

OVERVIEW

Building wrap is an integral part of an energy efficient exterior wall assembly. Properly constructed, the building wrap mitigates air infiltration through the wall, protects the exterior sheathing during construction, and allows interior moisture vapor to escape. While there are alternative systems that advertise similar properties, the use of wrap over wood-based sheathing is the most cost-effective method of meeting building codes and constructing an energy-efficient structure.

BUILDING WRAP CONSTRUCTION

There are two conventional types of building wraps: perforated and non-perforated. Perforated wraps are typically less expensive and utilize a cross-woven polyolefin fabric that is coated or laminated and micro-perforated (very small perforations) so that moisture vapor will transfer through the building wrap. The cross-woven process provides strength to the fabric so the material can be thinner and lighter in weight. Non-perforated building wraps that incorporate non-woven substrates are generally thicker and heavier due to the inherent manufacturing process. Permeability is constructed into the fabric during manufacturing, which allows for various levels of moisture transfer so the material does not rely upon mechanically punched holes to function.

Nearly all raw materials used to produce perforated wrap are imported. Some building wrap suppliers import pre-printed, ready-made rolls for resale while others purchase master rolls of material which they either convert and print themselves or send out to a third party for conversion and printing.

Non-perforated wrap materials are either made domestically or imported. Again, some building wrap suppliers source pre-printed and converted wraps while others convert and print themselves or send out to a third party for conversion and printing. Very few manufacturers produce the non-woven fabric used to make non-woven wrap, and most send the base material to a third party for printing.

CODE REQUIREMENTS

Building wraps should be tested to ICC-ES Acceptance Criteria for Water-Resistant Barriers (AC308) and be listed on an ICC-ES report. Residential-grade wraps should be recognized for use with the *International Residential Code* (IRC) and commercial-grade wraps should be recognized for use with the *International Building Code* (IBC). To be accepted, wraps must meet established minimums for strength, water-resistance, vapor transmission and surface burn characteristics. While most listed wraps comply with the IRC, not all listed wraps are suited for use in commercial applications.

REGIONAL VARIATIONS

The I-Codes require the use of a water-resistive barrier in conventional building projects. Based on particular regions, the use of building wrap to meet local or state building codes may be enforced differently by specific municipalities. Generally accepted “good building practices” for energy-efficient structures require the use of building wrap or similar method of air- and moisture-barrier on the exterior wall. Different manufacturers offer building wraps with different properties, some of those properties are considered by experts to be more suitable for the local/regional climate.

TRI-BUILT BUILDING WRAPS

TRI-BUILT offers both perforated and non-perforated building wraps with region-specific perm ratings. The manufacture of TRI-BUILT building wraps occurs across a globally-diversified platform with final production taking place in Richmond, VA. With control over the entire manufacturing process, TRI-BUILT offers product flexibility as a full-line, single-source supplier of TRI-BUILT brand building wraps.

TRI-BUILT BUILDING WRAP H/C

Is a woven, micro-perforated building wrap that meets commercial and residential building codes. With a perm rating of 10, TRI-BUILT H/C exceeds the minimum code requirement for water vapor permeability. TRI-BUILT H/C is an entry-level product and competes with most custom-print wraps.

TRI-BUILT PLUS

TRI-BUILT Plus is a commercial building wrap with multi-directional drainage planes that is designed and approved for use in EIFS construction and behind masonry or stucco. Unlike most drainage wraps, TRI-BUILT Plus will drain water on both front and back sides in any direction. As with other TRI-BUILT wraps, TRI-BUILT Plus is available in small quantities with custom-print advertising.

COMPARISON CHART

	TRI-BUILT H/C	Grip-Rite	Barricade*	Prime Wrap
Tensile Strength MD/CD(lbs/in) ASTMD882	54 / 37	50 / 34	63 / 51	50 / 46
Water Vapor Transmission (perms) ASTME 96, Method B	10	10	10	9
60-minute Water Resistance Listed (ICCES Code Report)	Yes	No	No	Yes
Flame Spread Index ASTME 84	Class A	n/a	Class A	Class A
Smoke Developed Index ASTME 84	Class A	n/a	Class A	Class A
Ultra Violet Light Exposure Rating	12 months	6 months	4 months	12 months
Translucent	Yes	Yes	Yes	Yes
Commercial Grade	Yes	No	No	Yes
Custom Print Minimum	13 rolls	1 pallet**	1 pallet	1 pallet
Alternating logos & colors	Yes	No	No	No
ICCES Report	ESR-2246	ESR-2248	ESR-1197	ESR-2496

* Info provided by Dryline

Recent production Barricade is what used to be sold as MarvelGuard and is identical to Barricade Basic wrap. Data represents what is available for MarvelGuard.

** Minimum of one pallet is not confirmed. Higher quantities may be required.

n/a: Data is not published and not available in the ICCES Report.

Grip-Rite is a brand name of PrimeSource Building Products.

Barricade is a product of Berry Plastics/Covalence Specialty Coatings

Prime Wrap is a product of CSFabric International

All competitive data is from published technical information and ICCES Reports and is considered accurate at the time.

Grip-Rite: <http://www.grip-rite.com/polyproducts.asp?Action=4>

Barricade:

http://www.covalencecoatedproducts.com/docs/_pdf/products/brands/MarvelGuardBrochure.pdf

Prime Wrap: <http://www.csfabric.com/>