

The Right Balance of Breathability.

Wrap it up.



ANOTHER QUALITY PRODUCT FROM

RAVEN
INDUSTRIES
www.rufcowrap.com

Rufco-Wrap Residential & Commercial Wrap

The best combination of strength, breathability and protection

Rufco-Wrap from Raven Industries is the proven housewrap for building contractors and architects that want to construct a more comfortable, energy-efficient building, and reduce the chance for damage from water and moisture intrusion.

The result of 20+ years of housewrap manufacturing experience, only Rufco-Wrap combines cross-laminated technology with the right balance of air and moisture management that building science experts recommend for an energy-efficient and healthy living environment. This means Rufco-Wrap protects your structure from the damaging conditions Mother Nature may send your way.

Trouble-free installation. The only housewrap made from 3 layers of cross-laminated (plywood-like) Valeron film for exceptional tear strength and increased holding power. With a tensile strength of 27 lbs. per inch and tear resistance of 31 lbs., other housewraps would have to be 10 mils thick to equal Rufco-wrap's strength.

Translucent design. Lets you see through it to the material below for easier, faster installation.

Greater energy efficiency. Cross-laminated Valeron strength film seals cracks and seams in exterior sheathing, protecting your insulation's R-value.

Added comfort. Reduces drafts and cold areas in the winter and keeps hot, humid air out in the summer.

Longer working window. UV stabilized up to 356 days.

Long-term protection. Will endure temperature changes from -70° to $+220^{\circ}$ F.

Breathable. Allows moisture to escape, minimizing potential mold and mildew problems.



Commercial Application

The Rufco-Wrap System...

- 1 Allows the wall to breathe, yet dramatically reduces inward air and moisture travel, helping to maintain R-values.
- 2 Allows trapped moisture to escape to the exterior.
- 3 With a perm rating of 6.5, Rufco-Wrap stops or retards inward moisture migration caused by the sun.



More Rufco-Wrap Advantages:

Reduces mold and mildew problems – Rufco-Wrap is engineered with a balance of properties to reduce inward vapor penetration, hold out bulk water and wind-driven rain, while providing the right breathability to allow moisture vapor to escape from inside walls.

The right balance – Rufco-Wrap is slightly more breathable than standard Grade D building paper, reducing the inward movement of solar-driven moisture.



Rufco-Wrap used behind brick.

Mission-critical performance and reliability – will not tear or separate like other brands when properly installed. This feature provides a reliable moisture vapor management system for both residential and commercial wall applications.

Meets Code Requirements

- NER-494
- ICBO-ER-5710
- BOCA-SBC-UBC
- SBCCI
- CCMC
- 1998-International Energy Conservation Code
- 2000-International Building & Residential Code

Common Roll Sizes:

- 4.5' X 100'
- 5' X 200'
- 9' X 100'
- 9' X 150'
- 9' X 195'
- 10' X 150'

The Total Envelope Package



Self-Adhering Window and Door Flashing

Rufco Shield Window Sealing Tape is a modified rubberized asphalt flashing membrane with advanced adhesion capabilities. Rufco Shield's peel and stick feature allows for easy installation around window flanges and door perimeters.



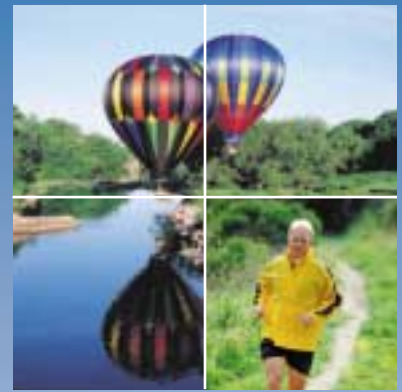
Rufco-Wrap Seaming Tape

For best adhesion, Rufco-Wrap seaming tape is engineered specifically for our product, helping form a superior weather envelope. Size: 1 7/8" wide x 165' long.





Who is Raven?



Raven Industries, Inc. is a diverse, publicly-held company. Founded in 1956, the corporation consists of three major operating divisions and one subsidiary which manufacture and supply flexible films, electronics, special apparel and inflatables to major markets throughout the United States and abroad. From High Altitude Research Balloons for N.A.S.A. to GPS based control systems, Raven has a reputation of excellence.

Within Raven Industries operating units, we have been helping customers with their flexible film needs for more than 45 years and have the resources to ensure longevity within our industry. You can draw on both our financial strength and manufacturing experience to get the products you need.

Quality products with higher performance and the utmost in customer service. That's why we continue to be a leader in designing and manufacturing engineered films. We have never settled for the status quo. Our products have set the standard in performance in the industry. From preliminary design stage through on-site installation, our team of dedicated engineering and business professionals have been driven by a desire to meet each customer's specific needs.

Rufco-Wrap Housewrap System carries a limited warranty against UV and thermal degradation. Raven Industries will replace any Rufco-Wrap Housewrap (material only) damaged during installation by weather or normal handling if it is installed to Raven Industries published installation instructions.



Rufco-Wrap Architectural Specifications

Air Leakage	ASTM E-283	0.017 ft. 3/min
Water Vapor Transmission Rate	ASTM E-96A	50 grams 6.5 perms
Water Penetration Resistance	TAPPI T433-CM-84	Exceeds 10 minute requirement
Wind-Driven Rain	ASTM 1677-Type 1	Passed
Tensile Strength	ASTM D-882	27 lb./in. (MD) 24 lb./in. (CD)
Tear Resistance (Trapezoid)	ASTM D-751-89	31 lbs. (MD) 21 lbs. (CD)
Weight		14 lbs./1000 sq. ft.
Thickness	ASTM D-1593	3 mil.
Flame Spread Index*	ASTM E84-91 A	5
Smoke Developed Value*	ASTM E84-91 A	15

** The Flame Spread and Smoke ratings are required to satisfy local and regional building codes, and are not intended to reflect hazards associated with this material under actual fire conditions.*

Rufco-Wrap is compatible with stucco, brick, vinyl and wood siding.

What customers are saying about Rufco-Wrap Residential & Commercial Wrap:

"I attach plastic housewrap through the foam sheathing with 1¹/₂" staples into the studs. After losing a lot of Tyvek to wind, I switched to Rufco-Wrap, which is both stronger and less expensive." – Feb. 2002, *Journal of Light Construction*

Steve Lentz
Lentz Custom Homes

"We purchase Rufco-Wrap because it's an excellent product that's priced right. If our centers wouldn't move it, we wouldn't carry it."

Rick Thesing
United Building Center

"We've been working with Raven Industries and Rufco-Wrap for about four years now. Since we started using their product, our sales have increased. With all the housewraps on the market these days, we have had the best results with Rufco-Wrap. They offer a very good product."

Jeff Graber
BMC West Corporation

"We used Rufco-Wrap on a twenty-one story condominium in downtown Dallas. The building is brick veneer with Densglass sheathing. The installation went well and the client was quite satisfied with the product."

Art Summerville
Lasco Acoustics and Drywall, Inc.

"I like the fact that Rufco-Wrap reduces air flow without trapping moisture inside. Our carpenters like how they can see through it and that there is no wind tear off."

John Samuelson
Samuelson Construction

Who Benefits from using Rufco-Wrap Housewrap?

Building Centers:

- Competitive pricing
- Decreased product damage
- Satisfied contractors and homeowners

Contractors:

- Easier Installation
- Decreased on-site weather damage
- Longer working window
- Cost effective

Home Owners:

- Cost savings
- Energy savings
- Comfortable living
- Product guarantee

Environment:

- Use less energy resources
- Decreased mold and mildew



See-through
design

Wrap
it up.



For more information or installation instructions, go to
www.rufcowrap.com or call **800/635-3456**

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