

ARclad[®] 4000 Series

Expanded Cellular Foam Glazing Tapes



PRODUCT DESCRIPTION

ARclad[®] 4000 series are the next generation of glazing tapes from Adhesives Research. ARclad[®] 4000 series tapes are flexible, closed cell polyethylene foam tapes coated on both sides with a permanent acrylic based pressure-sensitive adhesive. ARclad[®] 4000 series bonds well to many plastics, vinyls, metals, and construction materials, including glass and preserved wood. They are certified per AAMA 810.1 Expanded Cellular Glazing Tape, Type 1.

<u>Grades:</u>		<u>Black</u>	<u>White</u>	<u>Gray</u>
	1/16" thick	4416	4516	4716
	1/32" thick	N/A	4532	N/A
	3/32" thick	44332	N/A	47332

FEATURES

- High performance acrylic adhesive
- Blue poly liner

BENEFITS

ARclad[®] 4000 series tapes were developed to offer greater resistance to moisture, and an enhanced bond between the tape and glass interface. Whether the moisture comes as a result of manufacturing the product in a high RH environment (the Pacific Northwest, for example), or forced water in the testing process, this characteristic enables manufacturers to produce a higher performance unit. Summary of benefits:

- Improved bond to glass, over current rubber and acrylic glazing tapes – especially in humid manufacturing conditions and when exposed to water.
- Enhanced bond to the sash – vinyl, fiberglass, in dry or wet conditions.
- The foam offers greater flexibility/pliability, a benefit to customers who manufacture using radius corners.

PHYSICAL PROPERTIES – Typical Values*

Test	ARclad [®] 4000 Series	Mode of Failure
Z-directional dead load shear, 100°F/95% RH, Aluminum T-blocks, 1" x 1" x 500g	>10 hours	100% adhesive failure
Z-tensile, Aluminum T-blocks, 0.1"/min.	45#/in ²	100% adhesive failure
180° Peel, SS, 12"/min., Average	7.0#/in	100% foam split
Dynamic Shear, Aluminum panels, 0.1"/min.	38#/in ²	100% adhesive failure

***All stated values are nominal and should only be used as a guide for selection. They are not specifications.**

It is necessary, as with all pressure-sensitive tapes, that the surface to which the tape is to be applied be clean and dry. Users should assure the product meets the specific needs of their application(s). Adhesives Research can tailor the product to meet the needs of specific applications as requested by customers.

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STORAGE AND SHELF LIFE

Unconverted product should be stored at 70°F ± 20°F (21°C ± 11°C) and 50% ± 20% relative humidity, out of direct sunlight. The shelf life of the product is not to exceed one year from date of manufacture.

SERVICE TEMPERATURE RANGE

-20°F to 175°F (-29°C to 79°C)

Note: The information contained on this data sheet is based upon test results of limited quantities of this material and may be modified by Adhesives Research following additional production experience and evaluation. This data should not be used in preparing specifications. Products identified as developmental may be subject to modification by Adhesives Research, Inc.

(13 May 2015)

APPLICATION AND STORAGE OF PRESSURE-SENSITIVE ADHESIVE TAPES

Pressure-sensitive adhesive tapes function as a mechanical product; however, the adhesive itself is a chemical composition that can be sensitive to environmental conditions. A purchaser of pressure-sensitive adhesive products should be aware of the shelf life of each product and not purchase more than it can use before the expiration date. Shipping and storage conditions affect shelf life. The optimum storage temperature is 70 °F (21 °C). Cool, dry storage is recommended.

For best results...

- 1) The surfaces you wish to bond should be clean and free of oil, moisture and dust. If the surface temperature is below 40°F, it may be difficult to achieve a proper bond.
- 2) Do not use a pressure-sensitive adhesive product where it will be exposed to temperatures lower or higher than those designated for each product. Heat can destroy the effectiveness of the bond and extreme cold can cause the adhesive to harden and not adhere properly.
- 3) When the tape is applied, use firm hand or lamination pressure to achieve contact between the adhesive and the surface to which it is applied. Hand rollers or nip rollers may be needed for certain products or applications.

Consult your AR sales representative if you need additional information.

THIS IS NOT AN OFFER

This Product Information sheet ("PI Sheet") is not an offer to sell by Adhesives Research ("AR") and does not contain any binding warranties or terms of sale. While this PI Sheet does contain technical information and general warranty information, this PI Sheet is non-binding and is for information purposes only. If you wish to purchase the product set forth on this PI Sheet ("Product"), or have any questions regarding the warranty or other terms related to this Product, contact AR customer service or a sales representative and they will provide you with AR's terms of sale for the Product in the form of a Sales Order Acknowledgment. AR shall not be bound by any terms or information set forth in this PI Sheet.

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AR's warranty on product is limited to the warranty set forth in the Sales Order Acknowledgment. **NOTHING SET FORTH IN THIS PRODUCT INFORMATION SHEET SHALL CONSTITUTE A WARRANTY OF ANY KIND AND EXCEPT AS SET FORTH IN THE SALES ORDER ACKNOWLEDGMENT, UNLESS OTHERWISE STATED IN A SALES ORDER ACKNOWLEDGMENT, AR EXPRESSLY DISCLAIMS ALL WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** No provisions, statements, diagrams, drawings or pictures contained in any product literature, price list, catalogue, purchase order, product data sheet, order acknowledgment, invoice, delivery ticket, or any other communication by AR, including information on AR's website or statements made by AR's employees or agents, constitute express warranties. Results of tests and recommendations included in communications of AR do not constitute express warranties. **MANY FACTORS MAY AFFECT THE USE AND PERFORMANCE OF AN AR PRODUCT IN A PARTICULAR APPLICATION, INCLUDING, AMONG OTHERS, THE PRODUCT SELECTED FOR USE, THE CONDITIONS IN WHICH THE PRODUCT IS USED, THE TIME AND ENVIRONMENTAL CONDITIONS IN WHICH THE PRODUCT IS EXPECTED TO PERFORM, THE MATERIALS TO BE USED WITH THE PRODUCT, THE SURFACE PREPARATION OF THOSE MATERIALS, AND THE APPLICATION METHOD FOR THE PRODUCT; THEREFORE, PURCHASER ACCEPTS RESPONSIBILITY FOR DETERMINING WHETHER AR'S PRODUCT IS FIT FOR A PARTICULAR PURPOSE AND SUITABLE FOR PURCHASER'S METHOD OF APPLICATION.** AR retains the right to modify or change its products if in AR's judgment it is advisable.

AR limits the purchaser's remedies in the event of a breach of any warranty. The purchaser's exclusive remedy and AR's obligations for a breach of any warranty shall be as set forth in the Sales Order Acknowledgment.

ARclad[®] is a registered trademark of Adhesives Research, Inc. Adhesives Research[®] is a registered service mark of Adhesives Research, Inc. for engineering and design services in the field of pressure-sensitive adhesive systems.

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