## **3M**

# VentureClad<sup>™</sup> Insulation Jacketing System **1579 Series:** 1579GCW • 1579GCW-E • 1579GCW-WM • 1579GCW-WME

**Technical Data** June 2019

Product Description 3M<sup>™</sup> VentureClad<sup>™</sup> Insulation Jacketing System is a heavy duty, zero permeability, all weather, multi-layered laminate coated with an aggressive cold weather acrylic adhesive. Superior resistance to weathering, UV and extreme environmental conditions. Designed for use as a vapor barrier for insulation cladding and jacketing applications. Available in both flat and embossed.

#### **Features**

- Superior adhesion in cold or hot and humid conditions
- Aggressive acrylic adhesive offers instant adhesion in temperatures as low as -10°F (-23°C)
- Zero permeability vapor barrier for insulation cladding and jacketing applications
- Reinforced for very high puncture and tear resistance to ensure long life and durability
- Flexible and strong
- Cuts and installs easily on-site, no special tools required
- Available in multiple colors

### 3M<sup>™</sup> VentureClad<sup>™</sup> Insulation Jacketing System 1579 Series: 1579 GCW • 1579GCW-E • 1579GCW-WME

**Technical Information** 

Note:

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Product	1579GCW	1579GCW-E	1579GCW-WM	1579GCW-WME
Color	Natural Aluminum	Natural Aluminum	White	White
Embossed	No	Yes	No	Yes
Product Thickness	15 mils (0.38 mm)	16 mils (0.40 mm)	15 mils (0.38 mm)	16 mils (0.40 mm)
Peel Adhesion	87 oz/in (24 N/25 mm)	73 oz/in (20 N/25 mm)	102 oz/in (28 N/25 mm)	126 oz/in (35 N/25 mm)
Tensile Strength	155 lb/in (690 N/25 mm)	149 lb/in (663 N/25 mm)	184 lb/in (818 N/25 mm)	184 lb/in (818 N/25 mm)
Elongation	70%	60%	64%	64%
Chemical Resistance	Good	Good	Excellent	Excellent
WVTR	0.00 perm	0.00 perm	0.00 perm	0.00 perm
Service Temperature	-94°F to 300°F (-70°C to 149°C)	-94°F to 300°F (-70°C to 149°C)	-94°F to 248°F (-70°C to 120°C)	-94°F to 248°F (-70°C to 120°C)
Puncture	41 lbs (182 N)	41 lbs (182 N)	55 lbs (244 N)	55 lbs (244 N)
Emmitance	0.03	0.03	0.8	0.8
Passes ASTM C1775 Specification for Laminate Protective Jacketing for Outdoor Applications	х	Х	х	х
ASTM E84 (Flame / Smoke Rating)	10 / 10	10 / 10	20 / 30	20 / 30
UL723 Classified Flame Smoke Rating (UL file #R10984)	25 / 60			
U.S. Coast Guard approval	Х	Х	х	х
IMO Resolution A653 (16)	Х	Х	Х	Х
IMO Resolution MSC 61 (67) Annex 1 Part 2 and 5 IMO Resolution MSC 307 (88) Annex 1 Part 5	Х	Х	х	х

### 3M<sup>™</sup> VentureClad<sup>™</sup> Insulation Jacketing System 1579 Series: 1579 GCW • 1579GCW-E • 1579GCW-WME

Physical and Chemical Stability Membrane versions only

Acids	Acetic acid (all concentrations)	Resistant
Acius	50% formic acid	Resistant
	10% hydrochloric acid	Resistant
	30% hydrochloric acid	
	1	Partially resistant
	10% and 35% hydrofluoric acid	Resistant
	10% nitric acid	Resistant
	65% and 100% nitric acid	Not resistant
	30% and 85% phosphoric acid	Resistant
	20% sulphuric acid	Partially resistant
	Sulphur dioxide gas, dry	Resistant
	80% and above sulphuric acid	Not resistant
Aldehydes	Acetaldehyde	Resistant
	Formaldehyde	Resistant
Aqueous Alkaline Solutions	Ammonium hydroxide	Not resistant
	Calcium hydroxide	Partially resistant
	Sodium hydroxide	Not resistant
Chlorinated Hydrocarbons	Carbon tetrachloride	Partially resistant
·	Chlorinated biphenyls	Partially resistant
	Chloroform	Resistant
	Trichloroethylene	Resistant
Esters	Ethyl acetate	Resistant
Hydrocarbons	Aliphatic hydrocarbons	Resistant
	Benzene	Resistant
	Gasoline (petrol)	Resistant
	Mineral oils	Resistant
	Toluene	Resistant
	Xylene	Resistant
Miscellaneous Substances	Chlorine	Resistant
	Hydrogen peroxide	Resistant
	Oxygen	Resistant
	Water*	Resistant
Other Organic Solutions	Acetone	Resistant
· ·	Diethyl ether	Resistant
	Nitrobenzene	Not resistant
	Phenol	Not resistant
Salt Solutions	Alkaline carbonates	Resistant
	Bichromates	Resistant
	I .	
	Cyanides	Resistant

<sup>\*</sup>Chemical resistance info based in part on third party test data of the product backing.

#### 3M<sup>™</sup> VentureClad<sup>™</sup> Insulation Jacketing System 1579 Series: 1579 GCW • 1579GCW-E • 1579GCW-WME

Storage	Store in a clean, dry place. Temperature of 40-80°F (4-26°C) and 40 to 50% relative humidity are recommended.  To obtain best performance, use this product within 24 months from date of manufacture.  The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.		
Shelf Life			
Technical Information			
Product Selection and Use	Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property		
Warranty, Limited Remedy, and Disclaimer	Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.		
Limitation of Liability	Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.		

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.



**Industrial Adhesives and Tapes Division** 

3M Center, Building 225-3S-06 St. Paul, MN 55144-1000 800-362-3550 • 877-369-2923 (Fax) www.3M.com/construction

3M and VentureClad are trademarks of 3M Company. Printed in U.S.A.

©3M 2019 All rights reserved.