

# VentureClad®

## J A C K E T I N G   S Y S T E M S



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**VentureTape®**

# VentureClad®

## About Venture Tape Quality

### ISO 9001:2008 Status

Venture Tape is committed to providing the highest level of customer service. We strive to keep our customers up to date on order status, product availability, quotations, new products, quality, and other relevant issues. Honesty and integrity are the hallmarks of Venture Tape and the cornerstones of our permanent customer satisfaction commitment.

This commitment to our customers has allowed Venture Tape to achieve ISO 9001:2008 status at its global facilities and insures product consistency worldwide. Beginning with product development, carrying through materials procurement, manufacturing, and delivery, we strive to match our products closely to customer needs and meet our customers expectations every time. Our goal is always clear: Supply products which help solve problems.

In addition to our extensive internal capabilities, Venture Tape welcomes customer input. Providing samples, application specific testing, and on-site consultation allows us to see our products in use and gives us an understanding of field performance, assuring that our products meet the most important specification of all: they work.

Consult Venture Tape specialists for recommendations on product selection, specialized development and testing, and innovative answers to insulation jacketing challenges.

## About VentureClad Jacketing...

VentureClad jacketing is a revolutionary way of weatherproofing insulation as it is a completely self-adhesive product not requiring additional adhesive or mastics to create a seal. The materials bonds 100% to the surface of the insulation providing a zero-permeability barrier that moisture cannot penetrate, providing a neat, clean, and dependable weather barrier.

The unique adhesive system offers excellent resistance to moisture, UV exposure, and allows application in a wide range of weather conditions including cold temperatures. Additionally, VentureClad jacketing is easily cut with a pair of standard scissors, eliminating the need for expensive off site fabrication and allowing a fast, on-site tailored installation which requires no special tools to install and dramatically reduces labor expenses.

All Venture Tape products are manufactured to the highest quality standards. From material sourcing through product and shipment, all products are manufactured with the same degree of care and diligence. Our stringent quality standards result in VentureClad jacketing carrying a 10-year warranty.

Whether the application is interior or exterior, duct or pipe insulation, VentureClad jacketing has a product to meet the requirements, today as well as tomorrow. Venture Tape.....Delivering Solutions Every Day.

## About Venture Adhesives...

### Acrylic Adhesives

Venture Tape acrylic adhesives are manufactured with a specially developed formulation which combines exceptionally high shear strength with high tack and cold stick properties; unique performance features, especially for less-than-ideal application conditions.

Versatile, field tested, high performing acrylic adhesives can have a temperature range as wide as -40°F (-40°C) to 425°F (218°C) and retain their tack in cold, humid and even damp application conditions.

Bond strength of these adhesives increases over time through self cross-linking of the acrylic polymers.

### Custom Products

Venture Tape has dedicated engineering, manufacturing, and quality resources to develop application specific products for the most demanding applications.

Venture's fully staffed, on-site laboratory, manufacturing, and quality engineering ensure that products are developed for manufacturability and transition smoothly from prototypes to production.



Classified Facing



**VentureTape®**  
ISO 9001:2008 Certified

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Toll Free Fax 877-264-5490 (U.S.A. and Canada)

Most Venture Tape products are shipped from stock or from warehouses located regionally in the USA, Canada, as well as sites in Europe and Australia

# What is VentureClad® Jacketing?

*VentureClad jacketing is a zero permeability, self adhesive jacketing product which delivers significant advantages over traditional jacketing techniques.*



The above application shows a chiller that was insulated in a mechanical room with rubber insulation and covered with VentureClad® 1577CW-WM. VentureClad jacketing offers the following advantages for insulation jacketing applications:

- ***Service Temperatures as low as -40°F***
- ***Zero Permeability***
- ***UL 723/ASTM-E-84 Flame and Smoke***
- ***No Primers, Activators, or Heat Guns Required***
- ***Ideal for Internal or External Use***
- ***Neat, Clean, and Dependable Material***
- ***UV Resistant***

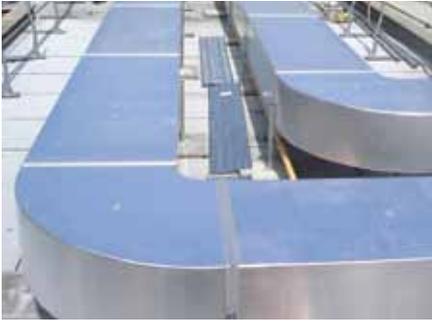
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**VentureTape®**

# VentureClad® Products

*VentureClad jacketing is an innovative, cost effective series of products designed with architects, mechanical engineers, and contractors in mind. In addition to exceeding most building code requirements, VentureClad jacketing installs quickly and easily on pipe or duct board with no special tools required, which delivers significant time, labor, and cost savings. VentureClad jacketing is the highest performing, best value insulation jacketing product on the market today.*



## **VentureClad® 1577CW**

*A multi-ply laminate for interior and exterior use, available in Natural Aluminum (1577CW), White (1577CW-WM), Black (1577CW-BM), Stucco Embossed (1577CW-E), and White Stucco Embossed (1577CW-WME) as well as with Tedlar® film (1577CW-T).*



## **VentureClad® 1577CW-BM & 1577CW-WM**

*A multi-ply laminate for interior and exterior use, VentureClad® White (1577CW-WM) and Black (1577CW-BM) deliver zero-permeability performance along with additional emissivity performance and aesthetic requirements.*



## **VentureClad® 1577CW-T**

*A multi-ply white laminate, made with an outer layer of Tedlar® film, coated with a special cold weather acrylic pressure sensitive adhesive system which combines superior quick stick at normal temperatures with superior low temperature performance below freezing. VentureClad 1577CW-T is FDA approved for indirect food contact.*

Hypalon® and Tedlar® are registered trademarks of DuPont



## **VentureClad Plus® 1579CW**

*A heavy duty multi-ply laminate for interior and exterior use, available in Natural Aluminum (1579CW), White (1579CW-W), both with and without adhesive, and Stucco Embossed (1579CW-E). VentureClad 1579CW is as tough as metal but installs easily with no off-site fabrication required.*

# VentureClad® 1577CW

VentureClad 1577CW is a zero permeability, absolute vapor barrier for insulation cladding and jacketing applications. A multi-ply, self adhesive material installs quickly and easily with no special tools required, resulting in significant time, labor, and cost savings. VentureClad 1577CW exceeds most building code requirements and can be used for new construction as well as repair on existing structures. Available in natural aluminum, white, black, and stucco embossed texture; contact Venture Tape for application and installation expertise.



## FEATURES & BENEFITS

- High performance jacketing product is a lightweight alternative to metal (aluminum, galvanized steel) jacketing
- Performs well over a wide temperature range; -40°F to +300°F (-40°C to +149°C) service temperature
- VentureTape® CW cold weather acrylic adhesive applies easily at temperatures as cold as -10°F (-23°C)
- Zero permeability, absolute vapor barrier
- High puncture and tear resistance
- Contains tested and approved mold inhibiting agents (Natural Aluminum only)
- Self adhesive material installs easily with no off-site fabrication required
- Exceeds standard building design requirements (UL 723 10/20 Flame Spread/Smoke Rating)
- Highly UV resistant
- Meets requirements of GSA Facilities Standard PBS-100
- LEED Credit under USGBC Rating System - contributes to Environment Quality Credit 4.1: Low emitting Materials, Adhesive and Sealant



## TECHNICAL DATA (typical values for natural aluminum grade, not for specification purposes)

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	7.0 mils	177.8 μm	PSTC-133
Adhesive Peel Strength	65 oz/in	18 N/25mm	PSTC-101
Adhesive Shear Strength	>72 hours	>72 hours	PSTC-107
Tensile Strength	70 lb/in width	316.5 N/25mm	PSTC-131
Elongation	85%	85%	PSTC-131
Puncture Resistance	30 lb	133.4 N	ASTM D 1000
Tear Strength	8.5 lb	38.3 N	ASTM D 624
Service Temperature	-40°F to 300°F	-40°C to 149°C	
Flame Spread/Smoke Developed	10/20	10/20	UL 723
Surface Flammability Using Radiant Heat	0	0	ASTM E 162
Specific Optical Density of Smoke	0	0	ASTM E 662
Water Vapor Permeability	0.0000 perms	0.0000 perms	ASTM E 96

## PRODUCT & SPECIFICATION APPROVALS

- UL Classified 
- Coast Guard 164.112/63/0
- British Standards BS 476, Parts 6 & 7, Class O
- IMO Fire Test Procedures Code Annex 1, Part 5 and Annex 2
- Lloyds of London Approved
- Meets requirements of SOLAS
- ROHS Compliant
- IMO Resolution A653 (16)
- USCG-EU
- DIN 4102, B1
- New York City School Construction Authority
- New York City MEA
- SABS: Sans 10177 Part 3, Class 1
- Netherlands CINI 3.3.12 Requirement
- VA Approval

# VentureClad® 1577CW-BM & 1577CW-WM

VentureClad 1577CW-BM (Black) and 1577CW-WM (White) are zero permeability, absolute vapor barriers for insulation cladding and jacketing applications. Both products are multi-ply, self adhesive, and install quickly and easily with no special tools required, resulting in significant time, labor, and cost savings. As with all VentureClad jacketing products, 1577CW-BM and 1577CW-WM exceed most building code requirements and can be used for new construction as well as repair on existing structures. Contact Venture Tape for application and installation expertise.



## FEATURES & BENEFITS

- High performance jacketing product is a lightweight alternative to metal (aluminum, galvanized steel) jacketing
- Performs well over a wide temperature range; -40°F to +300°F (-40°C to +149°C) service temperature
- VentureTape® CW cold weather acrylic adhesive applies easily at temperatures as cold as -10°F (-23°C)
- Zero permeability, absolute vapor barrier
- High puncture and tear resistance
- Self adhesive material installs easily with no off-site fabrication required
- Exceeds standard building design requirements (UL 723 10/20 Flame Spread/Smoke Rating)
- Highly UV resistant
- Meets requirements of GSA Facilities Standard PBS-100
- LEED Credit under USGBC Rating System - contributes to Environment Quality Credit 4.1: Low emitting Materials, Adhesive and Sealant

## TECHNICAL DATA (typical values for natural aluminum grade, not for specification purposes)

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	7.0 mils	177.8 μm	PSTC-133
Adhesive Peel Strength	65 oz/in	18 N/25mm	PSTC-101
Adhesive Shear Strength	>72 hours	>72 hours	PSTC-107
Tensile Strength	70 lb/in width	316.5 N/25mm	PSTC-131
Elongation	85%	85%	PSTC-131
Puncture Resistance	30 lb	133.4 N	ASTM D 1000
Tear Strength	8.5 lb	38.3 N	ASTM D 624
Service Temperature	-40°F to 300°F	-40°C to 149°C	
Flame Spread/Smoke Developed	10/20	10/20	UL 723
Surface Flammability Using Radiant Heat	0	0	ASTM E 162
Specific Optical Density of Smoke	0	0	ASTM E 662
Water Vapor Permeability	0.0000 perms	0.0000 perms	ASTM E 96

## PRODUCT & SPECIFICATION APPROVALS

- UL Classified 
- Coast Guard 164.112/63/0
- British Standards BS 476, Parts 6 & 7, Class O
- IMO Fire Test Procedures Code Annex 1, Part 5 and Annex 2
- Lloyds of London Approved
- Meets requirements of SOLAS
- ROHS Compliant
- IMO Resolution A653 (16)
- USCG-EU
- DIN 4102, B1
- New York City School Construction Authority
- New York City MEA
- SABS: Sans 10177 Part 3, Class 1
- Netherlands CINI 3.3.12 Requirement
- VA Approval

# VentureClad Plus® 1579CW

VentureClad Plus 1579CW is a zero permeability, absolute weather and vapor barrier for insulation cladding and jacketing applications. A multi-ply, self adhesive material is as tough as metal jacketing materials but installs quickly and easily with no special tools required. VentureClad Plus jacketing exceeds most building code requirements and can be used for new construction as well as repair on existing structures. Available in natural aluminum, white, and stucco embossed texture, both with and without adhesive. Contact Venture Tape for application and installation expertise.



## FEATURES & BENEFITS

- Flexible, strong, fabric reinforced insulation cladding product combines vapor barrier function with heavy-duty all weather mechanical protection
- Ultra high performance jacketing product performs well over a wide temperature range; -40°F to +248°F (-40°C to +120°C) service temperature
- High puncture and tear resistance
- Contains tested and approved mold inhibiting agents (Natural Aluminum only)
- Self adhesive material installs easily with no off-site fabrication required
- Ideal for use over all types of insulation materials including foil-faced fiberglass, faced mineral wool, faced calcium silicate, faced perlite, urethane and polystyrene; all seams must be taped with the VentureClad jointing/seaming tape
- Exceeds standard exterior building design requirements; contact Venture Tape for additional high traffic area and indigenous wildlife installation instructions
- LEED Credit under USGBC Rating System - contributes to Environment Quality Credit 4.1: Low emitting Materials, Adhesive and Sealant
- U.S. Patent #7,624,762 for 1579CW



## TECHNICAL DATA (typical values for natural aluminum grade, not for specification purpose)

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	15.5 mils	393.7 μm	PSTC-133
Adhesive Peel Strength	100 oz/in	28.4 N/25mm	PSTC-101
Adhesive Shear Strength	>72 hours	>72 hours	PSTC-107
Tensile Strength	188 lb/in width	838.2 N/25mm	PSTC-131
Elongation	33%	33%	PSTC-131
Puncture Resistance	80 lb	360 N	ASTM D 1000
Tear Strength	16 lb	71.2 N	ASTM D 624
Burst Strength - Inside/Outside	522 psi	3599 kPa	ASTM D 774
Burst Strength - Outside/Inside	539 psi	3716 kPa	ASTM D 774
Service Temperature	-40°F to 300°F	-40°C to 149°C	
Flame Spread/Smoke Developed	25/20	25/20	ASTM E 84
Water Vapor Permeability	0.0000 perms	0.0000 perms	ASTM E 96

## PRODUCT & SPECIFICATION APPROVALS

- UL Classified 
- IMO Resolution A.653 (16)
- IMO Fire Test Procedures Code Annex 1, Part 5 and Annex 2
- IMO Resolution MSC 61 (67) Annex 1, Part 2 & 5 Annex 2
- ROHS Compliant
- Corps of Engineers Unified Specification
- Coast Guard 164.112/1121/WCL MED0315T1
- South African Building Standard (SABS) SANS 10177 Part 3, Class 1
- Japan Building Standard Law Article 2, Clause 9
- Netherlands CINI 3.3.12 Requirement

# VentureClad® 1577CW-T with Tedlar® Film

VentureClad 1577CW-T with Tedlar film is a multi-ply white laminate made with an outer layer of Tedlar film. It is coated with a special cold weather acrylic pressure sensitive adhesive system which combines superior quick stick at normal temperatures with superior low temperature performance below freezing.



## FEATURES & BENEFITS

- High performance jacketing product performs well over a wide temperature range; -40°F to +300°F (-40°C to +149°C) service temperature
- VentureTape® CW cold weather acrylic adhesive applies easily at temperatures as cold as -10°F (-23°C)
- Zero permeability, absolute vapor barrier
- Facing for insulation in food plants and chemical plants
- High chemical resistance
- Self adhesive material installs easily with no off-site fabrication required
- Exceeds standard building design requirements (ASTM E84 15/5 Flame Spread/Smoke Rating)
- Meets FDA compositional requirements for indirect food contact (21 CFR 175.105 and 21 CFR 175.125; FDA: Indirect Food Additives: Adhesives and Components of Coatings)
- Approved by Canadian Food Inspection Agency for use in food processing facilities as vapor barrier for insulation cladding and jacketing
- LEED Credit under USGBC Rating System - contributes to Environment Quality Credit 4.1: Low emitting Materials, Adhesive and Sealant

## TECHNICAL DATA (typical values for natural aluminum grade, not for specification purpose)

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	7.0 mils	177.8 μm	PSTC-133
Adhesive Peel Strength	65 oz/in	18.0 N/25mm	PSTC-101
Adhesive Shear Strength	>72 hours	>72 hours	PSTC-107
Tensile Strength	44 lb/in width	199 N/25mm	PSTC-131
Elongation	40%	40%	PSTC-131
Service Temperature	-40°F to 300°F	-40°C to 149°C	
Flame Spread/Smoke Developed	15/5	15/5	UL 723
Water Vapor Permeability	0.0000 perms	0.0000 perms	ASTM E 96

Tedlar® is a registered trademark of DuPont

# ***VentureClad Installations***



***Neat...***



***Clean...***



***Reliable...***



***Uncompromising  
Performance.***

# VentureClad® Jacketing



*Patented\* laminated foil/film facing for interior and exterior applications*

## Installation Instructions

### Surface Preparation

Ensure that all surfaces are dry and clean, free from dust, oil and grease/silicone. All insulation should be taped securely, giving an even surface for the VentureClad application. All adhesives work best when firmly "wetted out" to the substrate surfaces.

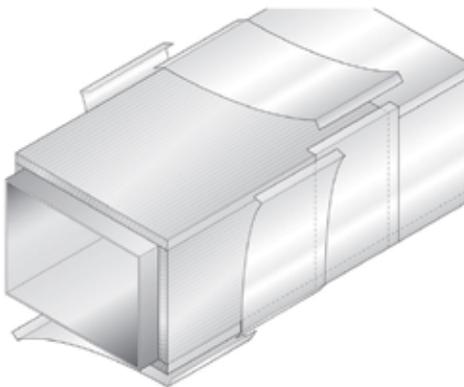
When applying, partly peel back and crease the liner so enough adhesive is available to attach the VentureClad in the correct position. Then, with a spreader, progressively remove the liner while smoothing, until the entire sheet has been applied.

When applying VentureClad sheet onto a continuous surface until it meets itself, a 3 inch (75 mm) overlap is recommended to give a strong, weatherproof seal. Plan the wrap so that the edge of the sealing flap faces down.

### Application to Rectangular Ductwork

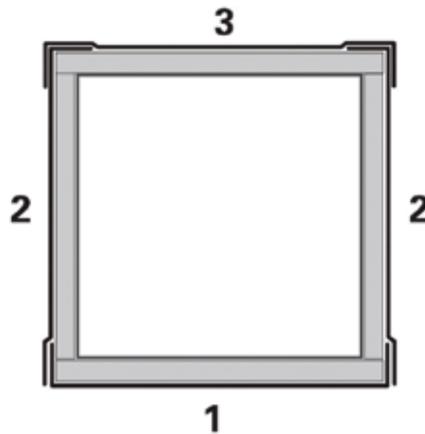
On ductwork over 32 inches (80 cm) wide, it is recommended that the top be crowned (pitched), to allow water runoff, preventing pooling.

For fast, easy application, VentureClad should be applied to each of the sides separately, starting with the bottom surface, then the sides, and finally the top.



Pre-cut the VentureClad to the required size, plus an additional overlap of 3 inches (75 mm) for each adjoining surface.

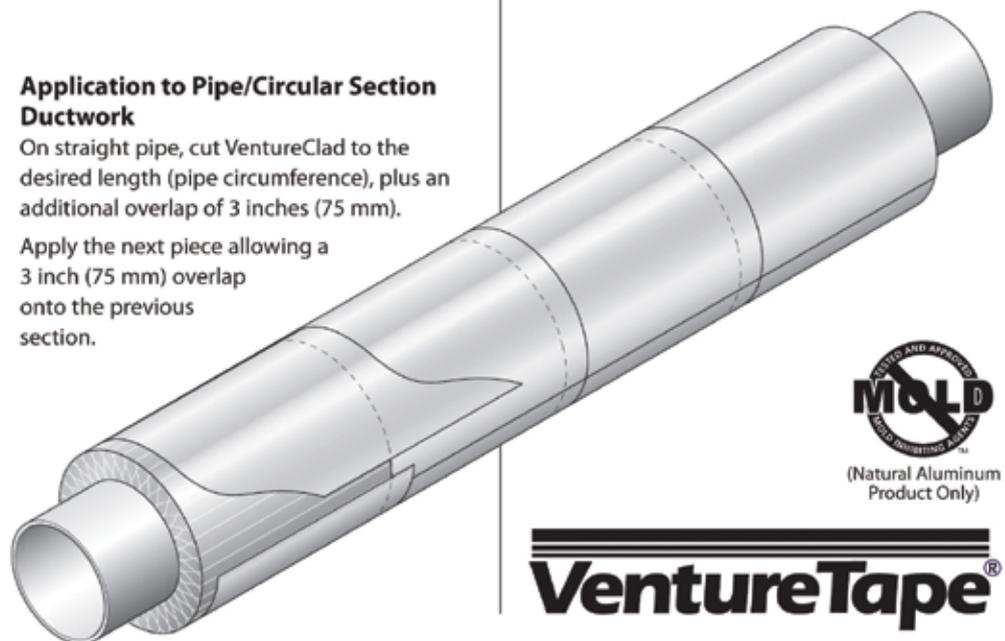
When applying to rectangular ductwork, apply to the bottom surface first, bringing the 3 inch (75 mm) overlap up, onto the sides. Next apply VentureClad to the vertical surface, bringing the 3 inch (75 mm) overlap over onto the top surface. Finally, apply VentureClad to the top of the duct, bringing a 3-inch (75 mm) overlap down onto each side of the vertical surface.



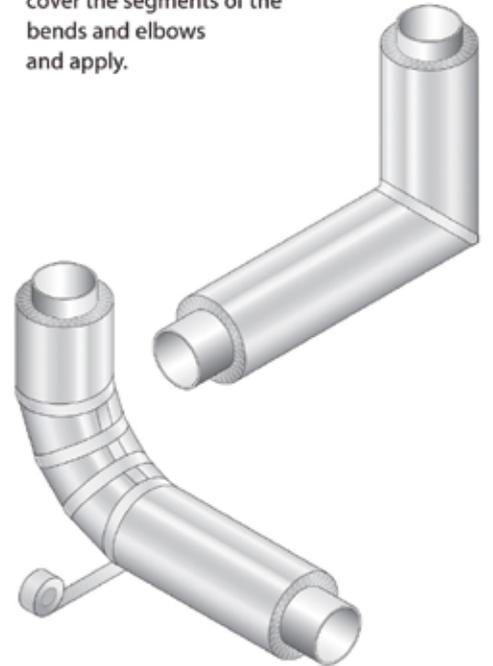
### Application to Pipe/Circular Section Ductwork

On straight pipe, cut VentureClad to the desired length (pipe circumference), plus an additional overlap of 3 inches (75 mm).

Apply the next piece allowing a 3 inch (75 mm) overlap onto the previous section.



On bends and elbow configurations, pre-cover the pipe insulation with VentureClad. Cut out the required shapes to cover the segments of the bends and elbows and apply.



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\* U.S. Patent #7,624,762 for 1579CW

**Application to Ductwork Reducer**

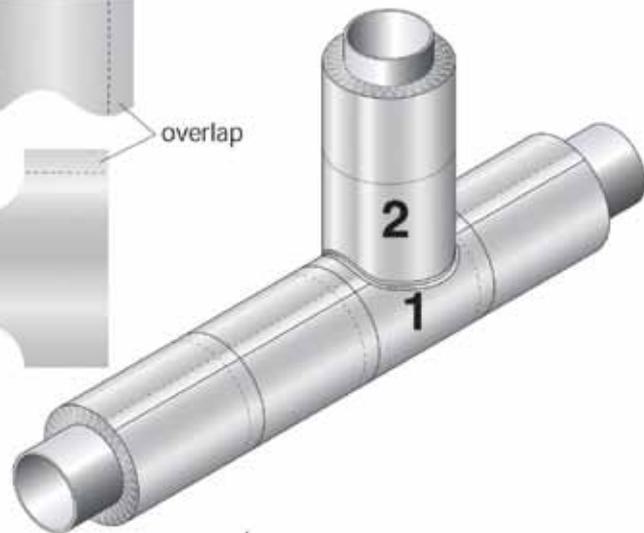
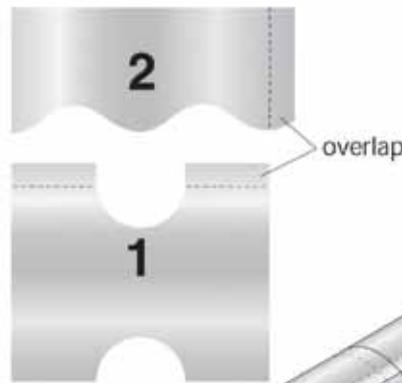
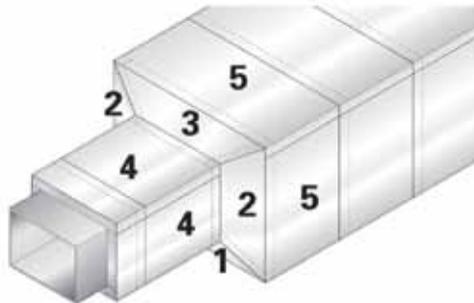
Starting from the bottom, work upwards allowing an overlap of 3 inches (75 mm) onto adjacent surfaces.

First apply VentureClad to surface No.1, and overlap onto each adjoining surface.

Apply VentureClad to surface No.2, and overlap onto surfaces no. 3, 4, and 5, sealing onto the overlap and trimming flush at surface No.1, to achieve a neat, secure finish.

Apply VentureClad to surface No.3 in the same manner as to surface No.2, but seal onto the overlap and trim at surface No.2.

Finally, apply VentureClad to surfaces No.4 and 5 as with other rectangular ductwork.



On "tee" sections, make appropriately configured templates of VentureClad, leaving a 1 inch (25 mm) overlap.

**Repair of VentureClad**

Should damage occur, simply ensure that the surface is clean, and apply a new section of VentureClad 1577CW over the damaged area, to a minimum of 3 inches (75 mm) past the damage site.



**NOTES:**

For installations using 1579CW, ALL seams must be taped with the recommended VentureClad jointing/seaming tape.

All underlying foil faced insulation products must be sealed with VentureTape foil or FSK tape to maintain warranty conditions.

Prior to VentureClad installation in the U.S., ducts must be sealed in accordance with SMACNA HVAC Duct Construction Standard Metal and Flexible, 3rd Edition (2005), Seal Class A.

For installations in the U.S., VentureClad is not recommended for use over flexible fiberglass such as ductwrap.

Please contact your local Venture Tape representative for additional high traffic area and indigenous wildlife installation instructions.



On reduced pipe, apply VentureClad first to surface No.1, overlapping onto surface No.2. Cut shape No. 2, allowing for 3 inch (75 mm) overlap, and apply to surface No.2, overlapping onto section No.1.

Apply VentureClad to surface No.3 overlapping and sealing onto section No.2.

Finally, apply to surface No.4, overlapping and sealing onto section No.1.

**VentureTape®**

**GTA**  
TAPES & ADHESIVES  
a 3M Company



# VentureWrap™ 1555U

A multi-ply laminate with an inner core of aluminum foil with polyester film on both sides. Primarily used as a low temperature vapor barrier in cryogenic applications, VentureWrap jacketing provides a zero permeability vapor barrier for extreme jacketing applications. (Available in Silver and White)



## FEATURES & BENEFITS

- Low temperature vapor barrier on cold/chilled water lines
- Polyester film on both sides of the laminate prevents formation of pinholes
- May be applied to all types of foam insulation
- Exceeds standard building requirements (ASTM E 84 10/20 Flame/Smoke Rating)
- This product must be covered by cladding material on all exterior applications
- Tape available for seams

## TECHNICAL DATA (typical values for natural aluminum grade, not for specification purpose)

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	2.4 mils	1.5 μm	PSTC-133
Tensile Strength	30 lbs./in. width	135.6 N/25mm	ASTM C 1136
Elongation	49%	49%	ASTM C 1136
Puncture Resistance	103 lb	463.5 N	ASTM D 1000
Continuous Operating Temperature	-20°F to 150°F	-29°C to 66°C	
Low Temperature Resistance, 4 hours @	-40°F	-34°C	ASTM D 1790
High Temperature Resistance, 4 hours @	240°F	149°C	
Flame Spread/Smoke Developed	10/20	10/20	ASTM E 84
Water Vapor Permeability	0.00 perms	0.00 perms	ASTM E 96
Emittance	0.57	0.57	ASTM E 408

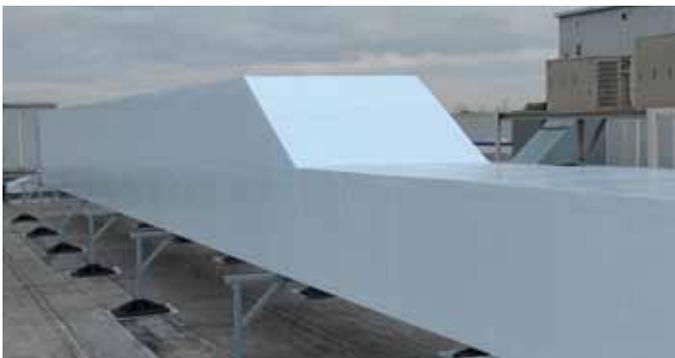
# VentureClad Global



*Dubai, UAE*



*Asia*



*United Kingdom*



*Canada*



*Africa*



*USA*

# ***Diverse Applications***



*Tunnel Applications*



*Marine Applications*



*Condensate Drip Pan Applications*



*Industrial Applications*



*Hospital Applications*



*Cold Room Applications*

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VC001 7/11

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