

# ***VentureClad***<sup>®</sup>

## **J A C K E T I N G   S Y S T E M S**



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## **VentureTape**<sup>®</sup>

# VentureClad®

## About Venture Tape Quality

### ISO 9001:2000 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 9001:2000 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...

### Cold Weather (CW) Acrylic Adhesives

Venture Tape products featuring Cold Weather (CW) Acrylic Adhesives are constructed specifically for use in extreme environments. Field proven for applications in temperatures as low as -10°F (-23°C), VentureTape® CW adhesives are also stable up to 300°F (121°C) ensuring secure, reliable bonding in all conditions. Additionally, as with other VentureTape® Acrylic Adhesives, CW adhesives continue to self cross-link after application, meaning that bond strength increases over time and ensuring secure, reliable performance.

### Rubber-Based Adhesives

VentureTape® rubber-based adhesives are aggressive pressure sensitive adhesives with high peel, tack, and shear performance. Rubber based adhesives perform well over a broad range of temperatures and environmental conditions. Typically, rubber based adhesives have a maximum application temperature of 200°F (93°C). For higher temperature applications, Venture Tape recommends its line of acrylic adhesives.

### Acrylic Adhesives

VentureTape® acrylic adhesives are high performance pressure sensitive adhesives with high peel, shear, and temperature performance. Acrylic adhesives are not initially as aggressive as rubber adhesives, but bond strength increases over time ensuring maximum reliability for demanding applications. Typically, acrylic adhesives have a maximum application temperature of 280°F (138°C); some Venture Tape acrylics withstand temperatures up to 400°F (204°C). Acrylic adhesives bond to a broad range of substrates and insulation materials.

### Custom Products

Venture Tape Corp. has dedicated engineering resources to develop application specific products for the most demanding applications. Venture's fully staffed, on-site laboratory and manufacturing engineering resources ensure that products are developed for manufacturability and transition smoothly from prototypes to production.



Classified Facing



**VentureTape®**  
ISO 9001:2000 Certified

Venture Tape Corp.  
30 Commerce Road  
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<http://www.venturetape.com>

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800-343-1076 (U.S.A.)  
800-544-1024 (Canada)  
800-343-1076 (Mexico)  
Fax 781-871-0065

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 white. VentureClad jacketing offers the following advantages for insulation jacketing applications:

- ***Application Temperatures as low as -30° 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***

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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 5-ply laminate for interior and exterior use, available in Natural Aluminum (1577CW), White (1577CW-W), Black (1577CW-B), Black Stucco Embossed (1577CW-BE) Stucco Embossed (1577CW-E), White Stucco Embossed (1577CW-WE) and also with Tedlar® film (1577CW-T).*



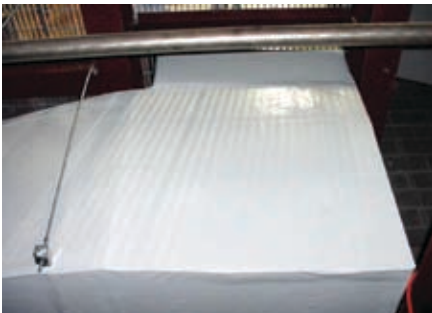
## **VentureClad Plus® 1579CW**

*A 13-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.*



## **VentureGuard® 1574CW**

*Chemical resistant Hypalon® type backing for use in corrosive environments. VentureGuard 1574CW is more flexible and versatile than stainless steel but installs on-site for a fraction of the cost.*



## **VentureClad® 1577CW - with Tedlar® Film**

*VentureClad 1577CW - with Tedlar® film is a four-ply white laminate, made with 2 layers of aluminum foil, a layer of polyester film, and 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.*

Hypalon® and Tedlar® are registered trademarks of DuPont

# VentureClad® 1577CW

VentureClad 1577CW is a zero permeability, absolute vapor barrier for insulation cladding and jacketing applications. A 5-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.



## FEATURES & BENEFITS

- High performance jacketing product performs well over a wide temperature range; -30°F to +300°F (-34°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
- Self adhesive material installs easily with no off-site fabrication required
- Exceeds standard building design requirements (UL 723 10/20 Flame Spread/Smoke Rating)



## TECHNICAL DATA (typical values- should not be used for specification purposes)

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	6.0 mils	152.4 µm	PSTC-133
Adhesive Peel Strength	55 oz/in	15.6 N/25mm	PSTC-101
Adhesive Shear Strength	>168 hours	>168 hours	PSTC-107
Tensile Strength	68 lb/in width	306 N/25mm	PSTC-131
Elongation	166%	166%	PSTC-131
Puncture Resistance	35.4 lb	159.3 N	ASTM D 1000
Tear Strength	8.5 lb	38.3 N	ASTM D 624
Application Temperature Range	-10°F to 248°F	-23°C to 120°C	
Minimum Continuous Use Temperature	-30°F	-34°C	
Maximum Continuous Use Temperature	300°F	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
- SOLAS
- Australian Standards AS 1530, Part 3

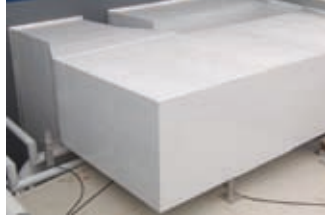


- ROHS
- IMO Resolution A653
- USCG-EU
- NORSOK
- CINI
- GSA
- DIN 4102, B1

- Esso (ExxonMobil) Site Standard Installation
- Corps of Engineers Unified Specification
- New York City School Construction Authority
- New York City MEA

# VentureClad Plus® 1579CW

VentureClad Plus 1579CW is a zero permeability, absolute weather and vapor barrier for insulation cladding and jacketing applications. A 13-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.



## 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; -30°F to +300°F (-34°C to +149°C) service temperature
- VentureTape® CW cold weather acrylic adhesive applies easily at temperatures as cold as -10°F (-23°C)
- High puncture and tear resistance
- Contains tested and approved mold inhibiting agents
- Self adhesive material installs easily with no off-site fabrication required
- Ideal for use over all types of insulation materials including fiberglass, mineral wool, calcium silicate, perlite, urethane and polystyrene
- Exceeds standard exterior building design requirements
- Patent pending on 1579CW



## TECHNICAL DATA (typical values- should not be used for specification purposes)

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	>168 hours	>168 hours	PSTC-107
Tensile Strength	160 lb/in width	720 N/25mm	PSTC-131
Elongation	35%	35%	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
Application Temperature Range	-10°F to 248°F	-23°C to 120°C	
Minimum Continuous Use Temperature	-30°F	-34°C	
Maximum Continuous Use Temperature	300°F	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 (1579NA)
- IMO Fire Test Procedures Code Annex 1, Part 5 and Annex 2
- Esso (ExxonMobil) Site Standard Installation Procedure QCP11
- ROHS
- Corps of Engineers Unified Specification

Call Today (USA) 800-343-1076

[www.venturetape.com](http://www.venturetape.com)

# VentureGuard® 1574CW

VentureGuard 1574CW is a chemical resistant vapor barrier for insulation cladding and jacketing applications. The self adhesive material installs quickly and easily with no special tools required, resulting in significant time, labor, and cost savings. VentureGuard 1574CW exceeds most building code requirements and can be used for new construction as well as repair on existing structures. As the only real performance alternative to stainless steel, VentureGuard 1574CW is the highest performing, best value product on the market today.



## FEATURES & BENEFITS

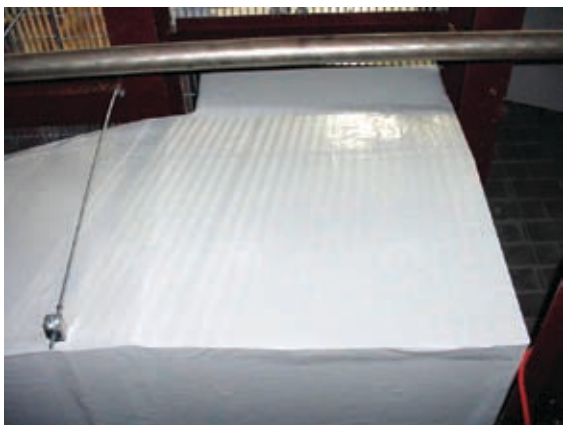
- VentureGuard 1574CW features a Hypalon® type backing and is resistant to a wide variety of organic and inorganic chemicals
- Designed as an alternative to stainless steel jacketing, VentureGuard 1574CW is ideal for use on piping, duct, and insulation in chemical processing, oil and gas refining, and transportation industries
- High performance jacketing product performs well over a wide temperature range; -30°F to +300°F (-34°C to +149°C) service temperature
- Contains tested and approved mold inhibiting agents
- Self adhesive material installs easily with no off-site fabrication required
- VentureTape® CW cold weather acrylic adhesive applies easily at temperatures as cold as -10°F (-23°C)
- Exceeds standard exterior building design requirements

## TECHNICAL DATA (typical values- should not be used for specification purposes)

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	23.6 mils	600 µm	PSTC-133
Adhesive Peel Strength	50 oz/in	14.3 N/25mm	PSTC-101
Adhesive Shear Strength	>168 hours	>168 hours	PSTC-107
Tensile Strength	25 lbs/in width	113 N/2.5cm	PSTC-131
Elongation	1000%	1000%	PSTC-131
Application Temperature Range	-10°F to 248°F	-34°C to 120°C	
Minimum Continuous Use Temperature	-30°F	-34°C	
Maximum Continuous Use Temperature	300°F	149°C	
Flame Spread/Smoke Developed	35/60	35/60	UL 723
Water Vapor Permeability	0.053 perms	0.053 perms	ASTM E 96

# VentureClad® 1577CW with Tedlar® Film

VentureTape 1577CW with Tedlar film is a four-ply white laminate made with 2 layers of aluminum foil, a layer of polyester film and 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; -30°F to +300°F (-34°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

## TECHNICAL DATA (typical values- should not be used for specification purposes)

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	5.6 mils	142 µm	PSTC-133
Adhesive Peel Strength	55 oz/in	15.6 N/25mm	PSTC-101
Adhesive Shear Strength	>168 hours	>168 hours	PSTC-107
Tensile Strength	55 lb/in width	247.5 N/25mm	PSTC-131
Elongation	60%	60%	PSTC-131
Application Temperature Range	-10°F to 248°F	-23°C to 120°C	
Minimum Continuous Use Temperature	-30°F	-34°C	
Maximum Continuous Use Temperature	300°F	149°C	
Flame Spread/Smoke Developed	15/5	15/5	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

Tedlar® is a registered trademark of DuPont

# Pipe jacketing - *made easy!*

*Pre-cut VentureClad® Jacketing Sheets  
applied in your shop, quickly and efficiently  
wrapped and sealed on the job.  
Nothing less than revolutionary!*



## **VentureClad® Jacketing Sheets**

- Pre-cut jacketing sheets with 3" scored liner for ease of application
- Available for all types and sizes of pipe insulation
- Zero Permeability
- UL Classified
- Indoor/Outdoor jacketing in one step
- CW Adhesive - can be applied as low as -10°F (-23°C)
- Matching Butt Strip Tape for sealing joints
- Proven Labor Savings

### **EMBOSSED NATURAL ALUMINUM SHEETS**

**VentureClad® 1577CW-ES**

*Attractive, Tough, Easy Application*

### **EMBOSSED WHITE ALUMINUM SHEETS**

**VentureClad® 1577CW-WES**

*High Aesthetic Appeal*



**VentureTape®**

**800-343-1076**  
**www.venturetape.com**

# VentureClad® Jacketing



*A patented\* method of laminating foil/film facing for interior and exterior applications*

## I n s t a l l a t i o n   I n s t r u c t i o n s

### 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 jacketing application. All adhesives work best when firmly "wetted out" to the substrate surfaces.

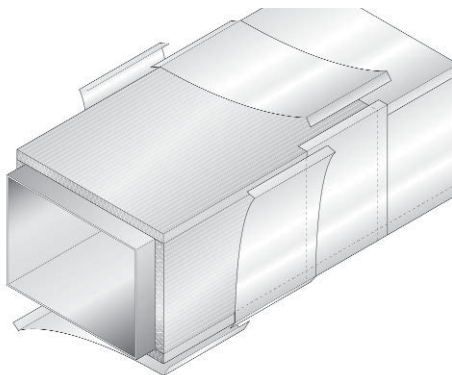
When applying, partly peel back and crease the liner so enough adhesive is available to attach the sheet in the correct position. Then, with a spreader, progressively remove the liner while smoothing, until the entire sheet has been applied.

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

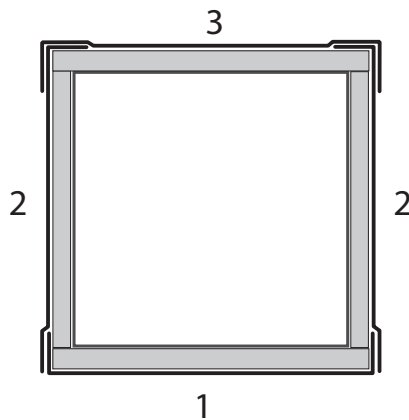
On ductwork over 32 inches (80 cm) wide, it is recommended that the top be crowned (pitched), to allow water runoff, preventing pooling.

For fast, easy application, VentureClad jacketing 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 sheet to the required size, plus an additional overlap of 3 inches (75 mm) for each adjoining surface.

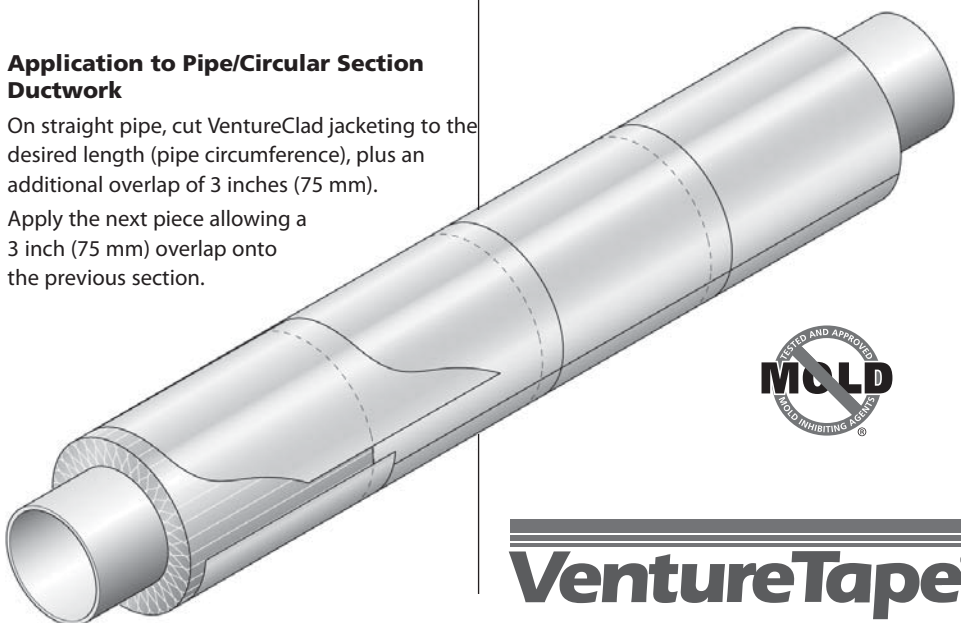
When applying to rectangular ductwork, apply to the bottom surface first, bringing the 3 inch (75 mm) overlap up, onto the sides. Next apply sheet to the vertical surface, bringing the 3 inch (75 mm) overlap over onto the top surface. Finally, apply sheet to the top of the duct, bringing a 3 inch (75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



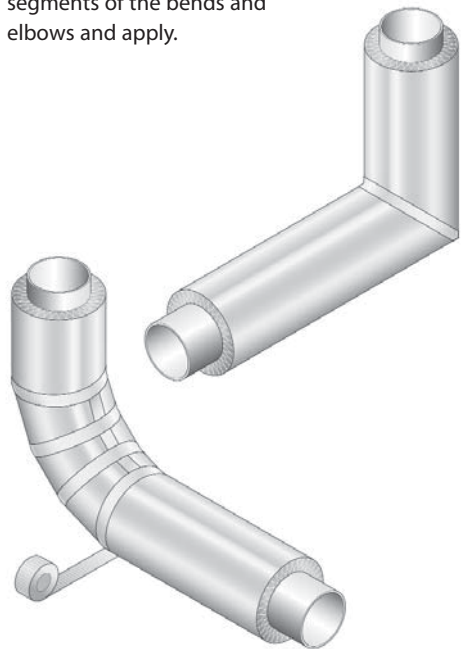
### Application to Pipe/Circular Section Ductwork

On straight pipe, cut VentureClad jacketing 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 jacketing. Cut out the required shapes to cover the segments of the bends and elbows and apply.



**VentureTape®**

\*US Patent 6,953,512

### Application to Ductwork Reducer

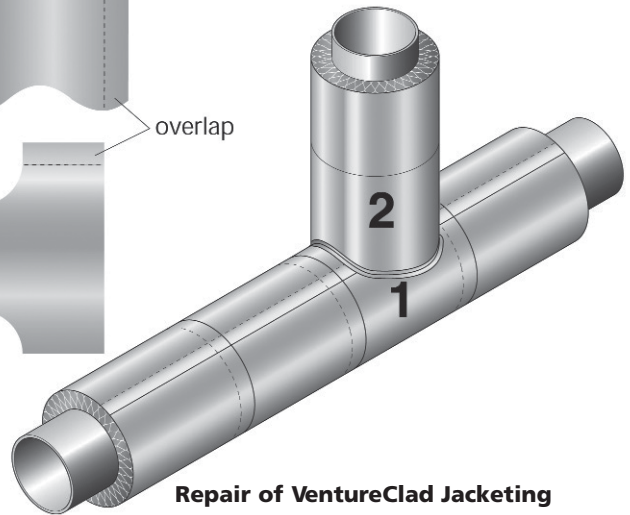
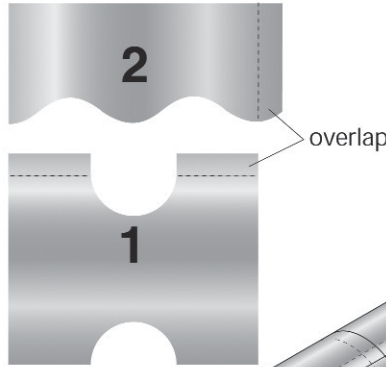
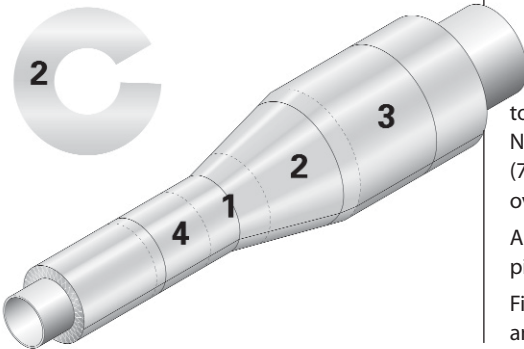
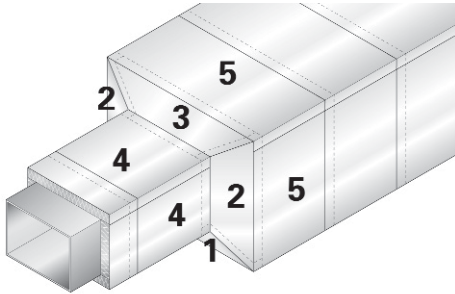
Starting from the bottom, work upwards allowing an overlap of 3 inches (75 mm) onto adjacent surfaces.

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

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

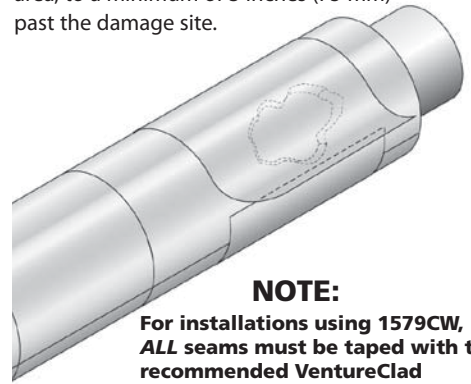
Finally, apply sheet to surfaces No.4 and 5 as with other rectangular ductwork.



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

### Repair of VentureClad Jacketing

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



### NOTE:

**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 conditions of Limited Warranty**

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

# VentureTape®



# VentureWrap™ 1555U

A three ply laminate constructed of a 1-mil (25µm) aluminum foil with 0.5 (12µm) mil 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- should not be used for specification purposes)

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	2.4 mils	1.5 µm	PSTC-133
Adhesive Peel Strength	- oz/in	- N/25mm	-
Adhesive Shear Strength	- hours	- hours	-
Tensile Strength	12,500 psi	86 MPa	PSTC-131
Elongation	49%	49%	PSTC-131
Application Temperature Range	-76°F to 302°F	-60°C to 150°C	
Minimum Continuous Use Temperature	-40°F	-34°C	
Maximum Continuous Use Temperature	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

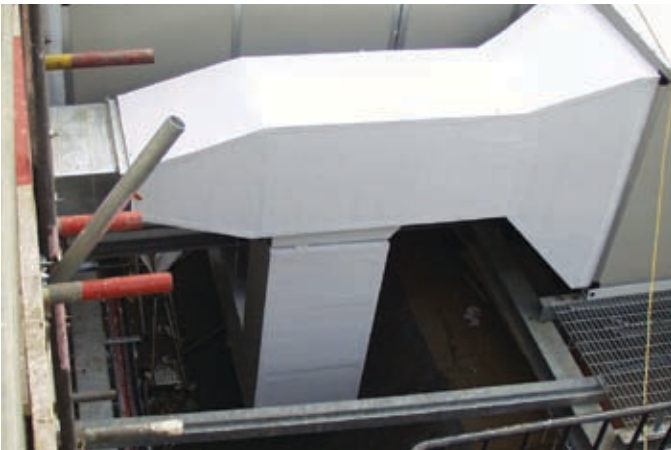
# ***Installations Worldwide***



*Dubai, UAE*



*France*



*USA*



*Canada*



*Germany*



*England*

# ***Diverse Applications***



*Large Diameter Pipe Applications*



*Marine Applications*



*Condensate Drip Pan Applications*



*Industrial Applications*



*Pharmaceutical Applications*



*Elbow Applications*

# Delivering Solutions Every Day

**R&D** – Customer-responsive product development keeps Venture Tape at the forefront in solutions to sealing, mounting and assembly problems. At Venture we strive for continuous improvement through process control and technical innovation.

**Coating** – State-of-the-art coating lines provide substantially increased capacity, through both speed and web width, with precise response to our computer control systems.

**Control** – Advanced process control systems at Venture Tape are unrivaled in the industry. Computer-control from start to finish ensures the highest levels of quality and customer satisfaction.

**Converting** – Fully automated systems provide flexibility, speed and improved consistency to the conversion process, facilitating custom cuts, reducing waste and providing better value.

**QA** – To better serve your needs, we maintain a program of continuous in-house testing and batch-tracking; Venture Tape's quality assurance system is aimed at providing consistent, reliable performance.

**Service** – Special order-handling capabilities, fast reaction service, and global warehouse locations ensure Venture products are available to meet your most challenging schedules.



3" Glued Pocket Fold

3.5" Slit for Business Card

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Fax: 781-871-0065  
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# VentureTape®

VC001  
7/09