Foster™

APPLICATION QUICK GUIDE*

NeoClad™ & NeoClad™ PRO

Vapor Barrier Jacketing

These self-adhered insulation jacketing solutions create a continuous water- and vapor-tight protective layer on insulated piping and ductwork. Engineered to replace traditional jacketing systems, they simplify installation while delivering consistent performance and long-term moisture protection.

For detailed information & full instructions please consult Foster™ Technical Service

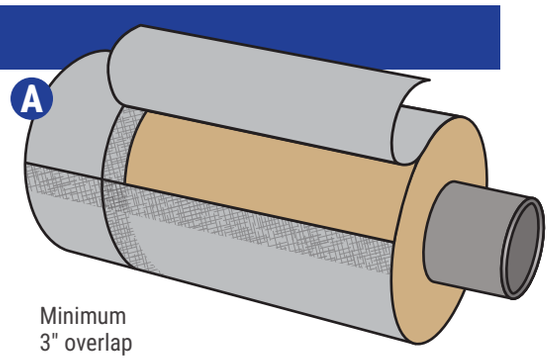
1 PREPARATION

Apply only to clean, dry, oil-free surfaces. Dirt, dust and loose insulation must be removed prior to application. Insulation surface should be as smooth as possible to provide a neat, even, finished appearance. All underlying insulation seams and longitudinal and butt joints must be taped with a compatible tape recommended by the insulation manufacturer. Ensure any HVAC ductwork is fully sealed against air leaks.

2 APPLICATION

A - PIPING

NeoClad™/NeoClad™ PRO jacketing is best applied by cigarette wrapping on piping. Cut membrane to desired length. Ensure length includes a minimum 3" (76 mm) overlap. For best finished appearance, keep the machine direction of all pieces of NeoClad™/NeoClad™ PRO aligned in the same direction. Start by positioning the membrane such that the finished overlap will allow for water to drain over and not into the lap. Peel back six to twelve inches of the release liner, taking care not to allow any exposed adhesive to touch itself. Firmly press exposed edge of sheet in place and continue removing release liner and smoothing sheet to substrate. Avoid wrinkling.
All longitudinal and circumferential seams must be overlapped a minimum of 3" (75 mm). Ensure complete contact at the laps and to the substrate using a tape squeegee or roller, applying firm pressure throughout.

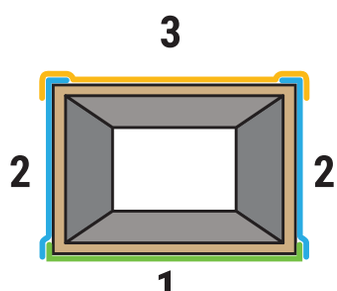


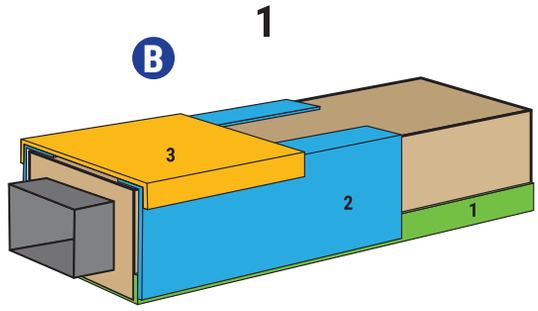
B - RECTANGULAR DUCTWORK

The top of rectangular duct work shall be sloped to avoid ponding water and ensure run-off.

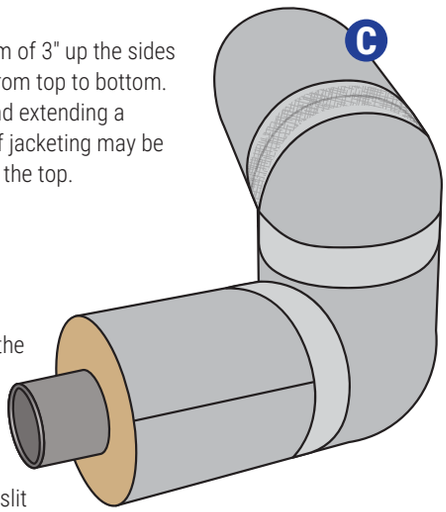
Weld pin caps and washers shall be covered with a 3.9" x 3.9" (100 mm x 100 mm) piece of NeoClad™/NeoClad™ PRO tape prior to the installation of the outer NeoClad™/NeoClad™ PRO jacketing.

Pieces of jacketing should be cut and applied to ensure complete water drainage over and not into the laps. For fast and easy application, NeoClad™/NeoClad™ PRO should be first applied to the bottom surface, then each side separately, and last the top. This ensures adequate coverage and avoids any open laps where water could drain into.



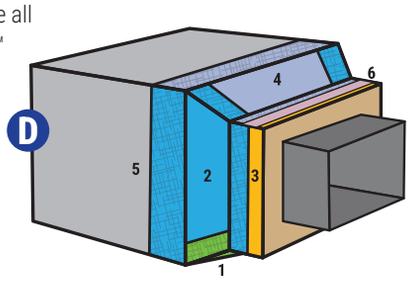


The bottom piece should be cut and applied first such that it extends a minimum of 3" up the sides of the duct. Side pieces should be cut next to cover the entire side of the duct from top to bottom. Finally, a top piece should be cut and applied, covering the entire top surface and extending a minimum 3" down the sides. Alternatively, for smaller duct, one or two pieces of jacketing may be used, ensuring that all final laps are overlapped a minimum of 3" and drain over the top.



C - ELBOWS & BENDS

For elbows and bends, follow procedures used for fitting metal jacketing by cutting gores from the roll of NeoClad™/NeoClad™ PRO jacketing to fit the insulation radius and diameter. Cut out the required shapes and apply to cover the segments of the bends and elbows. All fittings should be cut to allow for 2" (51 mm) overlaps. Cut feathers or slits into underlaps or overlaps to avoid wrinkles when changing dimensions of fittings require it. Where 2" (51 mm) overlaps are not possible, butt the two fitted pieces up as tightly as possible, avoiding wrinkling of the sheet. Be certain that each butting overlap covers any slit so that water cannot penetrate in. Use tape strips as necessary to ensure vapor tight seal; use 3.9" (100 mm) strips of NeoClad™/NeoClad™ PRO jacketing to seal all joints a minimum of 1.9" (48 mm) overlap on both sides. Use care to ensure all fittings are completely vapor sealed. Alternately, strips of NeoClad™/NeoClad™ PRO tape may be used to spiral wrap elbows if the configuration allows it.

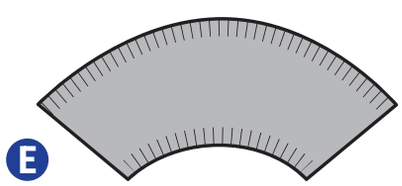


D - RECTANGULAR DUCTWORK REDUCERS

For rectangular ductwork reducers, NeoClad™/NeoClad™ PRO jacketing should be applied from the bottom to the top and overlapping a minimum of 3" (76 mm) onto adjacent surfaces. This application will ensure proper adhesion and avoids wrinkling of the jacketing and any open laps where water could drain into.

Starting with the bottom surface of the ductwork reducer insulation (1), apply the NeoClad™/NeoClad™ PRO jacketing and overlap onto the sides of the reducer (2) and onto both the smaller and larger duct sections (3 and 5). Next, apply the jacketing onto the sides of the reducer (2) and overlap onto the top of the reducer (4) and onto both the smaller and larger duct sections (3 and 5). Next, apply the jacketing onto the smaller duct section (3), starting with the bottom, then the sides, then the top, overlapping the jacketing that was already applied onto the bottom (1) and the sides (2) of the reducer. Then, apply the jacketing to the top of the reducer (4), overlapping onto the top of the smaller and larger duct sections (3 and 5). Next, apply the NeoClad™/NeoClad™ PRO jacketing to the larger duct section (5), starting with the bottom, then the sides, then the top. Last, apply a butt strip over tab of the top of the reducer (4) and onto the smaller duct section (3).

1. Overlap onto insulation 2, 3 & 5
2. Overlap onto insulation 3, 4 & 5
3. Apply bottom, sides & top in that order, overlapping tabs from 1 & 2
4. Overlap onto insulation 5 & surface 3
5. Apply bottom, sides & top in that order
6. Apply butt strip over tab of 4 & onto surface 3

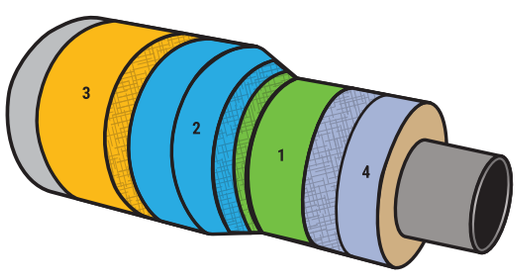


E - ROUND DUCTWORK & PIPING REDUCERS

For round ductwork and piping reducers, NeoClad™/NeoClad™ PRO jacketing is best applied by cigarette wrapping. Ensure length includes a minimum 3" (76 mm) overlap. Make sure that the finished overlap will allow for water to drain over the lap.

First, apply jacketing to the smaller section of pipe directly after the reducer (1) and overlap onto the reducer (2), cutting feathers as necessary. Using the figure shown to the right, cut the jacketing in order to fit to the reducer, cutting slits into both curves of the piece, which helps give the jacketing flexibility and avoids wrinkling when applied on the curved section. Next, apply the jacketing to the reducer (2) and overlap onto the smaller pipe section (1). Then, apply jacketing to the larger pipe section (3) and overlap onto the reducer (2). Last, continue applying NeoClad™/NeoClad™ PRO to the smaller pipe (4), making sure to overlap at least 3" (76 mm) onto any previously applied jacketing.

Alternately, strips of NeoClad™/NeoClad™ PRO tape may be used to spiral wrap reducers if the configuration allows it.

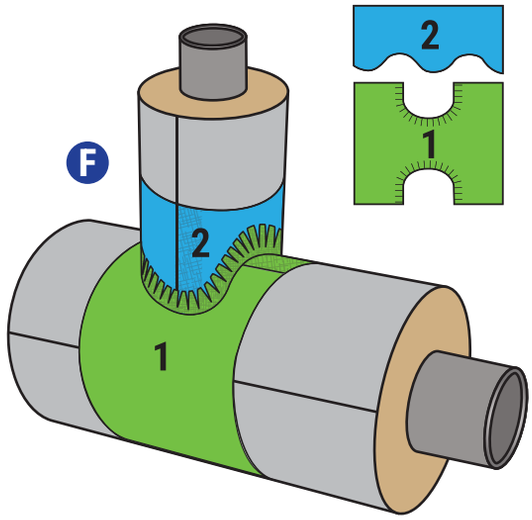


1. Overlap onto surface 2
2. Overlap onto section 1
3. Overlap onto surface 2
4. Overlap onto section 1

F - TEE SECTIONS

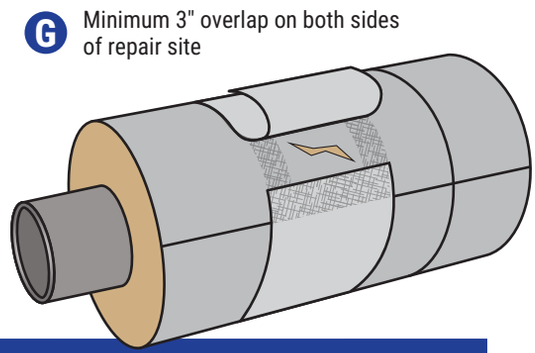
For tees, follow procedures used for fitting metal jacketing by cutting gores, legs, sine waves and C-collars from the roll of NeoClad™/NeoClad™ PRO jacketing to fit the insulation radius and diameter. All fittings should be cut to allow for 2" (51 mm) overlaps.

Using the figure shown to the right, cut pieces 1 and 2. As shown in piece 1, cut slits into the curves, which avoids wrinkling of the jacketing when it overlaps onto the pipe tee (2). Apply piece 1 first, overlapping the jacketing at least 2" (51 mm) when wrapped around the pipe and onto the pipe tee (2). Then apply piece 2 to the pipe tee, overlapping the jacketing at least 2" (51 mm) when wrapped around the pipe. Use care to ensure all fittings are completely vapor sealed.



G - REPAIRS

If any section of jacketing should be damaged, cut out the damaged section and patch it with new jacketing over the empty section. Make sure to overlap the existing sheet by a minimum of 3" (76 mm) all the way around the repaired area. Position the membrane such that the finished overlap will allow for water to drain over and not into the lap.



3 TIPS & SUGGESTIONS

Flexible elastomeric rubber foam insulations may significantly expand and contract with temperature fluctuation from exterior exposure or system cycling.
In extreme climates, this may result in wrinkling of the jacketing or potential opening of the jacketing laps. Evaluation of suitability for use with specific rubber foam insulation in specific conditions needs to evaluated by the user as conditions are beyond the control of H.B. Fuller. Additional NeoClad™/NeoClad™ PRO 3.9" (100 mm) wide tape strips wrapped around in the circumferential direction with a 3" (75 mm) overlap on each end of the NeoClad™/NeoClad™ PRO jacket and evenly spaced every 6 to 8" (30-40 cm) along the length of the jacketing may reduce potential for opening of the laps with elastomeric rubber foam. In extreme climates, stainless steel strip bands may also be installed circumferentially at every 12 to 16" (300-400 mm) to limit expansion of the insulation when heated. If stainless steel strip bands are used, extra care should be taken by the installer not to puncture or damage the NeoClad™/NeoClad™ PRO surface.

All penetrations, insulation supports, valves, expansion and contraction joints and other protrusions must be properly flashed to ensure complete seal between the protrusion and the jacketing. Foster® 95-44 Elastolar® Sealant may be flashed directly over the jacketing.

On low temperature applications, ensure the insulation and jacketing are free from frost or condensation. Apply the jacketing as normal, ensuring good adhesion at all overlaps. At temperatures below 20°F (-7°C), a heat gun and squeegee or roller are suggested to warm the sheet and obtain optimal adhesion at the overlaps.

To improve adhesion to dusty insulations, such as PIR, the insulation may be primed with Foster® 85-45 Fos-Stik™ Aerosol Adhesive.

When applying NeoClad™/NeoClad™ PRO jacketing over PIR pipe insulation greater than 4" (102 mm) pipe diameter, follow insulation manufacturers' recommendations for additional mechanical fastening.

To Learn More Visit
fosterproducts.com/neocladpro/

3073-PR-R0726

*** FOR PROFESSIONAL USE ONLY -** The information contained in this application guide has been prepared in good faith on the basis of information available at the time of publication. The accuracy or completeness of the information is not guaranteed. It is for guidance only. Use of this information in any way is the sole responsibility of the user. The information is intended only for experienced professionals familiar with techniques and applications of insulation jacketing materials. There are many factors that may affect the job performance and the installer must consider all job parameters and determine fitness for use of the product as well as ensure that the product is installed to ensure a water and vapor tight system. **IMPORTANT:** H.B. Fuller Construction Products Inc. warrants that each of its products will be manufactured in accordance with the specifications in effect on the date of manufacture. WE MAKE NO OTHER WARRANTIES AND EXPRESSLY DISCLAIM ANY WARRANTIES OF MERCHANTIBILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a product fails to meet this limited warranty, purchaser's sole and exclusive remedy is replacement of the product or, at our option, refund of the purchase price. OUR ACCEPTANCE OF ANY ORDERS FOR THE PRODUCT IS EXPRESSLY CONDITIONAL UPON PURCHASER'S ASSENT TO THE TERMS ON THE APPLICABLE INVOICE. **ADEQUATE TESTS:** The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements.