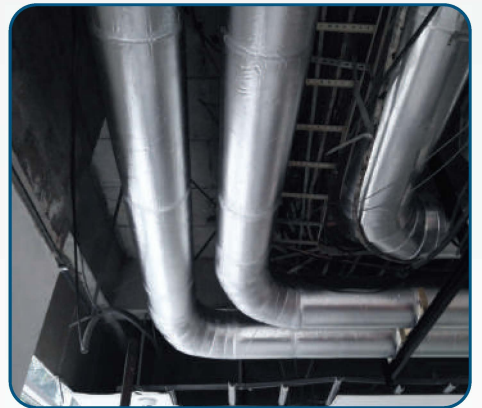


Installation Guide





FLEXICELL -XLPE

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1. Introduction

This document covers installation instructions for the FlexiCell® XLPE product range that can be used in various applications. FlexiCell® XLPE products are quick and easy to install. However, since they are based on cross linked closed cell polyolefin thermal insulation foam, they come with different installation techniques as compared to those used in fibrous and beaded insulations.

It is important to note the following while installing FlexiCell® XLPE products:

- (a)** Review the Engineer's specifications in conjunction with this manual.
- (b)** Before installation, read introduction and all section(s) relevant to the particular FlexiCell® XLPE product being installed.
- (c)** Should there be any uncertainty on how to carry out installation for FlexiCell® XLPE products, it is advisable to contact the FlexiCell® Technical Team and speak to a Sales Representative who will be able to advise regarding the best method of installation that must be adopted.

FlexiCell® XLPE products can also be used in various applications with ease. The installation instructions mentioned in this manual have been divided into sections that detail the different applications of FlexiCell® XLPE products. FlexiCell® XLPE Thermal Insulation has a variety of products that goes into different applications.

1.1 Safety Equipment

FlexiCell® XLPE is a CFC and HCFC free product. It does not contain, nor use in its production, any substances that contribute to Ozone Depletion Potential (ODP). FlexiCell® XLPE is fibre free and has a very low Volatile Organic Compound (VOC) emission level. FlexiCell® XLPE meet AS 1530.3, early fire hazard properties of materials. For further safety related information, refer to the FlexiCell Material Safety Data Sheet (MSDS).

1.2 Exposure to Heat

Closed cell foams tend to expand when heated. The expansion is small and predictable for service temperatures up to 100 °C but, it needs to be taken into account. The thicker the foam used, the more one must accommodate for any expansion of the foam. FlexiCell® XLPE varies within ranges of maximum line temperature, +105 °C and minimum line temperature, -80 °C. FlexiCell® XLPE foam is generally resistant to UV radiation. However, for all outdoor applications it must be protected with additional weather resistant cladding. Only FlexiCell® N-Clad products are suitable for outdoor conditions without additional protection.

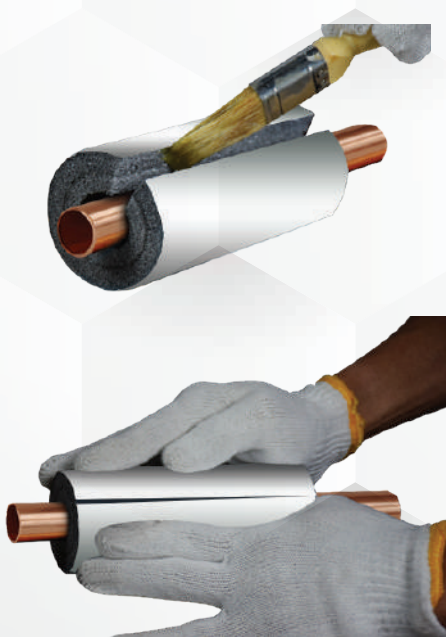
1.3 Handling and Storage

- Carefully unload FlexiCell® XLPE to avoid causing damages to the insulation. Careless unloading including dropping or throwing the products from any vehicle can result in damages to the edges or the outer layers.
- Keep the packed material dry and do not unload it in wet conditions in order to avoid any damages.
- Do not roll or drag the material along the ground. This may damage the insulation or foil facing layer due to protruding items. Rolling or dragging the products could also cause build-up of electrostatic charges.
- Keep FlexiCell® XLPE products in their original packaging until just before carrying out installation to ensure that all surfaces remain clean and free from dust and moisture.
- Store the products indoor and keep them dry and away from direct sunlight.
- Do not store the products on wet or damp floors.
- Do not expose to any source of flame, ignition or intense heat as it may damage the products.
- When stored indoors in original packaging and protected from moisture and direct sunlight, non-adhesive backed FlexiCell® can be stored for upto ten years without any deterioration.
- Adhesive backed FlexiCell® XLPE products must be stored in a cool and dry place, away from direct sunlight due to the effects of temperature and humidity on the adhesive coating. The products can be stored in dry, clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0 °C – 35 °C). Adhesive backed FlexiCell® XLPE products can be stored for a period of one year.

1.4 Taping Instructions

- Use recommended width of specified aluminium tape.
- It is important that the insulation surface is free from dust and dirt before applying tape. If uncertain, clean the surface with a clean rag. In case of any oil or silicone contamination, wipe the surface with a clean rag and suitable cleaning agent. Wait for the surface to dry before applying tape.
- Reinforced aluminium foil tapes must be applied using pressure. The more pressure applied, the better the result.

- The best way to apply this pressure is to continually rub the tapes external surface using a spatula.
- The vapour barrier should be continuous wherever there is a break in the FlexiCell® foil facing; i.e., no foam surfaces must be exposed after installation.
- When applying tape, follow the contours of the material. Do not try to flatten the contours out with the tape. Let the tape relax and adapt to the irregularities of the surface before fixing it.
- Fix tape over all joints ensuring a continuous seal. Wherever possible, the length of the tape should not only exceed the length of the joint, but it should continue around the next edge to provide an anchor point. There should be at least 50 mm overlap.



1.5 Instructions for Outdoor Installations

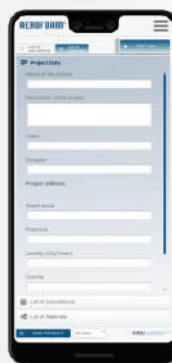
FlexiCell® recommends the use of FlexiCell® XLPE N-Clad for outdoor installations. FlexiCell® XLPE N-Clad maintains its appearance over a long period of time, and is resistant to puncturing, UV and salt water exposure due to high mechanical strength of N-Clad foil.

In addition to the Material Safety Data Sheet (MSDS), the following instructions must also be observed for outdoor installations:

- Do not store FlexiCell® XLPE products outdoors prior to installation.
- It is especially important that the underlying surface is clean, dry and at ambient temperature. Avoid installing the insulation during times of the day when the metal surface may be very hot, when it is raining or when condensation has occurred.
- Use outdoor recommended aluminium foil tape. Take extra care and ensure that you fully seal the tape onto the product and eliminate all air bubbles. Tape overlaps should not end along or near the upward facing insulation surface.
- FlexiCell® XLPE Alupet may be installed for outdoor applications with an additional protective layer such as metal cladding. However, FlexiCell® XLPE N-Clad is the one especially designed for outdoor installations without any additional protection.

AEROCALC

Calculation software is a tool for consultants, architects and engineers, available as **desktop** and **iphone** and **android** application.



Scan QR code to download desktop app



2. General Information

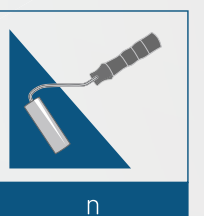
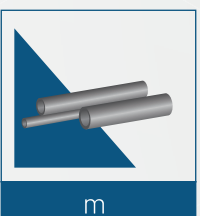
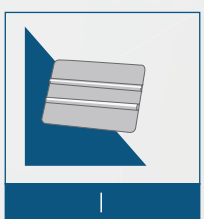
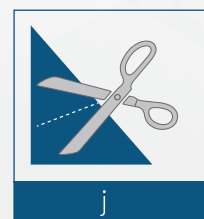
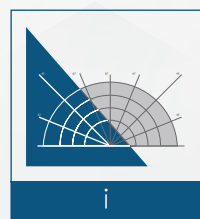
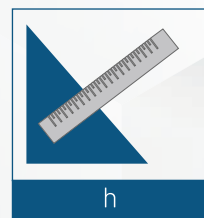
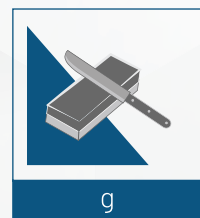
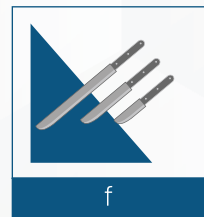
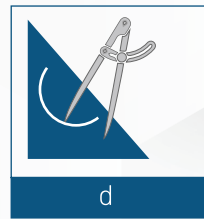
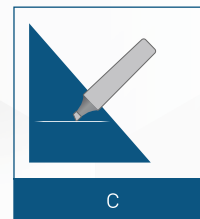
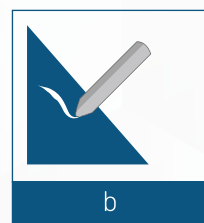
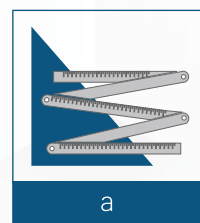
All the information below where FlexiCell® XLPE is referenced (without any clear difference between FlexiCell® NBR and FlexiCell® XLPE), can be applied to both FlexiCell® NBR and FlexiCell® XLPE. Where there are differences in the application procedures between the two products, then these will be clearly mentioned.

2.1 Working with FlexiCell® XLPE

- Use clean FlexiCell® XLPE material with no dust, dirt, oil or water on the surface; if present, clean with special glue cleaner.
- Use good quality tools, in particular a sharp knife, fresh FlexiCell® XLPE adhesive and a good brush.
- Use correctly dimensioned material. Never pull glued joints when sealing them, always push them together.
- Oval tubes should always be split on the flat side (applicable for FlexiCell® XLPE).
- Never insulate plants and systems that are in operation. Only start insulated plants after 36 hours as after this time the adhesive is fully cured.
- In general, an additional use of FlexiCell® XLPE tape is not necessary. Self-adhesive FlexiCell® XLPE tape should not be used as the sole fixing for butt and longitudinal joints and seams. If required, it should only be applied to joints and seams that have been glued previously with FlexiCell® XLPE adhesive and only after 36 hours to allow complete outgassing of the adhesive solvent.

2.2 Tools for Installing FlexiCell® XLPE

- (a)** Folding rule
- (b)** Chalk (for marking irregular shapes)
- (c)** Silver ink marker pen
- (d)** Dividers
- (e)** Calipers
- (f)** Sharp knives (short, medium, long)
- (g)** Sharpening stone
- (h)** Ruler
- (i)** Template (printed on every FlexiCell® XLPE carton)
- (j)** Scissors
- (k)** Brushes with short, firm bristles
- (l)** Smooth spatula
- (m)** Sharpened pipe ends for the most common pipe diameters
- (n)** Rollers for surface gluing
- (o)** Gluemaster



2.3. The Correct Use of FlexiCell® XLPE Adhesive

FlexiCell® XLPE adhesive has been especially developed to bond FlexiCell® XLPE. It joins the surfaces reliably and safely at medium temperatures of upto +105 °C. The bond is resistant to weathering and aging.

i. Preparing for work

Check condition of FlexiCell® XLPE adhesive. Cans of FlexiCell® XLPE should have been stored in a cool environment wherever possible. Cans must also have been kept free from frost. Damage due to frost can be reversed by storing in warm conditions, or for immediate use by placing the can into a bucket of hot water. The shelf life is approximately 1 year. Please refer to FlexiCell® Glue Technical Data Sheet.

- (a)** Where installation surfaces are soiled with dust, dirt, oil or water, all of these contaminants must be removed and where applicable, cleaned with special glue cleaner before starting work. In addition, all surfaces to be joined must be dry before gluing begins.
- (b)** Pay close attention to the installation instructions on the adhesive can. Use small cans during work so that the adhesive does not thicken too quickly. Refill from larger cans when necessary and keep them closed when not in use to avoid thickening.
- (c)** Ideal installation temperature is 15 °C to 20 °C. Do not use adhesive under 0 °C. If the adhesive is too cold, it can be warmed in a bucket of hot water. At temperatures below 5 °C, condensation can appear on the surfaces to be glued or the adhesive film, which makes it difficult for the materials to be glued.
- (d)** Stir adhesive well after opening. If left to stand, heavier components in the adhesive may settle in the bottom of the can. These must be mixed thoroughly before use in order to effectively activate the adhesive.

ii. Pipes with corrosion protection

Check that the adhesive will adhere to any rust inhibiting primer that has been used to protect pipes. Standard FlexiCell® XLPE adhesives should be compatible with all two-component coating systems based on epoxy design or polyurethane. FlexiCell® XLPE adhesive may not adhere to asphalt, bitumen or red lead.

iii. Application

- (a)** Use a brush with short, stiff bristles and keep clean. For larger areas, a spatula or paint roller (non-foam type) or the FlexiCell® XLPE gluemaster may be used to speed up application.
- (b)** Apply FlexiCell® XLPE adhesive thinly and evenly onto both surfaces to be glued.
- (c)** When adhering FlexiCell® XLPE to other materials (e.g. metal), first apply the adhesive to the FlexiCell® XLPE and then to the other clean surfaces.

(d) Allow the adhesive to 'tack-dry'. The time required will vary according to the ambient conditions. The correct initial drying time may be determined by the fingernail test; Touch the surface with a fingernail, if the fingernail does not adhere to the surface and the surface itself does not feel tacky, the joint may be closed. The maximum adhesive force will be obtained when two tack-dry surfaces are brought together.

(e) The glued surfaces should be pressed together, do not stretch. Do not leave glued seams at the top of the insulation in external locations. When working outdoors, always turn the glued seams away from the sun.

(f) When gluing joints under compression with no gaps present, the wet adhesive method should be applied. Pull the seam apart slightly and apply FlexiCell® XLPE adhesive thinly and evenly with the brush to both surfaces and press together. No open time is needed in this case.

(g) Use special glue cleaner to clean your tools, contaminated metal surfaces and surfaces which have had talc applied.

(h) Curing time for FlexiCell® XLPE adhesive is 36 hours.

Note: Do not mix special glue cleaner with FlexiCell® XLPE adhesive to thin it out, warm it instead.

iv. Application in hot and humid environments

High atmospheric humidity and temperatures lead to faster evaporation of the solvent in FlexiCell® XLPE adhesive. This means that a layer of moisture may appear on the surface of the adhesive. Consequently, the reliability of the adhesive seam cannot be assured as the surfaces to be joined may not bond together. Under these conditions, the following points may be observed as an alternative to our installation instructions:

- (a)** Apply FlexiCell® XLPE adhesive as normal in a thin uniform film on both surfaces.
- (b)** Unlike normal bonding, the surfaces to be glued should be held together under pressure whilst wet.

Note: Due to the shorter curing time, the adhesive can only be applied to a limited area at one time. Depending on the atmospheric humidity, temperature, material thickness and practical installation condition, we recommend a tube length of around 1 m as a reference figure.

(c) To prevent possible tensions within the material and the enclosed solvent opening, seams should be held in place immediately after bonding with self-adhesive FlexiCell® tape crosswise to the glued seam every 20 cm or so.

v. Alternative for the adhesive

We recommend Bostik 1222 Brushable Contact Adhesive manufactured by Bostik.

(a) Application and directions

■ Preparation:

- Surfaces to be bonded must be thoroughly clean and dry. It is recommended to pre-wipe cleaned surfaces with Bostik No. 3 Solvent for optimum results.
- Stir adhesive thoroughly before use.

■ Application:

- Use a brush or roller.
- Apply a thin, even layer of adhesive to both surfaces that you would like to bond together.
- Allow both layers of applied adhesive to dry for 5 to 10 minutes.
- Bond both surfaces together after the solvent evaporates-adhesive will be ready to bond once the surfaces are "sticky" to touch, without transferring to your finger.
- Place the components accurately - bond will be immediate once the contact is made.
- Apply maximum pressure to make sure that surfaces are properly joined and no air bubbles are trapped within the fixed area. It is recommended to use minimum pressure of 280 kPa for proper bonding.

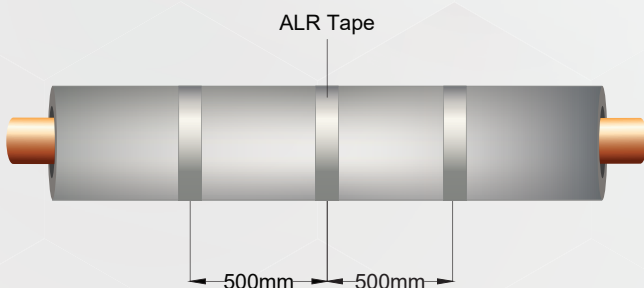
Note: The process of bonding must be completed within 20 minutes from the moment of applying the adhesive.

■ Temperature range

Tested to -20 °C to +90 °C

■ Coverage

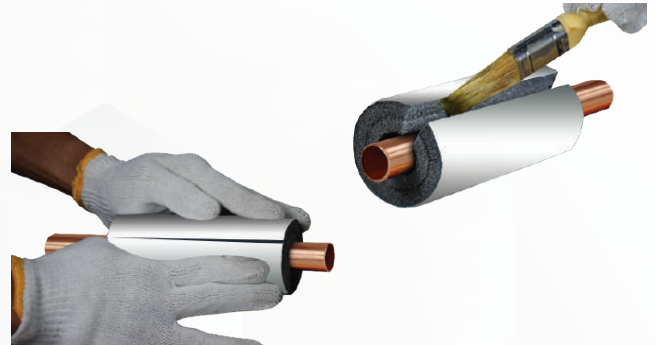
3-4 m² per litre bond area



Securely tape the slit and butt joints with ALR Tape. ALR Tape should be applied in bands around the pipe with a maximum gap of 500 mm between bands.

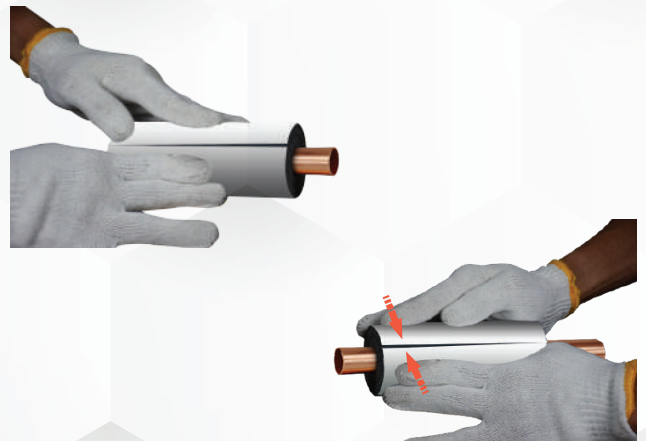
3. Insulating existing pipes by Snap-On

- (a) Place the slit tube onto the clean pipe; apply adhesive to the two cut edges with a thin even film of adhesive using a short bristle brush. Apply the adhesive at 200 mm intervals, along the tube length.

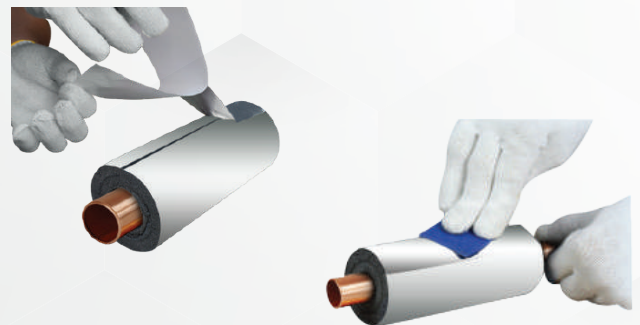


- (b) Allow the adhesive to touch dry, test with the finger nail.

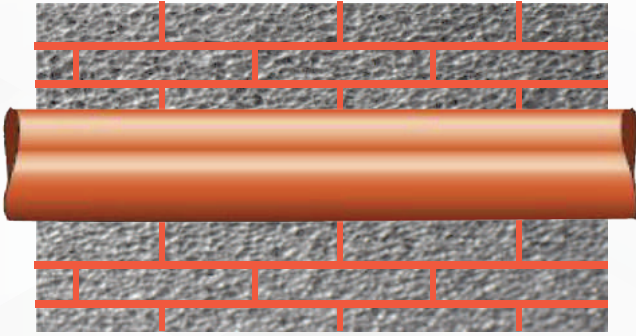
- (c) Free the seams from the pipe where applicable, line the edges together and press the seam detail with firm even pressure to finish.



- (d) Alupet tape has pressure sensitive adhesive. All air pockets needs to be removed and pressure has to applied for correct installation.



Staggering on pipe-work: longitudinal view



Orange lines indicate glued seams

■ Multi-layer insulation as a combination of tubes and sheets:

If the outer diameter of the first layer is large enough, we recommend that the second layer should be made with sheet, since this can be adapted exactly to the outside diameter of the first layer.

■ Multi-layer insulation of pipework with sheets:

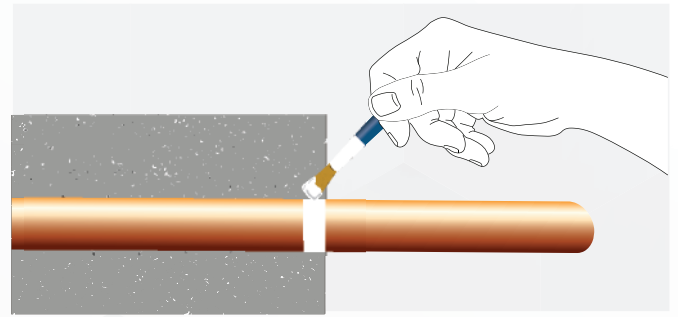
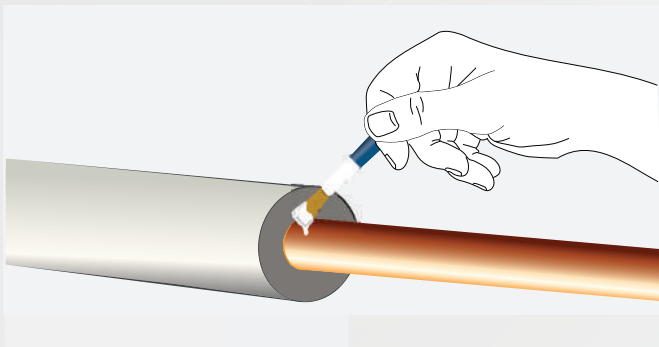
In general the insulation of pipes with sheet material is possible at an outer diameter of 89 mm. Select layer insulation thickness combinations as appropriate dependent on the outer diameter of the object.

Note: The ends of the tube or sheet of the second layer should be adhered to the first layer of FlexiCell. If there is a risk that the insulation may sag under the pipe, the insulation should be fully adhered to the underlying layer. When the piping diameter is above 600 mm all-over adhesive coverage should be applied on both surfaces.

■ Multi-layer insulation of flat surfaces with sheets:

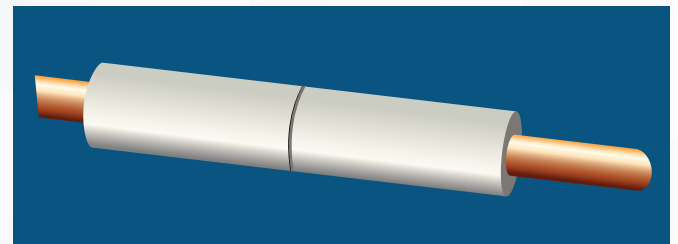
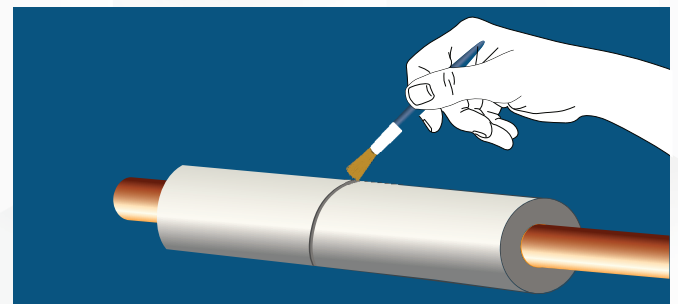
In the case of multi-layer insulation the first layer should be applied using all over adhesive coverage. The second layer should be adhered to the previous layer. Insulation on the underside of flat objects should be applied using all over adhesive coverage for all layers. In general the butt joints and the longitudinal seams of the second layer should be staggered to those of the first layer.

3.1 Wet Sealing of Butt Joints



(a) On all cold lines, fix and secure down to the piping surface FlexiCell® XLPE tube/sheet ends with FlexiCell® adhesive.

(b) The adhesive bonding will equal the insulation thickness at a minimum.



(c) For the final wet sealing of the tube/sheet, pull the compressed butt joint apart with the finger and apply a thin even film of adhesive to the two butt joint edges using a small brush.

(d) Apply firm and even pressure to the glued joint using the fingers and thumbs to finish.

(e) Apply respective FlexiCell® tape to cover the butt joint as described previously in this manual.

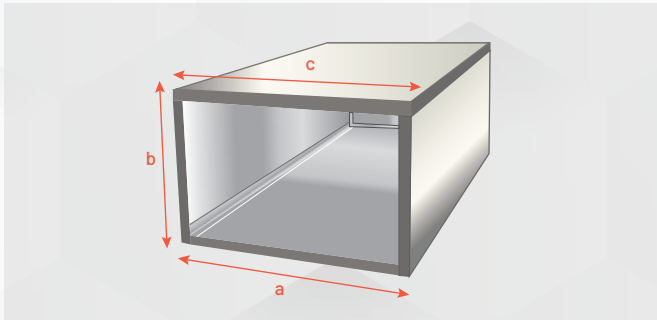
Note: In addition to all other types of hot piping lines located externally, it is highly recommended to follow the same procedures as with cold lines.

4.1 Insulating Ducts with FlexiCell® XLPE (Non Self-adhesive Method)

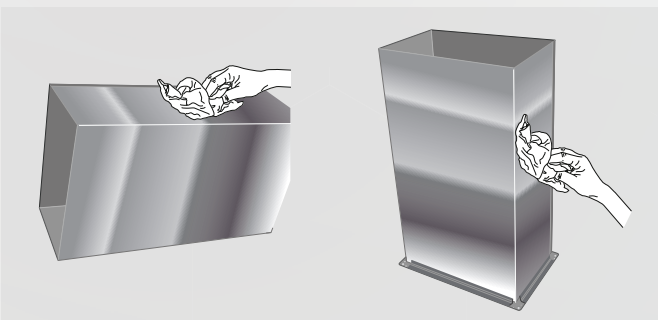
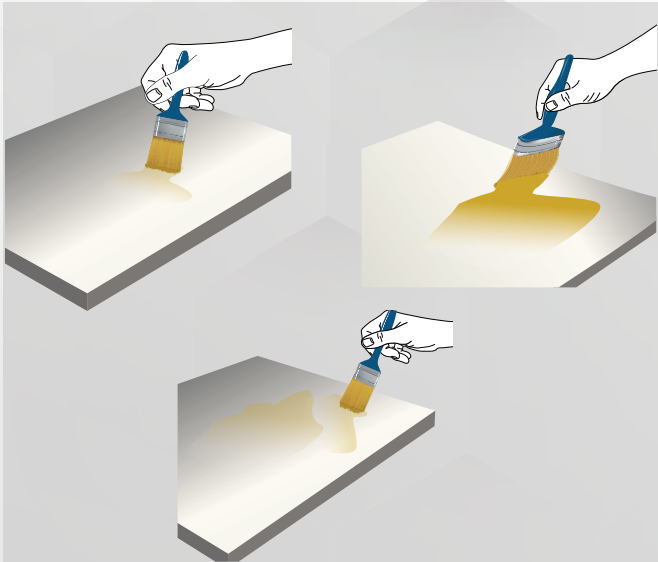
All ductwork should be free of dust, grease and oil. To clean the duct, first wipe with a clean cloth to remove dust particles. Then remove grease and oil by applying a methylated spirit or acetone (special glue cleaner) and allow evaporating. Work within a reasonably clean area to avoid too much dust.

(a) Measure the sizes of the surface and cut the FlexiCell® XLPE roll accordingly.

- a = Duct width + 2 x insulation thickness
- b = Duct height
- c = Duct width + 2 x insulation thickness

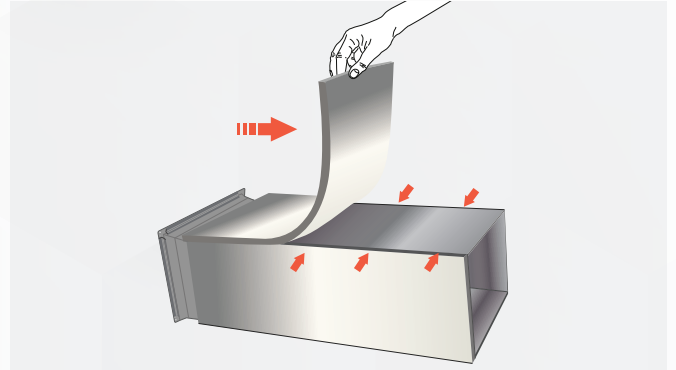


(b) FlexiCell® XLPE in rolls and sheets comes with self adhesive face. However, in case of better results or non self-adhesive material, FlexiCell® glue can be applied following these recommendations:



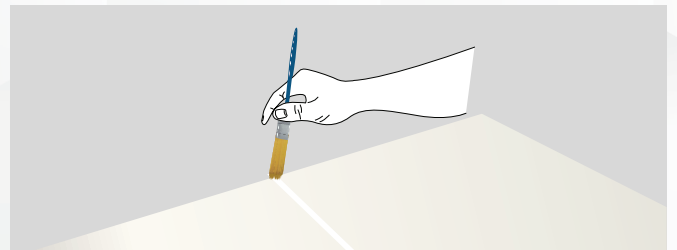
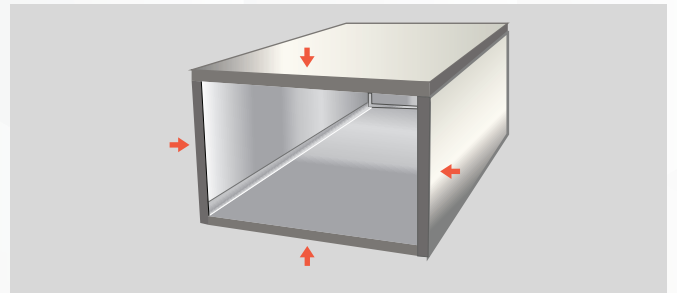
Apply FlexiCell® glue or an authorized glue by Hira Industries Technical Department. Application should be according to this installation manual on the insulating material and the flat surface.

(c) When the adhesive is tack only (fingernail test) place FlexiCell® XLPE roll in position and press firmly to achieve a good bond. Continue applying FlexiCell® XLPE adhesive to both surfaces, including the FlexiCell® XLPE edge and allow to tack-dry before pressing firmly into position.



Note: Remember to roll the sheet down into position along the insulated edges.

(d) Insulate according to the drawing below. This is especially important for external ductwork.



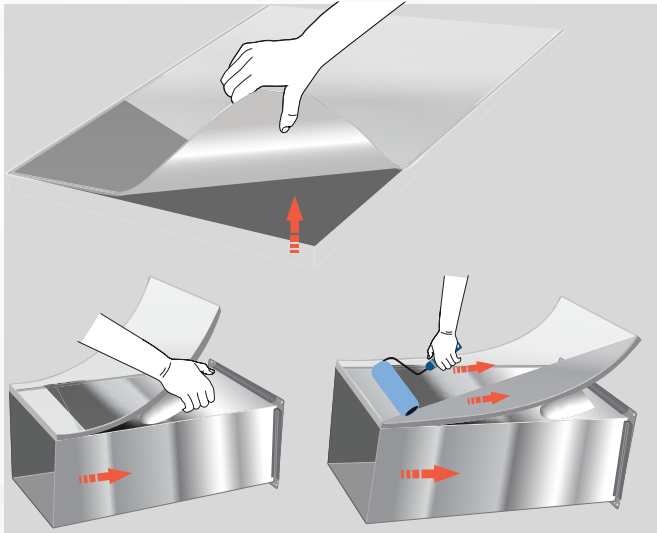
When pressed together, the material is under compression and is not stretched. Apply an additional wet seal along the butt joints.

4.2 Insulating Ducts with Self-adhesive FlexiCell® XLPE rolls and Sheets Shape

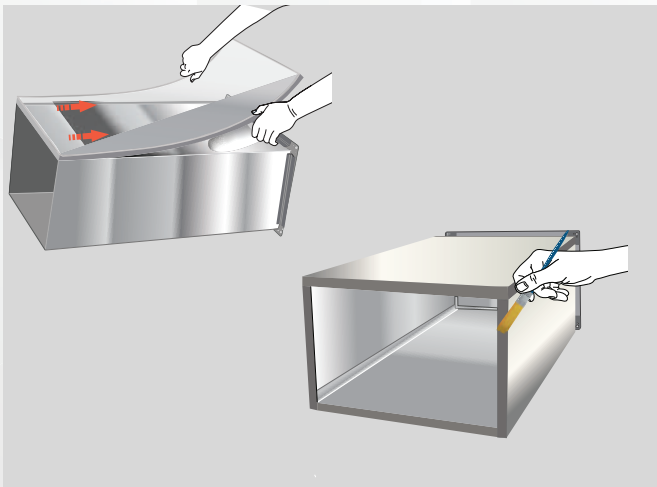
4.2.1 4 Pieces Method

All ductwork should be free of dust, grease and oil. To clean the duct, first wipe with a clean cloth to remove dust particles. In case of grease or oil, please clean the area by applying a methylated spirit, acetone, thinner or any special glue cleaner that allow evaporating. Work within a reasonably clean area to avoid too much dust.

(a) Peel off a small section of the adhesive paper. Start off with around 100 mm. Press firmly to activate adhesive (PSA), by applying uniform pressure over the top surface.



(b) Align the insulation edge with duct edge and gently lower the sheet exposing only required adhesive and pad firmly on the insulation as it lays on the duct from the fixed edge moving to the other edge ensuring air is expelled. Then, apply uniform pressure over the insulating material with the help of a smooth roller or with the help of hands.

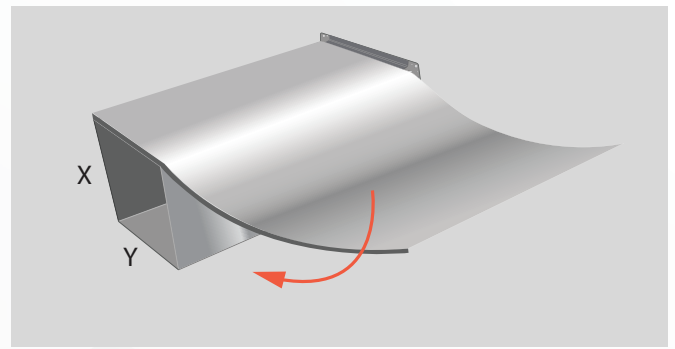


4.2.2 Wrapping Duct Method

This procedure is possible only for FlexiCell® XLPE thicknesses less than 20 mm (especially in case of FlexiCell® XLPE).

(a) Cut FlexiCell® XLPE insulation to the required length. Always allow 10 mm excess for final adjustment. Lay the duct on the floor. It is advisable to use a soft sheet, board or any other suitable covering on the floor to avoid damage on the insulation. The required length of the insulation is:

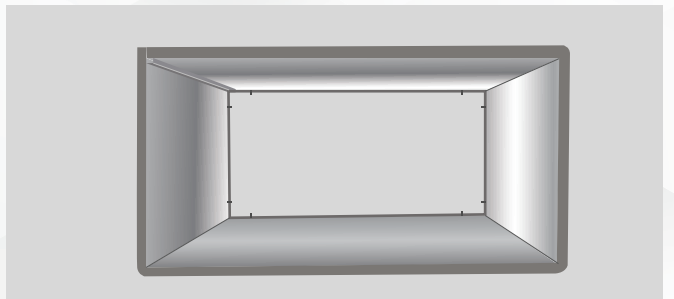
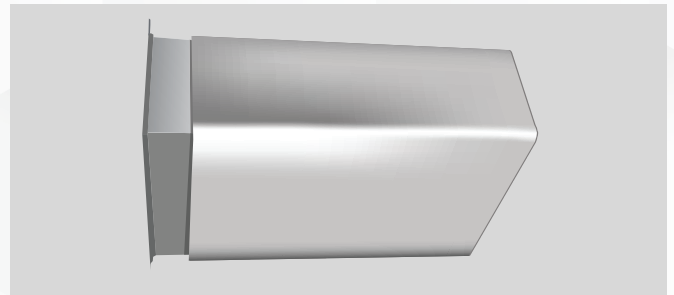
$$L = 2X + 2Y + 10 \text{ mm}$$



(b) Please follow the procedure explained above at 4.2.1

(c) Once one side is fixed, turn the duct to expose bare side. Repeat until completely covered and avoid pulling the insulation on edges to ensure the insulation thickness on the corners will be the same.

(d) On the final side, ensure the insulation length reaches the same level as the starting edge. Trim off the excess length with a sharp knife until it is leveled with the adjacent side.



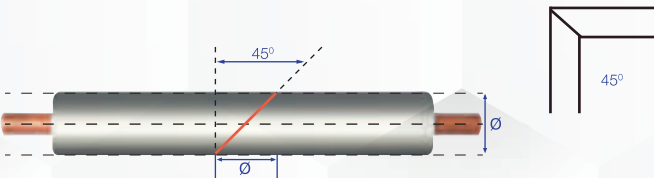
The same procedure is to be followed on a round duct ensuring the edges are butted firmly. Please apply FlexiCell® tapes on butt joints and length joints.

5. Fittings Fabrication: Elbows and Tee's

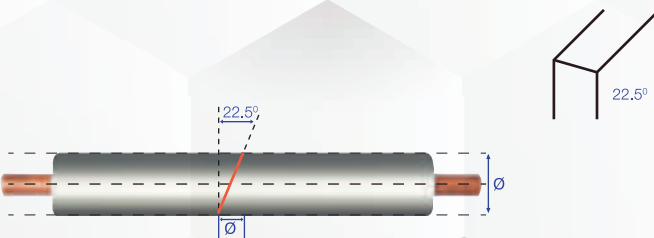
Below you will find the drawings needed to obtain different shapes made from insulation tubes. The orange lines indicate areas where cuts are to be made. For correct angle measurements, please use FlexiCell®. To request the templates, please contact our Technical Department.

Also, a miter box can be used for the same purpose.

i. Bend with 90° angle



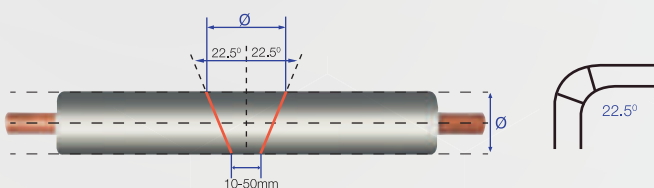
ii. Bend with 45° angle



*The θ details to achieve the 45° angle are approximate values.

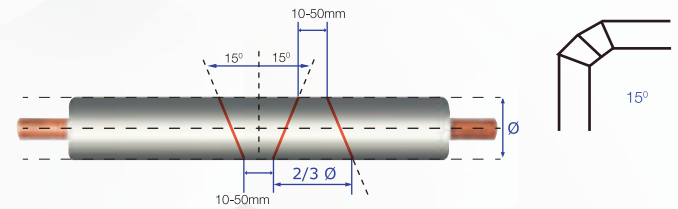
- To obtain the 22.5°, use miter box or cut the tube in an angle to achieve one third of the outer diameter of the insulation.
- Apply adhesive on both surfaces of the angle ends.
- Join both ends firmly.
- If the tubes have preapplied foil on them, it is recommended to use foil tape on the joint.

iii. Segmented bend with 1 middle part



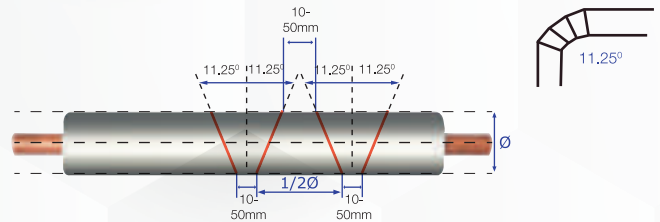
- To obtain the 22.5°, use miter box or cut the tube in an angle with a spacing of 10-15 mm for the middle piece.
- Apply adhesive on both surfaces of the angle ends.
- Join both ends firmly.
- If the tubes have preapplied foil on them, it is recommended to use foil tape on the joint.

iv. Segmented bend with 2 middle parts



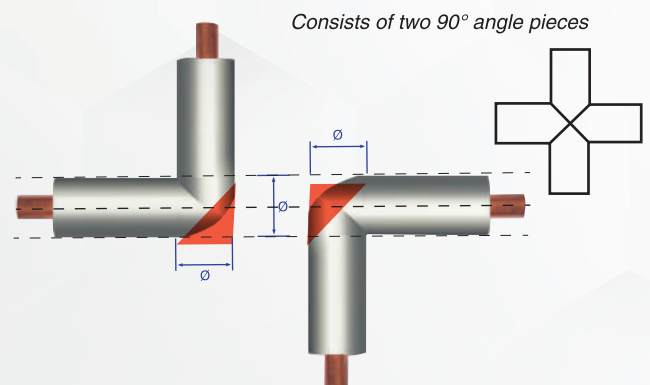
- To obtain the 15°, use miter box or cut the tube in an angle with a spacing of 10-15 mm for the middle pieces.
- Apply adhesive on both surfaces of the angle ends.
- Join both ends firmly.
- If the tubes have preapplied foil on them, it is recommended to use foil tape on the joint.

v. Segmented bend with 3 middle parts



- To obtain the 11.25°, use miter box or cut the tube in pieces.
- Apply adhesive on both surfaces of the angle ends.
- Join both ends firmly.
- If the tubes have preapplied foil on them, it is recommended to use foil tape on the joint.

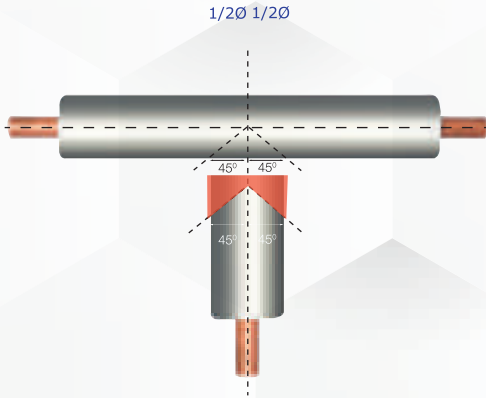
vi. Cross piece joint



- Follow the steps described at "Bend with 90° angle" to create 2 elbows of 90°.

- (b) Cut both elbows as indicated in the drawing after measuring them.
- (c) Apply adhesive on both surfaces of cut areas. Join both ends firmly.
- (d) If the tubes have preapplied foil on them, it is recommended to use foil tape on the joint.

5.1 The “Mitre Block” T-Piece



- (a) Cut two 45° angles at the end of the tube section for the branching pipe as shown, using either a mitre block or the FlexiCell® template.
- (b) Cut a 90° wedge into the tube section covering the primary pipe. This should correspond to the outer diameter of the branching tube.
- (c) Join the pre-cut parts with adhesive to form a T.
- (d) Slit the formed piece sideways with a sharpened knife, apply adhesive to seams, fit when tack-dry.
- (e) If the tubes have preapplied foil on them, it is recommended to use foil tape on the joint.

i. Insulating coupling pipe joints



- (a) Insulate up to the pipe fitting using FlexiCell® tube and secure to the pipe using adhesive.
- (b) The fitting cover is made from tube, the bore of which is the outer diameter of the incoming tube. Provide a minimum overlap of 25 mm on each side (increase the distance of the overlap to match the insulation wall thickness, if this exceeds 25 mm).
- (c) Slit in the throat, apply adhesive to seams, fit when tack-dry. Wet seal overlaps.



FLEXICELL XLPE

3.2 Outdoor Use of FlexiCell® XLPE

Whenever used externally, FlexiCell® XLPE must be either painted, covered or clad.

If additional mechanical protection or protection against severe weather conditions is required, FlexiCell® XLPE N-clad covering system offers a non-metallic cladding option. For installation details, please ask the Technical Service Department.

3.3 Advice for Insulating in Refrigeration and AC Equipment

(a) Surfaces of pipes and tanks must be sufficiently protected against corrosion before installing FlexiCell®.

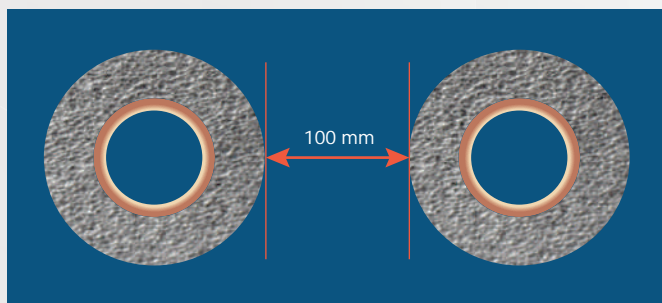
(b) In general, two component anti-corrosion system based on epoxy and polyurethane resin are compatible with FlexiCell® adhesives.

(c) In the case of conventional insulation systems, slight damage to the water vapour barrier can allow moisture to permeate throughout and underneath the insulation material. Using FlexiCell®, this can be easily prevented by attaching each end of the FlexiCell® tube to the pipe with FlexiCell® adhesive and making sure the adhesive joints are firm at critical points such as flanges, T-sections, elbows, supports, etc.

(d) By regularly adhering FlexiCell® to the pipe in this way the insulation system can be compartmentalized. Damage will therefore, be limited to the related sections and can easily be detected.

(e) All connected items of equipment shall be insulated with equal thickness where practical.

(f) Never insulate chilled water lines or refrigeration equipment if the sections to be insulated are too close together. Sufficient space should be allowed between insulated objects to ensure free convection as air movement by free convection provides an additional safeguard against condensation on cold pipes (see picture below).



Note: When insulating stainless steel with FlexiCell®, please contact our Technical Service Department.

3.4 Hot Water Piping Systems

This section in FlexiCell® Installation Manual illustrates instructions to be followed to insulate pipework and fittings associated with hot water piping systems.

3.4.1 General Installation Instructions and Preparation

- (a)** Select the right material for indoor or outdoor application.
- (b)** FlexiCell® is being supplied in a non-slitted tubular shape.
- (c)** FlexiCell® can be installed by slipping the insulation before brazing of the copper pipe, or slitting the insulation along its length which allows the installation of the insulation post installation of the piping.

3.4.2 Installation of FlexiCell® Insulation Tubes

There are two installation methods when the pipe is already installed and welded.

- (a)** Slit the tubes on the joint in the foil using a knife or scissors down its length.
- (b)** Apply the slit tube over the pipe.
- (c)** Butt joints can be sealed with high temperature resistant silicone.
- (d)** For end joints follow the previous method and make it tight to the structure.

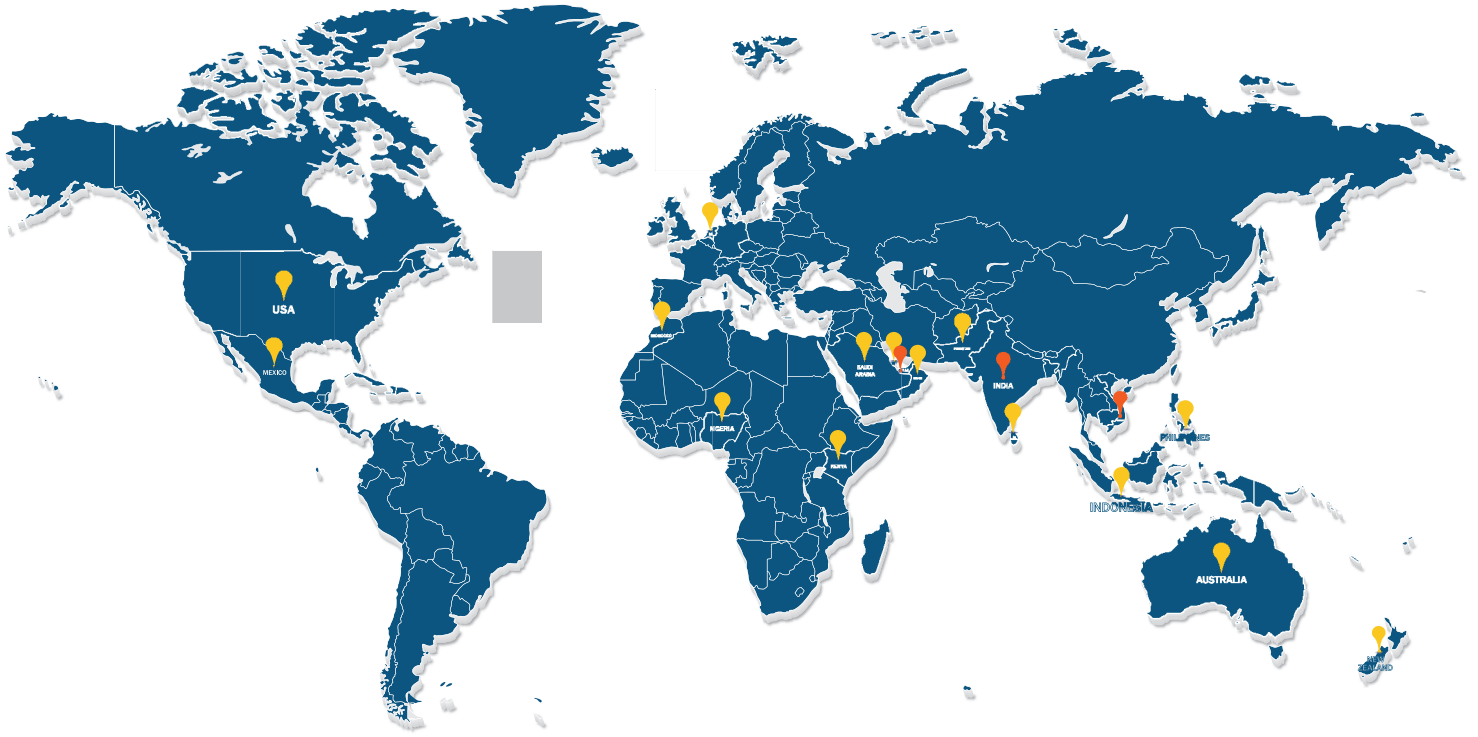
When the pipe is not installed, the FlexiCell® tubes can be installed simultaneously.

- (a)** FlexiCell® can be slid/slipped on to the pipe prior to brazing of the pipe. A wet cloth should be wrapped around the pipe to prevent excessive heat from the brazing process to travel up the tube which could potentially damage the insulation.
- (b)** The insulation should stop 300 mm prior to any point at which brazing can occur.
- (c)** Once welding is complete, one can slide the insulation up to the joint.

4. Ducts and Vessels/Tanks

In this chapter, the installation procedures for ducts and vessels/tanks will be presented. Please always consider that the adhesive applied on the FlexiCell® XLPE rolls is a Pressure Sensitive Adhesive (PSA), so that when it is needed that uniform pressure will be applied on the surface of the roll. In order to avoid having surfaces where the rot will not adhere to the duct due to the fact that not enough pressure was applied, it is recommended to use a roller.

FLEXICELL[®] - XLPE



Sales Units



Sales & Manufacturing Units



KE KELIT NZ Ltd.
0800 4 KE KELIT
0800 4 5353548
info@kekelit.co.nz
www.kekelit.co.nz

Manufactured by
Hira
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