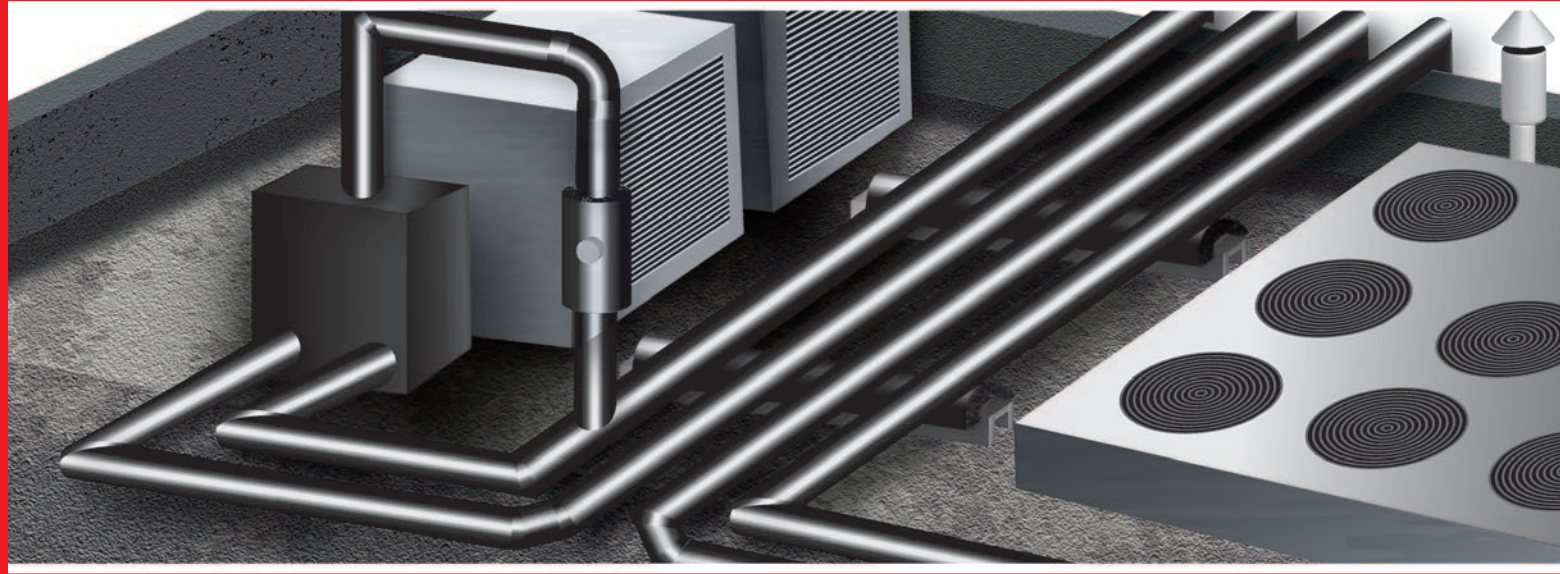
UNION FOAM



EUROBATEX® R

INSTALLATION MANUAL

CONTENTS

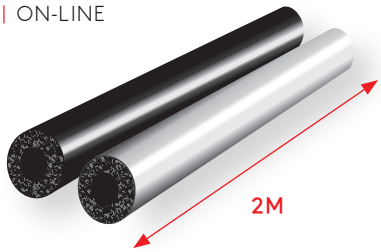
1.1 SYSTEM COMPONENTS

Eurobatex R is a coated pipe insulation product consisting of a range of 2 metre long "on-line" items and a range of 1 metre long "off-line" items. The basic insulation is the standard Class 0 Euroclass B product to which a polymeric coating has been factory applied. The on-line items are made by applying a liquid polymer to the Eurobatex on the production line, the polymer cools and cures to give a flexible seamless coating which bonds itself to the insulation material. The coated product is cut in to 2 metre lengths.

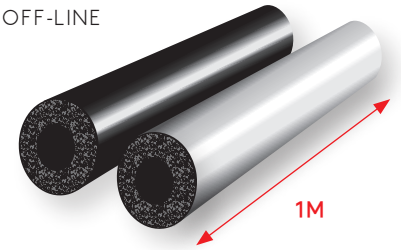
In the case of larger bore, thicker wall items Eurobatex is cut in to 1 metre lengths and a reinforced, flexible PVC jacketing is adhered to the insulation material off-line. In both cases the jacketing is designed to provide outdoor weather protection and additional resistance to mechanical damage including bird attack.
CNX Adhesive is used to bond Eurobatex to itself and to metal pipework as usual. There is also a Eurobatex R mastic which can be used to stick the jacketing to itself or to Eurobatex, this mastic remains flexible, has good gap filling

characteristics and seals joints to help ensure effective long term weather resistance. The PVC jacketing is supplied in the form of a self-adhesive tape 25mm and 50mm wide, this is used to provide additional weather protection at butt joints, longitudinal seams and when fabricating fitting covers. The PVC jacketing is also available as a 1 metre wide roll in both plain and self-adhesive forms; we refer to these items as Eurobatex R Jacketing, they can be used with both new Eurobatex R installations and existing Eurobatex pipework.

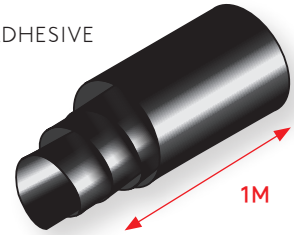
EUROBATEX R | ON-LINE



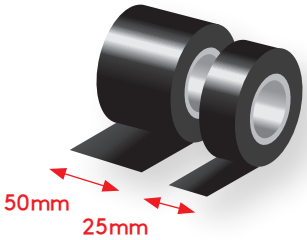
EUROBATEX R | OFF-LINE



PVC JACKETING | PLAIN | SELF ADHESIVE



EUROBATEX R SELF ADHESIVE TAPE



EUROBATEX MASTIC | CNX ADHESIVE

1.2 THE TOOLS FOR THE JOB

When working with Eurobatex R or any FEF insulation product you have to use the right tools in order to do a good job; in the case of this system you should have the following items:

1. A minimum of two sharp knives.
2. A sharpening stone
3. Brushes with short, firm bristles
4. Scissors
5. A safe edge craft knife
6. A hard plastic smoothing edge tool
7. Sharpened copper pipe ends
8. CNX Adhesive
9. CNX Cleaner
10. Eurobatex R Self-Adhesive Tape
11. Eurobatex R Mastic and Mastic Gun to take 290ml cartridges
12. Eurobatex R Jacketing (Optional)

KNIVES

You will need a minimum of two knives with sharp edges; the edges should be straight, not serrated, expanded rubber insulation materials blunt metal edges quickly and so it is important to have a sharpening stone and use it regularly if a neat looking job is to be achieved. One knife needs to have a long blade; a 12 inch (30cm) blade is suitable for use with all sizes of the Eurobatex R range and can also be used for Eurobatex Sheet applications. A short bladed knife with a 5 to 6 inch (12 to 15cm) blade is also essential for accurately cutting fittings. A medium blade knife, with an 8 to 9 inch (20cm to 23cm) blade, can also be useful if you are working regularly with both Eurobatex tube and Sheet but you can do a good job without one if you are just working with Eurobatex and Eurobatex R in tube form.

BRUSHES

You must use a brush with short, firm bristles when installing Eurobatex, Eurobatex R or any other FEF based insulation material; you need what is sometimes referred to as a "stippling brush", you can make a stippling brush from any good quality paint brush by cutting the bristles, clean and square, so that they about ¾ inch (20mm) long. You must use adhesive which is in a suitable condition, **(See Section 1.3)** and you must not use a brush which is coated with dried adhesive.

CNX CLEANER

You can clean your brushes using CNX Cleaner, do this during the day if necessary, when you don't use the brush for more than 25mins and always soak your brushes in CNX Cleaner overnight. CNX 200 is CNX Adhesive in a small screw top container which has plastic bristled brush in the cap; this brush makes a good stippling brush for use with Eurobatex tubes in thicknesses up to and including 19mm wall. You can refill the 200ml can from a larger container, just keep the brush and discard the tin or keep the brush in the tin which you have refilled with CNX Cleaner, whichever you find works best for you. A 1 inch (25mm) wide brush, cut down, is a better option for 25mm or 32mm wall tube. Pick the width of the brush to suit the form of material you are working with, even with Eurobatex Sheet a 50mm wide brush is usually wide enough.

The use of the other tools will be described later in the general body of the text.

1.3 USING CNX ADHESIVE & EUROBATEX MASTIC

CNX ADHESIVE

	Minimum	Maximum
Operating Temperatures	-30°C	110°C
Application Temperatures	10°C	30°C
Relative Humidity		80%
Storage Temperatures	10°C	30°C
Shelf Life (Unopened)		12 Months
Tack Times	5 Minutes	7 Minutes
Curing Time	72 Hours	

STORAGE & APPLICATION

CNX Adhesive should be stored in a cool frost free environment. If it is stored in sub-zero conditions then the adhesive will become too thick to use, this change should reverse once the tin has been at a temperature of 20°C for a couple of hours, if the viscosity does not reduce then there may be other problems. The texture of the adhesive should be even before it is used, this can be achieved by stirring or shaking. All stirrers must be smooth and substantial. All stirrers must be clean before use, soaking in CNX Cleaner should achieve this aim.

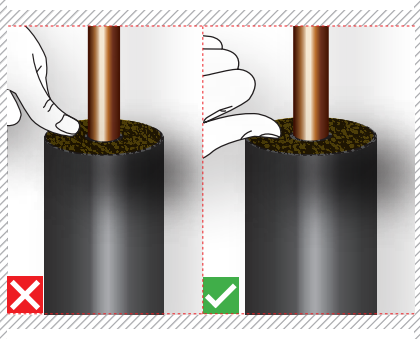
SHELF - LIFE

CNX Adhesive when new is a low to medium viscosity straw coloured liquid, it will become darker with age and will eventually turn into a brown gel, you will get poor and unreliable results if you try to use it in this condition. The Shelf Life for CNX Adhesive in unopened containers is 12 months if correctly stored. High Ambient temperatures above 30°C can significantly shorten the shelf life.

MAKING TACK - DRY JOINTS

When applying CNX Adhesive to Eurobatex you should apply a thin, even and continuous film to both faces and allow them to tack dry before bringing the two faces together. More adhesive does not make a better bond, in fact if you apply too much adhesive making a good joint varies from difficult to impossible depending upon how much you apply. The tack time for CNX Adhesive varies from 5 to 7 minutes according to the conditions, with fresh adhesive, an ambient temperature of 20°C and a relative humidity of 70% it should be about 5 minutes. A higher ambient temperature will shorten the 'tack-time' and a lower ambient will increase it. A relative humidity in the range 50 to 70 % has very little effect on the tack time but very low humidity can significantly shorten it and humidity's in excess of 80% can cause problems as they inhibit solvent evaporation but the resins may still continue to cure.

If you touch the adhesive film just after you apply it then it should have a good initial grab; don't do this with a surface you intend to bond, if it does not have a good grab then the product may not be in prime condition. The adhesive film should go from being tacky to tack dry, that is to say dry to the initial touch but still tacky under pressure, in 5 to 7 minutes; this interval is known as the tack time.



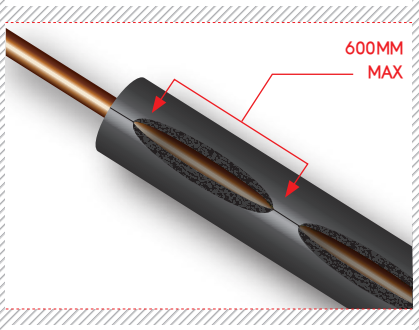
You test to see if the adhesive is tack dry using your nail, never your finger, as the oils in your skin can affect the strength of the adhesive bond.

OPEN - TIME

The time from when you start applying adhesive to the first surface to when you bring the two adhesive coated surfaces together is known as the open time. Open times in excess of 20 minutes should be avoided as parts of the adhesive film may have become too dry to give a strong and durable bond. If the open time has exceeded 20 minutes then you are recommended to reactivate the bonding surfaces, that is to say apply a fresh film of adhesive to both. It is not good practise to have to keep reactivating bonds and if you find yourself doing this you should probably bond smaller areas at a time.

HOW TO CLOSE A SEAM

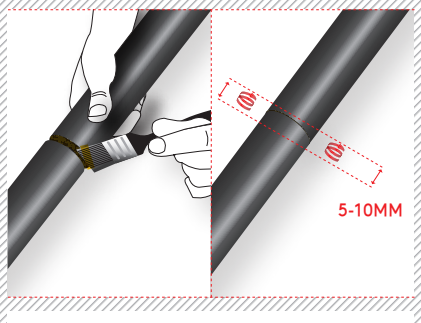
When making an adhesive joint you should start from the ends and work to the middle, in the case of tube material you should aim to keep the ends no more than about 600mm apart, if you were closing a joint on a 2 metre straight seam you should do this be making 3 or 4 pinch points and then closing each of the lengths between these in turn.



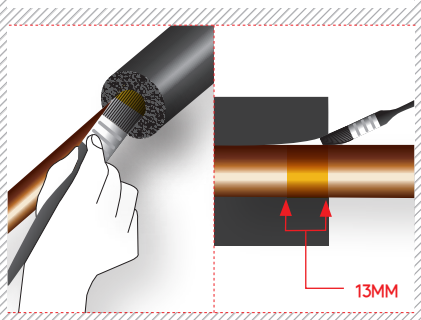
CNX Adhesive has good weather resistance but it is still good practise to turn seams so that they are bottom centre whenever possible, this keeps then out of direct sunlight outdoors and you always want a joint to be able to shed water.

MAKING WET-SEAL JOINTS

Butt joints should be made in compression; this can be achieved by cutting the second piece 5 to 10mm longer. Most joints should be closed by making tack dry bonds but butt joints should be adhered using the wet seal method, with this method the two mating surfaces are pulled apart, adhesive is applied to both and then the Eurobatex is immediately allowed to go back in to place, this method will only work properly if the butt joint is in compression. It is never advisable for any adhesive joint to be under tension until it is fully cured; with CNX Adhesive we recommend a minimum curing time of 72 hours.



For Refrigeration and Chilled water applications, involving both Eurobatex and Eurobatex R, the bore of the insulation should be stuck to the pipe using CNX Adhesive, making a wet seal joint, at all termination points and on all straight pipe runs at a maximum of 3 metre intervals. The width of adhesive joint should be a minimum of 13mm or the thickness of the Eurobatex, whichever is the greater. The purpose of this technique is to prevent any moisture from travelling freely in the system below the insulation.

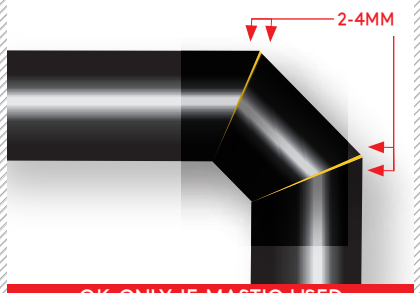


EUROBATEX R MASTIC

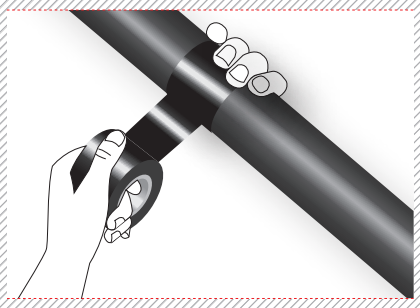
Eurobatex R Mastic is a one part moisture curing modified Silane based sealant; with an operating temperature range of -40°C to +120°C (+ 180°C for 30min maximum), it has a good initial grab for a sealant but this type of product cannot match the initial grab of a good contact adhesive such as our CNX adhesive. Eurobatex R Mastic is free from solvents, isocyanates and silicones. It should be applied at an ambient temperature between 5°C and 35°C. It is applied with a cartridge gun. The open time is 10 minutes approximately and the tack free time is about 4 hours, you do not need to wait for this type of product to tack dry but you do need to wait for the sealant to fully cure before putting any bond under tension. The curing time with Eurobatex R mastic is approximately 24 hours; once the product is cured it will produce strong and flexible joints with good UV resistance and good temperature resistance. Eurobatex R mastic, once cured has a high tensile strength and 350% elongation at break.

	Minimum	Maximum
Operating Temperatures	-40°C	120°C
Application Temperatures	5°C	35°C
Tack Time		4 Hours
Open Time		10 Minutes
Curing Time	24 Hours	

A good sealant such as Eurobatex R Mastic has much better gap filling properties than a contact adhesive, this feature can be utilised in making up large bore fittings or as an alternative to CNX Adhesive when making up wet seal joints. A joint made with Eurobatex R mastic can be 2mm to 4mm wide without causing any problems; you should never have an adhesive joint which is this wide when using a contact adhesive. You should always cover butt joints in Eurobatex R with Eurobatex R self adhesive tape



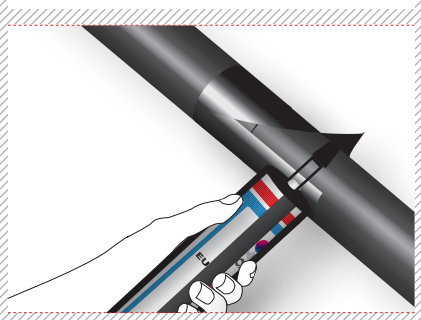
O.K ONLY IF MASTIC USED



SEALING EUROBATEX R JACKETING

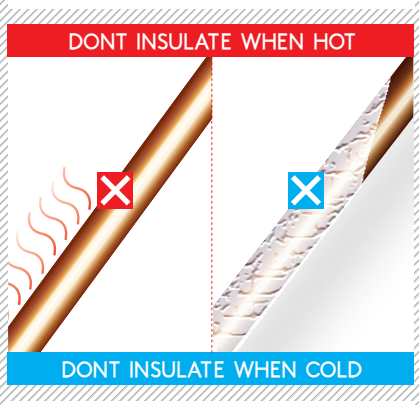
Eurobatex R jacketing is made from a plasticized PVC film, the plasticizers used in this type of product can affect the ability of neoprene based contact adhesives, including CNX Adhesive to work properly; even when a bond appears to have cured properly when first made, plasticizer bleed from the jacketing can make the contact adhesive become tacky again, more often it will prevent the contact adhesive from curing properly in the first instance. Plasticizer attack on contact adhesive bonds may not be noticed when a system is first installed and only become apparent when overlaps are put under tension by exposure to strong sunlight or differential thermal movement.

When sealing overlaps in Eurobatex R jacketing **do not** use CNX Adhesive or any other neoprene based contact adhesive, we strongly recommend the use of Eurobatex R mastic to seal joints and seams in Eurobatex R Jacketing.



1.4 PREPARING FOR WORK

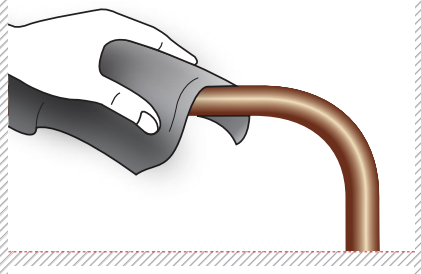
Never insulate a system which is in operation. If you insulate a hot system then the adhesive can cure too quickly and in an un-even fashion. If you insulate a live cold system, be it chilled water or re-frigeration pipework then there may be condensation on the pipes which can get trapped or interfere with the proper functioning of the adhesive.



If you try to insulate a live low temperature refrigeration circuit then there is a risk of not just water but also ice being present on the pipes, this can make the insulation less flexible and cool the adhesive to the point where the solvent no longer evaporates off properly. **UNION FOAM S.P.A.** nor any other FEF manufacturer who wishes to remain in business in the long term will sanction the use of their materials under these conditions; if you choose to do so then it is at your own risk. Adhesives must be allowed to cure before activating a system as detailed in Section 1.3.

Surfaces to be insulated should be;

- ✓ Clean
- ✓ Dry
- ✓ Free from Dirt and Grease
- ✓ Free from Loose Rust and Scale
- ✓ Avoid Dust with Self-Adhesive Products

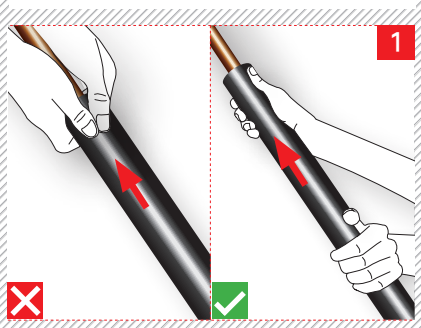


This subject and the broader subject of surface preparation is discussed in more detail in BS 5970. Neoprene contact adhesives such as CNX Adhesive will usually tolerate some dust without any significant adverse effects but pressure sensitive adhesives which are used to manufacture Eurobatex R Self Adhesive Tape and Eurobatex R Self Adhesive Jacketing will give a less strong and a less reliable bond if applied to greasy or dusty surfaces.

2.1 NEW COPPER PIPES

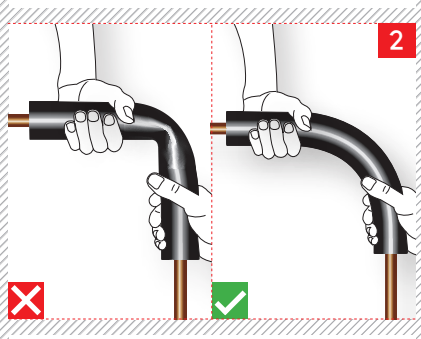
THE SLIDE ON TECHNIQUE

You should be able to apply a 2 metre length of the Eurobatex R online product or a 1 metre length of the off-line product directly on to a straight length of Copper Pipe, the Eurobatex R range has been sized so that the jacketed product should still slide on, if the fit is a bit tight then a lubricant such as Talc may help to reduce any problems with friction. The insulation should be fed on to the pipe using both hands in a push and pull action, do not try to pull the insulation on from the end of the pipe section, this will stretch the material and may damage it.



INSTALLING AROUND BENDS

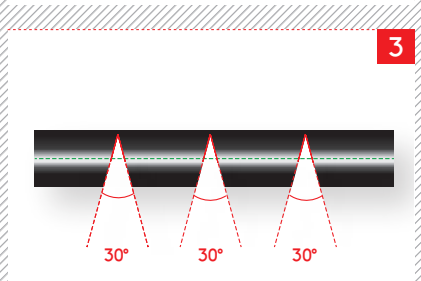
Normal Eurobatex can be pushed around bends and so can Eurobatex R, but the presence of the jacketing makes the composite product less flexible and this has to be taken in to account.



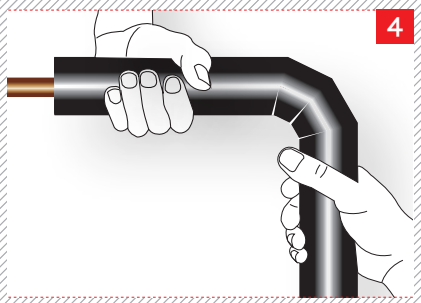
You will find that you will not be able to get Eurobatex R around a short radius bend and that if you attempt to do so without taking appropriate actions then the jacketing will kink and compress the insulation and the jacketing may be damaged upon installation or become damaged by tensile forces shortly afterwards. There are three techniques which can be used to get Eurobatex R around radiused bends.

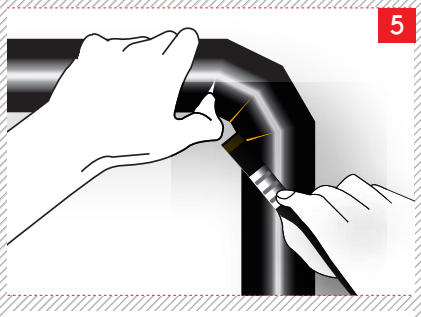
Technique 1: WEDGE REMOVAL

The first technique which will work for gentle to medium radius bends is to cut some wedges from the inner radius of the bend, an odd number of wedges typically 1, 3 or 5 seems to work best; for example if you are taking the product around a 90° bend you could cut 3 wedges, each of 30°. from the inner part of the bend to the back surface whilst leaving sufficient jacketing intact to cover the outer surface; the Eurobatex which is exposed by the cutting is sealed with CNX Adhesive making 3 wet seal joints.



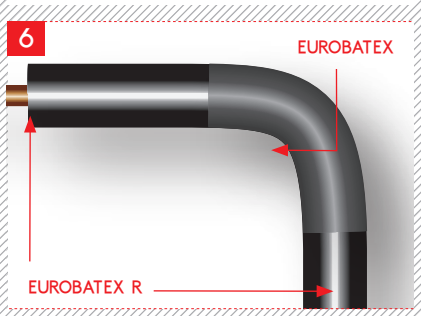
Note: The unbroken red lines indicate where cuts are to be made

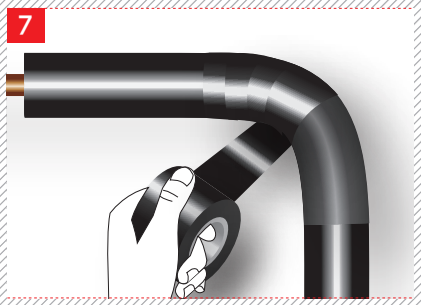




Technique 2: COMBINING MATERIALS

The second technique is to use unfaced Eurobatex to go around the bend, joining it up to Eurobatex R covered sections on either side and then to cover the Eurobatex around the bend with 50mm wide Eurobatex R Self-Adhesive Tape spirally wound. If the bend is tight then Technique 1 and Technique 2 can be combined by cutting some wedges out of the Eurobatex before wrapping it.





Technique 3: SEGMENTED BENDS

The third technique is to use Eurobatex R tube and make a segmented bend, if you choose to use this technique then we recommend that you use a mitre block,

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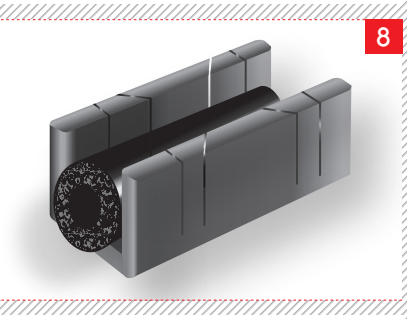

You can make a 90° bend by making 4 cuts each at an angle of 22 ½° in three pieces of Eurobatex R tube; the middle piece is made in a V shape with a 22 ½° cut on each side of the "V", the narrowest point of the V shape should be not less the 20mm wide.

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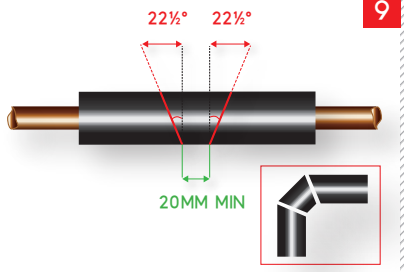
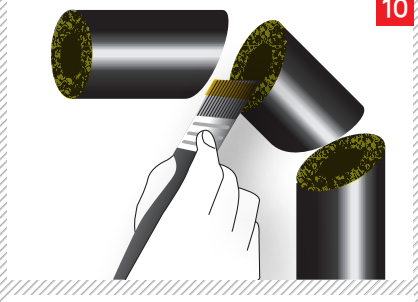


Note: The unbroken red lines indicate where cuts are to be made

For correct angle measurements, the mitre block must be used. The lengths of the left and right hand side end pieces with a single 22½° cut in them and the middle segment should, when assembled, be long enough to go completely around the radius of the bend. If this is not possible then it may be necessary to make up a segmented bend containing addition middle segments.

10



The 3 pieces of the segmented bend are stuck together with CNX Adhesive, using the tack dry method;

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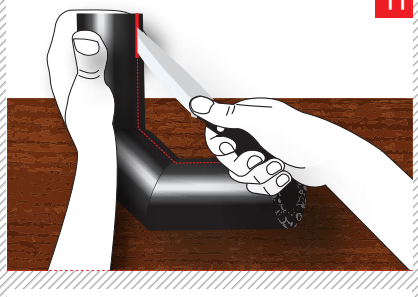
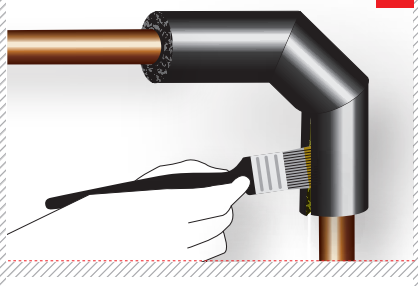


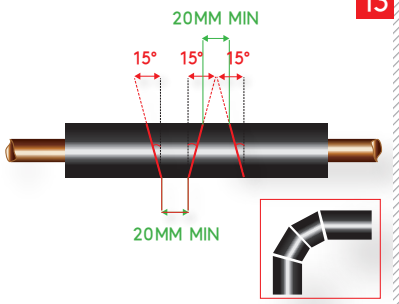
Once the adhesive has dried the fitting is slit open using a short bladed knife, it is preferable to slit the fitting on the inner radius of the bend whenever possible but may sometimes be necessary to make the slit on outer radius for practical reasons.

12



Apply the fitting to the pipe and then close the seam by sticking the two Eurobatex surfaces together with CNX Adhesive, using the tack dry method. Work from either end of the fitting, closing the seam towards the middle. The fitting must be made in such a way that the Eurobatex R goes smoothly and evenly around the bend with no gaps; if this is not possible using a 3 piece segmented bend more segments should be used.

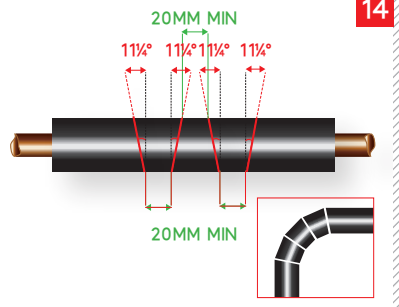
13



Note: The unbroken red lines indicate where cuts are to be made

A bend made up of 2 end bends and 2 segments with a series of 15° cuts in them is sometimes referred to as a 2 + 2 bend. If we employ the same terminology then the drawing below would be referred to as a 2 + 3 bend.

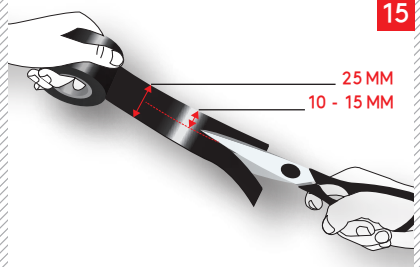
14



Note: The unbroken red lines indicate where cuts are to be made

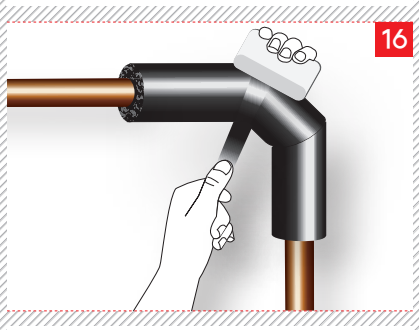
A 2+ 3 bend is made up of two end pieces and 3 segments with a series of 11¼° cuts to make up a total of 90°.

15



The seam in the throat of the bend and all the angled seams must be covered with Eurobatex R Self-Adhesive tape, once the fitting is on the pipe and the CNX Adhesive has dried. The seam in the throat of the bend may be covered with standard 25mm wide tape but the pieces of tape used to cover the angled seams must be cut down to give a width which is in the range 10mm to 15mm, the best width to use depends upon the pipe size. The tape must be cut to the appropriate width with a sharp pair of scissors.

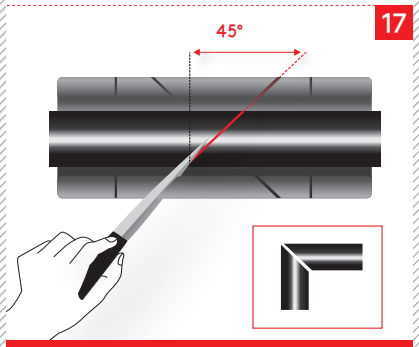
16



All the angled seams around the fitting should be covered with Eurobatex R Self-Adhesive tape once the fitting is on the pipe and the CNX Adhesive has dried. The tape should be applied carefully around the seams and be smoothed out to avoid any wrinkles, the overlap at the circumferential ends of the tape should be positioned so that it is in the throat of the bend and it sheds water.

90° ELBOWS

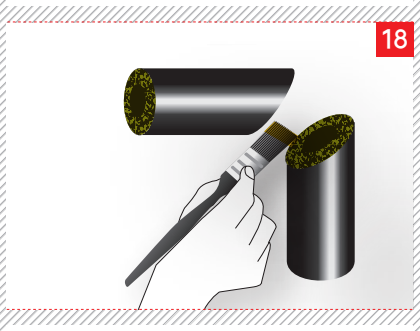
17



Note: The unbroken red line indicates where a cut is to be made

A 90° elbow can be covered using 2 pieces of Eurobatex R tube and making a 45° cut in each.
The 2 pieces are joined together with CNX Adhesive using the tack dry method;

18



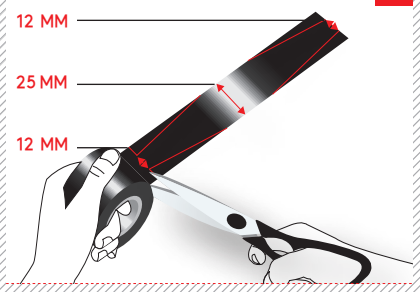
Once the elbow fitting is dry it is slit, applied to the pipe and the Eurobatex seams re-sealed using the same techniques described above for a segmented bend.

19

Note: The unbroken red lines indicate where cuts are to be made

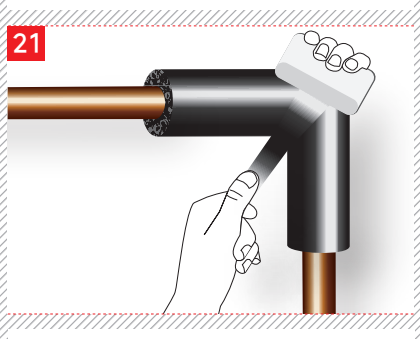
The Eurobatex seam is sealed with CNX Adhesive and when it is dry the joint in the Eurobatex R jacket is covered with 25mm wide Eurobatex R Self-Adhesive tape.

WIDTHS: 20



We recommend the use of 25mm wide tape to cover the angled seam on a 90° elbow, the extra width is useful when covering both sides of the outer radius although you may find that you get a neater job by cutting angles on the piece of tape so that its width is reduced to about 12mm in the throat of the bend.

21



Avoid leaving any permanent wrinkles in the tape; the plastic edge tool is useful for smoothing them out and for ensuring that sufficient pressure is applied to the self-adhesive film to produce a good and durable bond.

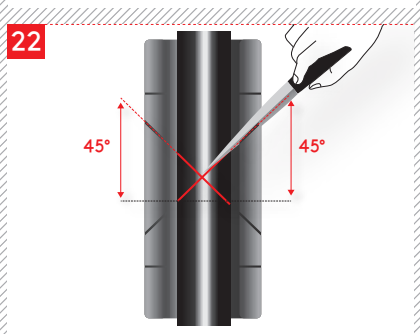
T- JOINTS

T- Joints can be made from either two or three pieces of Eurobatex R.

Technique 1:
MAKING A 3 PIECE T-JOINT

To make a 3 piece T-Joint you need two arrowhead pieces as indicated below, and one piece with a 45° angle cut in it as shown in Drawing 17.

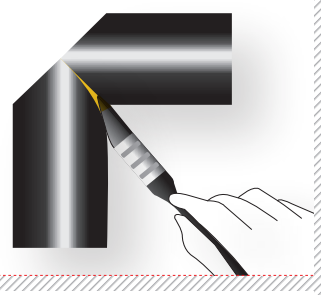
22



Note: The unbroken red lines indicate where cuts are to be made

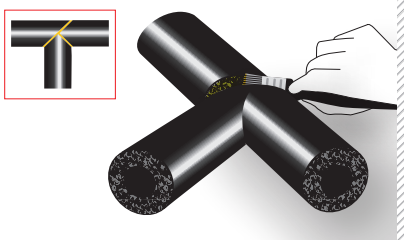
Stick the angled Eurobatex surfaces of the sides of the arrowheads together to form a 90° angle using CNX Adhesive and the Tack Dry Method.

23



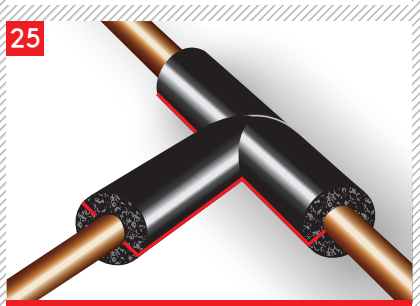
Once this piece is mechanically sound stick the 45° angled piece to the elongated surface you have created, using the tack dry method, and set the resulting T-Joint section to one side.

24



Once this is mechanically sound it can be slit down the neutral lines on each side of the incoming tube and applied to the pipe using CNX Adhesive and the Tack Dry Method.

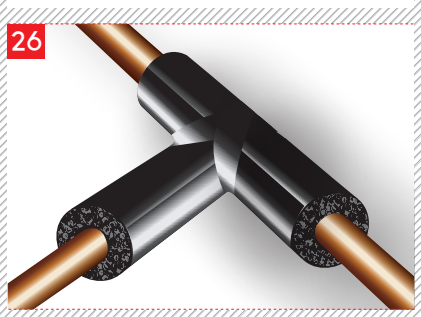
25



Note: The unbroken red lines indicate where cuts have been made.

We recommend 25mm wide Eurobatex R Self-Adhesive Tape to cover the cut seams in the T-Joint fitting. The straight seams should be covered with unmodified tape cut to length but we recommend that the pieces of tape used on the two angled seams are tapered as indicated in Drawing 20.

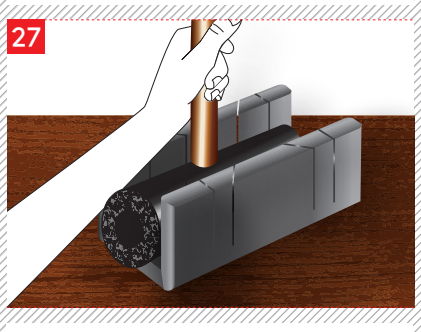
26



Technique 2: MAKING A 2 PIECE T-JOINT

A two piece T- Joint fitting is made by first taking a piece of Eurobatex R tubing and cutting a circular hole in it using a sharpened piece of Copper tube, the diameter of the hole should be the same diameter as the perpendicular pipe of the metal fitting.

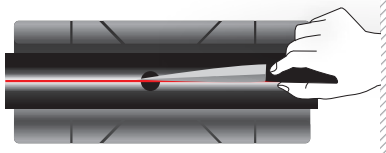
27



You should have prepared several sharpened end pieces of metal pipe before arriving on site. These should typically be 80 to 150mm long depending upon the pipe diameter. It is better to sharpen the pipe ends on a lathe if you have access to one but however you prepare these tools it is important to keep them sharp. Sharpened metal pipe ends can be made from both Copper and Steel pipes.

28

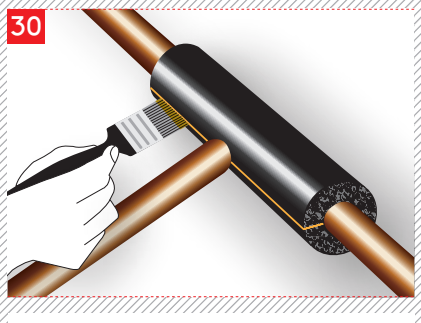
29



Note: The unbroken red line indicates where a cut is to be made

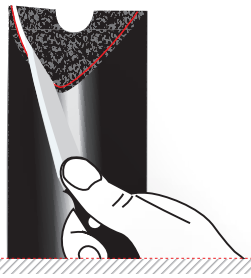
The resulting Eurobatex surfaces should be resealed on the pipe using the tack dry method. The straight seams in the Eurobatex R Jacketing should be covered with two pieces of 25mm wide Eurobatex R Self-Adhesive Tape. The tape should be pressed down using the plastic edge tool as usual.

30



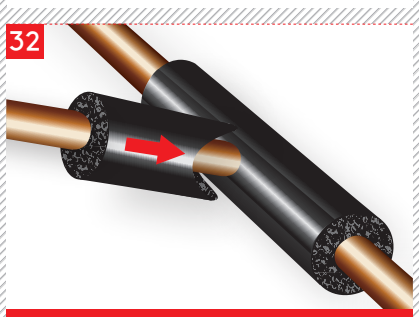
The second piece of the T-Joint fitting is made by first cutting an arrow head piece in a mitre box as shown in drawing 22. The Eurobatex within the arrow head is then cut with a sharp, short bladed knife to make a parabolic surface which should mate accurately with the first straight section of Eurobatex R which is already in place on the perpendicular Copper pipe.

31



If you are not confident that you can cut the Eurobatex accurately then leave it proud so that the joint is made in compression. Stick the arrowhead to the Eurobatex R Jacketing of the first piece of insulation using Eurobatex R Mastic. You do not need to wait for the mastic to dry but you will need to hold the arrowhead piece in place using a strap piece of Eurobatex R tape.

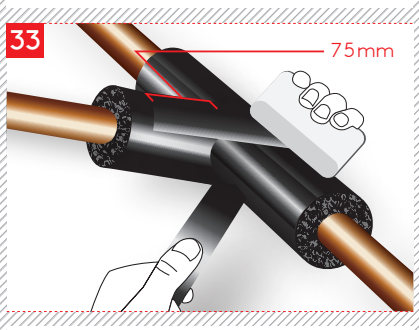
32



Note: Make Butt Joint with Mastic

The tape goes around the back of the first piece of Eurobatex R and has to come back up both sides of the arrowhead piece so that it covers them both for a distance of at least 75mm; this will hold the fitting together whilst the mastic cures.

33



The angled seams on the Eurobatex R Jacketing on both sides of the arrowhead also need to be covered with Eurobatex R Tape.

You may need to cut and shape these pieces with a sharp pair of scissors so that they fit closely to the surface of the jacketing. Make sure that all pieces of tape are well secured and wrinkle free by using the plastic edge tool.

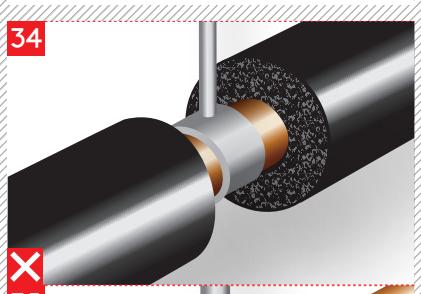
UNILOAD AND EUROBATEX PIPE SUPPORTS

Eurobatex and Eurobatex R are not load bearing materials and so on both chilled and refrigerated pipework Union Foam recommends the use of a material with sufficient compressive strength to support the weight of the pipe.

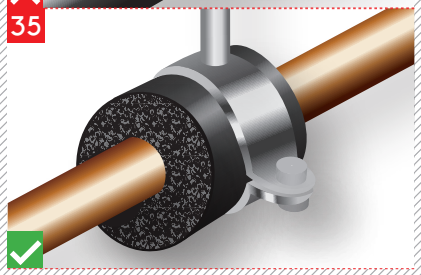
Union Foam do not recommend through metal connections on refrigerated pipework and so if the Copper pipe is supported by a metal ring and a drop rod these should be replaced by an insulated pipe support which has at least the same thermal resistance as the design thickness of Eurobatex.

Union Foam supply a range of insulated pipe supports called ' Eurobatex Pipe Supports' which are designed for use with either Eurobatex or Eurobatex R, this range can be supplied with a pipe clamp as shown in Drawing 35 or without them for when the drop rods already include clamps or when clamps are not required for other reasons.

34

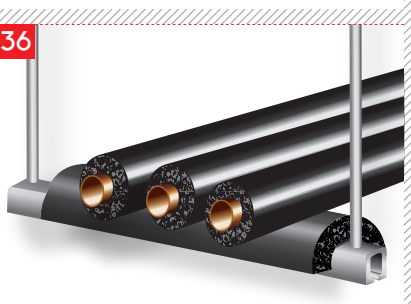


35



It can be time consuming to have to support each pipe individually and so Union Foam has developed a product called Uniload which can support several pipes at one time. Uniload is a high density load bearing grade of Eurobatex in the form of a 1 metre long, half round section. When banks of copper pipes traverse support systems such as Unistruts, be these overhead systems indoors or low level systems outdoors, a length of Uniload is placed over the Unistrut as shown in Drawing 36 and as many as 8 small bore pipes insulated with Eurobatex R can be supported by it. Some compression of both the Uniload and the Eurobatex R will occur but the system has been designed so that the residual thickness will be sufficient to prevent condensation provided that the size limit for the copper pipes is not exceeded.

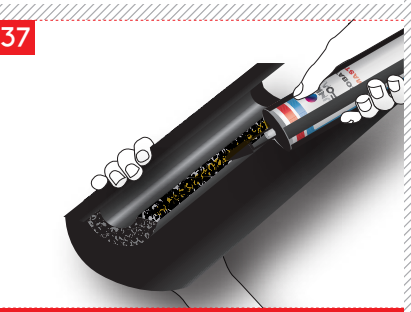
36



Note: Use only with Copper pipes up to 54mm O.D.

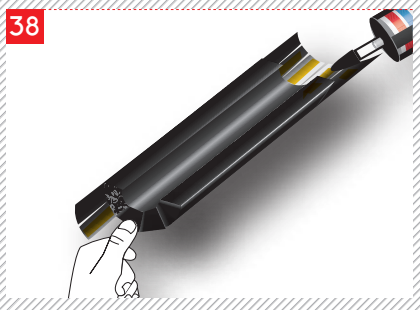
When using Uniload outdoors it should be covered with Eurobatex R Jacketing to provide weather protection before the Eurobatex R is laid across it.

37

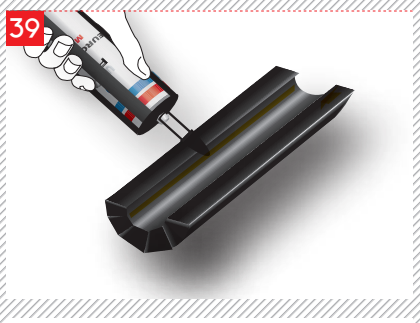


Note: Protect Uniload from weathering when outdoors

38



39



The jacketing should cover the ends of the Uniload section as well as the length, the two cut cell surfaces and any exposed parts of the inner bore. Eurobatex R Self-Adhesive jacketing can be applied directly to the Uniload; Plain Eurobatex R jacketing should be stuck to it using Eurobatex R mastic. Stick the bore of the Uniload section to the Unistrut using Eurobatex R mastic. The maximum distance between Unistruts when using Uniload is as indicated in the Table below. When several pipe sizes are being supported it is the largest pipe size which sets the maximum spacing.

Copper Pipe Outside Diameter mm	Maximum Distance Between Supports M
Less than or equal to 35	3
42	2
54	1.5

In the case of pipes bigger than 54mm we recommend the use of Uniload and Eurobatex Pipe Supports in combination. At the point where the pipe insulated with either Eurobatex or Eurobatex R would normally be resting on the Uniload the insulation should be cut out and be replaced with a Eurobatex Pipe Support of the appropriate size without a Clamp.

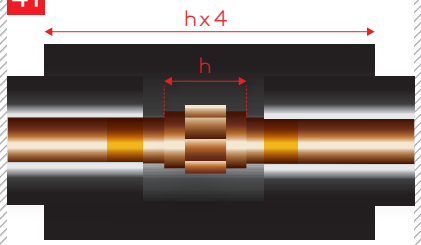
Eurobatex Pipe Supports are capable of supporting the weight of any Copper pipe commonly used in refrigeration circuits and the compressive strength of the Uniload is also sufficient for such an application. With Eurobatex Pipe Supports you will find that they have Eurobatex at either end of them and these ends can be vapour sealed in to the insulated pipe run with CNX Adhesive using the wet seal method.

40

A Eurobatex Pipe Support has been inserted in to the big pipe line to take the greater weight.

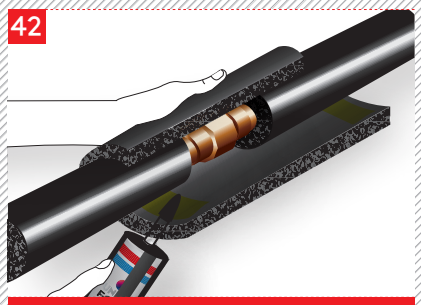
PIPE - UNIONS

41



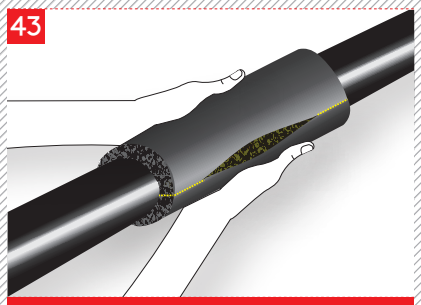
Pipe unions can be covered by Eurobatex, Eurobatex R or Eurobatex sheet, the length of the covering piece should be a minimum 4 times the width of the pipe union and the thickness of the insulation used to make the cover shall be at least equal to the thickness of the adjacent pipe insulation. The joints between the pipe insulation and the Pipe Union cover must be vapour sealed, if both surfaces are Eurobatex then CNX Adhesive may be used but if one or more of the surfaces is Eurobatex R then Eurobatex R Mastic must be used.

42



Note: Use mastic to stick the pipe jacket and Eurobatex sheet together.

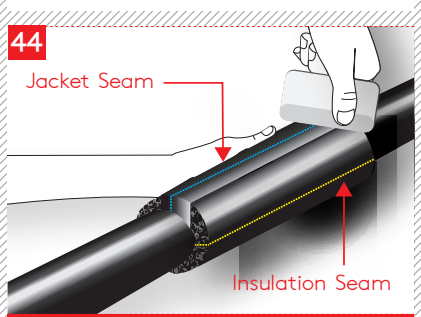
43



Note: Close Eurobatex seam using CNX Adhesive and the Tack Dry method.

For external applications both Eurobatex and Eurobatex sheet will require weather protection and Eurobatex R Jacketing should be used for this purpose. For all external applications regardless of whether Eurobatex or Eurobatex R has been used the longitudinal seam in the Union Covering and the surfaces of Eurobatex at either end of this fitting cover need to be covered with Eurobatex R Self- Adhesive tape in the usual manner.

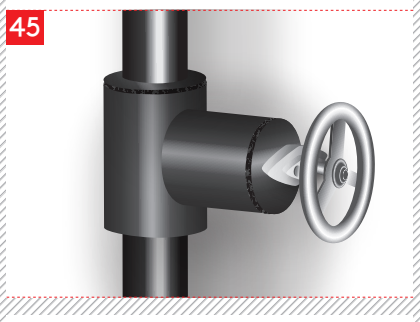
44



Note: Stagger the seams in the Sheet and the Jacketing.

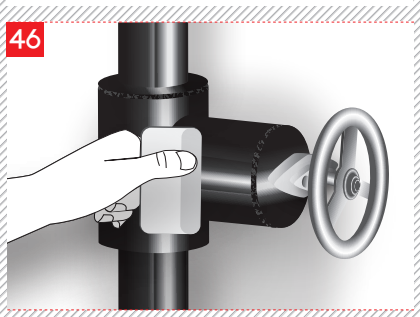
VALVES & OTHER FITTINGS

45



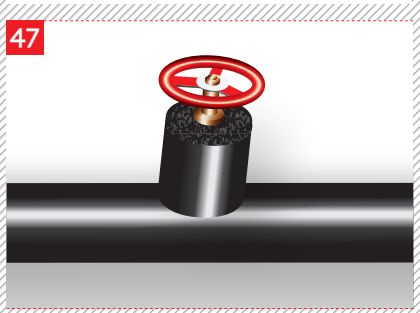
Fitting Covers for Gate Valves, Reducers and Strainers etc can be made from either Eurobatex Sheet and or Tube in the conventional manner.

46



When Valves and other fittings are used outdoors the Eurobatex must be covered with Eurobatex R Jacketing and all jacketing seams must be covered with Eurobatex R Self-Adhesive Tape in the manner described above.

47

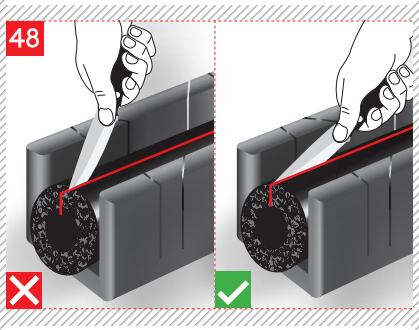


Alternatively they can be made from Eurobatex R Pipe insulation if a suitably sized item exists. In all instances CNX Adhesive should only be used to stick Eurobatex to Eurobatex and Eurobatex R mastic must be used where one or more surface to be joined is covered in Eurobatex R jacketing. Remember to cover any Eurobatex surfaces produced by cutting with either Eurobatex R Jacketing or Eurobatex R Self-Adhesive Tape when the fitting cover is being used outdoors.

2.2 EXISTING COPPER PIPES

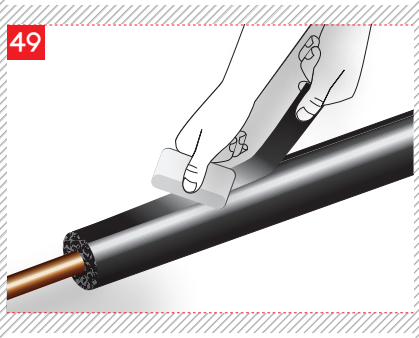
When insulating existing pipework; the Eurobatex or Eurobatex R must first be slit open before use. When slitting the insulation do so carefully and use a shallow angle so as not to damage the back surface of the tube.

48



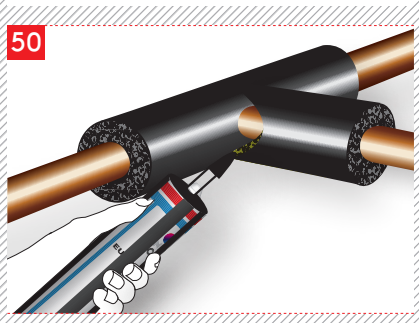
The Eurobatex to Eurobatex seam should be resealed with CNX Adhesive once the insulation has been applied to the pipe. The adhesive seam should be positioned so that it is top centre. Once the adhesive has dried the Eurobatex R surface must be wiped so that it is clean and dry, the jacket seam should then be covered with Eurobatex R Self-Adhesive Tape positioned so that the width of the tape is bisected by the jacket seam. We recommend 50mm wide Eurobatex R Tape for this purpose. It is always important to ensure that surfaces are clean and dry when applying a Self-Adhesive tape such as the Eurobatex R tape but it is essential to do so when the tape is being applied over a long straight run as with Longitudinal Seams; we therefore strongly recommend that CNX Cleaner is always used to ensure that the surface is clean and dry in such situations. The Cleaner should be applied using a Lint Free cloth. CNX Cleaner is an aid to getting a good bond with pressure sensitive adhesive tapes in many situations, this type of adhesive is much more sensitive to the presence of dirt, grease and water than conventional contact adhesives. CNX Cleaner will not only remove dirt and grease it is also effective in removing water from insulation surfaces and in the case of Eurobatex R site experience has shown that the use of the Cleaner immediately before a self-adhesive tape is applied will always help the tape to form a stronger bond. The tape must be pressed in to place using the plastic edge tool to ensure a firm, wrinkle free bond.

49



The Edge Tool must be used.
Finger pressure will not achieve an adequate bond particularly on long straight seams, if the edge tool is not used or there is water below the Eurobatex R Tape then it may detach under thermal stress in service.

50



All joints which include at least one Eurobatex R surface should be sealed using Eurobatex R Mastic, using Eurobatex R Self-Adhesive Tape to provide mechanical support whilst the mastic is curing where appropriate.
All joints in the system other than the seams produced by slitting should be made using the same techniques as are described in Section 2.1

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