

The Ubiflex system is conveniently available from www.nbs-home.co.uk

Tools required

- Sharp craft knife.
- Snips.
- Dresser tool(s) normally used when fitting lead flashings.
- Rubber mallet.
- Hammer.
- Chalked line.
- Straight edge.
- Set square.
- Measuring tape.
- Flat blade chisel to insert Ubiflex Fixing Wedges.
- Standard sealant gun

Ubiflex System Materials



Easily formed – will not spring back



Easily cut with a sharp knife

Ubiflex System Materials

1. Ubiflex - roll sizes offered by nbs

Width mm	Length mm	Weight per 12m roll kg	Length mm	Weight per 6m roll kg	Colours
150	12	7.2	-	-	Normally available in Grey or Black. (Upper surface) Terracotta available for large orders – contact nbs for details. The upper surface has a granular finish that normally resists marking and staining.
200	12	9.6	6	4.8	
250	12	12.0	-	-	
300	12	14.4	6	7.2	
400	12	19.2	6	9.6	
450	12	21.6	-	-	
500	-	-	6	12.0	
600	-	-	6	14.4	
1000	-	-	6	24.0	
Nominal thickness 3.5mm			Nominal weight per m ² = 4.0 kg		

2 to 6. Associated materials for Ubiflex

2. Ubiflex High-Tack sealant*	Sealing down to tiles, slates & overlap joints
3. Ubi-Seal Tape**	Sealing down to tiles, slates & overlap joints
4. Ubiflex Fixing Wedges***	For easier fixing in mortar joints
5. Ubiflex Gap-Sealant*	For sealing mortar joints
6. No lead notice	Deter thieves with this notice

* Ubiflex High-Tack sealant and Gap-Sealant tubes fit a standard sealant gun.

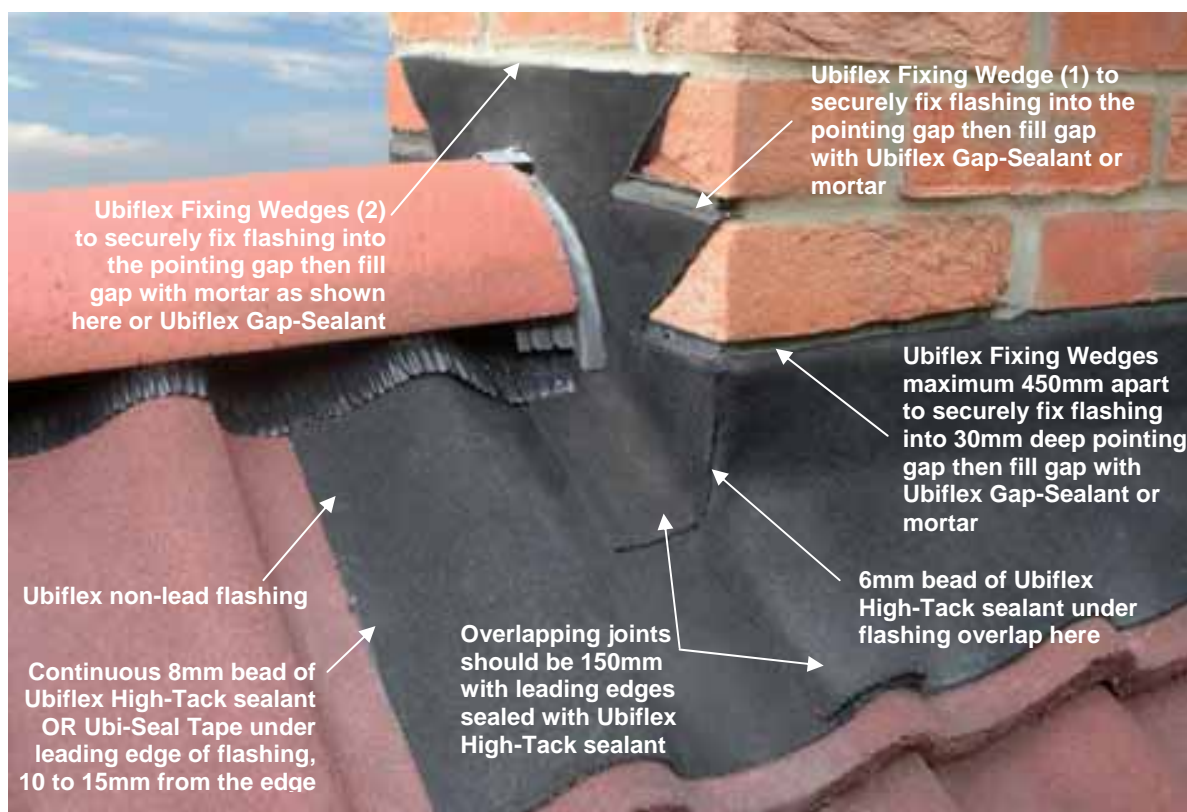
** Ubi-Seal Tape is 15mm wide in a 22.5m roll

*** Ubiflex Fixing Wedges – 25 wedges per pack

1. Ubiflex applications: SHARP CORNERS, VALLEY GUTTERS, COVER, ROOFLIGHT & CONSERVATORY FLASHINGS. DPC & CAVITY TRAYS IN MANSORY WALLS. SOAKERS, VALLEY GUTTERS, COVER, WINDOW, DOOR, STEP & FLASHINGS.
2. Ubiflex is worked in the same way as lead, but without the need for protective measures. It can be cut with a sharp knife or snips. It is easier to cut the flashing from the non-granular side – a grid is printed on the back surface.
3. As Ubiflex is not susceptible to thermal movement, depending on width offered, long runs of 12 metres can be completed without the need for expansion joints.
4. Lay Grey, Black or Terracotta Ubiflex granular side up.
5. Overlap joints (150mm), and the leading edge of the flashing must be sealed with a continuous 8mm bead of Ubiflex High-Tack sealant. One tube will provide approximately 8 metres of bead. Alternatively, for an immediate “grab” Ubi-Seal tape can be used close to the flashings edge. Always pressed the Ubiflex down to ensure a good seal.
6. For flashings, fit Ubiflex into the pointing gap by at least 30mm and hold it in place with Ubiflex Fixing Wedges. For most applications wedges must be no more than 450mm apart. A wedge should also be fitted into the pointing gap where the flashing overlaps. Fold down and dress Ubiflex to the roof covering. Slightly lift the flashing’s leading edge and apply a continuous bead of High-Tack sealant underneath, about 10 to 15mm from the edge. For an immediate “grab” Ubi-Seal tape can be used. Press down the Ubiflex to ensure a good seal.
7. Apply Ubiflex Gap-Sealant into the 30mm deep pointing gap to ensure a waterproof joint and smooth as necessary. One tube will fill approximately 0.68m of pointing gap. Mortar can be used to fill the pointing gap. For non-brickwork areas, Ubiflex can be mechanically fixed back to the structure with non-ferrous fixings, if protected by an overhang. If unprotected, Ubiflex must be sealed to the structure with either High-Tack or Ubi-Seal sealant prior to fixing, to prevent water ingress between Ubiflex and the structure.
8. If Ubiflex is likely to come into contact with aggressive chemicals during maintenance or other work, first test on Ubiflex flashing before proceeding.
9. A minimum temperature of -10°C is required for cutting and folding and +5°C for working with a lead dresser.
10. **THE UBIFLEX SYSTEM COMPONENTS ARE BEST STORED INDOORS. IF ROLLS OF UBIFLEX OR ITS ASSOCIATED MATERIALS HAVE BEEN LEFT OUTSIDE DURING FREEZING CONDITIONS THEN THEY MUST BE PLACED IN A WARM ROOM FOR AT LEAST 3 HOURS BEFORE ATTEMPTING INSTALLATION.**

N.B. Avoid foot traffic when installing valley lining or use a protection board.

If you require further advice on-site please contact bill@nbs-home.co.uk to arrange a free of charge site visit.



Typical chimney with Ubiflex flashing

Other installation methods are described on the following pages

General

Ubiflex is a non-lead waterproof flashing material which can be used in all applications where lead is traditionally used to provide a weather proof junction at features such as changes of direction and materials. Ubiflex can also be used to form damp proof courses and cavity trays in masonry walls. Ubiflex is manufactured by coating both sides of aluminium mesh reinforcement with a mixture of modified bitumen and additives. The underside of the product is finished with a kraft paper and film backing. Colour granules are added to the surface, the material cooled and rolled into the required.

When designed and installed in accordance with the relevant parts of BS 5534:2003, BS6229:2003 and BS 8000-6:1990, Ubiflex is suitable for use in flashing applications, such as abutments, chimneys, saddles, valleys and dormers to provide a weatherproof junction – see Application table on the right.

Application	Ubiflex
	3.5mm thick
Soakers	✓
Sharp corners	✓
Valley gutters	✓
Cover flashings	✓
Window flashings	✓
Door flashings	✓
Step flashings	✓
Roof light flashings	✓
Conservatory flashings	✓
DPC masonry walls	✓
Cavity trays masonry walls	✓

Unlike lead, Ubiflex can be used for long runs of up to 12m (where offered) when used as a DPC or a cavity tray in masonry walls. In addition, Ubiflex is resistant to the corrosion which affects lead when Portland cement containing free lime comes in contact with moisture so there is no need for additional paint protection. Ubiflex has excellent resistance to sliding under lateral loading and can withstand usual building settlement. Cutting and folding can be carried out to a minimum temperature of 10°C and when working with a lead dresser to a minimum temperature of 5°C. Foot traffic should be avoided or a protection board should be used when installing the product as a valley lining. For instances where a lead wedge would normally be used, Ubiflex has created a quick to install 'V' shaped fixing clip. These clips should be pushed into mortar joints spaced 450mm or less. Overlap joints of 150mm are required in all flashings and must be sealed with Ubiflex High-Tack. Ubiflex flashings should be sealed to tiles, slates, glazing, up-stands and soakers using a spot or continuous bead of High-Tack.

BRE wind tunnel test

Wind tunnel testing at BRE on a Ubiflex flashing surrounding a chimney and sealed with Ubiflex Gap-Seal demonstrated that the flashing will resist wind speeds of at least 49m/s(110mph) without failing. Copies of the BRE wind tunnel test, BBA Certificate, installation instructions and health & safety data sheets are available on request.

Installation Methods

Fixing Ubiflex into a wall or chimney

Without a DPC

On up-stands, parapets, chimneys and walls without a damp proof course (DPC), Ubiflex should be turned into a joint or chase by not less than 30mm. Ubiflex should then be held in place with Ubiflex fixing clips, spaced not more than 450mm apart and then the joint filled with Ubiflex Gap-Seal (Fig 1). Ubiflex Gap-Seal has been designed to resist the cracking associated with mortar and protect the joints from water penetration.



Fig 1

With a DPC

When installing Ubiflex in a joint which includes a pre-fitted DPC, the mortar should be removed to a depth of not less than 30mm below the DPC, Ubiflex fitted and the joint sealed with Ubiflex Gap-Seal (Fig 2).



Fig 2

If the DPC and Ubiflex are installed at the same time, the Ubiflex should be fitted to a depth of not less than 50mm with the edge turned back into a single welt to anchor it into the mortar (Fig 3). This method is particularly recommended when the height of masonry above the DPC is less than 600mm as there is a risk of the masonry lifting when clipping Ubiflex.

Larger joints

Ubiflex can also be used in situations where the joint width is large or uneven, for example, in masonry in old or historic buildings. In these instances Ubiflex should be turned up the back of the chase and mechanically fixed with the joint filled with Ubiflex Gap-Seal. Unlike lead, there is no need for a masking tape liner over Ubiflex when using mortar to fill shallow and wide joints.



Fig 3

Flashing to a flat roof up-stand



Fig 4

Fig 4: Flashing to flat roof up-stand

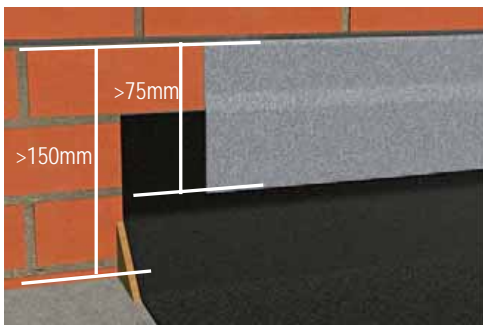


Fig 4a

Ubiflex should cover the up-stand by at least 75mm and be sealed to it with a continuous bead of High-Tack sealant. - Fig 4a. The height of the up-stand should be at least 150mm.

Flashing to a wall or chimney - side abutment - double lap tiles/slates



Fig 5

Fig 5: Flashing to a side abutment - double lap tiles/slates

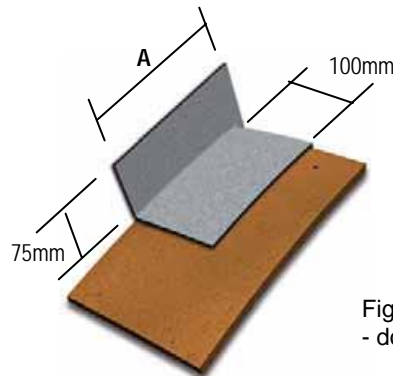


Fig 5a

Fig 5a :Flashing to a side abutment - double lap tiles/slates 150mm

Where double lap tiles or slates abut a wall they should be covered with Ubiflex and a Ubiflex stepped cover flashing (Fig 5 & 5a). Soakers should be cut from Ubiflex and shaped so they run 75mm up the wall, cover the width of the tile or slate by 100mm and the length of the tile or slate by a distance equal to gauge + lap + 25mm (Dimension A), with the extra 25mm being the amount of Ubiflex turned down over the top of the tile or slate.

The Ubiflex stepped flashing should be 150mm wide, cover the soakers by not less than 65mm and be sealed with a continuous bead of Ubiflex High-Tack. Ubiflex non-lead flashing system – Fig 5b.

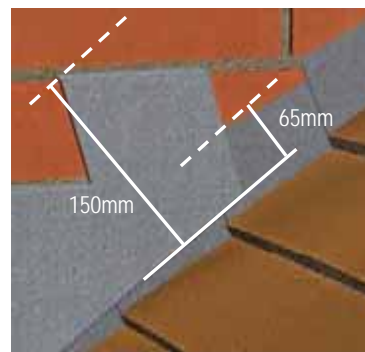


Fig 5b

Flashing to a wall or chimney - side abutment - single lap tiles

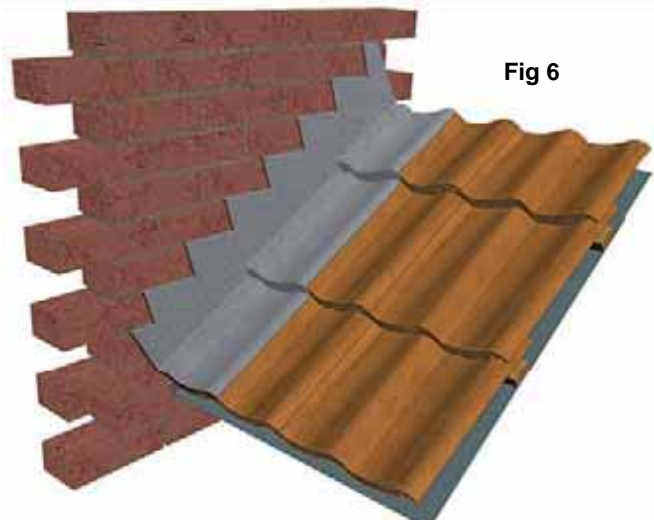


Fig 6: Flashing to a side abutment - single lap tiles

For single lap tiles a continuous Ubiflex cover flashing can be used (Fig 6 & 6a). This flashing should goup the wall 150mm (as double lap) and cover the tiles by at least 150mm (200mm for deep profiles or pitches below 25° in exposed areas) and be sealed with a continuous bead of Ubiflex High-Tack.

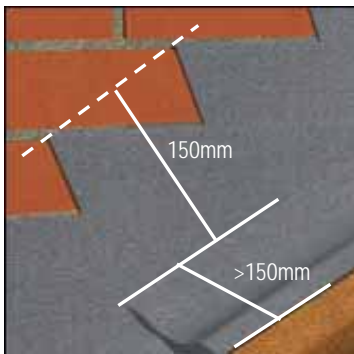


Fig 7: Flashing to a side abutment - single lap

Alternatively, single lap tiles can be weatherproofed at abutments by using a cover flashing and a separate stepped flashing (Fig 7 & 7a). As in double lapped tiles, the cover flashing should run 75mm up the wall and the stepped flashing should be 150mm wide and overlap the cover flashing by 65mm.

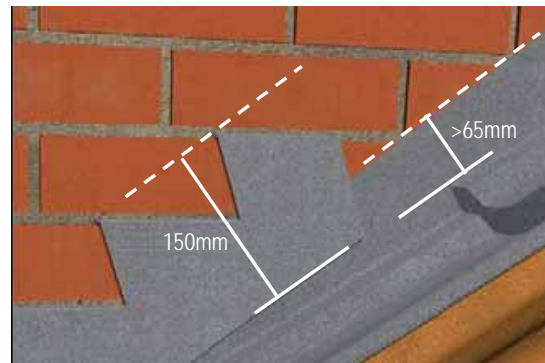


Fig 7a - The stepped flashing should be sealed to the cover flashing with a continuous bead of Ubiflex High-Tack sealant.



Flashing to a wall or chimney - top abutment - over tiles



Fig 8

Fig 8: Flashing to a top abutment - tiles and slates

When flashing a lean-to-roof or chimney in a pitched roof the Ubiflex should be turned up no less than 75mm and extend down the slope at least 150mm (200mm for pitches below 25° or exposed areas) and sealed to the roof covering (Figure 8 & 8a).

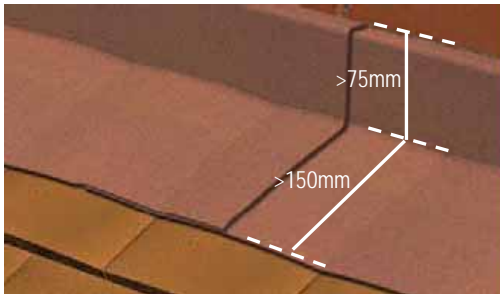


Fig 8a

Flashing to a wall or chimney - top abutment - patent glazing



Fig 9

Fig 9: Flashing to a top abutment - patent glazing

Ubiflex is ideal for flashing over patent glazing providing the glazing bars are not too deeply profiled (Fig 9). Ubiflex should be turned up no less than 75mm and extend down the slope at least 150mm (200mm for pitches below 25° or exposed areas) and sealed to the glazing with Ubiflex High-Tack



Chimney Flashing

At the junction of chimney and ridge, a separate saddle flashing is required. This flashing should extend down both sides of the roof by not less than 150mm and along the ridge by not less than 150mm. Details of this flashing are on page 2 of this publication. The flashing edge which is beneath the ridge tile should be turned back to form a welted weather check (see also Fig 10).

Photograph taken at BRE immediately after 49m/s (110mph) wind tunnel test

Fig 9

Flashing to vertical tile and slate hanging

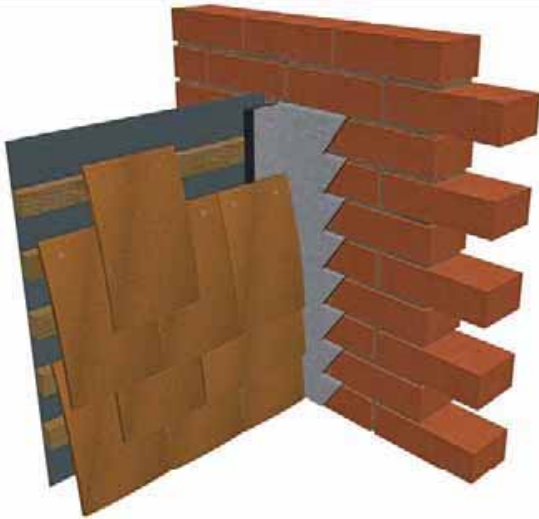


Fig 10



Fig 11

Fig 10: Flashing to vertical tile or slate hanging – side abutment

Ubiflex should be taken behind tiles by not less than 75mm and finished with a single weather check welt (Fig 10 & 10a).



Fig 10a

Fig 11: Flashing to vertical tile or slate hanging - cills

At the junction of the tiles/wall/cill, a separate cill flashing is required. This cill flashing extends up the wall at least 75mm and is chased into the brickwork minimum one course above the tiles or slates flashing (Fig 11). Where the window opening appears within the body of the tile hanging, a similar cill flashing is required. This cill flashing turns under the cill and extends past the vertical edge of the window by at least 100mm and up the jamb by at least 100mm from the underside of the cill.

In slate hanging the Ubiflex extends 100mm behind the slates without the welt. Alternatively, soakers and a cover flashing can also be used in this instance and should follow the same procedure as shown in Fig 5 previously.

Pitched valley lining

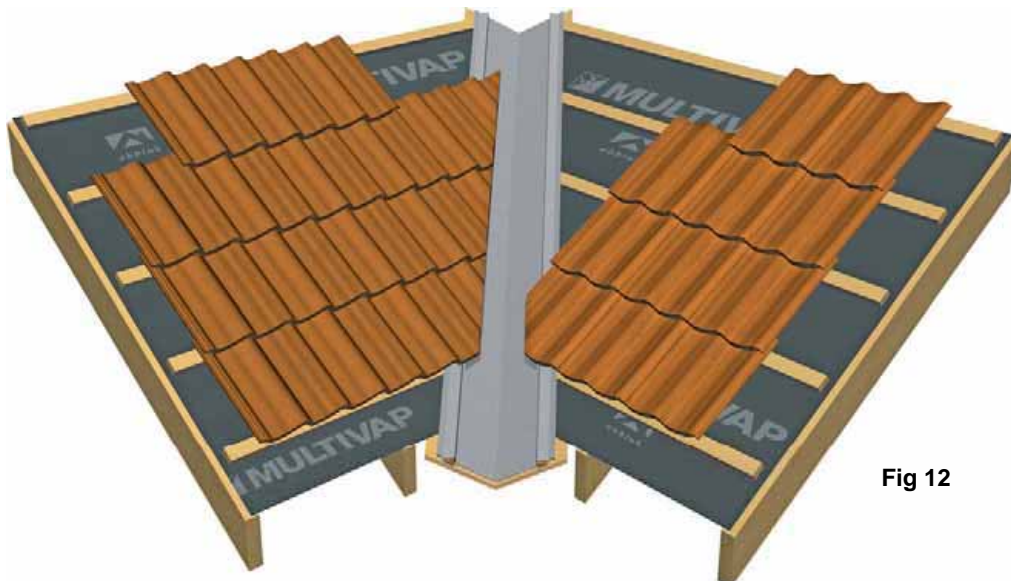


Fig 12

Ubiflex is suitable for use in a valley gutter with all types of roof covering and boarded, battened and counter battened roofs. (Fig 12 & 12a on the next page).

Ubiflex extends across valley boards, over the fillets (the tops of which should be level with the top of the tiling battens) and is then fixed to the boards behind the fillet.

Continued next page.

Figure 12a :Pitched valley lining

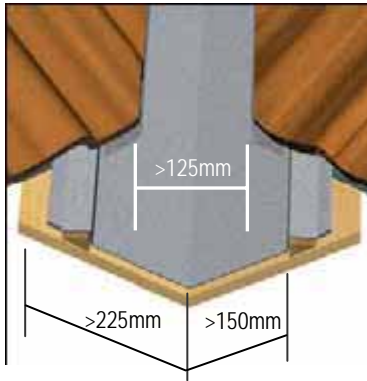


Fig 12a

Ubiflex sits directly on the valley boards – these should extend at least 225mm each side of the centre of the valley and include tilting fillets positioned 150mm each side of the centre. When the tiles/slates are laid the gap between them should not be less than 125mm. Valley boards (not less than 19mm thick) are laid on top of the rafters in boarded and counter batted roofs or fixed flush with the top of the rafters in batted roofs - either notched into the rafters.

Ubiflex is then welted to protect the fixings and provide a weather check. Cut edges of single lap tiles should be bedded on the Ubiflex with a clear water channel left behind the mortar bedding and the tilting fillet; double lapped tiles/slates are laid dry. Foot traffic should be avoided or a protection board should be used during installation.

Flashing to roof lights, north lights and solar panels

Most new, modern skylights and solar panels are supplied with built-in flashings. However, where this is not the case or flashings to existing skylights and solar panels need to be replaced, then Ubiflex should be formed up and over the up-stand and extend 150 - 200mm into the roof covering. Flashings should be positioned beneath plain tiles and slates (top and sides) and over profiled tiles.

North lights are flashed by dressing the Ubiflex over the ridge and shaping over the glazing bars as in Fig 9. Ubiflex should extend 150 -200mm down each side of the slope and be sealed to the glazing with a continuous bead of Ubiflex High-Tack.



Flashing to canopies, hoods and carports

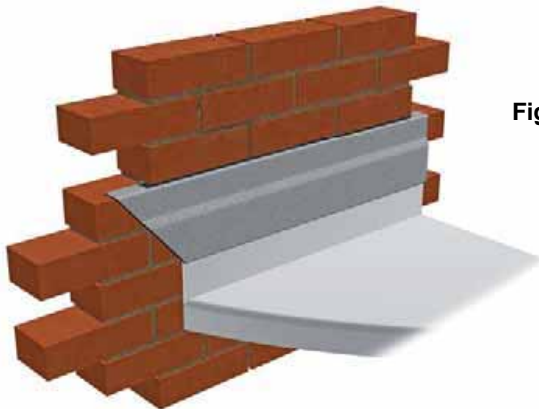


Fig 13

Fig 13: Flashing to canopies, hoods and carports with up-stands

Ubiflex can be used as a flashing to modern fibre glass, GRP and plastic door/window/patio canopies, door hoods and carports. For canopies and hoods with up-stands follow the procedure as shown in Fig 13, ensuring the flashing is sealed to the canopy etc. and covers the up-stand by at least 75mm and extends at least 100mm beyond the sides. For canopies and carports without up-stands the procedure is similar to the top abutment flashing shown in Fig 8 previously ensuring that the flashing is sealed to the canopy or carport and extends at least 150mm over the canopy and 100mm beyond the sides.

Site-work

Supply, handling and storage

Ubiflex rolls are supplied packed individually in boxes and should be stored in a dry area. No special handling is required during storage or installation. Ubiflex is non-toxic and recyclable.

Maintenance and repair

Ubiflex is self-sealing if punctured. Ubiflex does not require any maintenance in addition to a regular visual check for damage.

Installation

Ubiflex can be worked in the same way as lead, but without the need for any protective measures. Ubiflex can also be used in direct contact with any building material, including copper, zinc, iron, aluminium and stainless steel, in all climate conditions and environments. Ubiflex :

- Can be cut with a sharp knife.
- Can be fixed with stainless steel nails if required.
- Can be joined with Ubiflex High-Tack sealant to form a watertight joint.