

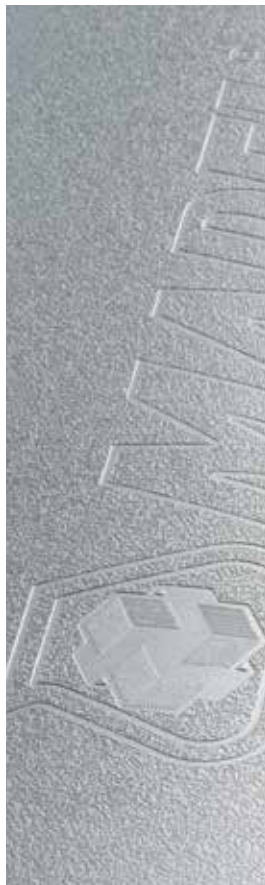
Installation manual

MAPEPLAN PVC-P



The technical details and recommendations contained in this manual are based on our knowledge and experience. However all the information must in every case, be used as guidance only. Any individual or company who intends to install the MAPEPLAN products must ensure that they are suitable for the correct waterproofing application. In every case the individual or company is fully responsible for the installation of the products and for any consequential loss deriving from the installation of the system.

For any further information please contact the MAPEI GROUP technical department.



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This manual provides the trained on-site operative with a general guideline to supplement the training given by the Mapei Group in the installation techniques for MAPEPLAN (PVC-P) roofing systems.

Membrane system and application fields

MAPEPLAN M

MAPEPLAN M is a polyester-reinforced membrane produced in a single multi-extrusion coating process. The membrane is suitable for mechanically-fixed, exposed roof applications. It is also used for detail flashings.

MAPEPLAN B

MAPEPLAN B is a glass-mat-reinforced membrane produced in a single multi-extrusion coating process. The membrane is suitable for loose-laid, ballasted, roof gardens, utility and parking decks. It is also used for bonding to exposed roof areas and detail flashings.

MAPEPLAN D

MAPEPLAN D is an unreinforced membrane suitable on areas where detail work cannot be achieved with MAPEPLAN accessories, e.g. corners, pipes, vents. This membrane is not intended, or suitable, for large horizontal or vertical roof applications.



1. Storage

Rolls of MAPEPLAN PVC-P membranes are delivered to site on pallets wrapped in white polythene.

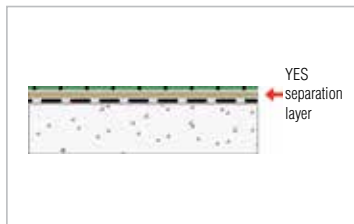
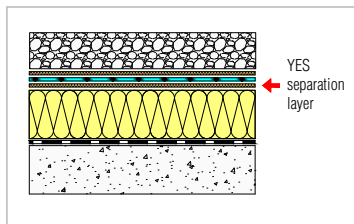
It is important to store the product in a dry place, elevated from the ground/roof and protected with waterproof tarpaulins against exposure to rain, frost and snow. Protection against the elements is even more crucial once the outer polythene has been removed.

2. Labelling

MAPEPLAN rolls are individually labelled with batch code, length, thickness and width.

3. Accessories

All accessories used in the installation of the MAPEPLAN PVC-P systems have blue identification labels and packaging.



MAPEPLAN PVC-P membranes are compatible with an extensive range of materials and substrates. Please refer to the MAPEPLAN PVC-P technical documentation.

Insulation Boards

MAPEPLAN cannot be laid directly to extruded/expanded polystyrene insulation boards. A minimum 120 g/m² separation fleece must be used between the MAPEPLAN PVC-P membrane and the insulation boards.

Bitumen

Bitumen products must be separated from MAPEPLAN PVC-P by using a geotextile/separation layer during installation.

PVC Membrane Systems

When overlaying an existing PVC membrane system with MAPEPLAN PVC-P, a separation layer must be used between the membranes during installation.

TPO Membrane Systems

When overlaying an existing TPO membrane system with MAPEPLAN PVC-P, a separation layer must be used between the membranes during installation.

***If in doubt please contact
our MAPEI GROUP technical
department for advice on
compatibility with MAPEPLAN
and other materials.***



MAPEPLAN must be clean and dry before welding.

Cleaning and preparation procedures of MAPEPLAN PVC-P overlaps

MAPEPLAN PVC-P

We recommend all overlaps and welding seams to new and existing membranes be clean and dry prior to welding.

Dirty membranes must be cleaned with MAPEPLAN PVC-P Cleaner prior to welding.

MAPEPLAN PVC-P (dirty)

(dirty building site,
air-born dust)

- clean with a broom
- clean with water
- clean with MAPEPLAN PVC-P Cleaner (use only on dirty surfaces)
- wait for the solvents to disperse and the membrane to dry before welding

- MAPEPLAN PVC-P (very dirty)** - clean with a broom
(refurbishment/extension project)
- clean with water and scrubbing brush (power wash if necessary)
 - clean with MAPEPLAN PVC-P Cleaner using a brush to dirty surface
 - wait for the solvents to disperse and the membrane to completely dry before welding

Do not rub the dust and dirt into the membrane. Apply Cleaner liberally to the surface or overlap and draw the dirt and Cleaner off on to a clean white cloth.

NOTE: For full details on the use of MAPEPLAN PVC-C Cleaner please refer to the product data sheet.



To install MAPEPLAN PVC-P membrane systems the following equipment should be used

- Hot-air digital welding gun
- 40 mm nozzle for main seam welding
- 20 mm nozzle for detailing
- 20 mm cranked nozzle for difficult detail work
- 4 mm / 5 mm speed welding nozzle for welding MAPEPLAN cord
- 28 mm red rubber roller for main seam welding
- 6 mm brass roller for difficult details
- Dremel for cutting T-Joints
- Scissors
- Metal snips for cutting MAPEPLAN coated metal
- Seam probe tester
- Automatic welding machine





Prior to welding, ensure the membrane edges to be welded are clean and dry. (Please refer to page 9 membrane clearing procedure).

Overlap width

Minimum 5 cm for adhered, or ballasted, roofing systems. Minimum 8 cm when using EPS insulation on a warm-ballasted, roofing system. (This avoids the welding machine nozzle melting separation fleece and the insulation). Minimum 11 cm for mechanically-fixed roofing systems.





Nozzle care

The nozzle used must be cleaned using a wire brush and the air gap should be equal across the full width of the nozzle.



Welding temperature

MAPEPLAN PVC-P has a wide welding window. This allows the operative to work slowly on difficult details. The temperature can be adjusted easily on the back of the PID gun to suit all conditions and applications.



The basic setting temperatures for hand welding MAPEPLAN PVC-P are as follows.

400/450 °C

It is necessary to carry out a welding test in order to determine the correct

temperature setting in line with weather and building site conditions.

Operating voltage can alter depending on the country. This can range from 110 to 220/240 volts.

NOTE: Do not use a shared power supply or long cables or 110 volt cables with a diameter less than 6 mm

Use a 40 mm nozzle for main, straight-line welding and a 20 mm nozzle for detail work.



Spot welding

To hold the membrane in place, spot-weld the overlap every 40 cm.

Spot-weld the membrane in the internal part of overlap.



Pre-welding

Weld the rear overlap area along the full length, allowing a width of 4 cm for the main weld.

Using 40 mm nozzle - 4 cm

Using 20 mm nozzle - 3 cm

NOTE: Check the pre-weld for delamination before continuing the main weld



With the nozzle angle at 45° to the welding line.

With the roller at 1 cm from the nozzle, apply pressure to the top sheet in a continuous back-and-forth flowing movement.



When using automatic welding equipment, such as a Leister Varimat (or similar approved) in conjunction with a MAPEPLAN PVC-P standard nozzle, ensure the welding machine has been adjusted correctly for welding MAPEPLAN PVC-P (alignment and temperature) and the standard nozzle is clean with even air flow. The basic setting temperature and speed for automatic welding MAPEPLAN PVC-P is as follows:

TEMPERATURE	500/550 °C
SPEED	2/3 m/minute

Welding temperature/ speed

Working temperatures can be affected by environmental and climatic conditions on site such as the roof surface temperature, humidity and wind.

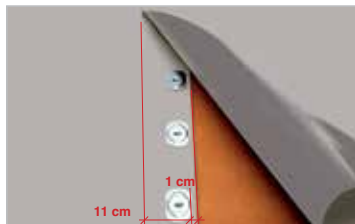
Each day, before starting work on the waterproofing project, carry out a sample weld on a 2 metre strip of 2 x 30 cm membrane and then test the weld using the destructive test method as described on page 55.



Transverse or T-Joints are created when the membrane sheets overlap more than once. On PVC membranes with a thickness of 1,5 mm and above, it is necessary to remove the step along the membrane edge where the membranes are welded together. This prevents any risk of capillary action of water along the welding line.

For example this procedure is carried out using a Dremel tool and stone grinding wheel as shown.

MAPEPLAN PVC-P MECHANICAL FIXING TO A HORIZONTAL SURFACE



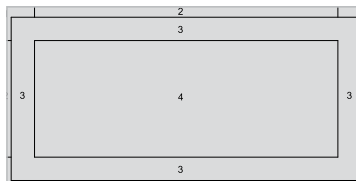
1	2	1
2	3	2
1	2	1

ROOF PLAN

- 1 - Corner
- 2 - Perimeter
- 3 - Main field

Buildings and roof areas are affected by wind loadings due to their height, location and topography. For this reason all mechanically fixed roof areas are design specific, having three/four areas (according to the wind load calculations/regulations of the country): perimeter, corner and field zones. The number of fixings must be determined for each of these zones before the installation of the MAPEPLAN PVC-P M system.

MAPEPLAN PVC-P M membrane systems are mechanically fixed using approved metal plates, or plastic telescopic tubes, and fixing screws to a variety of substrates that include concrete, timber and metal trapezoidal sheets.



ROOF PLAN

- 1 - Corner
- 2 - External perimeter
- 3 - Internal perimeter
- 4 - Main field

The plates and fixings are placed in a straight line 1 cm from the edge of the membrane as shown. The minimum overlap of the adjoining membrane is 11 cm.

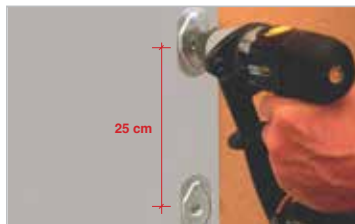
When fixing in to a metal trapezoidal deck, the membrane must be installed at 90° to the decking profile. This spreads the load evenly across the width of each decking sheet.

A mechanically-fixed membrane must be fixed around all penetrations that go through the roof system, such as outlets, pipes and columns.

Insulation boards incorporated within the MAPEPLAN PVC-P M system are mechanically fixed, or bonded, independently of the roofing membrane.

NOTE: For fixing and design calculations, please consult the MAPEI GROUP technical department.

MAPEPLAN PVC-P MECHANICAL FIXING TO A VERTICAL SURFACE



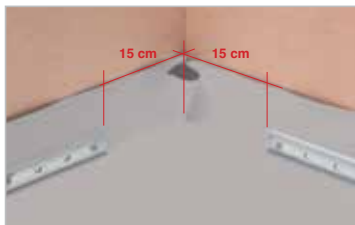
For features, such as vertical upstands with a height of over 50 cm on perimeter and internal walls, mansard roofs, roof-lights and smoke ventilator kerbs, additional fixings must be used to secure the membrane. The frequency of fixings per linear metre will be determined by the height, location and topography of the building.

On mansard roofs the fixings should not be greater than 25 cm apart.

The overlap width of the adjoining membrane covering the fixing plate line should be a minimum 11 cm.

Manual welding procedure.
Spot-weld, pre-weld, check pre-weld, main weld.

(See page 13-16 for full instructions)



MAPEPLAN M

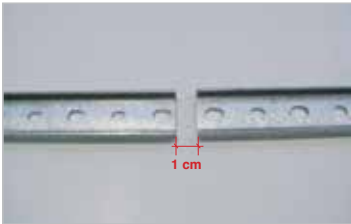
polyester-reinforced membrane systems must be mechanically fastened at all upstands with pre-punched bars, or fixing plates, and screws.

The membrane should be secured at the base of the upstand to the horizontal or vertical face.

MAPEPLAN B

glass-mat-reinforced membranes, for use on ballasted applications, must be secured at all perimeters and protrusions through the roof with MAPEPLAN pre-punched bars.

The membrane can be secured at the base of the upstand to the horizontal or vertical face.



The use of MAPEPLAN PVC-P cord is recommended in conjunction with MAPEPLAN pre-punched bars.

The MAPEPLAN pre-punched bars, screws and plates are recommended for perimeters and for all large penetrations through the roof such as roof lights, smoke vents, etc.

Ensure a 1 cm gap is left between the MAPEPLAN bars to allow for expansion.

To protect the waterproofing membrane from damage during stress loading the bar ends should be covered with a strap of membrane as shown.

NOTE: Mechanically fix with plates and screws around smaller penetrations such as pipes, columns and outlets.

INSTALLATION MANUAL

ADHERED TO A VERTICAL SURFACE



On upstands to perimeter and internal walls, roof lights and smoke-vent kerbs etc above 50 cm, MAPEPLAN PVC-P must be bonded to the vertical face of the upstand with MAPEPLAN ADS 200 solvent-based contact adhesive.



The glue is applied to the upstand surface and to the MAPEPLAN PVC-P membrane using a roller.



MAPEPLAN PVC-P ADHERED TO A VERTICAL SURFACE



Once the solvents have dispersed, bring the two surfaces together, taking care to smooth the membrane to avoid any creases or air blisters.

Do not apply glue to the bottom leg of the membrane flashing or areas that need to be welded. Should this occur the glue must be removed immediately with MAPEPLAN PVC-P Cleaner, otherwise the membrane will not weld.

(Please refer to the installation and spread rate instructions provided on the tin and data sheet).

Compatibility

MAPEPLAN ADS 200 cannot be used on newly laid bitumen or extruded/expanded polystyrene insulation boards, fibrous or wet surfaces.

Please contact the MAPEI GROUP technical department for advice on spread rates and compatibility with different materials.

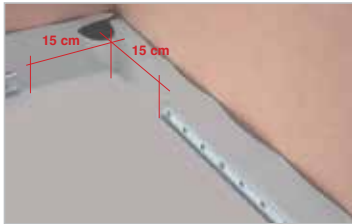


The MAPEPLAN PVC-P system has an extensive range of hot-air-weldable accessories that include outlets, wall scupper outlets, vents, internal/external corners and MAPEPLAN PVC-P laminated profiles and sheets that compliment the MAPEPLAN PVC-P roofing system.

Warranty

NOTE: To comply with the MAPEPLAN PVC-P system warranty, only MAPEI GROUP accessories must be used in conjunction with the MAPEPLAN PVC-P membrane.

MAPEPLAN PVC-P INTERNAL CORNER DETAIL



Mechanically fix, or fully adhere, MAPEPLAN PVC-P field sheet membrane with pre-drilled bars, peel stop bars, plastic telescopic or metal fixing plates with screws to the vertical or horizontal surface of the upstand. Locate the bars or plates 15 cm away from the corner to enable welding without obstruction.

Fold the excess membrane in the corner to form a 45° crease and weld the pocket together.

Weld the pocket to the membrane upstand as shown.

INSTALLATION MANUAL

INTERNAL CORNER DETAIL



Bond or mechanically fix the membrane flashing into position on the vertical face of the upstand. To assist with this operation, it is advisable to pre-crease the membrane shape you require, using the hot air gun and roller, before fixing.

Fold the membrane pocket and cut the crease 2 cm from the corner.

Fold one leg of the flashing below the other. Cut the leading edge with scissors in a neat curve and weld in place. Pre-weld and check the pre-weld before completing the main weld.



Fold the top membrane leg over the bottom cut at approximately 45° angle, curving the leading edge neatly with scissors.

Weld the top leg of the flashing in place. Pre-weld and check pre-weld before completing the main weld.

INSTALLATION MANUAL

INTERNAL CORNER DETAIL



Position the MAPEPLAN PVC-P pre-formed internal corner.



Working from the centre of the corner outwards, tack-weld, pre-weld and check pre-weld before completing the main weld. Use a 20 mm nozzle and narrow brass roller for awkward details.



NOTE: Before welding ensure the membrane and pre-formed corners are clean. Use a clean, white cloth and MAPEPLAN PVC-P Cleaner.

MAPEPLAN PVC-P INTERNAL CORNER WITH A VERTICAL CREASE



Mechanically fix, or fully adhere, MAPEPLAN PVC-P field sheet membrane with pre-drilled bars, peel stop bars or fixing plates with screws to the vertical or horizontal surface of the upstand. Locate the bars or plates 15 cm away from the corner to enable welding without any obstruction.

Fold the excess membrane in the corner to form a 45° crease and weld the pocket together. Weld the pocket to the membrane upstand as shown on page 22.

Cut the length of membrane you are going to use for the upstand and pre-crease the bottom leg using the hot air gun and roller to aid installation.

INTERNAL CORNER WITH A VERTICAL CREASE



Apply MAPEPLAN ADS 200 contact adhesive to the vertical upstand and to the underside of the membrane flashing **taking care not to allow glue to contaminate the area you intend to weld**. Allow the solvents to flash off before bringing both surfaces together.

Weld the first flashing in place. Spot-weld, pre-weld and check pre-weld before completing the main weld.

MAPEPLAN PVC-P INTERNAL CORNER WITH A VERTICAL CREASE



Cut, pre-bend and install the adjoining membrane as previously described. On PVC membranes with a thickness of 1,5 mm and above, it is necessary to remove the step along the membrane edge where the membranes are welded together. This prevents any risk of capillary action of water along the welding line. For example this procedure is carried out using a Dremel tool and stone grinding wheel as shown.

Fold and crease the excess membrane into a pocket and weld together as shown.

Fold the membrane back onto the opposite face. Draw a vertical line along the length of the flap in line with the bottom welded leg and neatly cut off the excess with scissors before welding into position.

INTERNAL CORNER WITH A VERTICAL CREASE



Complete the corner detail by hot air welding the flap as shown.

NOTE: Should the glue accidentally enter the area you intend to weld you must remove the glue immediately from the membrane using MAPEPLAN PVC-P Cleaner. Otherwise the membrane will remain contaminated and will not weld together.



Mechanically fix, or fully adhere, MAPEPLAN PVC-P field sheet membrane, with pre-drilled bars, peel stop bars or fixing plates with screws, to the vertical or horizontal surface of the upstand. Locate the bars or plates 15 cm away from the corner to enable welding without any obstruction.

Cut a length of membrane to fit the shape of the upstand. Cut the bottom leg of the flashing to allow it to fold at 90°.

Bond or mechanically fix the membrane flashing into position on the vertical face of the upstand. To assist with this operation, it is advisable to pre-crease the membrane shape you require, using the hot air gun and roller, before setting in position.

Then spot-weld, pre-weld and check the pre-weld before completing the main weld.

INSTALLATION MANUAL

EXTERNAL CORNER DETAIL



Position the MAPEPLAN PVC-P pre-formed corner and weld in place working from the centre outwards. Spot-weld, pre-weld and check pre-weld before completing main weld.

The 20 mm nozzle is recommended, in conjunction with a narrow brass roller for awkward details.

NOTE: On corners other than 90°, use adjustable pre-formed petal corners or form the detail with MAPEPLAN D unreinforced membrane.



Neatly cut a hole in the field sheet and then dress the membrane over the pipe or vent as illustrated.

If this is not possible, cut a square of membrane neatly, cut a hole smaller than the pipe in the centre and round off the corners with scissors. Warm and stretch the hole, using hot air from the hand gun, and then pull the square down over the pipe or vent to create an upstand and temporary water-tight seal.

Pre-formed pipe collar

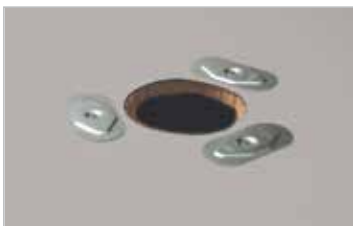
Warm the collar and then pull it down over the pipe and hot air weld the flange to the main field sheet. Using a 20 mm nozzle, spot-weld as close to the pipe as possible and then, working outwards, pre-weld and check the pre-weld before completing the main weld. (Should access



or size be difficult, use a larger diameter pipe collar, cut it open on one side, then wrap around the pipe and weld the overlap on the collar and the flange to the field sheet). Otherwise form this detail in non-reinforced membrane.

Apply MAPEPLAN Sealant around the top rim of the collar to ensure a completely waterproof seal.

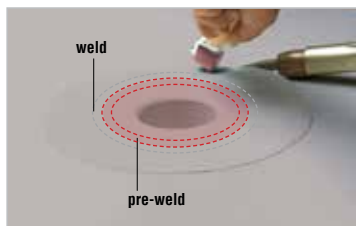
Fit a stainless steel, or non-corrosive, jubilee clip around the rim and tighten as necessary.



MAPEPLAN PVC-P pre-formed outlets are supplied in a variety of diameters. They are gravity bore outlets supplied with gravel/leaf guards.

Cut a neat hole in the membrane to correspond with the downpipe.

To prevent wind uplift on a mechanically fixed system, apply fixing plates and screws around the pipe and screw the membrane down to the decking.



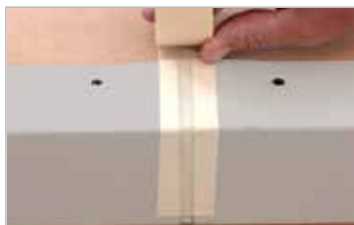
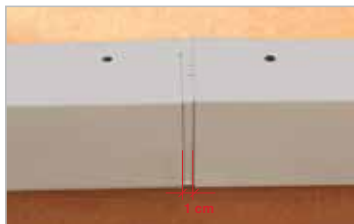
Insert the pre-formed outlet into the downpipe as shown.

Using a 20 mm nozzle, spot-weld as close to the hole as possible then, working outwards, pre-weld and check the pre-weld before completing the main weld

Polyglass recommend several manufacturers of rigid outlets and rainwater goods that include symphonic outlet systems. They can be supplied with a factory fitted PVC flange for welding to our MAPEPLAN roofing system.

***Please contact
MAPEI GROUP technical
department for details.***

MAPEPLAN PVC-P PERIMETER EDGE FLASHING



MAPEPLAN PVC-P metal laminate is supplied in flat sheets or profiled flashings, 2 or 3 metres in length x 1 metre in width.

Mechanically fix the profile trim to the perimeter edge with expansion nails or countersunk screws.

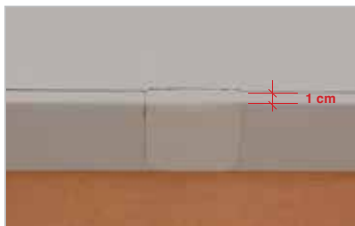
At all joints it is necessary to leave a 1 cm gap between the profiles to allow for expansion and contraction.

To ensure the face of the profile remains straight and square, insert a metal butt strap beneath the joint making sure it fits tight in to the lip of the drip.

Overlay the gap with 2 cm wide masking tape. This prevents the membrane strip from welding along the joint.

Weld a 10 cm wide membrane strip to the joint as illustrated.

NOTE: Do not use domed fixings as they prevent the membrane cover flashings welding flat against the metal.



To assist the welding of the membrane along the top of the MAPEPLAN PVC-P metal, leave a 1 cm gap from the front face. Hot air weld the new flashing by spot-welding, pre-welding and checking the pre-weld before completing the main weld.

NOTE: Always ensure that the perimeter edge and fixings used can accommodate the wind loadings created. MAPEPLAN PVC-P metal profiles should be fixed at a maximum of 25 cm fixing centres. Should the front face be deeper than 15 cm a secret fix method can be used or additional screws must be inserted into the face of the metal profile.

MAPEPLAN PVC-P PARAPET WALL DETAIL



Mechanically fix MAPEPLAN PVC-P field sheet with plates, telescopic tubes or MAPEPLAN bars at the base of the upstand wall.



Mechanically fix with countersunk, flat-head screws, twice bent MAPEPLAN PVC-P edge profile metal at a minimum of 25 cm.



Pre-bend MAPEPLAN PVC-P membrane and tack weld tight to the base of the upstand. Pre-weld then check the pre-weld before completing the main weld.

INSTALLATION MANUAL

PARAPET WALL DETAIL



Measure, mark and pre-bend the membrane flashing so it fits tight at the top of the internal face of the parapet wall as illustrated.



Tack weld to the MAPEPLAN edge trim. Pre-weld then check the pre-weld before completing the main weld.

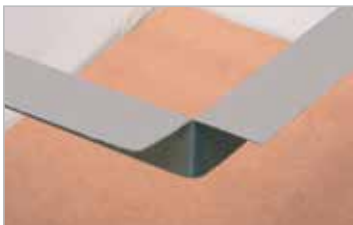


MAPEPLAN PVC-P INTERNAL PERIMETER EDGE FLASHING



Mark the cutting line with a pencil to the vertical and horizontal surface.

Cut along the horizontal face following the pencil line.



Open the metal and bend to the required angle.



Mechanically fix the profile trim to the internal perimeter edge with expansion nails or countersunk screws.

INTERNAL PERIMETER EDGE FLASHING



Hot air weld the upstand membrane flashing to the front face of the profiled metal.

To assist the welding of the membrane along the profile, leave a 1 cm gap from the top edge. Hot air weld the new flashing by spot welding, pre-welding and checking the pre-weld before completing the main weld.

Using the reversed face of a MAPEPLAN PVC-P external corner and then hot air weld the corner as illustrated.

NOTE: Always ensure that the perimeter edge and fixings used can accommodate the wind loadings created. MAPEPLAN PVC-P profile fixing centres must not exceed 25 cm. Do not use domed fixings to secure MAPEPLAN PVC-P metal profiles as they prevent the membrane cover flashings welding flat against the metal.

MAPEPLAN PVC-P EXTERNAL CORNER TO PERIMETER EDGE FLASHING



Mark the cutting line with a pencil to both faces of the profiled metal.

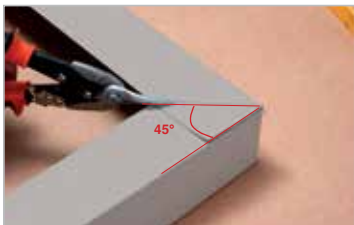


At the pencil line, squeeze the drip along the bottom edge as shown to identify the bending point.



Cut out, along the pencil lines, a 30° wedge.

EXTERNAL CORNER TO PERIMETER EDGE FLASHING



Bend the profile to form a 90° corner and trim the overlap at 45°.

Mechanically fix the profile trim to the perimeter edge with expansion nails or countersunk screws.



Pre-bend the membrane to the internal wall so that it fits tight to top of the upstand before welding to the MAPEPLAN PVC-P metal profile as illustrated.



To assist the welding of the membrane along the profile, leave a 1 cm gap from the top edge. Hot air weld the new flashing by spot welding, pre-welding and checking the pre-weld before completing the main weld.

MAPEPLAN PVC-P EXTERNAL CORNER TO PERIMETER EDGE FLASHING



Complete the detail by welding the external face of an internal corner as shown.

NOTE: Always ensure that the perimeter edge and fixings used can accommodate the wind loadings created. MAPEPLAN PVC-P profiles fixing centres must not exceed 25 cm. Do not use domed fixings to secure MAPEPLAN PVC-P metal profiles as they prevent the membrane cover flashings welding flat against the metal.

INSTALLATION MANUAL

WALL TERMINATION PROFILE



Mechanically fix
MAPEPLAN PVC-P wall
termination profile with
countersunk flat head screws
to the wall upstand at a
maximum 25 cm centres.



Where the profile joins, weld
a minimum 5 cm wide strip
over the joint to seal the two
together.

MAPEPLAN PVC-P WALL TERMINATOR PROFILE



Pre-bend the MAPEPLAN PVC-P membrane flashing to create a sharp crease and tack weld the flashing tight to the base of the upstand.



Pre-weld, check the pre-weld before completing the main weld of the bottom leg of the flashing to the main field sheet.



Tack weld the top of the flashing to the wall profile. Cut level leaving a 1 cm gap from the top of the profile to assist the welding procedure.

Pre-weld and check pre-weld before completing main weld.

Apply MAPEPLAN Primer before applying MAPEPLAN Sealant along the full length of the profile as shown.



Non-destructive control method

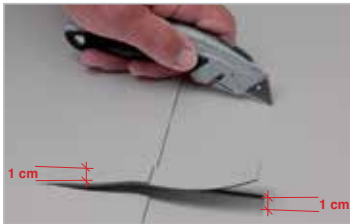
The test is carried out on cooled membrane with a metal seam probe. The probe is run along the welded edge using sufficient pressure to identify defective seams.

Should a defective seam be detected please follow the seam cleaning procedure explained on page 5.

In dirty or extreme circumstances, it will be necessary to weld a 15-20 cm wide strip of membrane over the defective welding line. In this case the excess dirt should be removed with MAPEPLAN PVC-P Cleaner prior to welding.

Once the membrane has cooled, re-test using the seam probe.

NOTE: to avoid mechanical damage to the membrane the seam tester must have a rounded point.



Destructive control method

Cut out a strip from the welded seam 1 cm wide x 15 cm in length.



Apply pressure to the weld by pulling the two ends of the strip apart.



The membrane is twice as strong at the weld.
Failure must occur outside the weld as illustrated in the photograph.

NOTE: When setting up the automatic machine each day, it is recommended a test length of approximately two metres be welded and then destructive test samples taken as described above.



Because the membrane has a dark underside, it is easy to see any damage to the membrane's light grey top surface. Should damage occur after installation, or on older membrane, the repairs are simple.

Cut a disc of membrane that covers completely the damaged area.

Using a pencil, trace around the disc onto the membrane surface.



Using a clean white cloth, apply a liberal amount of MAPEPLAN Cleaner to the area and remove the dirt by drawing it off the membrane with the cloth.



Once the solvents have flashed off, and the membrane is completely dry, weld the new patch by starting in the centre and working out, checking the integrity of the weld as you progress.



NOTE: Do not rub the dirt and the solvent into the membrane. Apply the Cleaner liberally to the weld area then lift off the dirt and Cleaner on to a white cloth. Allow the solvents to flash off before welding.

WELDING TO AN EXISTING PVC-P MEMBRANE



When connecting or joining a new MAPEPLAN PVC-P membrane system to one previously installed, for example a roof extension make sure the existing membrane is free of dust and dirt. This can be achieved with the use of a water pressure machine or by following the guidelines on page 9 of this manual. Once the membrane is clean and dry, use an automatic welding machine to weld the membranes together.

MAPEI GROUP has the right to modify or change the text, photographs or details contained in this manual. This is to enable any new or innovative production or practical installation methods to be applied to the manual should they arise.

MAPEI GROUP will warranty only the systems and accessories manufactured by the Group. Further, these systems must be installed only by approved contractors and operatives who have undertaken training to install the MAPEPLAN systems.

For all technical guidance on the installation of the MAPEPLAN ROOFING SYSTEMS not covered in this manual, please contact the nearest registered MAPEI GROUP technical department.

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