

# INSTALLATION GUIDE ROOFING

## VERY LOW SLOPE

**BETWEEN 1/8 / 12 AND 4/12**

A flat roof has a very gentle slope that allows the accumulated surplus water to be directed to an evacuation point. Hence, given the very low slope, water certainly tends to stay longer than on a steeper slope roof surface.

To waterproof a flat roof a two-layer system composed of a base membrane combined with a granulated surface membrane is the optimal solution. All roof details must also be sealed with two membrane layers.



**RESISTO<sup>®</sup>**

# 1 | BASE SHEET

## INSTALLATION REQUIREMENTS

### MINIMUM APPLICATION TEMPERATURE

- EXTERIOR PRIMER: -10 ° C
- SELF-ADHERED WATERPROOFING MEMBRANE 60 MILS: 10 ° C
- REDZONE 40 MILS
- OR SOPRASEAL STICK 1100T: -10 ° C

### COMPATIBLE SUBSTRATES

The substrate must be clean and free of dust, grease or other contaminants. Nails or screw heads should be flush.

- PLYWOOD
- OSB
- ASPHALTIC PANELS (SOPRABOARD)

### TOOLS REQUIRED

- KNIFE
- TAPE MEASURE
- PAINT BRUSH OR STANDARD ROLLER
- HEAVY ROLLER

## BASE SHEET

### PRODUCTS REQUIRED FOR THIS STEP:

- EXTERIOR PRIMER
- SELF-ADHERED WATERPROOFING MEMBRANE 60 MILS

### BASE SHEET INSTALLATION

1. Apply primer to the entire roof surface. The primer is dry when it is sticky to the touch, but not messy.
2. Position the first membrane parallel to the edge at the bottom of the roof.
3. Begin peeling back the silicone protective film over a length of about 30 to 40 cm (12 to 16 in) by folding it back at a 45 ° angle.
4. While applying pressure to the other end of the membrane, press the membrane to the support using a scrub brush by pressing from the center toward the sides of the membrane.



5. Continue to remove the protective film while applying pressure with the broom on the bonded portion.

#### Installation tip:

Cut the first strip of SELF-ADHESIVE WATERPROOFING MEMBRANE vertically to obtain a 50 cm (20 in) wide strip in order to stagger the joints of the first waterproofing layer with those of the second layer made with the GRANULATED CAP SHEET – HIGH RESISTANCE – HR CAP SHEET.

### OVERLAPS

- Lateral: 100 mm
- Transversal: 150 mm

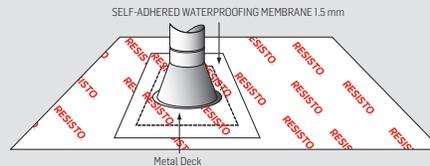
## BASE SHEET ON CIRCULAR PROTRUSIONS

### PRODUCTS REQUIRED FOR THIS STEP:

- SELF-ADHERED WATERPROOFING MEMBRANE 60 MILS
- ELASTOMERIC SEALER

### INSTALLATION OF THE BASE SHEET ON A CIRCULAR PROTRUSION

1. Attach the flashing and metal decking to the roof surface with ELASTOMERIC SEALER applied under the decking and using roofing nails.
2. Install a piece of SELF-ADHERED WATERPROOFING MEMBRANE 60 mils, in the center make a circular opening 50 mm larger than the diameter of the protrusion. The membrane should exceed the metal deck by 10 cm (4 in).
3. Firmly press the membrane with a heavy rubber roller to increase adhesion.



4. If it is impossible to install the piece in this way, proceed using two overlapping pieces of 75 mm (3 in).

## EDGE FLASHING ON AN UNDERLAYMENT

### PRODUCT REQUIRED FOR THIS STEP:

- SELF-ADHERED WATERPROOFING MEMBRANE 60 MILS, REDZONE 40 MILS OR SOPRASEAL STICK 1100T

### EDGE FLASHING INSTALLATION

1. After installing the metal drip edge, apply a membrane strip (SELF-ADHERED WATERPROOFING MEMBRANE 1.5 mm, REDZONE 40 MILS OR SOPRASEAL STICK 1100T) of at least 10 cm (4 in) wide overlapping the drip edge and the underlayment already installed.
2. Peel back the silicone; release film over a length of 10 cm (4 in).
3. Position and press the membrane in place.



4. Continue removing the silicone film.
5. Firmly press the membrane with a heavy rubber roller to increase adhesion.

## BASE SHEET ON VERTICAL SURFACES

### PRODUCTS REQUIRED FOR THIS STEP:

- EXTERIOR PRIMER
- SELF-ADHERED WATERPROOFING MEMBRANE 60 MILS

### INSTALLATION OF BASE SHEET ON UPSTANDS

1. Apply the primer on the surface. The primer is dry when it is sticky to the touch, but not messy.

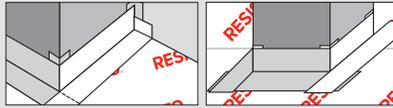
2. Apply interior or exterior gussets on each corner of the detail to be covered.



3. Cut the membrane to a width of 20 cm (8 in).

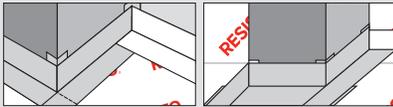
4. Then cut the ends of the membrane to the required length; add approximately 75 mm (3 in) to both ends.

5. Start with the lowest side of the detail to be treated; press the membrane in place, 10 cm on each of the two surfaces (horizontal and vertical).



6. Firmly press the membrane with a heavy rubber roller to increase adhesion.

7. At the junction cut the lengths exceeding the covered section horizontally and fold back on horizontal and vertical surfaces.



8. For details where it would be difficult to apply the membrane properly, use a bead of ELASTOMERIC SEALER to ensure waterproofing.

## 2 | CAP SHEET MEMBRANE

### INSTALLATION REQUIREMENTS

#### MINIMUM APPLICATION TEMPERATURE

- EXTERIOR PRIMER: -10 ° C \*
- HR CAP SHEET MEMBRANE HR: 10 ° C
- ELASTOMERIC SEALANT: -10 ° C
- ELASTOMERIC SEALANT ALU: -10 ° C
- ALSAN FLASHING: 5 ° C

#### COMPATIBLE SUBSTRATES

The substrate must be clean and free of dust, grease or other contaminants. Nails or screw heads should be flush.

- PLYWOOD
- OSB
- ASPHALTIC PANELS (RESISTOBOARD)
- SELF-ADHERED WATERPROOFING MEMBRANE 60 MILS

#### TOOLS REQUIRED

- KNIFE
- STANDARD EXTRUDER
- TAPE MEASURE
- PAINT BRUSH OR STANDARD ROLLER
- HEAVY ROLLER
- TROWEL

\*The application of EXTERIOR PRIMER is mandatory if the SELF-ADHERED WATERPROOFING MEMBRANE 60 mils is exposed for more than 24 hours.

### FINISHING MEMBRANE

#### PRODUCTS REQUIRED FOR THIS STEP:

- HR CAP SHEET MEMBRANE
- ELASTOMERIC SEALANT
- ALSAN FLASHING (OPTIONAL)

#### INSTALLING THE FINISH MEMBRANE

It is recommended to apply the HR CAP SHEET MEMBRANE horizontally, starting at the bottom of the slope.

1. Position the membrane parallel to the lower edge of the roof.

2. Overlap the sheet over itself, on half of its width, or 50 cm over the whole length already positioned. It is recommended to kneel on the unfolded portion of the membrane to keep it in place during this operation.

3. Peel back the protective film from the folded section while dropping the membrane on the support.

4. Then lift the other side of the membrane and repeat the previous step.

5. Immediately apply pressure to the membrane using a heavy metal or hard rubber roller, ensuring adhesion between the support and the membrane to avoid forming swellings, folds or gaps.

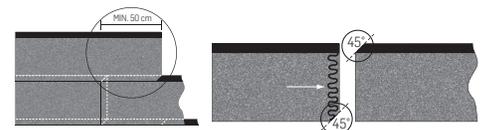
#### OVERLAPS

- Lateral: Use the non-granulated lateral portion of the membrane being 100 mm (4 in) between each edge. The overlap must always be positioned on the upper side of the slope.
- Transversal: 150 mm (6 in) with ELASTOMERIC SEALANT applied with a trowel.
  - Make sure you have a minimum linear distance of 50 cm (20 in) between the transverse overlap of two parallel membranes.
  - When three membrane thicknesses overlap, cut the center membrane corner at a 45 ° angle over a width of 10 cm (4 in).

#### Hints and tips:

Self-adhesive cap sheet membranes can be affected by insufficient ventilation when installed directly on ventilated wood decking. Since it is impossible to anticipate the temperatures that the membranes will be exposed to under these conditions, it is recommended to mechanically fasten them. This can be done with 25 mm (1 in) roofing nails or washer nails installed at the horizontal overlaps every 305 mm (12 in) before covering them with the next strip of membrane. When the slope is quite steep, i.e. 3:12 (25%) and more, this step is strongly recommended.

Note: All nails must be covered with a membrane.



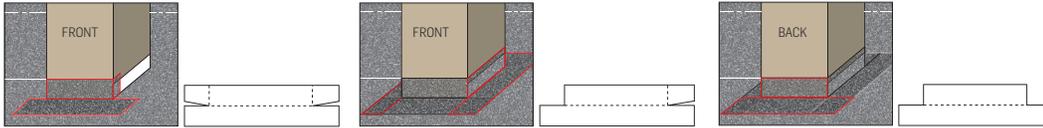
## CAP SHEET MEMBRANE ON VERTICAL SURFACES

### PRODUCTS REQUIRED FOR THIS STEP:

- EXTERIOR PRIMER
- HR CAP SHEET MEMBRANE
- ELASTOMERIC SEALER

### INSTALLATION OF THE CAP SHEET MEMBRANE ON UPSTANDS

- |                                                                                                                                                                                      |                                                                               |                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Apply the primer on the surface. The primer is dry when it is sticky to the touch, but not messy.                                                                                 | 2. Cut the membrane to obtain a width of about 30 cm (12 in).                 | 3. Cut the ends to the required length to cover the surface and add about 8 cm (3.15 in) at both ends according to the drawings and picture as shown below.                                                                        |
| 4. Press the membrane in place, the middle against the middle horizontally and vertically, always starting the process from the lowest detail side and ending with the highest part. | 5. Firmly press the membrane with a heavy rubber roller to increase adhesion. | 6. If the top of the cap sheet membrane is not covered with an exterior cladding, it is recommended to mechanically fasten the top of the membrane and then seal it with a sealant as shown in the example below for the parapets. |



#### Hints and tips:

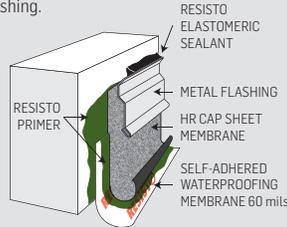
For details where it would be difficult to apply the membrane properly use ALSAN FLASHING.

## FINISHING PARAPETS

HR CAP SHEET MEMBRANE must cover the vertical surface of the parapet up to approximately 150 mm (6 in) above the membrane underlay.

1. Apply the metal flashing over the existing membrane.

2. Apply a bead of ELASTOMERIC SEALER on top of the metal flashing.



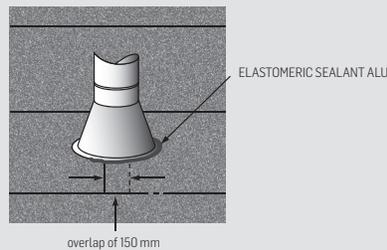
## CAP SHEET MEMBRANE ON CIRCULAR PROTRUSION

### PRODUCTS REQUIRED FOR THIS STEP:

- FINISHING MEMBRANE
- ELASTOMERIC SEALANT ALU OR ALSAN FLEX 2945 SB

### INSTALLATION OF MEMBRANE ON A CIRCULAR OUT

- |                                                                                                                      |                                                                                                                   |                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Cut the membrane to obtain a length to cover approximately 75 mm (3 in) longer than the middle of the metal deck. | 2. Practicing a semi-circular opening at the end of the membrane, in the metal flashing shape, and glue in place. | 3. Cut a semi-circular opening in the second membrane, making sure to obtain a transverse overlap of 150 mm (6 in) on the membrane already in place. |
| 4. Firmly press the membrane with a heavy rubber roller to increase adhesion.                                        | 5. Apply a bead of ELASTOMERIC SEALANT ALU to seal around the membrane and metal deck.                            |                                                                                                                                                      |



#### OPTIONAL FINISH

**ALSAN FLASHING:** Small colored granules can be applied to the finishing coat of ALSAN FLASHING immediately after its application when the surface is still wet. This application is performed from bottom to the top with a plastic spatula, for example.