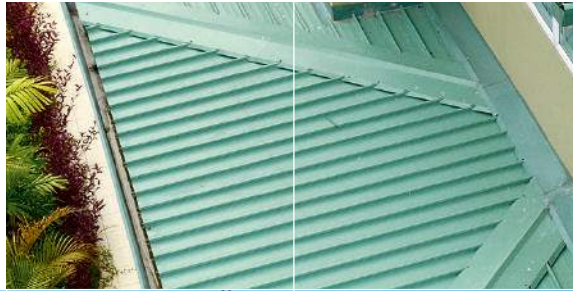


NS BLUESCOPE LYSAGHT SINGAPORE

LYSAGHT® KLIP-LOK® OPTIMA™

Installation Guide



Structural Solutions



Roofing & Walling Solutions



House Framing Solutions

LYSAGHT® KLIP-LOK® OPTIMA™

The Widest Concealed-Fixed Cladding

INSTALLATION METHOD

PREPARATION

Before starting work ensure that:

- The supports for your cladding are truly in the same plane;
- The minimum roof slopes conform to our recommendations; and
- The overhangs of sheets from the top and bottom supports don't exceed our recommendations.
- The first and last supports and clips should be at least 75mm from each end of the sheet to keep maximum holding power.

Make any necessary adjustments before you start laying sheets, because they will be difficult to rectify later.

ORIENT SHEETS BEFORE LIFTING

Consider which end of the building is best to start from. For maximum weather-tightness, start laying sheets from the end of the building that will be downwind of the worst-anticipated or prevailing weather (Figure 1).



FIGURE 1

Lay sheets towards prevailing weather

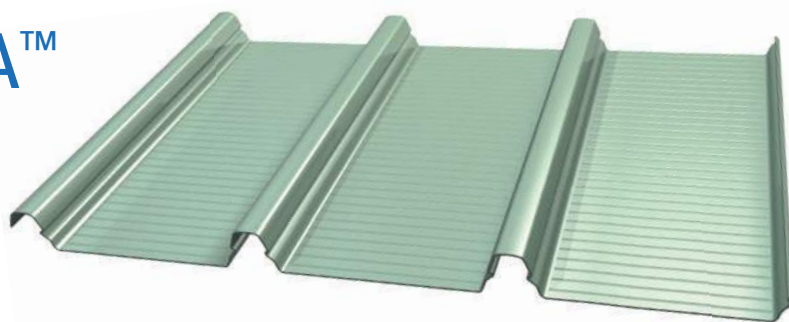
It is much easier and safer to turn sheets on the ground than up on the roof. Before lifting sheets on to the roof, check that they are the correct way up and the overlapping side is towards the edge of the roof from which installation will start.

Place bundles of sheets over or near firm supports, not at mid span of roof members.

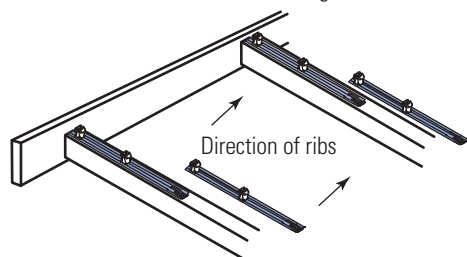
STEPS FOR INSTALLATION

- 1 Lay and fix wire mesh to the supports in accordance with the appropriate building requirements. (Figure 2)
- 2 Position the first clips on each support by placing onto the support nearest the gutter. (Figure 3)
- 3 Fix the first clip on the support so they point in the direction of laying. Ensure the clip is 90 degrees to the edge of the sheet.
- 4 Align the clips with the spacer using a string line (or the first sheet as a straight edge) to align the clips as you fix a clip to each support working towards the high end of the roof.
- 5 Drive hex-head screws through the top of the clip, into the support.
- 6 Work along the edge of the gutter, ensuring it aligns correctly at its ends in relation to the gutter and ridge (or parapet or transverse wall).
- 7 Place the glass wool insulation between the supports.
- 8 Measure the distance from the gutter end of the sheet to the support.
- 9 Position the first sheet so that it overhangs the desired amount (usually 50mm) to the gutter. It is important to ensure this first sheet is placed square to adjacent edges. (Figure 4.)
- 10 Engage the sheet with clips using vertical foot pressure on all the ribs over each clip. (Figure 5)
- 11 Fix the next row of clips, one to each support with the slots and tabs engaged. Be sure the clip is 90 degrees to the edge of the sheet.
- 12 As before, place the next sheet over its clips ensuring you also engage the edge of the preceding sheet.
- 13 Accurately position the sheet so that it overhangs the desired amount into the gutter. It is important that you keep the gutter-end of all sheets in a straight line.
- 14 Fully engage the two sheets along the overlapping rib. You can do this by walking along the full length of the sheet with one foot in the centre pan of the previous sheet and the other foot applying vertical pressure to the top of the interlocking ribs at regular intervals. It is important that you don't walk in the unsupported pan beside the overlap (Figure 5)
- 15 Similarly, engage all the clips by applying vertical foot pressure to the top of the other two ribs over each clip.

It is essential that the sheets interlock completely. It is important that your weight is fully on the sheet you are installing.



LYSAGHT® KLIP-LOK® OPTIMA™: Starting method



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FIGURE 2

Fix the first rows of clips. Fix the next (and subsequent) clips and sheets.

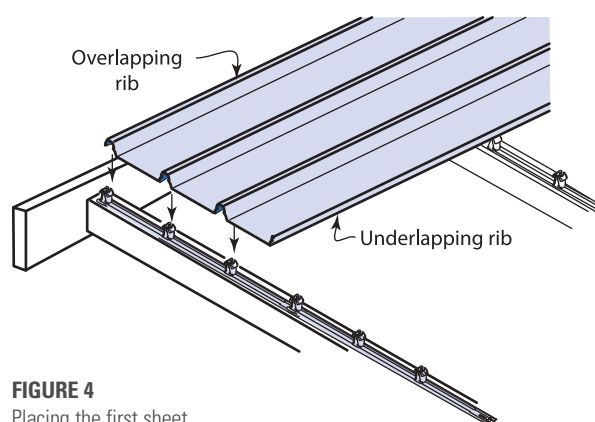


FIGURE 4

Placing the first sheet

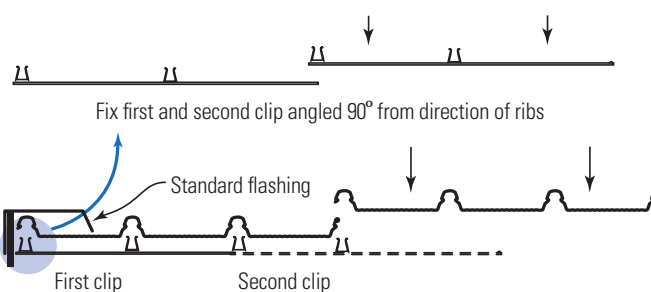


FIGURE 3

Place first sheet on clip and snap onto clip. Add subsequent clips and sheets as required.

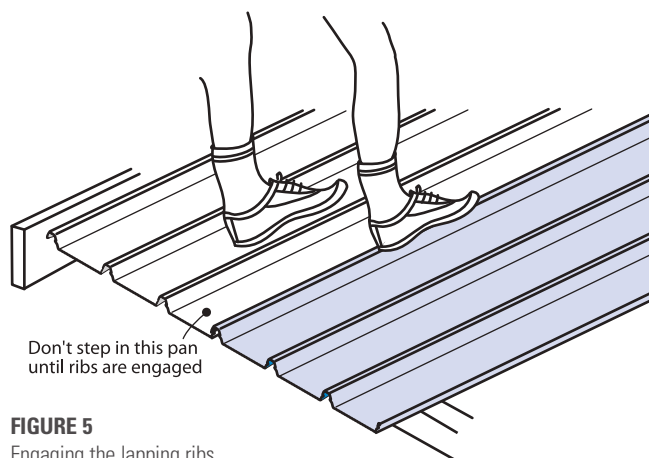


FIGURE 5

Engaging the lapping ribs

CHECK ALIGNMENT OCCASIONALLY

Occasionally check that the sheets are still parallel with the first sheet, by taking two measurements across the width of the fixed sheeting.

At about half way through the job, perform a similar check but take the measurements from the finishing line to aim for the final sheet to be parallel with the end of the roof. If the measurements are not close enough, lay subsequent sheets very slightly out of parallel to gradually correct the error. (Figure 6) To allow this to happen, flatten the tabs on the base of subsequent clips - the slot in the clip will allow the clips to be fixed out of standard pitch.

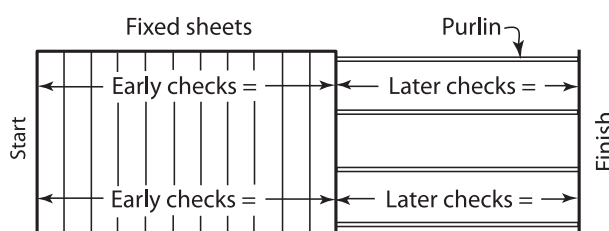


FIGURE 6

Check alignment occasionally

FIX THE LAST SHEET

If the final space is less than the full width of a sheet, you can cut a sheet along its length and shorten the clips as appropriate. It is desirable to fix the sheet at one end.

INSTALLING LYSAGHT® KLIP-LOK® OPTIMA™ WALLS

The installation procedure for walls is similar to that described for roofs. To prevent LYSAGHT® KLIP-LOK® OPTIMA™ from sliding downward in the fixing clips, you should pierce-fix through each sheet under the flashing or capping, along the top of the sheets.

INSTALLING TRANSLUCENT SHEETS WITH LYSAGHT® KLIP-LOK® OPTIMA™

Because of its greater thermal expansion, translucent cladding should be fixed using oversized holes and sealing washers recommended by the cladding manufacturer. When used with concealed fixed claddings, ensure the fasteners do not penetrate the steel cladding. There are translucent products available that easily accommodate this.

Note: Don't exceed the maximum support spacing specified by the translucent cladding manufacturer. Use of translucent sheeting may result in lower limit state capacities.



Trusted Partner for Building Systems

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