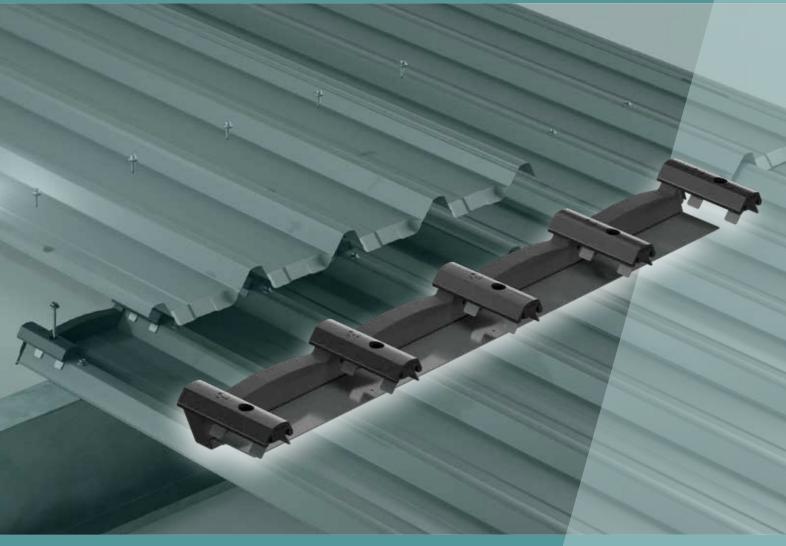


ROOF LAP JOINT SYSTEM FOR TRIMCLAD® ROOFING



A Met-TECH™ GUIDE

OCTOBER 2025





WHAT IS LOKSEAL™?

LOKSEAL[™] is a patented roof lap joining and sealing system for Trimclad[®] roofing, providing roofing installers with a fast and easy, cost effective solution to long-length roof sheet spans. LOKSEAL[™] is a high-strength steel clip that has been tested to withstand the rigours of high wind and rainfall events.

TESTED AT JAMES COOK UNIVERSITY CYCLONE TESTING STATION

Uplift tested to comply with Australian Standards AS/ NZS 1170.2. Testing for LOKSEAL™ was undertaken at James Cook University (JCU) Cyclone Testing Station. The objective was to evaluate the lap expansion/ seal joint's ability to withstand extreme weather conditions, specifically those associated with 1 in 100 year maximum rainfall events and wind loads, in accordance with Australian Standard AS3500.3.

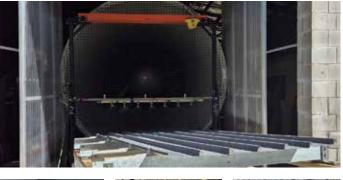
The test simulated a worst-case scenario involving rainfall runoff rates of approximately 10 litres per metre per minute and wind speeds ranging from 55 to 60 km/h. These wind forces were applied at an angle parallel to the roof sheet surface (i.e., 0 degrees), representing the most severe wind-driven rain conditions. LOKSEAL™ was tested at three different roof angles; 0 degrees, +15 degrees, and -15 degrees. All tests were conducted with a turned-down overlap sheet to replicate standard installation practice.

What is

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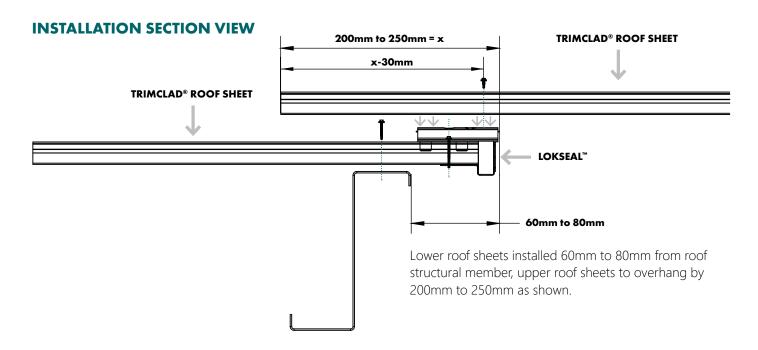








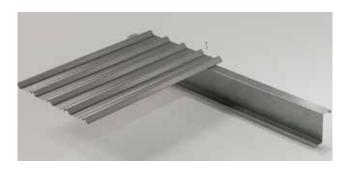




INSTALLATION STEPS - CLIP FIX ROOF SHEETS

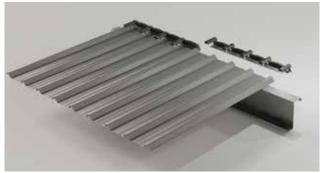
STEP 1

Do not turn up underlapping sheet. Screw roof sheet down onto purlin. Fasteners to be as per standard Trimclad® fastener specification.



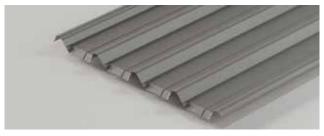
STEP 2

Slide the LOKSEAL $^{\text{m}}$ length into the ribs of the roof sheet, fix M6 x 50 hex head roof zip screw through each bracket to securely attach the LOKSEAL $^{\text{m}}$ to the roof sheet. Continue this step down the length of the lower run of roof sheets. Ensure LOKSEAL $^{\text{m}}$ is pressed against the roof sheet when fixing tek screw to achieve seal. Ensure screw is fixed through the hole in the top of the bracket. Ensure LOKSEAL $^{\text{m}}$ captures and attaches to the bottom rail fully.



STEP 3

Turn down the pan section of upper run of roof sheets.



STEP 4

Install the upper run of roof sheets, LOKSEAL™ is then encased between the joining roof sheets and forms a strong connection and sealed joint of the upper and lower roof sheets. Use one #12 x 20mm hex head self-drilling screw per rib to fix the top roof sheet to LOKSEAL™ as per dimensions on installation section view on page 2 between the rail screw and the foam. Use a string line to line up screw before fixing.



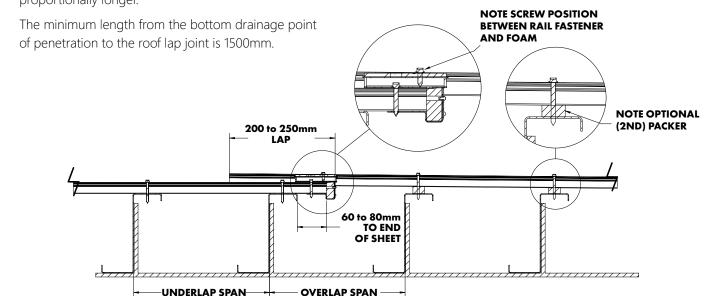
SPAN PRESSURES & DESIGN NOTES

When LOKSEAL™ Trimclad® roof lap joint system is used in conjunction with Trimclad® fix roof system, the spans, pressures and design notes in the Trimclad® design and installation guides remain unchanged with the following conditions:

- The lapping spans at each joint shall be regarded as end spans for the purpose of determining wind and foot traffic capacity.
- To ensure drainage, the overlap span minimum length depends upon the use of suitable packers beneath the sheeting on upstream purlins.
- Table A provides data for the range of spans and packer thicknesses. This is for packers on the first purlin upstream.
- The need for a second packer further upstream can improve this for lower pitches.
- If 10mm packers are used on the first purlin upstream, and 5mm on the second purlin, then the minimum end span drops to about 400mm, regardless of roof pitch.
- Where a packer is used the screw length needs to be proportionally longer.

TABLE A - MINIMUM OVERLAP ROOF SPAN mm

ROOF PITCH	PACKER THICKNESS		
	0 mm	5 mm	10 mm
2°	2300	1750	1150
2.5°	1150	900	600
3°	800	600	400
4°	500	350	250
5°	350	250	200



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