

BEST PRACTICE TIPS TO ENSURE A SUCCESSFUL APEX PLUS INSTALLATION

This summary of critical installation points in no way replaces the full Apex Plus Installation Guide which is available for download on www.eva-last.com. It is recommended that you download and familiarise yourself with the full installation guide.

CRITICAL INSTALLATION POINTS

- **Safety:**

- Please refer to the safety information provided in the Installation guide, Material Safety Data Sheet and Safe Working Procedure for guidance when working with Apex Plus and other glass fibre reinforced products.

- **Substructure:**

- Plan your substructure to align with the intended deck layout.
- Ensure your substructure is level and secure.
- Use appropriate spans. The maximum centre-to-centre span for the 140 mm wide Apex Plus profile is 450 mm. These spans are suitable for residential applications and most other applications. Consult an appropriately qualified professional for spans above this maximum, or where ultimate load cases are greater than 4 kPa and/or serviceability load cases are greater than 2 kPa (based on a serviceability limit of 2.5 mm for this span).
- Support boards along all cut edges.
- Use double joists at all butt joints so that both board edges are fully supported.
- Use noggins between joists where breaker boards are used. The spans between noggins must not be greater than the maximum centre-to-centre span of Apex Plus.
- Boards should overhang the last clip fixing by a minimum of 10 mm and must not exceed 20 mm from the support edge.

- **Fastening:**

- Hulk halo (s-series) or Chain Collated Clips must be used when installing Apex Plus. The manufacturer cannot guarantee a successful install using other decking clip brands which could then affect the warranty.
- Use two fasteners (hidden clips or top fixings) at every joist.
- Boards wider than 150 mm require three fasteners per joist when top fixed.
- Maintain a clip fastening distance of between 10 mm (minimum) and 30 mm (maximum) from the end of the board.
- When top fixing boards (decking and fascia), ensure a minimum spacing of 30 mm between fasteners.
- When top fixing boards (decking and fascia), ensure a spacing of 30 mm between the fastener and any profile edge.
- Appropriate fasteners must be used when top fixing.
- Do not over-tighten any fasteners. The torque setting of your driver must be less than 30 % of the maximum allowable.

- **Ripping:**

- Do not rip groove boards narrower than 60 mm or square edged boards narrower than 90 mm.

- **Trim or Fascia:**

- Always install your trim or fascia beneath the lip of the boarder board.

- **Expansion:**

- Apex Plus can expand and contract up to similar rates experienced with typical wood-plastic composite materials.
- To allow for an appropriate expansion gap per board, multiply the length of the board (Length) by 0.04 and by the difference between the installation temperature and the possible maximum temperature of the boards (Change in Temp.):

$$\text{Change in board length} = \text{Length} \times 0.04 \times \text{Change in Temp.}$$

Example: Change in board length = $5.45 \times 0.04 \times (36 - 18)$

Change in board length = 3.9 mm

Expansion gap = $3.9 \text{ mm} / 2$

Expansion gap = 1.95 mm (either end of the board)

- Use the same method to estimate maximum gap size (when boards are fully contracted) to ensure this is suitable for the project.
- Where the expected temperature range is high consider using lighter coloured deck boards to reduce the required expansion gap.
- To further reduce the expansion gap, boards can be cut to shorter lengths.
- Breaker boards can be used between boards that are installed end-to-end to assist in controlling expansion and contraction.
- Use boarder boards around the perimeter of an installation to further assist in controlling expansion and contraction.
- Do not use grooved decking boards for stairs, breakers and/or boarder boards, only use square edge boards.
- Please refer to the appropriate section in the full installation guide for more information on this topic.

If the expansion and contraction is not managed appropriately, the warranty may be affected!