

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

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 and 190 mm (5.51" and 7.48") wide Apex Plus profiles is 450 mm (16"). These spans are suitable for residential applications and most other typical applications. Consult an appropriately qualified professional for spans above this maximum, or where ultimate load cases are greater than 4 kPa (0.580 lbf.in²) and/or serviceability load cases are greater than 2 kPa (0.290 lbf.in²) (based on a serviceability limit of 2.5 mm (1.0")).
- 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.

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 your warranty.
- Use two fasteners (hidden clips or top fixings) at every joist.
- Boards wider than 150 mm (5.906") require three fasteners per joist when top fixed.
- Maintain a clip fastening distance of between 10 mm (0.379") (minimum) and 20 mm (0.788") (maximum) from the end of the board.
- When top fixing boards (decking and fascia), ensure a spacing of 30 mm (1.182") between fasteners and from any board 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 solid groove boards narrower than 60 mm (2.113") or square edged boards narrower than 90 mm (3.554").

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 (L) by 0.04 (0.000022) and by the difference between the installation temperature and the possible maximum temperature of the boards (Change in Temp.):

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

Example: Change in board length = $5.45\text{m} \times 0.04 \times (36 - 18) / (18' \times 0.000022 \times (96.8 - 64.4))$

Change in board length = $3.924\text{mm} / (0.155")$

Expansion gap = $3.924\text{mm} / 2 / (0.270" / 2)$

Expansion gap = $1.962\text{ mm} (0.078")$ (either end of the board)

Please refer to the Section 3.5.1 for more information on this topic.

- 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 must 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.
- If the expansion and contraction is not managed appropriately, the warranty may be affected.



Before installing, please ensure you have downloaded the latest version of this installation guide by scanning this code.