Pioneer

CRITICAL INSTALLATION POINTS

BEST PRACTICE TIPS TO ENSURE A SUCCESSFUL PIONEER INSTALLATION

This summary of critical installation points in no way replaces the full Pioneer 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 145 mm (5.709″) wide Pioneer profile is 450 mm (17.7″).
    - 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 (0.580 lbf.in^2) and/or serviceability load cases are greater than 2 kPa (0.290 lbf. in^2) (based on a serviceability limit of 2.5 mm (1.0″)).
  - Support boards along all cut edges.
  - Use double joists at all butt joins 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 Pioneer.
  - Boards should overhang the last clip fixing by a minimum of 10 mm (0.379″) and must not exceed 20 mm (0.788″) from the support edge.

- **Fastening:**

  - HULK halo (S-series) or Chain Collated Clips must be used when installing Pioneer. 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 and Cutting:**

  - Do not rip solid groove boards narrower than 60 mm (2.113") or square edged boards narrower than 90 mm (3.554").
  - When cross cutting Pioneer boards it is essential to cut through the capping of the board at a slow pace to prevent the cap from lifting. Once the cap has been cleanly severed cutting can commence at a regular speed and pressure.

- **Trim or Fascia:**

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

- **Expansion:**

  - Pioneer 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 and by the difference between the installation temperature and the possible maximum temperature of the boards (Change in Temp.):
  - Change in board length = **L x 0.04 x Change in Temp.**

    Example: Change in board length = 5.45 x 0.04 x (36°C - 18°C)
    Change in board length = 3.9 mm
    Expansion gap = 3.9 mm / 2
    Expansion gap = 1.95 mm (either end of the board)

Please refer to **Section 3.5.1** in the full Pioneer installation guide 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.

Excessive and unusual heat sources

Eva-Last products are designed for typical exterior installations. Damage from excessive heat is excluded from warranty coverage. n your substructure to align with the intended deck layout.

- **Warranty Exclusion:** Damage from excessive heat sources, including reflected sunlight from Low-E glass, is not covered. Refer to the Eva-Last Warranty.
- **Low-E Glass Impact:** Low-E glass windows can reflect sunlight, causing concentrated heat that damages exterior products. This can lead to surface and structural damage on Eva-Last products.
- **Recommendations:**
    - Contact the Low-E glass manufacturer for solutions to mitigate reflected sunlight effects before installation.
    - Consider potential heat damage during installation.

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