Drainage and Ventilation

When designing and building a deck, it is important to consider the drainage and ventilation to prevent moisture absorption. The boards may start cupping and structural damage may occur due to moisture absorption. Ventilation should always be considered prior to construction. To achieve rainwater "run off", the deck should be laid on a slight gradient of at least 1 in 80 (1.25%) in the direction of the long side of the boards in the grooves direction. Good drainage and ventilation around and under the deck is required.

Safety Instructions

When handling and processing Timco Wood products, always wear gloves, eye protection, and work in a well-ventilated area. Always wash your hands after handling Timco Wood products, especially before eating or drinking. Wear eye protection when pressure washing or scrubbing the deck. Keep children and animals away from the work area until the job has been completed and the tools have been stored in a safe place. When cutting, planing, or sanding our products, be aware that the creation of dust and noise will occur. We recommend that all operatives carrying out these tasks wear suitable P.P.E., including gloves, eye protection, dust masks, and ear defenders.

Weathering & Storage

Timco Wood composite products are made from 60% natural material and each board is designed to imitate traditional timber often with naturally occurring variations in colour, texture, and grain pattern. For this reason, slight colour variations may occur (more noticeable when purchasing different products). We will always endeavour to pick all products from the same batch however, when orders are added or amended at a later date the boards will likely be from a different batch. Therefore, colour variation is likely. Please ensure you order the correct amount of boards on the initial order.

Where possible, Timco Wood composite should be stored indoors and away from any direct sunlight to avoid any natural weathering prior to installation. Should indoor storage not be possible, the boards should be kept covered in a shaded, free-draining area and supported off the ground by level bearers set at least 200mm apart, centre to centre.

We recommend that all operatives carrying out these tasks wear suitable P.P.E. including gloves, eye protection, dust masks, and ear defenders.

Please Test pass results apply to the groove side of the boards only.

Prepare Your Site

Clear any plants or vegetation, trees, and rocks from the area taking care not to disturb any underground cabling or drains. If the area to be decked is currently grass, remove the turf or cover the area with a weed barrier ensuring to bury and tuck the material around the edges.

Once the above has been done, the area must be solid prior to installing joists. Standard recommendations such as a concrete base or compacted gravel or hardcore is suitable as it allows for drainage and provides a strong solid structure on which to build the subframe.

Joist Configurations

Timco recommend a minimum of 200mm elevation between the ground and joists is required beneath Timco Wood decking. Always leave at least 2 sides of the subframe open to allow for cross ventilation under the deck.

Always lay deckboards groove direction in the same direction of the drainage gradient so water can drain freely with a gradient across the whole length of the deck of at least 1:80 (1.25%). Ventilation is very important, composite wood will absorb moisture from the ground beneath the deck. If adequate ventilation is not adhered to, the moisture underneath the deck is likely to cause swelling, e.g., expansion, cupping, or bowing. Ventilation should always be considered prior to construction.

Products Required

3.6 Solid Board Clip System & Victoria Boards
- Starter Clip
- Locking Clip
- Clip Screws & Bit

2.4 Solid Board Clip System
- Starter Clip
- Nylon Clip
- Clip Screws & Bit
- Locking Clip

Solid Board Screw System
- Countersink Tapered Drill Bit
- Colour Matching Screws

Timco recommends the use of 3.6 Solid Board Clip System & Victoria Boards for Box Construction, Joist Configurations, Raised Deck Construction, and Construction Over Existing Patio. For Composite Decking - Installation Guide, Joist Configurations, Raised Deck Construction, and Construction Over Existing Patio, we recommend the use of 2.4 Solid Board Clip System. For Joist Configurations, Raised Deck Construction, and Construction Over Existing Patio, we recommend the use of Solid Board Screw System.
When designing your deck please make note of the joist spacing in your frame. Composite wood behaves differently to traditional timber, hence for different spacings than you may be used to. Expansion prediction is crucial when it comes to composite decks. If you need any advice please let us know prior to commencing the job.

A gap of 20mm must be left between the decking and any walls or existing structures.

Any overhang must be at a maximum of 20mm.

Fix Locking/Nylon Clips on each joist at 400mm (300mm for Victoria) centre to centre.

For water drainage, the height of the decking must fall 12.5mm for every 1000mm length. Always pitch down the length of the boards away from any buildings or structures.

A minimum gap of 6mm must be left between each board in any direction to allow for expansion.

Abutted boards must be supported by double joists

All main joists within the subframe must be set at a maximum of 400mm (300mm for Victoria) apart, centre to centre. This applies to both timber and aluminium substructures.

To install fascia trim, pre-drill holes and fix using single screws along the length, in the centre of the trim.

All joins must be supported by a pedestal or joist foot.

Timco Wood composite will expand and contract up to 0.25% of the boards length. Locking clips can be used to control the direction of the expansion.

Pre-drill appropriate holes and fix step boards to the subframe using screws. (25mm from all edges)

Install subframe in accordance to relevant installation guide.

IMPORTANT - Always pre-drill composite wood to avoid cracking or splitting. Prepare the groundwork prior to commencing the fit. Building regulations and Timco recommend the finished decking surface has a drainage gradient of 1 in 80 (1.25%) to allow for water to “run off” freely.

Lay your Joists 400mm (300mm if installing Victoria boards) centre to centre, running the opposite way to the intended direction of the Deck Boards. Make sure to leave a 20mm gap between any walls / fencing / immovable objects such as fixed planters, to allow for expansion.

Ensure cross ventilation is allowed around and under the decking.

Abutted Boards

Ensure all abutted boards are supported by double joists. In certain areas where this is not possible, affix a secondary joist to the main joist using two screws, set at least 25mm from all edges.

If preferred, an optional gap of 4mm can be left between joists to help with drainage.

Step Boards

Step boards should be fixed to joist subframe using two screws per joist, pre-drill holes and set at least 25mm from all edges.

Deck boards can be screwed vertically to mask the subframe beneath, again ensuring all screws are fixed to joists through pre-drilled holes and set at least 25mm from all edges.

Timco Wood composite boards will expand and contract due to weather and temperature changes. We advise following the below instructions for 3.6 metre length boards using Locking Clips (L) to help control expansion. For 2.4 metre length boards, Nylon Clips (N) can be used in place, fixing Locking Clips (L) at specific points to control the direction of any expansion if required. Please see expansion diagram on page 4 for a more detailed explanation.
JOIST CENTRES

When designing your deck please make note of the joist spacing in your frame. Composite wood behaves differently to traditional timber, hence for different spacings than you may be used to. Expansion prediction is crucial when it comes to composite decks. If you need any advice please let us know prior to commencing the job.

Applies to Timco Heritage, Vintage & Classic boards, installed using the Traditional Screw System ONLY Not suitable for Timco Victoria range

A gap of 20mm must be left between the decking and any walls or existing structures.

Any overhang must be at a maximum of 20mm.

Fix two Screws at each joist at 400mm centre to centre, minimum 25mm from all edges.

For water drainage, the height of the decking must fall 12.5mm for every 1000mm length. Always pitch down the length of the boards away from any buildings or structures.

A minimum gap of 5mm must be left between each board in any direction to allow for expansion.

Abutted boards must be supported by double joists

All main joists within the subframe must be set at a maximum of 400mm apart, centre to centre. This applies to both timber and aluminium substructures.

To install fascia trim, pre-drill holes and fix using single screws along the length, in the centre of the trim.

All joins must be supported by a pedestal or joist foot.

Due to weather and temperature changes, Timco Wood composite will expand and contract up to 0.25% of the boards length.

Pre-drill appropriate holes and fix step boards to the subframe using screws. (25mm from all edges)

Install subframe in accordance to relevant installation guide.

IMPORTANT - Always pre-drill composite wood to avoid cracking or splitting.

Prepare the groundwork prior to commencing the fit. Building regulations and Timco recommend the finished decking surface has a drainage gradient of 1 in 80 (1.25%) to allow for water to “run off” freely.

Lay your Joists 400mm centre to centre, running the opposite way to the intended direction of the Deck Boards. Make sure to leave a 20mm gap from any walls or solid structures.

Ensure cross ventilation is allowed around and under the decking.

Abutted Boards

Ensure all abutted boards are supported by double joists. In certain areas where this is not possible, affix a secondary joist to the main joist using two screws, set at least 25mm from all edges.

If preferred, an optional gap of 4mm can be left between joists to help with drainage.

Step Boards

Step boards should be fixed to joist subframe using two screws per joist, pre-drill holes and set at least 25mm from all edges.

Deck boards can be screwed vertically to mask the subframe beneath, again ensuring all screws are fixed to joists through pre-drilled holes and set at least 25mm from all edges.
TIMCO WOOD TRADING LTD

Additional Instructions - Maintenance

Expansion control  Applies to 2.4m boards only

Timco Wood composite decking boards will expand and contract at a rate of around 0.25% of the boards length. However, the direction of expansion can be controlled using Locking Clips (L).

Measure and pre-drill screw holes in the centre of the fascia trim and continue along the length at every 300mm. Screw the trim directly into the joist as shown below. Fascia trim is for decorative use ONLY and is not designed to be walked on.

Installing fascia trim

Installing joists for 45° angle decking

For decking installed at 45° in entirety, the maximum gap between joists should be set at 250mm centre to centre.

Installing joists for 45° angle corners

To finish the corners with 45° angles, set the joists according to figure 1 below. Joists 1 and 2 should be set to the full width of the board final board along the edge. Joist 3 should be positioned at the start of the main boards length, taking into account required expansion gaps (see relevant decking installation guide) and must not allow an overhang of more than 20mm. From joist 3 continue gaps as per relevant decking installation guide.

For decking installed at 45° in entirety, the maximum gap between joists should be set at 250mm centre to centre.

MAINTENANCE

Regularly use a brush and hot soapy water to wash Timco Wood WPC. For water stains or any marks caused by birds, berries or leaves, use a soft cleaning detergent to wash off. For harder stains such as marks containing dyes that leave permanent stains, clean the surface using wire wool or sandpaper lightly to carefully remove.

If using a power washer to clean your product, keep a distance of at least 30cm from the boards.

Do not use solvent based materials on Timco Wood WPC. Do not stain, oil or paint any Timco Wood WPC without guidance.

MINOR DAMAGE

As with any product that is meant for outdoor use, scratches and acts of nature will inevitably occur. If this does happen a 200 grit or finer sandpaper can be used to remove the scratch with no detrimental effect to the longevity and performance of the decking.

COLOUR EXPECTANCY

Timco Wood’s composite products will fade due to sun bleaching over time. As our composite wood is a man made partially recycled product, colour variations and dimension tolerance are to be expected. Our warranty does not cover colour fade, discolouration tolerance or water marks, or stains on our products. On deliveries colour variations may occur in different batches.

DISCLAIMER

The information given in this publication is based on those guidelines for installation on domestic properties. Commercial decks require more robust design, materials and construction to deal with the loads placed on them and are not covered by the guidance in this brochure.

Timco Wood installation manuals are designed as a general guide. They may not cover every installation scenario envisaged. Since each installation is unique; the installation method used and/or the actual installation and its actual performance are the sole responsibility of the installer.

Timco Wood recommends that all designs be reviewed by a licensed architect or engineer before installation. Please ensure your plan and/or design meets building regulations and permission before you begin installation.

If you are unsure of the best practices, please use suitably qualified personnel such as GQA accredited to prevent injuries or accidents and get the best performance from Timco Wood products.

If you require any further assistance or have any questions regarding the installation of Timco Wood composite decking products, please call on 01438 311 203 or email us at info@timcowoodtrade.com.