

Installation guide for NEULAR Deck

neular

the future of green

Technical data

Neular Deck is an economically advantageous and nature-friendly choice. It has been created as an alternative to wood where humidity tolerance, durability and a long lifetime are required.

Our Decks will last you a lifetime, without fading and cracking, with minimal maintenance and virtually limitless options when it comes to textures and colors.

Key features

Maintenance-free

Weathertight – highly enduring; UV resistant

Safe – does not splinter

Watertight – does not absorb moisture

Nonslippery even in wet conditions (level R10)

Density 0,75 g/cm³

Non-toxic

Core composition

LDPE (Low Density Polyethylene) /

HDPE (High Density

Polyethylene) / PP (Polypropylene) / PS

(Polystyrene)

Storing of Neular boards

Make sure that Neular boards are not stored in direct sunlight (to avoid strong warming up).

Please read more in section "Working with Neular" or section 3 about thermal expansion.

Neular boards are watertight and there is no need to protect them from water.

To avoid deformations, the boards must be stacked horizontally. The distance between the bearing woods must not exceed one meter.

Installation

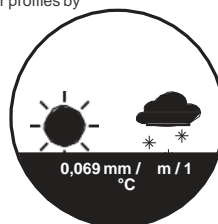
Avoid cutting in freezing or hot conditions. Let the boards acclimatise to reach the homogeneous temperature after removing them from package. During planning take into account also polymers specifics of tolerance (Neular material has max 5% tolerance).

Working with Neular

Neular boards can be cut and drilled like timber. It is recommended that all Neular boards are cut and installed at the same temperature.

Before cutting make sure that the temperature of the boards are the same. An infrared thermometer must be used to measure the surface temperature.

The Neular boards expand or contract when temperature changes occur. Temperature change of 1°C changes the longitudinal dimension of the Neular profiles by 0,069 mm per 1 m.



Distances to fixed components (e.g. house wall, fascia board etc.) must be adhered to. Mounting distances depend on the temperature of the air and boards.

A rough guideline is a distance of 4 mm by 3 m boards and 5 mm by 3,6 m boards if these are laid at air temperatures of less than or equal to 20°C (if the surface temperature of the plank is ≤ 20°C). At temperatures higher than 20°C (board temperature > 40°C), the gap can be smaller or no gap is needed, as the boards will contract on cooling.

**For any assistance,
consult Neular distributor or
info@neular.com**

01 | Material, Decking

Decking Boards



Construction beams

95 x 50 mm



95 x 32 mm



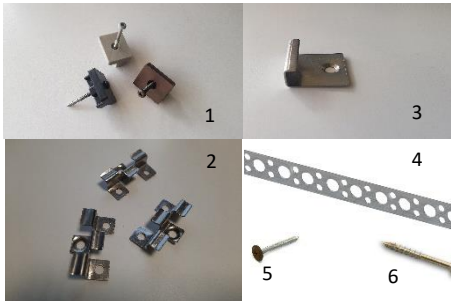
140 x 50 mm



95 x 95 mm

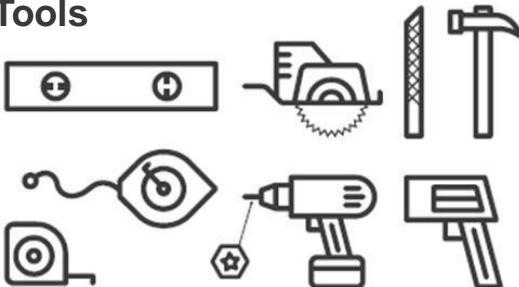


02 | Accessories



1. Plastic clip
2. Metal clip
3. End / Start clip
4. Perforated stainless steel tape for extending the decking length of Neular Craft
5. Facia board screws 4 x 50 mm
6. Fixing screws 4 x 50 mm

Tools



03 | Expansion Gap



Neular boards have the characteristic of changing length based on temperature. When building the deck it is necessary to leave an expansion gap at one end (A). A temperature change of one degree changes the longitudinal dimension of the decking by 0.069 mm per 1 metre.

04 | Base Structure



Neular decking must be placed on Neular joists. The sample used in this installation guide is a 95x95 mm polymer joist. The ground area of the deck must be even and stable to avoid sagging or an uneven tension (load) distribution.

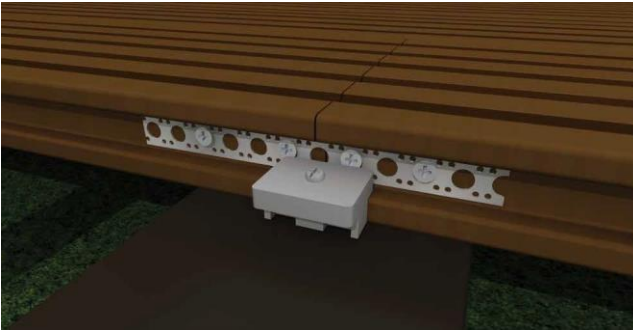
The maximum distance between the joists is 400 mm.

The maximum span
To build the joist structure strength calculations must be made to ensure the construction can support the weight of the decking: 1 m = 3.5 kg and 1 m² = 23 kg



* Optional way of building a higher terrace.

05 | Extending the Decking



To connect Neular Natural decking boards it is necessary to use the stainless steel plate and screws intended for this purpose. They should be placed on the underside of the decking. The stainless steel plate requires at least 6 screws (2 x 3 screws).

* B connecting Neular Craft Decking Boards

06 | Fitting Start Clip

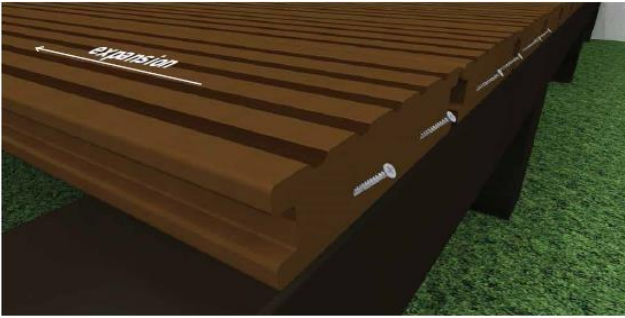


An edge clip is screwed to one end of the joist before installing the decking.

The first deck board is placed against the edge of the clip.



07 | Fixing the Boards and Linear Expansion



A

Fix only one end of the decking board to allow for expansion and shrinkage because of temperature changes.

**NEVER FIX
BOTH SIDES!**



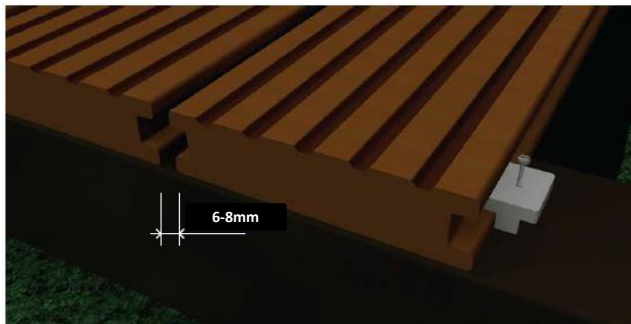
B



C

If you wish to leave extension gaps to both ends, then fix the boards in the middle only.

08 | Fitting Clips



Decking clips allow for longitudinal movement of the decking.

A. Plastic Clip (gap between decking boards 6–8 mm)

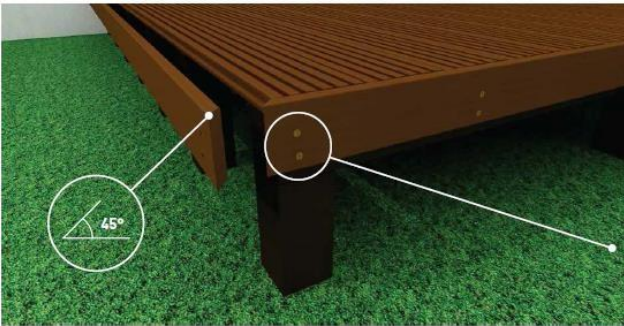


B. / Metal Clip (gap between decking boards 1-2 mm)

09 | Fitting End Clip



10 | Fitting Fascia Board



Fascia boards need to have predrilled holes (2 mm larger than the screw). The screw head must cover the hole. Larger holes provide necessary expansion space.

Fascia boards are attached on each substructure beam (not on decking board).

Fascia boards are always fitted with 2 screws.

The corners of the fascia board must be cut at a 45-degree angle.

The fascia boards are extended leaving a gap of 5 mm between two boards to allow for expansion.





More information

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