



Changes to E3/AS1 Effective 4 November 2021

ENGINEERED TIMBER FLOORING INSTALLATION GUIDE



1 SCOPE OF USE

Creative Flooring's engineered timber flooring system is designed for use as non-structural overlay flooring inside residential and commercial buildings. Installations outside of the scope of use will not be covered under warranty.

- Our flooring is suitable for all areas other than garages, bathrooms and commercial kitchens.
- Our flooring should always be installed onto an approved substrate.
- Additional requirements must be adhered to for installations in wet areas.
- Additional requirements must be adhered to for installations with underfloor heating.
- The area with flooring should be protected against changes in climate. Refer to our specific instruction document for site installations.

2 APPROVED SUBSTRATES

- 1) Concrete floors
- 2) Timber flooring (structural or overlay, but not timber joists)
- 3) Concrete floors with hydronic underfloor heating systems (set into slab 45mm minimum)
- 4) In-screed electric underfloor heating system (not ideal and sign-off required – but a supplier such as Warm-Up will warranty under their guidelines <https://www.warmup.co.nz/>)
- 5) Wet-area membrane systems (when approved by the membrane system supplier)
- 6) Acoustic underlay glued to an approved substrate

3 SLIP RESISTANCE

In regards to slip resistance, please check the recommendations from your local Council. Particularly for commercial applications.

There are options from Tredsafe <https://www.tredsafe.co.nz/> .

Adhesive inserts can be routed and glued into the tread nosing.

Entrance mats should always be incorporated at main entrance points, especially in commercial settings, to minimise damage.

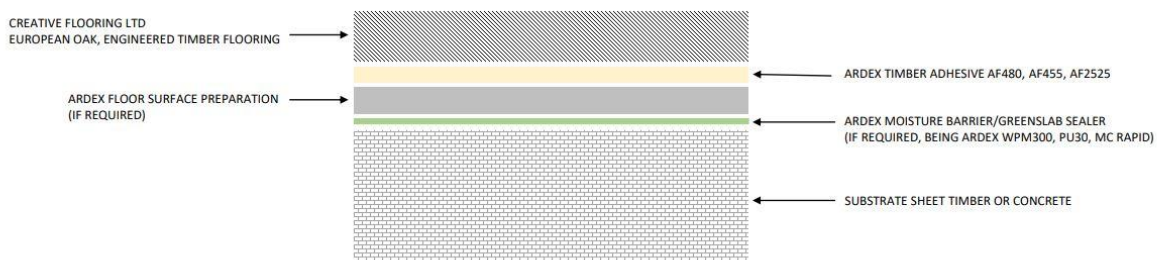
4 WET AREAS

A wet area is a kitchen, bathroom, laundry, toilet and any other area containing sanitary fixtures/appliances. Under changes to E3/AS1 from 4/11/2021 'Acceptable Solutions' in wet areas are only; Tiles, Vinyl or Polished Concrete. Timber flooring in wet areas must now be submitted to Council under the category 'Alternative Solution'. Timber flooring IS an acceptable alternative solution for wet areas, however we still recommend a surface such as tiles in bathrooms and laundries, due to the humidity factor and high water splash. In areas where open/door-less showers are installed, we do not recommend wood flooring.

5 INSTALLATION OPTION

Please note that all Creative Flooring’s engineered timber **lock** flooring has wax applied to the edges (and sealed backs) by our manufacturer. For added insurance against moisture ingress however, applying waterproof, cross-linked PVA would be providing a further level of protection.

Adhesive system for our engineered flooring diagrams below. Please note that Ardex Moisture Barrier WPM002 has BRANZ Appraisal No 472. This is one system option. Similar systems can be used. With reference to the following diagrams; first two refer to single level dwellings, second two refer to E3 compliance for multi-level dwellings.



ARDEX NZ TIMBER INSTALL (NO IMPACT/SOUND REDUCTION)

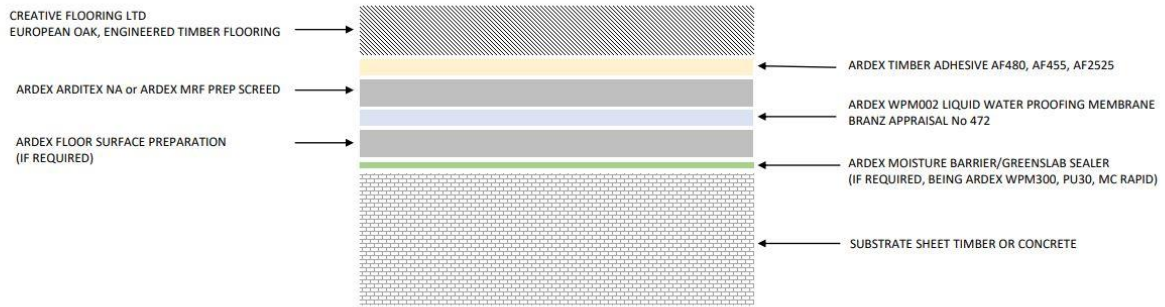
Please reference back to the Ardex data sheets for specific details on each product.



ARDEX NZ TIMBER INSTALL (WITH IMPACT/SOUND REDUCTION)

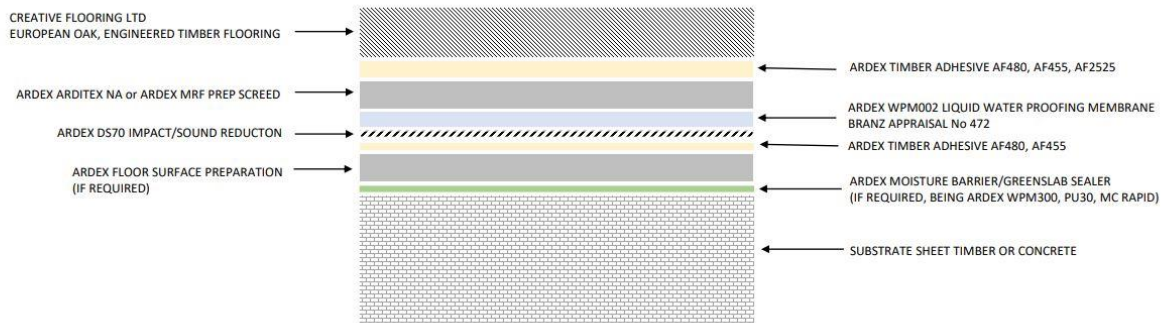
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ARDEX NZ TIMBER INSTALL E3 COMPLIANCE (NO IMPACT/SOUND REDUCTION)

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ARDEX NZ TIMBER INSTALL E3 COMPLIANCE (WITH IMPACT/SOUND REDUCTION)

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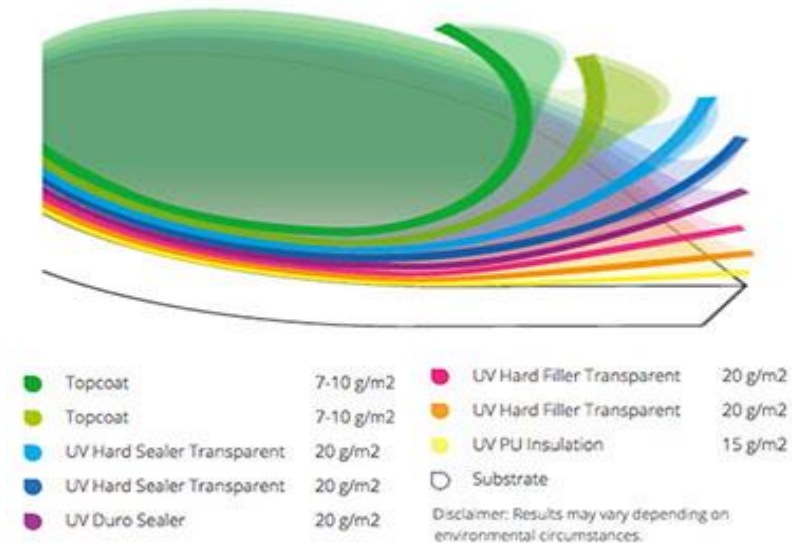
It is important to note that all installation components of the wet-area membrane and the timber flooring installation come from the same supplier to ensure the system is complete so as to not void the warranty.

After installation is complete, use a flexible, waterproof sealant specific for use with timber flooring to seal the perimeter as well as any fixed items in the room. In open-plan spaces this should extend 1.5m from each sanitary fixture/appliance.

6 FINISHES (COATINGS)

LACQUER

All our pre-finished **lacquered** engineered flooring has the Treffert Sapphire coating system, where eight coats are applied.



HARD WAX OIL

On our **oiled wood** floors we use is Osmo Hard Wax Oil. Wood is a natural material and the cell structure, similar to our skin, can take on and release moisture - meaning it breathes. To ensure that this exchange is not prevented we use finishes especially suited to the nature of wood. Osmo natural wood finishes are based on oils and waxes. The oils penetrate into the wood surface, protecting the wood from deep within. The waxes form an elastic, microprorous surface which protects the wood from external moisture and abrasion. The wood remains naturally beautiful, protected and durable <https://www.osmo.co.nz/product/Polyx%C2%AE-Oil>.

7 CLEANING & MAINTENANCE

Timber flooring is easily cleaned using a vacuum and a damp mop. We supply detailed care and maintenance guides with our wood floors along with the option to supply the correct products on an ongoing basis.

Timber flooring is a natural material and regardless of whether it is a lacquer or oil finish, correct care and maintenance will extend its performance and longevity.

Maintenance of Osmo finished floors is easy. Regular cleaning and maintenance with a Ph neutral detergent, such as Osmo's Wash & Care, will ensure the finish will look good for years to come.

8 UNDERFLOOR HEATING

Creative Flooring (like most other engineered timber flooring suppliers) does not recommend installation of wooden flooring over **electric radiant heat** and therefore does not warrant such installations. The main reasons for this are:

Electric under floor heating is able to supply an almost instantaneous heat that warms up the flooring over a very short period of time. This can cause tension in the wood with the risk of splits appearing in the top layer.

The main problem is that the end user has the tendency to give full power to the system as the ambient temperature drops.

A **hot water pipe system**, by nature of its operation, tends to have a slower heating time frame but the following should be adhered to. Engineered flooring is the more stable option for such installations.

The guidelines below are offered as additional pointers to successful installation:

1. As with any direct stick floor you should be checking and recording your slab moisture levels (particularly new slabs). Obviously only installing over acceptable levels.
2. It should be ensured that the floor is flat – 3mm over 3m is the acceptable industry standard.
3. The radiant heat should be turned on for a lengthy period prior to the install to chase out any moisture from the slab. 21 days is recommended for new slabs.
4. The floor should be coated with a moisture barrier/retarder.
5. Moisture levels should be checked and recorded again once the barrier/retarder has been applied and cured as per the manufacturer's recommendations.
6. As far as is possible, acclimatisation of the timber floor within the environment it is going into, for as long as possible, would be ideal. The room temperature should not vary more than 9 degrees C between seasons and humidity should be maintained between 45% and 60% throughout the year.
7. The boards should be run at right angles to the heating pipes/elements below the substrate to give even heating across the boards (**consider your desired flooring direction, and advise your heating installer**).
8. Sufficient glue applied as per the manufacturer's recommendation.
9. Before installation, reduce the temperature gradually by 5 degrees C per day. At the time of installation, the sub floor temperature should be between 16-18 degrees C. After installation a temperature of 16-18 degrees C should be maintained for a further 3-4 days before returning to the recommended subfloor temperature of 24-27 degrees C.
10. Thermostats should be in the floor and not wall mounted.
11. Any increase in temperature should be made slowly, only 2-3 degrees at a time and left for a period of at least 12 hours to stabilize before increasing further. Maximum temperature is 27 degrees Celsius.
12. Once a desired temperature is reached, it should be maintained for the duration of the winter months.
13. Avoid rapid changes in heating temperatures.

Decrease temperature in a similar way, avoiding rapid changes.