
GENERAL INSTALLATION

a) Before Installation

1. Care must be taken to ensure the C/S screeding are flat and even.
2. The C/S screeding must be dried and ready to lay pre-finished engineering flooring. It is also had to prevent excess moisture, humidity and water entering the premises either from floor, wall and/ or window, before, during and after fixing.
3. Flooring should send to site of which the flooring is going to lay 3 – 5 days before fixing. So that the flooring could acclimatize the surrounding condition.

b) Installation

1. To lay 1 layer of plastic sheet (DPM) on top of the existing C/S concrete screeding (the C/S screeding must be even and dry) and dress up about 80mm high along the wall and skirting. The plastic sheet should have 200mm overlap with each other.
2. To lay 1 layer of 15lbs bitumen felt on top of above plastic sheet (This layer is NOT a must!)
3. To punch nail on 1 layer 12mm(tk) plywood backing onto existing floor surface with suitable size of concrete nail and firmly fixed the plywood. 6-8mm gap should be allowed between the plywood backing and 10mm expansion gap should be allow along the perimeter of wall.
4. To secrete nail the pre-finished engineered flooring onto the plywood substrate and apply the white glue under the tongue of the pre-finished engineered flooring. This is not a must procedure. But it will surely help the pre-finished engineered floor to prevent the noise occur and wherever the subfloor is not even.
5. Allowing 10-12mm expansion gap along the perimeter of the wall.
6. To remind, the gap allowed as stated above is only a reasonable guideline. If the wood flooring end up absorbing too much moisture from surrounding (ie from floor, wall or air or water flood...etc), it will expand more than the expansion gap allowed.

c) After Installation

After completion, to cover the pre-finished flooring with suitable protective layer. It is suggested to use a layer of 2mm foam sheet plus 5mm thick plywood protection.

INSTALLATION OF UNDERFLOOR HEATING SYSTEM

When the flooring is to be installed in an area with an underfloor heating system, it is necessary to use the nailing down OR glue down method. As well as conferring greater dimensional stability on the floors, the perfect adherence of the wood to the sub-floor guarantees better conduction of heat into the rooms.

When the nailing down OR glue down installation is over an underfloor heating system, it is necessary first of all to make sure that the heating system is one that functions at a low temperature, then that the distance between the wood and the heating pipes or cables embedded in the screed is at no point less than 30 mm, and finally that the contact temperature of the hardwood floor surface will not exceed 26/27°C.

The construction characteristics of the sub-floor must be determined; it must be protected against the possibility of moisture intrusion and must be level, solid, clean and, in the case of concrete slab, have a maximum residual humidity of 1.7% (percentage of water to dry weight).

The Specific Requirements For Wood Floors Over Under Floor Heating.

The floor construction must have a heat-distributing layer that gives a very even temperature across the entire floor area, in order to avoid excessive temperatures near the heat source. The entire living area must be heated. However, this does not apply to comfort heating systems, which complement the normal heating. The temperature in this case is significantly lower than the permitted 27°C at the floor surface. The floor covering (including intermediate layer) should have a low thermal conductivity. It must be possible to control and limit the surface temperature very accurately. The installed floor's temperature must never exceed 27°C. This also applies under carpets and furniture. If the room does not have too many textile floor coverings or particularly thick rugs, it is reasonable to achieve 23°C in the clear floor areas, giving a room temperature of approximately 21°C. The condition, of course, is that the room has normal heating requirements, i.e., it must have normal standards of draught proofing, insulation, window area, ceiling height, etc. Note that the requirement for max. 27°C also applies to pipe runs from bypass groups. A vapour barrier must be built into the floor construction. This should be as close to the wood floor as possible. It is particularly important that the vapour barrier is close to the wood floor if the structural floor is thick or heavy. Under no circumstances must the vapour barrier be on the opposite side of the structural floor. The wood floor must lie tightly to the substrate, without air gaps that may cause substantial drying of the wood. Provided the conditions above are met, both warm water and electrical under floor heating systems are suitable for use with our engineered wood floors.

Above information is for reference only; all depends on the site decision and type of floor heating system used.
Better to inform and consult with supplier every time.