

## **Information and guidance**

Your floor is a living, breathing material. You will enjoy years of beauty with your floor if you understand certain aspects of how it will behave and what you need to do to look after it.

The two key issues are Humidity and Maintenance. Understanding these elements will prolong the life of your floor.

Several points need to be clarified as there is much misinformation from retailers and installers...

Your floor will mark, dent and scratch, this is unavoidable.

Your floor will expand and contract throughout the seasons. Solid floors do this considerably more than engineered floors.

You will need to maintain, care for and look after your floor.

Spend some time considering the finish of your floor. This will have a direct effect on the frequency of the maintenance regime you will need to employ.

## **Humidity**

When talking about humidity we are referring to the amount of moisture in the air. With timber being hygroscopic, your floor will absorb and emit moisture from and to the surroundings.

Relative humidity can be measured as a percentage in the air and therefore we can easily check and maintain the levels we need. Your floor will always adjust to equilibrium in humidity conditioned by air temperature and relative humidity. In other words the higher the temperature the more moisture the air holds. Therefore we can expect your floor to absorb moisture in summer and swell, omit moisture in winter and shrink.

Now you start to understand why it is so important to understand relative humidity. Understand this and you can manage your floor.

Your floor will arrive to site typically with 9 to 11 % moisture content. After acclimatisation and fitting you could expect this figure to be 8 to 10%. This figure equates to a relative humidity of 40 to 50%. If relative humidity drops to 30% you can expect the moisture content to drop to as low as 6%. Your floor may now have lost between 20 and 30% of its moisture content. You can imagine the size of the shrinkage.

We strongly advise and recommend fitting a small and inexpensive hygrometer to monitor RH levels. As levels drop you can take measures to increase RH and as levels increase you do the reverse. Humidifiers and Dehumidifiers are the obvious solution.

In winter time practical solutions can be; open the dishwasher immediately after the rinse cycle, hang laundry on radiators to dry, use a fine mist spray and keep flowers and plants in dish filled with water.

The human body is made up of a large % of water. The best health advice always maintains regular intakes of water; the body also needs the correct

level of moisture in the air. Monitoring the levels in your home will also promote the healthiest conditions for you, your family and pets as well as your floor. Try sleeping one night in the winter with the central heating full on, and the windows closed. If you're lucky enough to get any sleep you will suffer the next day with a sore throat, possible headaches and irritation of any asthmatic condition. These symptoms can be as a result of low RH in the air. It's no wonder your floor begins to shrink, you're starving it of moisture.

## **Underfloor Heating**

Such a contentious issue. This subject is also full of misleading information. Understanding how your floor behaves to RH is again the key.

In most cases engineered floors will be specified over underfloor heating. Always seek to use a cold press engineered board rather than a hot melt board. This refers to the gluing of the wear layer to the ply sub board.

Seek an engineered board where the sub base is birch ply. This is infinitely more stable than poplar or softwood core constructed board. So, we have engineered floors suitable for over underfloor heating. Solid floors are also suitable but you must install mechanical measures to regulate RH.

Tappei floors or overlay flooring is also not a problem, pay attention to the sub floor, the method of fixing and again, the RH. Your floor can be adhered to most surfaces including a screed sub floor or it can be floated. A floated floor on Elastilon, for instance, can help promote an even heat spread. If using adhesive it is essential that a full bed adhesive be used. The underside of your board needs to be in constant contact with the heated surface. Air gaps must be avoided as this will act as an insulator and you will find pockets of unheated floor. Every underfloor heating system must be restricted so that ambient surface temperature never exceeds 27 degrees.

We would always seek to obtain a full heating spec of the chosen system and converse with the manufacturer to ensure compatibility. Wood floors can be fitted over both water fed and electric heating systems.

## **Maintenance**

Let's be clear about one thing, maintenance free wood floors do not exist. All floors need cleaning, all floors mark, and all floors at some stage will need to be re finished.

What you can do is choose a finish to your floor that is in keeping with the look you want and easy to maintain and restore. Generally there are two types of finish; oiled floors and lacquered floors.

Lacquer is a finish that sits on the surface and acts as a protective layer; oil finishes flood the floor's pores and form a protective finish from within. One thing to remember is, and this could be considered as a general rule, a lacquer floor will need re-sanding to refinish, and an oiled floor can be cleaned and re-oiled without re-sanding.

Refinishing can be expensive and disruptive to family or commercial life so this is where a good maintenance regime comes in to play.

Following simple good practise as listed below will add life and keep the beauty in your floor...

- 1 An entrance mat made from cotton will remove more moisture and grit than any other form of mat. In commercial situations the larger the matting the better.
- 2 Regular dry sweeping and vacuuming will prevent dust and grit build up on the floor.
- 3 Do not allow spilt liquids to dry on the surface. Wipe up all spillages immediately and dry these areas.
- 4 Always use protective pads to furniture legs.
- 5 Only use proprietary cleaning fluids on your floor, those that are compatible with the floor finish.
- 6 Never soak or wet mop your floor. Only ever use a well wrung out damp mop and dry the area immediately.
- 7 Only use compatible cleaners and wax polishes for your floor. This will assist when considering refinish of your floor.
- 8 Keep ambient temperatures at 18 to 25 degrees Celsius and maintain RH within a level between 45 and 65%.
- 9 Never be afraid to seek professional advice; from us it's free.

### **Distressed and aged floors**

Rainleaf, for a number of years, has specialised in distressed and aged floors. These products undergo a number of treatments in order to make them look as if they "grew there".

Generally the methods of producing these boards involve scraping, tumbling, press stamping or hand working. Edges will get knocked and damaged in the process, this is to be expected. Please be aware that random distressing may vary from any sample, same as grade of timber and colour of timber. Knots, splits and shakes may be part filled or unfilled.

### **Those all-important numbers**

The following are the relevant readings we are looking for on our site surveys. Readings outside this frame work may raise issues that we have to address.

- Atmospheric humidity 45-65%
- Concrete moisture RH 75%
- Moisture in Tier of beams max 10-12%
- Moisture in Joists max 10-12%
- Moisture in chipboard 8-10%