



## **TECHNICAL BULLETIN #7**

### **IMPORTANT INFORMATION**

**Set out below is important information, which you should know :-**

- **Building Code Of Australia - “Free Board” Requirements** and other pertinent information that affects our trade
- **Below Grade Installations**
- **Moisture Meters** – types and operation
- **Responsibility for full assessing the “suitability”** of the site before effecting any installation
- **Site**
- **Environmental Aspects - “Tips And Technical Advice”**
- **Exposed Slab Edges**
- **New Product – “R” Floor - Sub-Floor Sheeting**
- **Sub-Floor Ventilation** – still represents major cause of complaints and product failure – be aware of BCA requirements
- **Trading Conditions**
- **Silicone Filled – Expansion Voids**
- **Bamboo Flooring** - do not try and direct bond
- **Full Curing** - of all coatings !
- **Edge Bonding** - be fully informed on the dangers of “Edge Bonding” being caused by the coating systems that you choose as **you** could have to replace the floor if it goes wrong.
- **Intermediate Expansion Joints** - be sure to leave additional expansion joints in all strip floors over 6.00 metres wide.

## BUILDING CODE OF AUSTRALIA - “FREE BOARD” REQUIREMENTS

Gerry Swindale again drew to the attention of members the requirement of the **Building Code of Australia** (BCA) that there must be a minimum of **150 mm** “Free Board” between the **top** of internal **concrete** floors and external ground levels.

The only exception to this requirement is if external ground level immediately surrounding the residence is tiled or paved (with “**fall**” away from the residence) in which case “Free Board” may be reduced to a **minimum** of **50 mm** below the height of internal concrete slabs.

Wood Floor Contractors are expected to be an “expert” in their vocation and have an **obligation** to inform clients that their site is “**unsuitable**” for the installation of a wood floor, if certain conditions prevail.

### BCA References : “Freeboard’ requirements

Clause 3.1.2.3 (b) and Figure 3.1.2.2 of the BCA, both on page 119 of the 2011 Volume 2 edition.

## BELOW GRADE INSTALLATIONS

Consistent with the above comments, there are occasions when members are requested to price work on sites which are either “**below natural ground level**”, in geographically challenging sites (rain forest or particularly “wet” environments etc) where “logically” those sites are either, “**unsuitable**” for the installation of wood floors **or** are only suitable for a “**Floating Wood Floor**” with **addition provision** for expansion and additional **protection**.

“**Protection**” might **also** include **both** a “**Liquid Membrane**” treatment of walls and floors and a **physical membrane** of minimum **200 um** Fortecon or Heavy Builders Plastic, lapped a minimum of **300 mm** and carefully taped with 50mm duct tape.

The consideration of installing a **second membrane** lapped and taped in the **opposite** direction, both taped 300mm minimum up the walls and cut only after fitting of skirtings are also worthy items to consider.

**How** skirtings are fitted, is also an area for careful consideration in each project of this nature.

However, regardless of all of the above, contractors have an **obligation** to make their client’s **aware** in **writing** of the **dangers** of installing wood floors (includes Bamboo etc) in areas which are “suspect”.

Better not to do a job than it turn out to be one that can cost you “big time”.



## ENVIRONMENTAL ASPECTS - OF THE WOOD FLOOR INDUSTRY

### “TIPS and TECHNICAL ADVICE”

Members are advised that, from time-to-time NWFAA choose to distribute information from various sources, where it believes this might be helpful to members.

Members are also advised that as a Policy - NWFAA and it's Executive **do not** promote or endorse any products. **However**, as we are closely aligned with the Victorian **Wood Flooring Association (WFA)** we regularly circulate information from **WFA** with “tips” which our members might also find useful.

From time-to-time other **practical advice** comes to our attention which if considered **useful** to members we will also distribute regardless of who the author of the source document might be. However, members should **not** regard such facilitation of information, as an endorsement of either the products or the companies whose products might be sighted in such literature.

The **most significant** point that the NWFAA wishes to underline is this :

**Professionals** operating in today's wood floor industry, **must** understand that **every day** they need to make a **judgement call**, on what they are going to do **different** on today's job, compared to what they did yesterday. The meeting identified a range of **geographical** circumstances, which **demand** a **change** in what is done and just **how** such projects should best be approached.

#### Examples were sighted of:-

Construction sites that are highly exposed to **high winds/ surf spray/ cold and damp**.  
(*Lurline Bay – floor failures - extreme expansion*)

**Members should take note**, that **Jamberoo** has recently been identified as among the “**highest**” consistently humid sites, anywhere in NSW. Department of Meteorology records disclose a considerable number of days in which humidity is 100% or 99% relative humidity.

Particularly, **Sunny** or **Cold** sites, or sites with vast areas of glass, can all have a big impact on the speed with which coatings dry, and how you manage the process, as all such sites can traditionally prove to be troublesome.

**Every** site has its own **unique** differences. They **will** affect the performance of your floor and floor coatings. So, get used to **recognising** these phenomena as aspects of the job site, which you must either, **manage** or **decline to install**.

Train your staff to “**think**” - ahead of the game.

Take the IPOD out of the ears, **look** and **think** before you start, and be proactive at managing your **commercial risks** !

These things can either **cost** you money, or **make** you money, – the choice is yours. Such decisions might well influence your **choice** of floor coating system as each will perform very **differently** in the same environment.

Members are encouraged to carefully reflect upon the “tips” and advice provided in a recent distribution entitled “**WINTER BLUE's**” (*a further copy attached herewith*) which one would be wise to retain (share with your staff) and re-read from time-to-time to remind ourselves, **just how important this information is**.

## SUB-FLOOR VENTILATION

**Lack of subfloor ventilation**, under pier and beam construction, continues to be an on-going problem in the industry. When assessing a property to quote for timber floors it is important to assess **both the quality and quantity** of sub-floor ventilation and whether “**cross-flow**” ventilation is operational, or are there restrictions or obstructions ?

**IF** the results of your inspection are not satisfactory, wisdom suggests that **it is important to advise the client of your findings** and to recommend that they deal with this issue **prior to commissioning the installation of wood floors.**

**If they do not**, at least you have offered your **advice** in writing. Attached to this report is a copy of the **BCA requirements for subfloor ventilation** which varies in requirement across the three (3) different **Regional Zones** that are described within the Code. Members should retain this information as an on-site reference when considering subfloor ventilation.

Please also note that ventilators should be within **600 mm** of every **corner** of the building – **to avoid “dead spots”.**

### BCA Requirements for SUB-FLOOR VENTILLATION

Clause 3.4.1.2 on pages 239, 240 and 241 of the 2012 Volume 2 edition.

## EXPOSED SLAB EDGES

Recent discussions involving the **increase in moisture problems** in new dwellings, has caused us to request Bill Durkowsyk (Sydney Flooring) to engage in discussion with David Hayward of ATFA, with a view that we might both support an approach to Government to highlight the significance of this failure and have better requirement placed upon **builders to carefully maintain their vapour-proof membrane to the full height of concrete slabs** and even possibly to use superior membranes that are not so easily damaged.

## NEW PRODUCT – SUB-FLOOR SHEETING

**“R” Floor** - this year has seen the release of an excellent new subfloor sheeting product call **“R” Floor** by Carter Holt Harvey.

This product is very well engineered to offer **vastly improved benefits** when compared to the typical “yellow tongue” or similar Structural Sheet Flooring.

**“R” Floor** comes with :-

- **“Metalized Foil”** surface to the underside,
- peel off **“Blue Protective Film”** on the face,
- **Blue Wax** sealant on edges and
- **H2 Termite Protected.**

**All contractors are encouraged to “google” this product** or pick up a “sample” from your suppliers as use of this product is to be encouraged as it offers the Wood Floor Industry significant improvement, due to the advantages offered.

## SILICONE FILLED – EXPANSION VOIDS TO PERIMETER OF WOOD FLOORS

This year we have also observed a growing number of projects in which architects, developers and others are specifying that **expansion voids** required to the perimeter of wood floors should be “filled” with “**Sicaflex**” or similar.

Having now observed a number of floor failures in which expansion joints have been “**filled**”, the **NWFAA** strongly advises against any attempt to **reduce** the required **expansion void** to the perimeter, by using silicone or any similar materials.

This practice does **not** conform with the requirements of the BCA.

### Intermediate “Expansion Voids”

As all contractors are aware, all wood floors which **span** more than **6** meters **across the Width of the boards**, should have an **additional 12 mm** provision for **expansion, built into** the wood floor system.

This “**provision**” can be made in one of a number of ways.

### Intermediate spacing :

- by using “**whipper snipper**” cable or “**shim metal**” to physically space boards **apart** to provide for expansion of the floor

|      |                                       |   |   |
|------|---------------------------------------|---|---|
| i.e. | 80mm boards 1mm every 8 boards        | = | 12.5mm <b>additional</b> provision      |
|      | 130mm boards 1.5mm (+) every 5 boards | = | 13.86mm (+) <b>additional</b> provision |

### Cork Expansion Joints :

**HOWEVER**, when a 12 mm **cork** expansion joint is introduced to the floor this is **not** 12 mm of “expansion”.

As 12 mm cork will only compress to around **5 mm**, when making **additional provision** for expansion, one **must** take account of this factor when planning ones job.

## BAMBOO FLOORING

As people will be aware, there has been a significant increase in the number of Bamboo Floors that are being installed. Similarly, there has been a very significant increase in complaints and failures in bamboo flooring systems.

**Not all bamboo products are of equal quality** and many problems are being reported throughout the industry

The most important advice that **NWFAA** can offer is a **recommendation** to **not “directly-bond”** any bamboo floor, direct to a subfloor.

Our observations cause us to believe that the only **safe** method of installing bamboo floors is as a “floating” floor system, over an **appropriate** acoustical blanket underlay.

However, even then, all matters pointed to earlier, about “difficult sites and extremes of environmental conditions, equally apply to all bamboo installations.

**THINK CAREFULLY**, about your decisions, **before** effecting the installation.

## TRADING CONDITIONS

This year has seen very difficult trading conditions continue to prevail in the Construction Industry throughout Australia and some of our oldest and most respected builders have been sent to the wall.

There are **no** gold plated builders left in Australia, so be very careful with whom you do business and look diligently at the contracts that you enter.