



F.A.Q: Does ply expand and contract? YES

Ply is a manufactured timber product which means it has similar properties to timber flooring so it will expand and contract depending on it's moisture content.

OOPS! The builder has methodically installed his floor as per Nash Timbers recommendations but within a couple of months the floor has cupped.

Why has my flooring cupped I have done everything correctly?

David asked the builder did you test the moisture content of the ply before installing the floor. Unknown to the builder the ply had become wet from a burst pipe in the slab before they commenced work on the site. If the ply or timber joists are wet it will alter the moisture content in the floorboard which can cause the floorboard to cup. The moisture content between sub floor and flooring should not exceed 2%.

F.A.Q; Does a timber floor need control joints? YES.

Control joints should be installed using the EMC calculator as all timber species, depending on width and sites will vary considerable.

The formula calculates the growth of the board depending on the species, width, temperature and relative humidity and installation method.

Example 1. Grey Ironbark 130 x 19 Floorboard glued and nailed with the temperature @ 22 degrees and Relative Humidity @ 60 degrees each board will grow 0.06mm

Example 2. Grey Ironbark 130 x 19 Floorboard glued and nailed with the temperature @ 22 degrees and Relative Humidity @ 80 degrees each board will grow 1.7mm

Control joint allows for the timber to grow and shrink, remembering it is a natural product.

If control joints are not installed timber cups due to not having any room to grow.

You have only two choices when it comes to installing control joints, a level floor or a cupped floor.

OOPS! ; No control joints.

Again and again David is called into look at flooring that is cupped. There can be many causes but quite often no control joints have been installed. Why, you must ask are the control joints not installed. The main response is because the client or Architect does not like the look but on the other hand a cupped floor looks worse and does nothing for the cause of timber. Just last week David saw four floors that had cupped due to no control joints

F.A.Q; Can any floor be stained any colour? YES.

As long as the timber species used does not react with the stain and sealant finish.

For some unexplained reason occasionally Blackbutt will release tannin when liming which leaves a very patchy finish. If liming Blackbutt flooring, we lime the Blackbutt off cuts from the site to check reaction to liming & use a product the client is confident to use. There are certain finishing products which do not bring the tannin out of the timber.

OOPS; Have you ever gone to check your newly finished floor and found pimples (looks like tiny bubbles on the floor). The bubbles are caused by the dust particles floating in the air, when the finishing has been applied the dust particles will float down and stick to the finish. Use a quick drying product. Tung oil takes a long time to dry in cold & high humidity conditions.

Vacuum-clean well and tack with a damp cloth before applying finish. Ensure all sills, ledges, skirting board, tops of doors and picture rails are free of dust.

WHEN INSTALLING A FLOOR THE NASH TIMBERS RECOMMENDED CHECKLIST

1. Correct species for location. (Eg: High Janka Rating timber in high traffic area).
2. Correct timber profile for site. (Eg. 14mm T & G Board trowel glue on ply in preference to 19mm T & G board)
3. Correct width and thickness for site. (Eg, recommend not to install a board over 200mm wide in damp conditions and full air condition environment.)
4. Ensure under floor ventilation is correct if not on concrete slab. (Eg. There must be good cross flow ventilation under the floor.
5. If installing onto slab ensure correct moisture content.(Recommend a moisture barrier is used on top of slab)
6. If using ply slab must be level (Eg Unable to put packing under ply)
7. Battens must be Kiln Dried Hardwood (Eg Pine battens will flex when the floor is sanded causing corrugations in the floor)
- 8.A high quality glue must be used. (Eg. if cheaper glue is used floor will cup or the floor may squeak)
9. Timber not to be installed until site is sealed. (Eg. Floor will not acclimatise correctly)
10. When installing flooring, use EMC calculation.
11. Strip stacking on site not recommended
12. No secret nailing over 80 x 19mm but can secret nail 14mm thick board up to 180 x 14.
13. Ensure the correct nail and application is used to minimise the puncture mark in the surface of the floorboard and ensure correct adherence to substrate.
14. Nash Timbers recommends that you always check the milling and moisture content of the board. (eg, Sometimes the milling process may cause a problem with the floorboard)
15. Control joints must be installed as per EMC calculation.
16. Finally be aware of climate condition that will affect you floorboard. (Eg, direct sunlight, air condition vents, wind and water)

DO YOU UNDERSTAND THE IMPORTANCE OF USING CORRECT PLY, GLUE AND NAILS?

WHEN YOU ARE GETTING A QUOTE FROM A FLOOR INSTALLER ENSURE YOU ARE GETTING WHAT YOU ARE PAYING FOR.

A CHEAPER QUOTE CAN BE GIVEN AS A CHEAPER ALTERNATIVE CAN BE USED.

WHICH WILL COMPROMISE THE QUALITY OF THE FINAL OUTCOME OF THE FLOOR?

OVER THE NEXT FEW POINTS I HOPE TO GUIDE YOU THROUGH THE MAZE OF COST CUTTINGS THAT CAN BE USED WITHOUT YOUR KNOWLEDGE.

I WANT YOU TO BECOME AN INFORMED FLOOR EXPERT.

1. A moisture barrier to be used on a ground floor substrate as it reduces moisture between ply or timber floor to decrease the expansion and contraction of these products.

If a moisture barrier is not used the cost saving is \$3sqm.

2. Carrying flooring and products onto site.

Cost cutting if builder does it saving of \$2 per sqm.

3. When using ply ensure that you are using a reputable Ply. a certain Chinese ply can delaminate and very toxic glues are used in the process of manufacturing the sheets.

Cost cutting if using cheaper ply a saving of \$1 per sqm.

4. Ply installed by pinning is done usually downstairs, drill into concrete with six and half SDS diameter bit. Install with split anchors 75mm long, hammer below surface of the ply, 22 anchors per sheet.

Cost cutting if using only 10 per sheet a saving of \$10 per sqm.

5. Ply is installed in a brick pattern, flooring is laid at a ninety degree angle over the ply by using this process movement of the ply is eliminated when the moisture content changes in the floorboard and the ply..

Cost cutting not using brick pattern has a saving of \$10 per sqm.

6. Stamp on ply must be visible, as this is the correct face of the ply to adhere floor too.

7. Control joints been installed cost more as this takes

8. If the outside is meeting the inside as example verandah ensure that the builder has installed a damp course.

9. Ply to be flat sanded if floorboards not installed immediately onto ply.

10. When gluing ply must trowel out with 5mm trail & the whole area must be covered with glue.

Cost cutting if using only spot gluing a saving of \$10 per sqm.

11. If ply is not pinned or glued correctly, the ply will move & it will squeeze which gives a noisy floor & when sanding you get chatter marks due to movement of ply.

12. If ply gets wet due to other trades you must let the floor installer know as the ply sheet might need to be replaced as it may cause the floor to move & glue will not adhere.

13. When gluing floorboards to joists use a sausage gun with a flexible glue to allow for expansion & contraction. If you don't glue joist, when the floorboard expands the nails will move and a space is created because there is no glue and with time the top nails may need to be re punched If a cheaper glue is used with no flexibility same result occurs. Worst of all your client ends up with a squeaky floor! (Recommended glue flexible glue not rigid glue)

14. ND Nails galvanized recommended do not use C BRAND for installing as heads are not big enough.

15. Note the difference of prices of glues per sqm

NO GLUE	\$ 0.00/ SQM
CHEAP GLUE	\$1.00/ SQM
MAXIBOND	\$ 5.00/ SQM
SIKA BOND_T55J FLEX	\$ 8.80/ SQM
SHELLY'S DIRECT STICK	\$ 10.00 / SQM

16. Nash Timbers tips on achieving a high quality outcome for installing a floor

A Ensure that you get a break down on cost for installing a floor.

B Ensure the correct ply, glue, nails are been used and correctly.

C Ensure correct species is used with finish.

D Ensure correct width & thickness is suitable for site.

E. Ensure no moisture is present under floor.

F Ensure not to spill water on floor.

G. Better outcome if you use the same installer and floor finisher (One company).

15. Nash Timbers tips on achieving a high quality finish

When organising to have a job to be quoted it is very important to ensure that you are comparing apples with apples, not apples with lemons. Cost can be reduced by using inferior timber ply, battens and glue and installing expansion joints. Concerning timber, clients can be sold a different species which is a lower grade but similar colour. (Eg, Blackbutt replaced with mixed creams)

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