

# ***Tuffply Flooring***



Plywood Flooring



# IPL Tuffply Flooring

IPL makes a range of Tuffply Flooring manufactured to AS/NZ 2269 Construction Plywood, which can be used in a variety of situations from residential to commercial and industrial applications.

IPL Tuffply Flooring has the normal plywood qualities of light weight to strength ratio, which lends itself to being used in a range of applications where strength and stiffness is required.

IPL Tuffply Flooring is available treated to H3.2 (CCA treated) and on request clear treated LOSP to H3.1 standard necessary for wet areas and situations where there is some likelihood of dampness. It is also available untreated to be used in areas where contact with moisture is not a consideration. Available in more environmentally friendly option ACQ H3.2.

IPL Tuffply Flooring comes with a T&G plastic tongue which allows the sheets to be interlocked doing away with the need for nogging/blocking between, hence savings on labour and material.

IPL Tuffply Flooring is also available in a square edge finish which requires the panel to be joined on a joist on the 1.2m wide end and the 2.4m length is to be joined on nogging or blocking which will be required between the joists.

IPL Tuffply Flooring is available with a C grade face and with a D grade back although on request can be manufactured with a clean (S grade) face which can be clear coated to take advantage of the natural pine face.

IPL Tuffply Flooring can be manufactured for use in a situation where the underside can be exposed with our 100mm spaced V groove profile giving the TG&V effect to be seen on a mezzanine floor or second storey.

IPL Tuffply Flooring is available in 15, 17, 19, 22, 25 and 32mm.

Bonding of the plywood is made with Super E0 formaldehyde resin. The E0 level is less than 3 parts per million which is often less than the reading that occurs in natural surroundings. This makes IPL Tuffply Flooring a very good eco-friendly option.

## Installation

- 1) Subfloor to be constructed to comply with relevant building codes
- 2) Sheets must be laid perpendicular (sheets laid lengthways across joists) to the floor joists.
- 3) Sheets must be laid in brick pattern as per diagram to disperse load more evenly.

## Strong reasons to specify IPL Tuffply Flooring

- ☐ PROVEN tough, strong and stable
- ☐ GUARANTEED quality via EWPA Product Certification Scheme
- ☐ VERSATILE with 6 thicknesses for residential commercial and industrial applications
- ☐ LIGHT & EASY to handle
- ☐ LABOUR SAVING with easy-fit T&G plastic tongue jointing system
- ☐ ECO-FRIENDLY - rated as Super E0 (less than 3 parts per million formaldehyde emissions)



4) T&G edges should not be forced up tight to allow for some expansion if moisture is taken up during construction..

Square edge sheets and end joints on T&G sheets should be left with a 2mm gap to allow expansion. The total floor area should be left with at least a 5mm gap around the perimeter of the floor. This is to allow for any expansion that may take place if moisture is absorbed into sheets.

5) Nail or screw at 150mm around perimeter of sheet and 300mm around through the intermediate. When fixing H3.2 (CCA treated) use a minimum of hot dip galvanised but preferably stainless steel 316. If using H3.2 (ACQ treated) use stainless steel 316. Use annular grooved or ring shanked nails for superior holding power

6) To eliminate squeaking and to aid screw/nail holding use a continuous bead of construction adhesive on all joists, timber and steel.

7) Use suitable thickness plywood flooring as per Flooring Span Table. If special loads are required consult an engineer for subfloor design and thickness of plywood.

8) IPL Tuffply Flooring can be left exposed to the weather but the surface will deteriorate gradually over a period of time with checking (fine splits) etc. The structural integrity of the sheets will remain even though exposed during construction.

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9) If floor is to be clear finished care must be taken to protect the surface. If sanding is required only a light sand is advisable as heavy sanding weakens the panel and could expose the glueline.

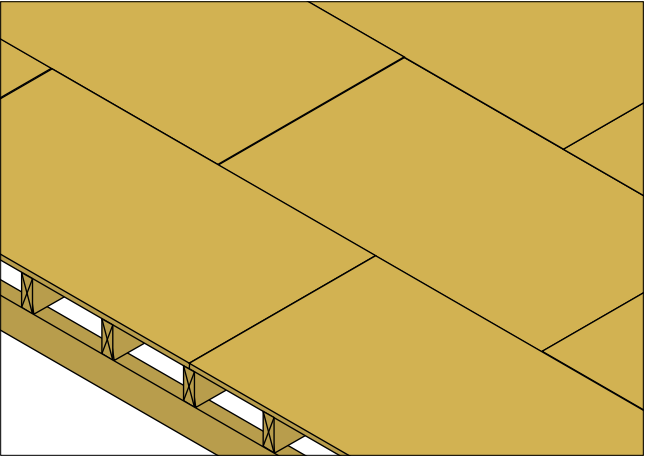
## Compliance with Standards

IPL Tuffply Flooring is manufactured in accordance with AS/NZ 2269 Construction Plywood. The panels are to be installed in accordance with the building design code.

The Engineered Wood Products Association of Australasia (EWPAA or PAA) audits the production processes and internal quality control procedures to ensure we meet the requirements of the product Standard. This third party audited, process based, quality assurance scheme meets the requirements of an ISO Type 5 system and ensures constant monitoring of maintaining production of quality

plywood. The EWPAA is an accredited body to JAS - ANZ under registration No. Z1460695AB.

## Laying Pattern



## Flooring Span Table

		15mm F8	17mm F8	19mm F11	22mm F8	25mm F8	32mm F8
Domestic Homes	2kPa/1.8kN	400	480	600	600	800	1200
Domestic Garages	2.5kPa/9kN				400	480	800
Office	3kPa/2.7kN				600	800	1200
Retail Shops	4kPa/1.1kN				400	800	1200
Industrial	.25kPa/1.8kN					600	800

Design actions as per AS/NZ standard 1170

## Fixing Recommendations

Ply Thickness (mm)	Timber Frame		Steel Frame	
	Nails Length x thickness (mm)	Screws Gauge x length (mm)	Screws Steel Thickness <1.15mm	Screws Steel Thickness <2mm
15	50 x 2.8	8 x40	10-24-40	10-16-40
17	60 x 2.8	8 x 50	10-16-45	10-16-45
19	60 x 2.8	8 x 50	10-16-45	10-16-45
22	60 x 2.8	10 x50	10-16-45	10-16-45
25	75 x 3.15	10 x 50	10-16-45	10-16-45
32	100 x 4.0	10 x 75		



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## Environmentally Sustainable

All veneer used in IPL Tuffply Flooring is from renewable, plantation-grown Pinus Radiata New Zealand plantations and is available FSC (Forestry Stewardship Council) certified on request.



## Product Details

### **Thicknesses**

IPL Tuffply Flooring comes in 15, 17, 19, 22, 25 and 32mm.

### **Sheet Size**

2400mm x 1200mm. The dimension tolerance for untreated plywood is +/- 1.5mm.

There may be some variation from these parameters on CCA treated plywood because during the treatment process the sheet expands and contracts during drying.

### **Stress Grading**

IPL Tuffply Flooring plywood is rated at F8 (F11 for 19mm).

### **Bonding**

All IPL construction plywood is bonded with phenol formaldehyde resin (dark red in colour). This results in a permanent bond which after manufacture will not part. This is the same bonding material used in Marine type plywood.

Formaldehyde emissions in IPL plywood are very low and rated as Super E0 - less than 0.3mg/l AS/NZ Standard 2098:11.

### **Branding**

Back of all sheets marked:

<b>CD</b>	The back of all sheets marked with sheet face and back grade
<b>IPL</b>	Company name
<b>A bond</b>	Bond type
<b>F8 or F11</b>	Stress grade
<b>AS/NZ 2269</b>	Structural Plywood Standard
<b>914</b>	Engineered Wood Products Association mill number
	Construction code eg 19mm 19-24-7



INTERNATIONAL PANEL & LUMBER (WEST COAST) LTD  
3 Trickies Road, Greymouth, New Zealand, PO Box 179  
Telephone 03-762 6759, Facsimile 03-762 6789,  
Freephone 0800 650 801, Freefax 0800 650 802, Email [sales@tuffply.co.nz](mailto:sales@tuffply.co.nz)  
Website [www.iplplywood.co.nz](http://www.iplplywood.co.nz)