

FormPly™

IPL Formply is manufactured for use in the concrete forming industry to provide strong, stiff, lightweight support for the forming of concrete structures. It can also be used where any other hard wearing surface is required. IPL Formply is the only manufactured concrete forming plywood made in New Zealand.

At a glance

- Used successfully in Asia, Australia, the Pacific Islands and New Zealand for 30 years
- Overlaid with high quality, heavy duty phenolic resin impregnated papers which provide a hard wearing surface.
- Suitable for concrete shuttering and also for truck and ute decks, shelves and any wooden surface which is subject to high wear.
- Superior quality and surface which transmits into the finish of the concrete.
- Phenolic overlay paper protects the surface veneer from excessive moisture uptake which assists to minimize hydration staining and grain raising.
- Resists dilute acids and alkalines which increases the number of uses that is obtained when used with concrete.

Usage and Maintenance

- Place long edge of sheets across the supports.
- Allow 2-3mm expansion gap on all sheet edges and, if required, use some form of elastic sealer to fill the gap — the gap may have to be widened to allow for the gap filler.
- When nailing or screwing the sheets, it is essential to fix to avoid movement. When countersinking the fixings through the overlay paper it will be necessary to fill these with epoxy filler and smooth off to give good finish and limit moisture uptake.
- To avoid staining from fasteners use hot-dipped galvanised, stainless or alloy fasteners.
- Cut edges should be resealed using acrylic paint which helps keep moisture out and minimises distortion that can be caused by expansion around sheet perimeters. The factory's cut edges are coated with a waterrepellent coating. The veneers are bonded with marine type glue, which ensures they will not separate under wet conditions.
- Use release agent before use and reuse to ensure clean release from concrete and to minimise hydration staining and grain raising.

- Take care to avoid vibrator contact as much as possible to keep face intact and in so doing extend the life, to give repeat service.
- When storing sheets, where possible, lay flat with support of bearers.

Design and Installation

Spacings for framing supports depend on the properties that pertain to the sheets construction and direction of the face veneer (table1). These values are used in conjunction with standard engineering standards to design the form to withstand the pressure developed by the wet concrete and how much deflection is allowable. The actual thicknesses of our sheets are 12.5mm and 17.5mm but the 12mm and 17mm values in the tables can be attributed to our sheets.

Quality Assurance

IPL Formply is made to the highest quality levels based on the requirements of the Australian/
New Zealand standard 2269 and AS6669 in conjunction with the Engineered Wood Products Association of Australasia.

Identification, section properties (per mm width) for the two thicknesses of standard IPL Formply

ID Code	Thickness	Parallel to face grain	Parallel to face grain	Perpendicular to face grain	Perpendicular to face grain
		Moment of Inertia 1 (mm4/mm)	Section Modulus Z (mm3/mm)	Moment of Inertia 1 (mm3/mm)	Section Modulus Z (mm3/mm)
12-15-5	12	80	14.5	60	13.0
17-15-7	17	220	25.5	190	26.5

Allowable pressures for IPL Formply supported over three spans to give up to an F5 finish as per NZ 3114;1987. "Specification for concrete surfaces finishes"

Thickness	12mm	17mm
ID Code	12-15-5	17-15-7
Frame Centres (mm)	Concrete pressure (kPa) for deflection limited to lesser of span/270 or 3mm	Same
Face grain across supports	48.2	115.2
225	20.3	46.7
300	8.6	19.7
400	6.0	13.8
450	5.0	11.4
480	2.5	5.8
600		
Face grain parallel to supports		
225	29.8	108.0
300	12.6	48.2
400	5.3	20.3

Specifications

Sheet size	2.400 x 1.200 2.400 x 1.220 (on request) Tolerance ± 1.5mm
Thickness	12.5mm and 17.5mm Tolerance ± 3% (other thicknesses available on request)
Glue type	Type A Phenol Formaldehyde (marine)
Stress Grade	F14
Standards	Made to AS/NZ 2269 - Structural Plywood and AS6669



