

# Formply vs Normal Plywood

Understanding formwork: what makes real formply different from ordinary plywood, and how to choose and use it on the job.

‘Formply’ and ‘plywood’ are not interchangeable. Formply is a structural plywood with a film-faced surface, made to AS 6669 to be the face of concrete formwork — the film releases cured concrete cleanly and protects the panel between pours. Big River has manufactured formply (its ArmourForm range) at the Grafton NSW mill for over 40 years, in F17, F22 and F27 stress grades. This guide explains how real formply differs from normal plywood, and the trade tips that get the most out of it.

| PRODUCT                                 | STANDARD                            | SUPPORT                                       |
|-----------------------------------------|-------------------------------------|-----------------------------------------------|
| ArmourForm formply<br>(F17 · F22 · F27) | AS 6669 · EWPAA<br>· JAS-ANZ · PEFC | Grade & finish advice<br>at your local branch |

## 1 · What is Formply?

Formply is not general-purpose plywood. It is a **structural plywood panel with a film-faced surface**, manufactured to **AS 6669** for use as the face of concrete formwork. Two things make it a distinct product: the film face, which releases cured concrete cleanly and gives a specified off-form finish, and the stress-graded construction beneath it, which carries the live load of a pour.

Big River manufactures its ArmourForm formply at the Grafton NSW mill and has done for over 40 years, in F17, F22 and F27 stress grades. It is EWPAAs stamped, JAS-ANZ accredited and PEFC chain-of-custody certified (PEFC/21-31-174), with Super E0 low-emission construction. Big River also manufactures ordinary structural plywood at the same mill — so the difference between the two is a certified distinction, not a marketing label.

**It's all about the face.** The film face is what separates formply from normal plywood. It does the opposite of what a normal timber veneer does: instead of accepting glue, paint or coatings, it is engineered to **let go** of cured concrete, strip clean, and protect the panel so it can be poured against again. That release face — plus a certified off-form finish class — is exactly what a concrete pour needs and what ordinary plywood cannot give.

### Two different standards, two different jobs

- **Formply** → **AS 6669**. Certified for concrete formwork: a film-faced panel engineered to release concrete and deliver a specified off-form finish.
- **Structural plywood** → **AS/NZS 2269**. Certified for load-bearing jobs — flooring, bracing and roofing — with a timber veneer face, not a release film.
- **Marine plywood** → **AS/NZS 2272**. Different again: void-free construction for prolonged moisture (boat building), not a formwork product.

## 2 · Formply vs Normal Plywood at a Glance

| Formply<br>Made for the pour |                        | Normal Plywood<br>Made to carry load |                          |
|------------------------------|------------------------|--------------------------------------|--------------------------|
| Standard                     | AS 6669                | Standard                             | AS/NZS 2269              |
| Face                         | Film-faced (release)   | Face                                 | Timber veneer, no film   |
| Built for                    | Concrete formwork face | Built for                            | Floors, bracing, roofing |
| Off-form finish              | Class 2 first pour*    | Off-form finish                      | Not rated                |
| Reuse                        | Protected, many pours  | Reuse                                | Degrades in formwork     |
| Grades                       | F17 · F22 · F27        | Grades                               | Structural stress grades |

\*Standard Big River formply reliably achieves a Class 2 off-form finish on the first pour when used with appropriate release agents. A quick orientation only — the sections below give the detail.

### 3 · Formply (ArmourForm) — Features, Benefits & Applications

*ArmourForm is Big River's film-faced formply, purpose-built as the contact face of concrete formwork and made to carry the live load of a pour while delivering a clean, repeatable off-form finish.*

#### Features

- Film-faced structural plywood manufactured to AS 6669 specifically for concrete formwork.
- Three stress grades — F17, F22 and F27 — to match load, reuse and application.
- Australian made at the Grafton NSW mill for 40+ years; EWPAAs stamped and JAS-ANZ accredited.
- PEFC chain-of-custody certified (PEFC/21-31-174) with Super E0 low-emission construction.

#### Benefits

- **Clean concrete release** — the film face lets cured concrete strip away cleanly, protecting both the slab face and the panel.
- **Consistent off-form finish** — reliably delivers an AS 3610 Class 2 finish on the first pour with appropriate release agents (Off-Form Premium is available for a superior Class 2).
- **Reuse between pours** — the protected face means many castings per sheet, turning cost per sheet into a lower cost per pour.
- **Engineered to carry the pour** — stress-graded construction handles the live load of concrete placement, not just the surface job.
- **Certified compliance** — EWPAAs / JAS-ANZ / AS 6669 gives you the paperwork your job needs.

#### Choosing the stress grade

| Grade      | Typical application                                              | Reuse expectation                              |
|------------|------------------------------------------------------------------|------------------------------------------------|
| <b>F17</b> | Slabs, footings, tilt-up panels; residential & light commercial  | Confirm with your branch                       |
| <b>F22</b> | System formwork and multi-storey pours where reuse cycles matter | Higher strength-to-weight; confirm with branch |
| <b>F27</b> | Heavy civil: table forms, jump forms, mining infrastructure      | 50+ castings under good site practice          |

#### Typical applications

- The contact face of concrete formwork: slabs, footings, columns, walls, tilt-up panels and system formwork.
- F17 for most residential and light-commercial pours; F22 for system formwork and multi-storey work.
- ArmourForm F27 (total hardwood construction) for heavy civil — table forms, jump forms and mining infrastructure.

## 4 · Normal Plywood — What It's For (and Why It Isn't Formply)

*Structural plywood is a genuinely useful product — it is simply built for a different job. Made to AS/NZS 2269, it is a load-bearing panel with a timber veneer face. The trouble starts only when it is pressed into service as formwork, where it is missing the two things that matter most: a release face and a certified off-form finish.*

### What normal (structural) plywood is for

- Load-bearing construction under AS/NZS 2269 — flooring, bracing and roofing.
- Jobs where the panel carries or distributes load and the surface is not a concrete face.
- Applications that will be glued, coated or painted — a timber veneer accepts adhesion; a formply film face does not.

### Why it isn't a formwork substitute

- **No release face** — concrete bonds to a bare veneer and tears the surface on strip, damaging both slab and sheet.
- **No finish-class performance** — it isn't rated for an AS 3610 off-form finish, so the concrete surface is a lottery.
- **Not certified to AS 6669** — it carries load, but relies on a formwork certification it doesn't hold.
- **Short life in formwork** — with no protective film it degrades fast against wet concrete and won't reuse.

**And marine ply isn't the answer either.** Marine plywood (AS/NZS 2272) is graded for void-free construction and prolonged moisture — boat building and permanently wet environments. Neither product is 'better'; they're built for different jobs. Using marine ply as formwork pays for properties a pour doesn't need, and using formply in a marine application relies on a certification it doesn't hold.

## 5 · Key Differences Explained

Both are plywood; only one is built for a concrete pour. The table sets real formply against normal structural plywood across what matters on formwork.

| What matters             | Formply (AS 6669)            | Normal plywood (AS/NZS 2269)         | Why it matters                       |
|--------------------------|------------------------------|--------------------------------------|--------------------------------------|
| Standard / certification | AS 6669, EWPA, JAS-ANZ, PEFC | AS/NZS 2269 (structural)             | Your compliance evidence for the job |
| Surface / face           | Film-faced release surface   | Timber veneer, no film               | The film is what releases concrete   |
| Primary job              | Face of concrete formwork    | Load-bearing: floors, bracing, roofs | Built for different loads & duties   |
| Concrete release         | Strips cleanly               | Concrete bonds & tears               | Protects slab face and the sheet     |
| Off-form finish          | Class 2 first pour*          | Not rated                            | Drives the concrete surface quality  |
| Reuse between pours      | Many castings per sheet      | Degrades fast in formwork            | Cost per pour, not per sheet         |
| Paint / coating          | Poor adhesion by design      | Accepts coatings                     | Don't repurpose formply for paint    |

*\*Class 2 off-form finish on the first pour with appropriate release agents. Confirm grade, thickness and finish class with your branch against your formwork design.*

### Reading the comparison

It comes down to the face and the certification. Normal plywood can carry the load of a pour, but without a release film the concrete bonds to it, the strip tears the surface, and there is no rated off-form finish — so the concrete face is unpredictable and the sheet is spent quickly. Formply is engineered for exactly that surface job and certified to AS 6669 for it. Choose by the duty the panel has to perform, not by the fact that both happen to be plywood.

## 6 · Trade Tips — Getting It Right on Site

The practical points that separate a clean, compliant, reusable pour from a costly one.

| Trade tip                                         | What to do                                                                                                                                                                                                                                   |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Choose by the concrete face, not just load</b> | If the concrete surface matters, you need formply. Normal structural ply will carry load but lacks the release face and finish-class performance, so it is not a substitute where the finish counts.                                         |
| <b>Match the stress grade to loads and reuse</b>  | F17 for most residential and light commercial; F22 for system formwork and multi-storey where reuse cycles matter; ArmourForm F27 for heavy civil with 50+ castings under good practice.                                                     |
| <b>Specify to the AS 3610 finish class</b>        | Off-form finishes run Class 1 (architectural) to Class 5 (concealed). Standard formply gives Class 2 on the first pour with release agents; ask about Off-Form Premium for a superior Class 2.                                               |
| <b>Always use an appropriate release agent</b>    | The film face and a suitable release agent work together — that combination is what delivers the specified finish and lets the sheet strip clean for the next pour.                                                                          |
| <b>Let the design set the thickness</b>           | Thickness follows the formwork design — bearer and joist spacing, pour depth and the load during placement. Confirm stocked thicknesses with your branch against your design before ordering.                                                |
| <b>Reseal every cut edge</b>                      | Cut edges are the weak point. Reseal them so water can't get into the core — unsealed edges swell and delaminate and cut a sheet's life short.                                                                                               |
| <b>Service life is about site practice</b>        | There is no fixed 'months outdoors' figure. Stored flat, edge-sealed and out of standing water, and cleaned between pours, formply lasts far longer than sheets left exposed on site.                                                        |
| <b>Don't cross-use marine ply and formply</b>     | Marine ply (AS/NZS 2272) is for prolonged moisture, not the load and finish of a pour. Using it as formwork pays for properties you don't need; using formply in marine work relies on a cert it doesn't hold.                               |
| <b>Don't expect paint to stick</b>                | Paint adheres poorly to formply by design — the film releases concrete, the opposite of paint adhesion. To repurpose used sheets for a painted job, the film must be fully abraded or removed first, and even then adhesion depends on prep. |
| <b>Look for the stamp</b>                         | Genuine formply is EWPAAs stamped and JAS-ANZ accredited to AS 6669. Treat the stamp as your proof of compliance and reject uncertified 'formply'.                                                                                           |

## 7 · Summary Comparison

The main points at a glance — a quick reference for spec'ing and ordering.

| Aspect                  | Formply                                  | Normal Plywood                          |
|-------------------------|------------------------------------------|-----------------------------------------|
| <b>Standard</b>         | AS 6669 (formwork)                       | AS/NZS 2269 (structural)                |
| <b>Face</b>             | Film-faced release surface               | Timber veneer                           |
| <b>Purpose</b>          | Face of concrete formwork                | Load-bearing (floors, bracing, roofs)   |
| <b>Concrete release</b> | Strips cleanly                           | Bonds & tears                           |
| <b>Off-form finish</b>  | Class 2 first pour*                      | Not rated                               |
| <b>Reuse</b>            | Many castings                            | Poor in formwork                        |
| <b>Grades</b>           | F17 · F22 · F27                          | Structural stress grades                |
| <b>Certification</b>    | EWPA · JAS-ANZ · PEFC                    | EWPA to AS/NZS 2269                     |
| <b>Paint adhesion</b>   | Poor (by design)                         | Accepts coatings                        |
| <b>Best for</b>         | Any pour where the concrete face matters | Structural jobs away from the pour face |

**Bottom line:** Real formply is a film-faced panel certified to AS 6669 to be the face of a concrete pour — it releases cleanly, delivers a rated off-form finish and reuses across many pours. Normal plywood is a load-bearing panel to AS/NZS 2269 for a different job. Use formply wherever the concrete surface matters, match the grade and finish class to the work, and look for the EWPA / JAS-ANZ stamp.

### Talk to Big River

Our branch teams can match the ArmourForm grade, thickness and finish class to your formwork design — and price your job fast.

Get a quote or find your nearest location at [bigrivergroup.com.au](https://bigrivergroup.com.au) · 25 locations · 130+ years · Australian Made

**Important.** This guide is a general product and application reference for Australian formworkers and builders, and is not engineering advice. Formwork design — panel grade, thickness, bearer and joist spacing and pour loads — must follow the project engineer's design and the relevant Australian Standards (including AS 6669, AS/NZS 2269 and AS 3610) and the National Construction Code. Off-form finish results depend on release agents, site practice and sheet condition. Confirm the right ArmourForm grade, thickness and finish class for your job with Big River and the product data. © 2026 Big River Group.