IN THIS EDITION

RIGHTFUL STORAGE AND USAGE OF SHUTTERING PLY ON SITE

Good shuttering ply delivers its expected performance only when it is stored, handled and used correctly.



Shuttering ply performance begins as soon as the material reaches the construction site. Even a high-quality panel can become warped, swollen, scratched or delaminated when it is stored on damp ground, supported unevenly, exposed to water or handled roughly.

Correct site practices help preserve the shuttering ply's flatness, edge condition, surface quality and reuse potential. They also reduce unnecessary material replacement, additional labour, poor concrete finishes and avoidable project delays.

In this edition, **PAAM** highlights the correct methods for receiving, storing, handling, using and maintaining shuttering ply on site.

THE THREE ESSENTIALS

01

STORE IT FLAT AND DRY

Shuttering ply should be placed horizontally on level, aligned bearers and kept raised above the floor.

02

HANDLE IT CAREFULLY

Sheets should be lifted and supported properly rather than dragged, dropped or rested on their corners.

03

USE IT CORRECTLY

The shuttering ply grade, thickness and bond classification should match the intended application and exposure conditions.

Shuttering ply performance begins
when it reaches the site.

STORAGE

CORRECT STORAGE OF SHUTTERING PLY ON SITE

Shuttering ply should preferably be stored under a roof in a dry and ventilated area. The storage space should be protected from direct rain, curing water, excessive sunlight and sudden changes in moisture.

Sheets should be stacked horizontally on a flat and level base. The stack must be raised above the ground using straight, evenly aligned timber bearers. These supports should be positioned to distribute the panel weight evenly and prevent sagging or permanent deformation.

Shuttering ply should never be placed directly on concrete floors. Concrete can retain moisture even when the surface appears dry. Prolonged contact may allow moisture to enter through the bottom sheet and exposed edges, resulting in swelling, staining or warping.

If outdoor storage is unavoidable, the stack should be covered with a waterproof sheet or tarpaulin. The covering should protect the top from rain while allowing ventilation around the sides. Completely sealing damp shuttering ply inside plastic can trap moisture and create favourable conditions for mould, mildew and surface deterioration.

Sheets should not be stored vertically against walls for extended periods. Leaning shuttering ply places uneven pressure on the panels and may cause bowing. Heavy or irregularly shaped materials should also never be placed on top of the stack.

Before installation, shuttering ply should be allowed to adjust to the environmental conditions of the intended use area wherever the manufacturer or application requires acclimatisation.

CORRECT STORAGE PRINCIPLE

Keep it flat.

Keep it raised.

Keep it covered.

Keep it ventilated.



Correct storage protects
flatness, edges and reuse.

WARPING CAUSED BY UNEVEN STORAGE AND MOISTURE



A technical report explains that shuttering ply can develop bowing, cupping or twisting when its two faces absorb or release moisture at different rates. The report identifies vertical storage, insufficient support, humid storage conditions and one-sided wetting as common causes.

The case demonstrates that shuttering ply may reach the site in acceptable condition and become warped afterward because of incorrect storage. Flat stacking, even support, ventilation, acclimatisation and protection from one-sided moisture exposure can substantially reduce this risk.

COMMON CAUSES IDENTIFIED

- ✕ Vertical storage
- ✕ Insufficient support
- ✕ Humid storage conditions
- ✕ One-sided wetting

WHAT REDUCES THE RISK

- ✓ Flat stacking
- ✓ Even support
- ✓ Ventilation
- ✓ Acclimatisation
- ✓ Protection from one-sided moisture exposure

Shuttering ply can arrive in good condition
and still warp on site.

USAGE

CORRECT USAGE OF SHUTTERING PLY ON SITE

Before using shuttering ply, the project team should confirm that the selected grade, thickness and bond classification are suitable for the intended application. Shuttering ply designed for limited construction moisture should not be treated as though it can remain permanently exposed to weather.

Cutting should be performed using sharp, appropriate tools to produce clean edges and minimise splintering. The shuttering ply must be supported adequately during cutting so that it does not bend, vibrate or break near the cut line.

Freshly cut edges and drilled holes expose the internal veneers of the panel. For formwork or moisture-exposed applications, these areas should be sealed with the product or coating recommended by the manufacturer. Damaged protective film should also be repaired before the panel is used again.

During installation, the shuttering ply should receive adequate support according to its thickness, span and application. Incorrect support spacing can cause excessive bending, surface unevenness and premature failure.

In formwork applications, a compatible release agent should be applied evenly. Excessive or unsuitable release agents may affect the shuttering ply surface or the resulting concrete finish.

Stripping should be performed carefully after the concrete has reached the required condition. Workers should avoid aggressive crowbar use, hammering and sudden impact. These practices can break corners, crush edges and tear the protective film.

After stripping, concrete residue should be removed before it hardens completely. Suitable plastic or non-damaging scrapers should be used instead of sharp metal tools. The panel should then be inspected, allowed to dry and returned to flat storage.

FROM DELIVERY TO REUSE

1. Match the grade
2. Cut cleanly
3. Seal cut edges
4. Support correctly
5. Apply release agent
6. Strip carefully
7. Clean & restack



Handled right, every panel
gives more successful uses.

POOR MAINTENANCE
REDUCING FORMWORK REUSE

Wood's maintenance guidance explains that delayed cleaning, rough stripping, damaged edges and improper storage can significantly shorten the usable life of formwork shuttering ply. Concrete residue that remains on the surface becomes harder to remove and may require aggressive cleaning that damages the overlay.

The guide presents an illustrative example showing that increasing the number of successful uses from 10 to 20 could reduce the shuttering ply component's cost per pour by approximately 50%. This is a manufacturer example rather than a guaranteed result, but it demonstrates how handling and maintenance affect the economic value obtained from each panel.

≈50% lower shuttering ply cost per pour when successful uses rise from 10 to 20 — a manufacturer's illustrative example, not a guaranteed result.

BEFORE EVERY REUSE, CHECK FOR

- Permanent warping
- Excessive edge swelling
- Veneer separation
- Damaged film
- Concrete build-up
- Crushed corners

Panels with significant damage should not automatically return to service without assessment.



Panels with significant damage
need assessment before reuse.

THROUGH BETTER SITE PRACTICES

PROTECTING SHUTTERING PLY PERFORMANCE

Correct shuttering ply management should continue throughout the panel's complete site life. A sheet that is correctly stored before its first use can still lose its value if it is stripped roughly, left dirty, stored while wet or reused without inspection.

PAAM supports project teams by connecting shuttering ply selection with the actual application, expected moisture exposure and performance requirements. The objective is to help projects use the right material correctly and protect its value after delivery.

Better storage, handling and usage can help improve material utilisation, preserve reuse potential, reduce unnecessary replacements and support more predictable project execution.

Moisture-resistant shuttering ply should not be interpreted as moisture-proof shuttering ply. Moisture resistance relates primarily to the adhesive bond, while the timber veneers can still absorb water, swell and move when exposed to uncontrolled site conditions.

THE FINAL TAKEAWAY

The value of shuttering ply is not determined only by its purchase price.

Its real value is determined by the condition in which it performs, the quality it delivers and the number of successful uses achieved on site.

Right material. **Right storage.** **Right handling.** **Right usage.**

Shuttering ply performance begins when the material reaches the site.