



# IBS HardCore Formply IBS Builders Grade Formply Installation Guide





**AUGUST 2021** 

## **Contents**

1.	Inti	oduction	3
	1.1	What is IBS Formply?	3
	1.2	Benefits of IBS Formply	3
	1.3	IBS Formply Intended Use	3
	1.4	Limitations	3
	1.5	Supporting Information for IBS Formply	3
2.	Info	ormation for Designers and Installers	4
	2.1	Skills Required	4
	2.2	For More Help	4
	2.3	For Our Warranty	4
	2.4	Health & Safety	4
	2.5	Handling & Storage	4
	2.6	Tools Required	4
3.	Inst	tallation	5
	3.1	Formwork	5
	3.2	Release agent	5
	3.3	Tools Required	5
No	tes		7

### NZBN 9429000097253

IBS HardCore Formply F17 Product Details							
L x W x Thickness (mm)	Weight (kg)	IBS Product Code	GTIN				
2400 x 1200 x 17	31.1	FORM172412	09421028769273				
IBS Builders Grade Formply F11 Product Details							
Length (mm)	Weight (kg)	IBS Product Code	GTIN				
2440 x 1220 x 18	34	FORMBG182412	09421028769297				

Contact us for more information or to talk to our team.				
www.ibs.co.nz   0800 367 759   info@ibs.co.nz				

### 1. Introduction

This guide provides advice on installing and maintaining IBS Builders Grade and Hardcore Formply (IBS Formply).

### 1.1 What is IBS Formply?

IBS Formply is a structural formwork panel that provides a strong, rigid, temporary mould for insitu concrete that is easy to handle, erect and strip. Its surface is designed to provide a clean, smooth surface finish to in-situ concrete structures.

IBS Formply is suitable for use with proprietary shutters and formwork systems or installed in accordance with specific engineering.

Formwork must be designed to:

- minimize deflection (limited to the lesser of span/270 or 3 mm)
- hold joints tightly together
- create a cohesive structure for handling and stripping
- enable the easy removal of fixings that hold the formwork together
- enable easy dismantling and reduce risk of damage to the formwork,
- meet the requirements as per AS 3610:1995
   Formwork for Concrete, or as per a specifically engineered design.

Before installing IBS Formply, ensure that all design requirements have been considered and met. In most cases, IBS expects that the specific design details for the formwork will have been carried out by a registered Structural Engineer.

### 1.2 Benefits of IBS Formply

**IBS Hardcore Formply** is fully inline certified to F17 grade and is ideal for use when an engineered strength rating is critical.

It brings together the strength and durability of a full hardwood veneer layup with a marine bonded WBP glue line and a 120gm/m2 dynea paper overlay.

If you are looking to use in formwork or shutters then this is the best choice for you.

**IBS Builders Grade Formply** is batch tested here in

New Zealand to an F11 grade.

A 120gm dynea paper is laminated to the face of the board to give you a great finish on your concrete as well as being able to use it many times over if you look after it.

### 1.3 IBS Formply Intended Use

For full details of physical characteristics, scope and limitations refer to IBS Builders Grade Formply pass™ and IBS Hardcore Formply pass™. Formply can be used as formwork for concrete.

### 1.4 Limitations

When used as IBS Hardcore Formply, limitations include:

- A sheet can be reused 5 to 8 times each side, provided it is used, stored and maintained as instructed.
- Release agents must not come into contact with reinforcement, embedded items, or hardened concrete against which fresh concrete is to be placed.
- Diesel, petrol, or other oil-based products are not recommended as release agents.
- Any cut edges must be sealed with paint or sealant.

When used as IBS Builders Grade Formply, limitations include:

- A sheet can be reused 5 to 8 times each side, provided it is used and stored as instructed.
- Release agents must not come into contact with reinforcement, embedded items, or hardened concrete against which fresh concrete is to be placed.
- Diesel, petrol, or other oil-based products are not recommended as release agents.
- Any cut edges must be sealed with paint or sealant.

### 1.5 Supporting Information for IBS Formply

This guide must be read in conjunction with the:

- IBS Builders Grade Formply pass<sup>™</sup>
- IBS Hardcore Formply pass<sup>™</sup>
- · IBS Formply Warranty.

# 2. Information for Designers and Installers

### 2.1 Skills Required

IBS Formply is for use by a competent construction worker or, for smaller projects, a competent DIYer.

### 2.2 For More Help

Technical assistance is available at info@ibs.co.nz.

While all reasonable efforts have been made to ensure the accuracy of information provided, this document is a guide only. It may be subject to change.

### 2.3 For Our Warranty

Refer to www.ibs.co.nz.

### 2.4 Health & Safety

Take all necessary steps to ensure your safety and the safety of others:

- ensure adequate ventilation or mechanical dust extraction when cutting or drilling
- ensure the sheets are well supported when cutting
- wear appropriate safety equipment, clothing and footwear
- use all tools in accordance with relevant instruction manuals
- clear the work area of any obstructions before work starts.
- ensure there is adequate walkway space at the top of the formwork
- take all precautions when working at height
- no obstructions or unnecessary overhangs and fall protection.

For further information refer to:

- WorkSafe, Absolutely essential toolkit
- WorkSafe, Health and safety at work quick reference guide

These documents are available at www.worksafe. govt.nz.

### 2.5 Handling & Storage

Take care when transporting, handling, and storing IBS Formply to prevent damage to the sheets.

Face veneers, panel edges and panel corners are vulnerable to damage and should always be protected. When storing or handling take care to avoid sharp objects and place on a flat clean surface to avoid scratching, chipping and damage to edges.

IBS Formply is manufactured at low moisture content. Short exposure to damp conditions will not affect its dimensions, but with continued wetting, warping will occur. If panels are wet, allow them to dry slowly. Do not place in direct sunlight for extended periods.

Store panels flat, under cover and always in a well-ventilated area. Vertical storage is not recommended. If stacked ensure support is placed in at least three areas under the bottom panel.

Framed panels should be stacked alternately faceto-face and back-to-back to avoid face damage from bolts etc. Where prone to on-site damage, add edge and corner protection using a stiff folded cardboard or light folded metal angle.

### 2.6 Tools Required

- · tape measure, edge, and chalk line
- · general hand tool
- hard tip hand saw
- skill saw
- electric or battery drills
- · selection of speed drill bits
- electric planer
- · laser level.

### 3. Installation

### 3.1 Formwork

To construct the formwork

- Lay the long edge of the panel (face grain) across the frame structure.
- Fix the panel to form the structure using 60 mm HDG nails (annular grooved if possible).

IBS recommend 50 mm x 2.8 mm diameter self-drilling, self-tapping wood screws for easy dismantling.

- If using screws, pre-drill screw holes using a highquality counter-sunk speed bit.
- Countersink the fasteners and fill for optimum performance.
- Secure panels at 150 mm centres on the edges and 300 mm centres on the cross members.
- To avoid staining from fasteners use hot dipped galvanized, stainless or alloy fasteners.
- Allow 1 2 mm expansion gap between panels when fastening.
- Use gap-filling compound and/or tape over expansion gaps to produce the best finish.

### 3.2 Release agent

Always use a release agent.

Prior to every concrete pour:

- Ensure the release agent used is applied sparingly. Heavy application may cause runs and discolouration in the concrete.
- IBS recommend a light coating of a chemically reactive release agent. Chemically reactive release agents react with the lime in the fresh concrete and create a waterproof layer between the concrete and the panel. This ensures serviceability of the IBS Formply is not reduced.
- IBS do not recommend the use of barrier type release agents (including petroleum-based products).
- When selecting the release agent, consider the type of surface finish quality required.

Note: Continuous pours are recommended to minimize 'cold joints'.

### 3.3 Tools Required

- random orbit sander
- fast dry 2-part wood filler
- · putty knife or small trowel
- · sanding block.

IBS Formply can be reused 5 – 8 times each side, provided it is used, handled, stored and maintained as instructed.

Cleaning should be carried out immediately after each use.

Clean with a soft absorbent material and cold water. If necessary, dislodge hardened surface concrete. Use a stiff brush or fine edge hardwood or PVC scraper. Do not use a wire brush or sharp metal scraper to dislodge hardened surface concrete on the plywood film surface.

Inspect the IBS Formply regularly for damage. Where the face finish is critical, check for delamination and unacceptable face damage prior to use.

The IBS Formply faces and edges are sealed with a protective coating during the manufacturing process. Should the protective coating become damaged, ripped or dislodged, the serviceable life of the panel will be reduced, and the struck face of the concrete could become flawed and unsightly.

Repair the protective coating by sealing, patching or filling with a 2-part, water repellent timber filler. Sanded flat and apply an application of protective sealer.

**Notes:** 





1/7 Fraser Road, Panmure, Auckland, New Zealand 0800 367 759 | info@ibs.co.nz www.ibs.co.nz