GIB® Design tips for minimising plasterboard construction waste

The New Zealand building industry is becoming increasingly aware of the financial and environmental gains possible through minimising construction material waste especially as landfill disposal costs continue to increase year on year.

But what practical steps can a designer take to start minimising plasterboard construction waste on site?

01. Waste Ownership and Accountability

Clear ownership and accountability for waste minimisation both during design and construction is essential.

If minimising waste is a priority it's worth clearly defining on a project:

- Who is specifically responsible for monitoring and implementing waste minimisation initiatives during both the design and construction phases.
- Do clear waste minimisation targets exist for the project.
- Are waste streams being regularly reported on using data from the waste collection service provider.
- Are waste minimisation targets included in the project contracts and subcontractor agreements to help ensure they remain a priority on the project.
- Is there a plan for reusing or recycling plasterboard offcuts.

02. Standardised Room Design and Framing Layouts

Room Dimensions

GIB® plasterboard sheets are typically available in sheet lengths of 2400-6000mm in increments of 300mm or 600mm to cater for a range of room dimensions.

Ideally frame set outs and room designs would be standardised to align with these commonly avaialble sheet lengths however often this is not realistic given the need to optimise room sizes and cladding specific frame requirements.

Ceilings tend to be easier than walls to accomodate the use of common plasterboard sheet sizes to reduce offcut waste.

Building Stud Heights

GIB® Standard plasterboard is manufactured in 1200mm and 1350mm widths and in a wide array of length options. The 1200mm and 1350mm widths when installed horizontally are well suited to cater for stud heights of 2400mm, 2550mm and 2700mm. Working to these stud heights can be an easy way to help minimise generating offcut waste while also reducing the amount of stopping work required.

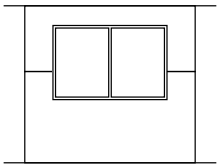
Horizontal Plasterboard Installation

Specify on design plans that the plasterboard is to be installed horizontally on walls where possible. This provides greater opportunity for sheet lengths to be ordered which work in more closely with the total room length and reduce the overall amount of plasterboard waste generated than if the plasterboard was installed vertically.

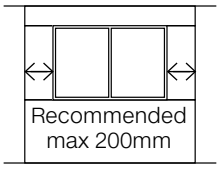
Horizontal fixing can also reduce the number of sheet joins in a room reducing the amount of stopping required.

Some GIB®performance systems may require sheets to be installed vertically, always check the appropriate GIB® systems manual before commencing installation.

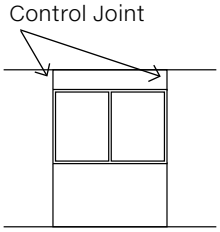
03. Window and Door Openings



Another potential source of plasterboard waste is where plasterboard full sheets are used around door and window openings to reduce the risk of cracking in the corners.



One option worth considering to reduce offcut waste is to move the sheet joint away from corner openings and use a floating joint such as shown here.



Alternatively for applications prone to high degrees of movement, such as transport homes consider including a control joint at the edge of the opening.

04. Room Take-off and Ordering Processes

Lastly it makes logical sense that the person responsible for installing the plasterboard onsite should also be the one paid to do the site measure and specify the plasterboard sheet lengths required.

An experienced installer can help ensure the most efficient sheet sizes are used to reduce offcut waste, while also providing good guidance on other potential installation considerations such as the most efficient delivery method to use so the plasterboard installation can occur smoothly and efficiently.

05. Plasterboard Offcut Recycling Options

Winstone Wallboards is working with a number of regionally based companies with the aim of providing more recycling and composting options for plasterboard offcuts.

For more information on recycling options available in your area visit gib.co.nz/sustainability