MASONS 4.5 MM FIBRE CEMENT SOFFIT LINING

DESIGN AND INSTALLATION GUIDE



V1.0 August 2021

General and product information

PURPOSE

This design and installation guide relates to Masons 4.5 mm Fibre Cement Soffit Lining.

IMPORTANT DOCUMENTS

This guide must be read in conjunction with:

- Masons 4.5 mm Fibre Cement Soffit Lining pass™
- > the relevant Masons 4.5 mm Fibre Cement Soffit Lining details
- Masons 4.5 mm Fibre Cement Care and maintenance guide
- Masons 4.5 mm Fibre Cement Warranty
- > NZS 3604:2011
- Acceptable Solution E2/AS1.

SKILLS REQUIRED

This guide is suitable for use by a competent designer and person with basic carpentry skills. Where applicable the person specifying or installing the Masons Fibre Cement Soffit Lining must be able to meet all RBW provisions.

FOR MORE HELP

Technical assistance is available at www.mpb.co.nz

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

FOR OUR WARRANTY

Refer to www.mpb.co.nz.

PRODUCT DESCRIPTION

Masons 4.5 mm Fibre Cement Soffit Lining is a 4.5 mm fibre cement sheet, manufactured from cement, cellulose fibres and additives. The sheets are made using a laminar process and autoclaved using high pressure steam curing, which makes the sheets dimensionally and chemically stable.

The sheets are 4.5 mm thick x 600 mm wide x 2440 mm long.

SCOPE AND LIMITATIONS

For scope of use, limitations, conditions and statement of building code compliance, refer to the Masons 4.5 mm Fibre Cement Soffit Lining pass™.





Design

This section applies where Masons 4.5 mm Fibre Cement Soffit Lining is to be specified in a building consent.

CONFIRM SCOPE
Confirm the proposed use is within the scope and limitations of the pass $^{\text{TM}}$.
CONFIRM RELATED BUILDING WORK
Masons 4.5 mm Fibre Cement Soffit Lining is suitable for use with a timber or lightweight steel structure. Masons Plastabrick recommends that soffit support framing is at maximum 450 mm centres.
For new and existing buildings confirm that the soffit and roof primary structure:
 comply with the NZ Building Code and are designed in accordance with NZS 3604:2011 or NASH Design Standard 2019 Parts 1 and 2, or are specifically designed to NZS 3603:1993 or
AS/NZS 1170:2002, or
> where existing are suitable for the intended building work
ESTABLISH REQUIREMENT FOR A FLASHING
 Mechanical flashings are required in the following situations: At the junction of the soffit and wall cladding of a raking eave.
 At the junction of the soffit and an irregular wall cladding (bevel back weatherboard) at a gable verge.
SPECIFY FIXINGS
Masons 4.5 mm Fibre Cement Soffit Lining may be installed using 40 mm x 2.8 mm galvanised clouts fixed at maximum 300 mm centres, 12 mm from edge of sheet.
SELECT ALL NECESSARY DETAILS
Select the relevant Masons details.
SPECIFY FINISH

STEP 7: **QUALITY CHECK**

Confirm all relevant design requirements are met.





Check that the building consent plans and specifications clearly define and include:

- all relevant installation details, these should be shown on each relevant plan sheet
- fixing and jointing requirements
- **)** finishing requirements.

Collate the following documents and include in the building consent application:

- Masons 4.5 mm Fibre Cement Soffit Lining pass™,
- Masons 4.5 mm Fibre Cement Care and maintenance guide,
- Masons 4.5 mm Fibre Cement Warranty and this document.





Pre-installation

HEALTH AND 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 Masons 4.5 mm Fibre Cement Soffit Lining sheets are well supported when cutting and nailing
- > wear appropriate safety equipment, clothing and footwear
- > use all tools in accordance with relevant instruction manuals
- > plan and monitor a safe approach for working at height; select and use the right equipment
- > clear the work area of any obstruction before work starts.

For further information refer to:

- > WorkSafe. [July 2018] Small Construction Sites, the Absolutely Essential Health and Safety Toolkit.
- > WorkSafe. [December 2016] Health and Safety at Work, Quick Reference Guide. These documents are available at www.worksafe.govt.nz.

HANDLING AND STORAGE

Handling

Care must be taken during loading, unloading, and transporting the materials to prevent pre-installation damage.

Unload the sheets by hand or using a forklift. Use two people to carry the soffit lining sheets on edge and hold near each end. Do not lean them against vertical surfaces as this can cause the sheets to bend.

Storage

Store the soffit lining sheets in a flat area undercover. They must be off the ground, placed on a pallet or supported by timbers running the length of the sheet.

TOOLS AND EQUIPMENT REQUIRED

Install the lining using standard carpentry tools and equipment. Use tools in accordance with good trade practice and supplier's instructions.

Masons Soffit Lining can be cut or scored and snapped with tungsten carbide tipped tools.







Installation

STEP 1

BUILDING CONSENT DOCUMENTATION

Where applicable, access and view building consent documentation.

Access and view details in the building consent documentation or access the relevant details from Masons.

NZS 3604:2011 or NASH Design Standard Part Two: 2019 and Acceptable Solution E2/AS1 and E2/AS4 should also be available for reference.

STEP 2

CHECK RELATED BUILDING WORK

For new and existing buildings ensure the soffit substrate is straight and true and within framing tolerances as described in NZS 3604:2011 section 2, Table 2.1 or NASH Design Standard Part Two: 2019, section 2.5.

Masons Plastabrick recommends that soffit support framing is at a maximum of 450 mm centres. This will ensure that over time the soffit lining will not sag, which can happen if fixings are at greater than 450 mm centres.

Where framing is not at 450 mm centres insert additional sprockets evenly spaced between framing, fixing at both ends to the ribbon board and the fascia support.

Check the moisture content of timber framing. It must be no greater than 18 % before the soffit lining is installed.

STEP 3

INSTALL THE SOFFIT LINING

All sheet edges must be supported by the fascia and the framina.

Where required install a mechanical flashing.

Fix at minimum 300 mm centres and a maximum 12 mm from the edge, using a 40 mm x 2.8 mm galvanised clout.

Fix at the central to midpoint of the sprocket and at 300 mm centres on the ribbon board, inserted into groove of fascia.

Nails must be flush with the sheet surface. Do not screw fix sheets.





STEP 3 CONTINUED

At gables ends or a monopitch roof, install a mechanical flashing to the soffit-wall junction with minimum 35 mm laps where the soffit slopes upwards away from the wall.

For a raking soffit or flat soffit, no flashing is required.

Join sheets using PVC H moulds ensuring that they extend past the cornice mould at the junction of the wall cladding and that the sheet is eased into the mould.

STEP 4

FINISHING

Paint with the specified paint system or select a quality exterior grade paint system.

Ensure the sheet surface is dry and free of dust and contaminants.

Apply the selected paint coating in accordance with the paint manufacturer's instructions.

STEP 5

COMPLETION

Check to ensure all components are installed correctly and in accordance with Masons 4.5 mm Fibre Cement Soffit Lining details.

Ensure all care and maintenance information is available for the building owner.

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