

Product Substitution

PLASTERBOARD

GUIDANCE

Substituting plasterboard – guidance
for building consent authorities

Version 4



Ministry of Business, Innovation and Employment (MBIE)

Hīkina Whakatutuki – Lifting to make successful

MBIE develops and delivers policy, services, advice and regulation to support economic growth and the prosperity and wellbeing of New Zealanders.

The Product Substitution Plasterboard Guidance document is produced by the Building System Performance branch. It is intended to supplement the Product Substitution Guidance for designers and builders, published in November 2021.

This document is issued as guidance under section 175 of the Building Act 2004.

While MBIE has taken care in preparing the document it should not be relied upon as establishing compliance with all relevant clauses of the Building Act or Building Code in all cases that may arise. This document may be updated from time to time and the latest version is available from MBIE's website at www.building.govt.nz

Information, examples and answers to your questions about the topics covered here can be found on our website www.building.govt.nz or by calling us free on **0800 24 22 43**.

First published June 2022

ISBN 978-1-99-104119-7 (online)

More information

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1. Purpose

The purpose of this guidance is to provide building consent authorities (BCA), designers and contractors with the Ministry of Business, Innovation and Employment's (MBIE) position on the appropriate way to apply the Building (Minor Variation) Regulations 2009 with respect to the substitution of plasterboard wall and ceiling linings

It is intended that this guidance promotes clarity and certainty for all parties regarding how minor variations involving plasterboard and similar wall and ceiling linings are dealt with.

This guidance must be read in conjunction with the more general Product Substitution guidance [Product Substitution Guidance](#) published by MBIE in November 2021.

Who is this guidance for?

This guidance is for BCAs, designers and contractors who need to use wall and/or ceiling linings different from those specified in the building consent.

2. Background

Aotearoa New Zealand is currently experiencing a shortage of plasterboard products. MBIE's view is that an effective substitution procedure – and the application of the [Building \(Minor Variations\) Regulations 2009](#) – has a significant part to play in enabling progress for those building projects currently delayed due to the shortage.

When considering the substitution of plasterboard products, it is critical that with the substituted products, the building work will continue to meet the performance requirements of the [New Zealand Building Code](#) (the Building Code).

It is possible to manage product substitution and minor variations quickly and effectively, while still maintaining compliance with the Building Code.

Plasterboard substitution that is managed poorly, without considering how substituted products are likely to perform, risks introducing latent defects into buildings particularly in relation to building element performance. Assurance of comparable structural integrity, sound rating, fire protection, and moisture impervious properties, should be provided where plasterboard is substituted and used for these applications.

All parties to a building project have a role to play in ensuring that product substitution and, in particular, the minor variation procedures, are quick, effective and deliver buildings that comply with the Building Code.

3. Substituting plasterboard: Guidance for Building Consent Authorities

In the Aotearoa New Zealand context plasterboard has five key uses:

- As a general wall and ceiling lining, where there are only standard performance requirements. This product could be shown to be compliant through conformance with the manufacturing and performance specifications within AS/NZS 2588:2018 Gypsum plasterboard. Substituted linings would need to conform to manufacturers installation specifications for fixings and achieving durability for the location installed.
- When used as a substrate lining in areas subject to water splash such as bathrooms and kitchens as part of a lining system that needs to be impervious to water and easily cleaned to enable compliance with clause E3 Internal Moisture.
- As a component of a fire rated building element that needs to meet the requirements for surface finish non-combustibility, fire resistance, heat transmission, and structural integrity that will in turn meet requirements for clause C Protection from Fire. This may be demonstrated by meeting the relevant fire test standards in the Building Code and MBIE solutions for Fire compliance.
- As a component of a sound rated building element eg to achieve a Sound Transmission Class (STC) or Impact Insulation Class (IIC) of 55 in accordance with clause G6 Airborne and Impact Sound. Compliance can be demonstrated using the STC rating test ASTM E 336:1990 and IIC rating testing to ASTM E 492: 1990.
- As a component of a building element that is intended to resist earthquake and wind load demands (usually described as bracing demand and quantified as bracing units). Bracing capability can be demonstrated by testing linings using the P21¹ bracing test as referenced in NZS3604: 2011² and B1/AS1].

4. Substituting plasterboard that has standard performance requirements

MBIE's guidance is that substitution of plasterboard products that are for use as wall and/or ceiling linings, with standard performance requirements, presents a low risk and, if required, the minor variation process can generally be managed on-site.

To ensure the process is efficient and effective, all parties have a role to play.

The designer or contractor who wishes to substitute the product should:

- Ensure that the customer is informed about, and agreed to, the substitution taking place.
- Ensure that they choose a product that has been demonstrated to comply with the Building Code.

¹ <https://www.branz.co.nz/pubs/technical-papers/p21/>

² <https://www.standards.govt.nz/product-download/download/461950/0?mediaTypeId=4af995f7-f243-48a1-aec8-6016b05da360&formatId=1bd170ba-2514-eb11-a812-000d3a6aa268>

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- Ensure that adequate evidence is provided so that the BCA can be satisfied on reasonable grounds that the building work will continue to comply with the Building Code.
- Ensure that they are on-site to talk to the building control officer about the proposed substitution and provide documentation if requested.

The Building Consent Authority should:

- Always be mindful of the need to ensure that the building work with the proposed substituted product will continue to comply with the Building Code
- While being mindful of the above point, deal with the proposed substitution as quickly and efficiently as possible – usually on-site
- Talk to the designer or contractor if there are any concerns or if more information is required
- If the minor variation is approved, record the variation on the building consent file.
- Provide information to customers on what information, and the process involved if they wish to substitute a product
- Have effective and efficient processes and procedures in place for assessing minor variations.

5. Substituting plasterboard that has additional performance requirements

MBIE's guidance is that substitution of plasterboard that has additional performance requirements (for example, for use as a substrate lining in areas subject to water splash such as bathrooms and kitchens, as an element within a fire-protection system, or a sound rated system or a bracing system) should in the majority of cases be processed as a minor variation rather than as an amendment to the building consent.

The designer or contractor who wishes to substitute the product should:

- Ensure that the customer is informed about, and has agreed to, the substitution taking place.
- Ensure that there is adequate information and evidence so that the BCA can be satisfied on reasonable grounds that the building work complies with the Building Code. Where an application for a minor variation is required to be submitted, providing sufficient technical information (such as a product technical statement) and installation specifications will enable the BCA to process the application efficiently.

The designer is responsible for ensuring that the work complies with the Building Code (Section 14D of the Building Act)

The BCAs ability to process a substitution as a minor variation will depend to a large extent on the technical quality and credibility of the information provided by the designer or contractor.

A failure to provide sufficient information will likely lead to delays in assessing variations, rejection of the application, or potentially the need to submit an application for an amendment to the building consent.

The BCA considering an application for plasterboard substitution should:

- Always be mindful of the need to ensure that the building work will continue to comply with the performance requirements of the Building Code.
- Where the application involves a product that has specific performance requirements, that there is adequate information provided to show continued compliance with the Building Code.
- Readily consider the use of substituted products other than those with which they are immediately familiar, if those products are accompanied by sufficient evidence to enable the BCA to be satisfied on reasonable grounds that the work will comply with the Building Code.

BCAs should not accept substitution of wall or ceiling lining elements requiring specific performance properties – whether through the minor variation procedure or as an amendment to the building consent – unless there is sufficient evidence to enable the building consent officer (BCO) to be satisfied on reasonable grounds that the work will comply with the performance requirements of the Building Code.

6. Specialist wall and ceiling lining products with available technical information

MBIE is aware of other wall and ceiling lining products available in Aotearoa New Zealand that have technical information available about their performance when used for bracing, fire protection or water resistance.

In order to promote a broader Aotearoa New Zealand-wide understanding of available tested wall and ceiling lining products, Tables 1 and 2 below summarises what is available from these product suppliers. References to the technical information provided by these product suppliers are given in the Appendices to this guidance. The information includes:

- Relevant product technical specifications.
- The testing that has been conducted on these products in relation to their intended installed performance properties for general lining, bracing, moisture imperviousness, and fire protection properties (or combinations thereof).
- The results of those tests, along with any available appraisals of performance.

This information has been provided by the product suppliers. MBIE has not independently verified the information provided by the suppliers.

The information provided here and, in the Appendices, represent MBIE's current knowledge about available products that have been tested to Building Code performance requirements. Should MBIE become aware of additional products to appropriately add to this list, this guidance will be updated.

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Table 1: Plasterboard that can be substituted as a minor variation

Manufacturer	Board type	Components and elements
Elephant board	Elephant plaster board Standard 10 & 13 mm	Standard grade
	Elephant plaster board FireSmart 10-16 mm	Fire resisting element
	Elephant plaster board MultiSmart 10 & 13 mm	Bracing element Fire resisting element Water resisting component Acoustic component
	Elephant plaster board AquaSmart 13 mm	Water resisting component
USG Boral (Knauf Gypsum)	USG Boral (Knauf) Sheetrok 10 & 13 mm	Standard grade
	USG Boral (Knauf) Standard plasterboard 10 & 13 mm	Standard grade
	USG Boral (Knauf) Wetstop 10 & 13 mm	Water resisting component
	USG Boral (Knauf) Fiberock 10-16 mm	Bracing element
BPB Proroc (Thai Gypsum Products Plc)	BPB Proroc Standard Plasterboard	Standard grade
	BPB Duraline	Standard grade
Plasterglass Optima Fibrous Plaster board	Plasterglass Optima Fibrous Plaster board	Standard grade
SaveBOARD *	SaveBOARD Paperfaced 10 & 12 mm	Bracing element
Siniat	Siniat Mastashield plasterboard 10 & 13 mm	Standard grade

*Saveboard is a wall lining product but not a plasterboard product

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Table 2: Other standard grade plasterboards that Building Consent Authorities are accepting substitutions as minor variations

Manufacturer	Board type
CSR Gyprock	CSR Gyprock Plus 10 & 13 mm
	CSR Gyprock Superceil 10 & 13 mm
	CSR Gyprock Sensitive 10 & 13 mm
	CSR Gyprock standard plasterboard 10-16 mm
	CSR Gyprock Impactchek 10 & 13 mm
	CSR Gyprock Superchek 10 mm
	CSR Gyprock Habito H 12.5 mm
	CSR FyrChek
Trusus (Beijing)	Trusus Gypsum Board 10 mm only

7. Avoiding the need for substitution

Most designers will already be trying to avoid specifying products that are likely to need to be substituted at construction stage. To do this, designers should consider the availability of the products they propose to use within a system and consider whether any of the following are more readily available and could be suitable alternatives:

- other readily available plasterboard products
- non-plasterboard panel systems, or
- alternative construction systems.

Proprietary bracing solutions

There are several proprietary sheet lining products available that use materials other than plasterboard, eg. Plywood, MDF and fibre cement sheets. Proprietary products that are used for bracing must be validated by the P21 test.

Non-proprietary bracing solutions

BRANZ study report SR 305 (2013) gives bracing ratings for non-proprietary bracing walls. It gives construction details and ratings for bracing elements that were used in older construction. Examples include let-in timber braces, diagonal timber braces cut between studs, and standard plasterboard fixed to one or both sides. While the report is for those altering and repairing existing buildings, some of the systems and their bracing ratings could also be used for new construction.

- <https://www.branz.co.nz/pubs/research-reports/sr305/>

Appendix A: Sources of product information

Compiled below is a series of links that may be of use when considering substituting plasterboard linings for other lining products that will achieve the intended design purpose.

British Plaster Board (BPB Gyproc/Proroc)

Products: Standard, Aquastop, Braceboard, Firestop, Duraline

- <https://www.gyproc.sg/products/gypboard>
- http://www.buildspace.co.nz/files/BPB_NZ_Brochure.pdf
- <https://www.british-gypsum.com/documents/certificates/british-gypsum-bba-internal-wall-insulation-systems-drilyner-dab-sealant-variant.pdf>
- <https://www.certainteed.com/resources/regular-gypsum-data-sheet-e-2201ctg.pdf>

Elephant Board

Products: Standard, Aquasmart, Multismart, Firesmart

- <https://elephantplasterboard.co.nz>
- <https://www.branz.co.nz/appraisal-codemark-certificates/far-4707-to-elephant-plasterboard-fire-rated-wall/>
- Refer for individual test reports: <https://www.branz.co.nz/appraisal-codemark-certificates/>

USG Boral (Knauf)

Products: Sheetrock, Multistop, Aquastop

- https://www.knaufapac.com/en_au/
- <https://www.branz.co.nz/appraisal-codemark-certificates/899-2015-usg-boral-bracing-systems/>
- <https://www.branz.co.nz/appraisal-codemark-certificates/955-2017-usg-boral-wet-area-systems/>
- <https://www.branz.co.nz/appraisal-codemark-certificates/fh-6100-tt-usg-boral-skyrock-classic-acoustic-panel/>
- <https://www.branz.co.nz/appraisal-codemark-certificates/fr-6123-tt-usg-boral-wall-system-tb451a/>
- Refer for individual test reports: <https://www.branz.co.nz/appraisal-codemark-certificates/>

Saveboard

Products:

- <https://www.saveboard.nz/products>

Winstone Wallboards

Products: Standard/Braceline/Ultraline/Fireline/Aqualine

- <https://www.qib.co.nz/>
- Refer also for individual test reports: <https://www.branz.co.nz/appraisal-codemark-certificates/>

Other lining product options

- <https://www.building.govt.nz/assets/Uploads/building-code-compliance/certifications-programmes/product-certification-scheme/product-certificate-register/hume-cemboard-primaaqua-primalux-primactu-primaliner-primalpha-groove.pdf>

Codemark certified products

- <https://www.building.govt.nz/assets/Uploads/building-code-compliance/certifications-programmes/product-certification-scheme/product-certificate-register/kooltherm-k12-k17-k18.pdf>

General and wet area linings

For general and wet area linings, select Appraisal under Certification: All and select Wall, Ceiling, Soffit and Interior Finishing under Category.

Appraisal No.	Appraisal Title
427 (2021)	GIB® Wet Area Systems https://www.branz.co.nz/appraisal-codemark-certificates/gib-wet-area-systems/
601 (2020)	Panorama PVC Lining System https://www.branz.co.nz/appraisal-codemark-certificates/601-2020-panorama-pvc-lining-system/
737 (2019)	PRIMAaqua™/PRIMAliner™ Wall and Ceiling Linings https://www.branz.co.nz/appraisal-codemark-certificates/737-2019-primaaqua-primaliner-wall-and-ceiling-linings/
738 (2019)	PRIMAaqua™/PRIMAliner™ Wall and Ceiling Linings https://www.branz.co.nz/appraisal-codemark-certificates/738-2019-primaaqua-primaliner-wall-and-ceiling-linings/
790 (2019)	Seratone Wall and Ceiling Linings https://www.branz.co.nz/appraisal-codemark-certificates/790-2019-seratone-wall-and-ceiling-linings/
869 (2019)	Multicom® Wall Panel System https://www.branz.co.nz/appraisal-codemark-certificates/869-2019-multicom-wall-panel-system/
951 (2022)	Metra Ceiling https://www.branz.co.nz/appraisal-codemark-certificates/metra-ceiling/
955 (2017)	USG Boral Wet Area Systems https://www.branz.co.nz/appraisal-codemark-certificates/955-2017-usg-boral-wet-area-systems/

Appendix B: Additional product appraisals and testing

Product appraisals and testing information are listed below. BRANZ appraisals are available from <https://www.branz.co.nz/appraisal-codemark-certificates/>. Product appraisals and testing information may be obtained from other suppliers. MBIE has not independently verified the information provided below.

Interior bracing solutions

For interior bracing solutions select Appraisal under Certification: All and select Wall Bracing under Category. Click on the hyperlink for the Appraisal and company contact details.

Appraisal No.	Appraisal Title
779 (2018)	GoldenEdge® MDF Panelbrace™ Wall Bracing Systems https://www.branz.co.nz/appraisal-codemark-certificates/779-2018-goldenedge-mdf-panelbrace-wall-bracing-systems/
899 (2015)	USG Boral Bracing Systems https://www.branz.co.nz/appraisal-codemark-certificates/899-2015-usg-boral-bracing-systems/
928 (2021)	GIB EzyBrace® Systems https://www.branz.co.nz/appraisal-codemark-certificates/gib-ezybrace-systems/
1065 (2021)	IPL Bracing Ply™ https://www.branz.co.nz/appraisal-codemark-certificates/ipl-bracing-ply/
1079 (2020)	Gamma Wall Bracing Systems https://www.branz.co.nz/appraisal-codemark-certificates/1079-2020-gamma-wall-bracing-systems/

Alternative construction systems

There are also alternative construction systems for housing. Select Appraisal under Certification: All and select Building systems under Category.

Appraisal No.	Appraisal Title
364 (2021)	Metra Panel System https://www.branz.co.nz/appraisal-codemark-certificates/metra-panel-system/
385 (2021)	EVG 3D Concrete System (not currently active in NZ market) https://www.branz.co.nz/appraisal-codemark-certificates/evg-3d-concrete-system/
481 (2019)	Triboard Construction System https://www.branz.co.nz/appraisal-codemark-certificates/481-2019-triboard-construction-system/
1058 (2019)	Green Precast 'Livin Modular' System (not currently active in NZ market) https://www.branz.co.nz/appraisal-codemark-certificates/1058-2019-green-precast-livin-modular-system/
1202 (2021)	Durapanel Structural Panel System https://www.branz.co.nz/appraisal-codemark-certificates/durapanel-structural-panel-system/
1203 (2021)	NZSIP Smart Panel Building System https://www.branz.co.nz/appraisal-codemark-certificates/nzsip-smart-panel-building-system/

The BRANZ website also lists a number of **Technical Opinions** and **Type Test** reports. These can be used to demonstrate compliance with a specific Standard or requirement of the New Zealand Building Code. Most of those listed on the BRANZ website relate to fire performance.

Select **Type Test** or **Technical Opinion** under Certification: All.

Version Control

Version Number	Publish Date	Updates made
Version 1	10 June 2022	
Version 2	28 June 2022	<ul style="list-style-type: none"> • Section 5 -Paragraph "Consideration of specific products" added (page 5) • Section 6 – Updated to reflect changes noted above in Section 5 - (page 6)
Version 3	7 July 2022	<ul style="list-style-type: none"> • Version Control Added • Section 5 -Paragraph "Consideration of specific products" deleted (page 6) • Table "Plasterboard that can be substituted as a minor variation" added (page 6-7)
Version 4	5 August 2022	<ul style="list-style-type: none"> • Added Section 7 "Avoiding the need for substitution" with additional advice on bracing solutions" • Revised text to recognise the performance requirements for standard grade plasterboard within AS/NZS 2588:2018 and to make minor typographical corrections • Removed link to USG Boral handyboard that is no longer available • Added Siniat Mastashield plasterboard to table 1 • Moved, relabelled and revised tables to improve usability • Labelled appendices as A and B



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BP 8399