



SPECIFICATION

Bagging Bricks

Bagged Plaster over Brick



PROJECT NAME

PROJECT ADDRESS

OWNERS NAME

This EasySpec page is designed for your ease of use. Please make changes to the type of finish you require and then print off and attach to your plans for consent.



Bagging Bricks

Bagged Plaster over Brick

THIS VERSION INCLUDES THE BRICK VENEER SPECIFICATION

If you don't want the veneer included please use the bagging bricks plaster specification

PRODUCT DESCRIPTION

Bagging plaster is an economical way to provide an attractive rustic feel to the exterior of any masonry clad building without completely concealing the nature of the underlying substrate's character.

SELECTIONS

Brick or Blocks	<input type="text"/>
Bonding Type	<input type="text"/>
Surface Preparation:	<input type="text"/>
Texture Coat:	<input type="text"/>
Paint:	<input type="text"/>
Paint Coats QTY:	<input type="text"/>
Colour:	<input type="text"/>

SUBSTITUTIONS

Product substitutions are not permitted.

QUALIFICATIONS

Bricklayers; The veneer is to be installed by a 'qualified' tradesman and 'supervised' by a Licenced Building Practitioner (if not the tradesman doing the laying) who will be responsible on completion of the brick veneer installation, certifying that the veneer meets all requirements of E2/AS1 Masonry and NZS4210; in addition to any requirements on the 'Approved Plans' and Specification.

Plaster applicators are required to hold a licence for plaster applications.



BRICKLAYING SPECIFICATIONS

The 'Architect or Architectural Designer' is responsible for ensuring that the 'brick veneer', as detailed on the Building Consent Plans and Specification, complies with all aspects of E2/AS1 Masonry and NZS4210. Where aspects of the design do not comply with these requirements, 'Alternative Solutions', submitted to and approved, are to be obtained in writing from the BCA, issuing the Building Consent.

The 'Architect or Architectural Designer' is also to ensure that the details submitted to council for the building consent on any one particular dwelling, specifically relate to the methodology and veneer to be installed.

Note: Any product, other than a clay or concrete brick/block, requires 'Specific Design' supplied by the manufacturer/marketer of the alternative product being specified. That 'Design' is to be fully specified and detailed on the Building Consent plans.

Ensure WANZ support bars have been specified under all doors and windows, as required.

BRICKLAYING WORKMANSHIP

The normal viewing position distance for internal and external exposed architectural masonry feature walls is 6.1 m. Where it is not possible to achieve this distance, specific issues can be viewed at closer distances in accordance with the details mentioned below.

Cracks and chips unless otherwise specified, exposed walls should be:

- Free of visible cracks and chips when viewed from 6.1m in diffused light. (ASTM C90-1418)
- From closer distances, chipping of edges on bricks is acceptable provided the total length of chips per brick is no more than 10% of the perimeter length of the brick and;
 - For 95% of the bricks the chips are no longer than 3 mm from edges and 6 mm from corners, and;
 - For the remaining 5% of the bricks the chips are no longer than 6 mm from edges and 9.5 mm from corners.

RELATED DOCUMENTS

All relevant NZ Standards shall apply in their latest revisions. In particular, the following documents:

E2/AS1	Building Code , External Moisture, Masonry Veneer
NZS4210	Materials and Workmanship
NZS4229	Masonry Buildings not requiring Specific Design
NZSHB4236	All standards relating to masonry veneers – summary.
TB1	Design Note TB1: CB&PMA 2 Storey Brick System

John Oliver's BRICK BOOK 2014, 3rd Edition

Approved 'Alternative Solutions' for items not complying with E2/AS1 Masonry.

BUILDING WRAP

Where studs exceed 600mm centres, and the building wrap is not a flexible or rigid air barrier, the building wrap is to be taped and fixed horizontally at 300mm centres up the height of the stud to comply with E2/AS1. The bricklayer is to check prior to laying any bricks and advise the Contracts Manager if this has not been done.



PRODUCTS

All materials shall be the best of their respective kinds, free from impurities, imperfections and other faults likely to impair the finished masonry veneer. In addition, all materials are to comply with any NZ Standards applicable to them.

BRICKS OR BLOCKS

- Use the bricks or blocks specified on page 2 of this document.

MORTAR

- The mortar to be used can be a pre-bagged factory manufactured 'Trade Mortar'. Alternatively, the mortar may be site mixed using a formula by volume, not exceeding 1 cement to 4 wash-mixed sand, clean water and any plasticizing agents deemed appropriate. (Sea Spray Zones use 1 cement to 3 sand).
- Mortar must be flush not raked

Note: The 'wash-mixed' sand is to have a maximum salt content of 0.04%.

BRICKTIES

- Use MASONS BrickTies (CodeMark Certified); Hot dipped galvanised or 316 Stainless Steel BrickTies. Masons BrickTies are suitable for all buildings applications including Heavy Duty Earthquake zones.
- Masons BrickTies are available in the following lengths: 85mm, 90mm, 110mm and 135mm. The BrickTies must have sufficient length to span the cavity and ensure a minimum 50% bedding in the mortar course.

BRICKLAYING

HOT WEATHER - DRYING WINDS

- During the bricklaying process, when the air temperature is above 25°C and/or hot drying winds are present, the newly laid brick veneer must be properly cured for the first 24 hours by adding moisture to the veneer and protecting it from direct sun and drying winds.
- It is critical that 'hydration' takes place and the mortar sets firmly. In the event that 'hydration' has not occurred, the required bond strength not achieved and the mortar is powdery, the veneer is to be removed and re-laid at the bricklayer's expense.

TOLERANCES

- All bricks are to be laid plumb and level, and within the tolerances given in Table 2.2, NZS4210. In the event that this is not possible due to the alignment of the structural frame, the Construction Manager is to be advised immediately.
- Where the veneer is likely to be either inside or outside the foundation line, (visually unacceptable - common sense to apply) the contracts manager is to be advised prior to laying.

BONDING OF BRICKS

- The bricks, unless otherwise specified, are to be laid half-bonded. It is important that all perpend joints throughout the height of the veneer are in vertical alignment (+/-10mm).
- Any 'Stack-bonding' other than minor isolated areas where it may be unavoidable, requires 'Specific Design' and that specification adhered to. Refer Design Note TB2
- Bricks across the heads of openings and on sills are to appear uniform in width.



MORTAR JOINTS

- Where the height and brick size results in the need to cut bricks horizontally for the top course, discuss the possibility of a soldier course as the top row with the contracts manager, to provide what may be a more acceptable appearance.
- All bed and perpend mortar joints are to contain a full spread of mortar; any holes in the finished veneer mortar are to be minimal and filled on completion.
- The joints, beds and perpends, should be full and finished flush off the trowel and all mortar joints should be 10mm ± 2mm. No gaps or voids should be present in any joint. All pointing shall be flush finished. The finished appearance of the wall is highly dependent on the standard of the wall construction.
- Mortar should be allowed to cure for 7 days or as per the manufacturers required curing time. This is essential to reduce the likelihood of shrinkage and cracking of the bagged finish along mortar lines.

BRICK CAVITY

- Unless specified otherwise, the brick cavity will be 50mm from the frame to the inside face of the veneer.
- Wash-outs are to be installed every 10th brick, and one at each corner around the base of the veneer. The cavity is to be thoroughly cleaned on a daily basis as the job progresses. Mortar droppings removed from brick ties. Minimum cavity 40mm (clear) and maximum 75mm – where exceptions occur; adjust length of ties accordingly.

BRICK TIES

- The brick ties are to be installed in accordance with E2/AS1 Masonry. Where 'specific design' is involved, such as Design Note TB1, two storey veneers, ties are to be installed in accordance with that design.

Important: The screw on the brick ties is to be installed hard against the brick tie and its full length embedded into the stud or acceptable framing timber. Where sheet material is installed over the framing timber adjust the length of the screws accordingly.

BRICK LOCK

- **Consideration should be given to incorporating MASONS Bricklock 4.0mm** at recommended intervals to reduce the incidents of cracking over the life time of the brick veneer.



JOINTS

- **Control joints** 10mm wide, are to be installed as per plans, unless otherwise directed by the Construction Manager.
- **Construction joints** must be according to the brick manufacturers design criteria. All construction joints must be in place and must be waterproofed prior to the commencement of plastering.

WEEP AND VENT HOLES

- Around the base of the veneer, install weep holes every 800mm, 75mm high in the perpend joint, or, 1000sqmm's per 1.0m of veneer length. Install vent holes to match in the second row of bricks from the top only if a 5mm gap has not been left.
- Sills over 2.4m in length require vents under the sill bricks at 800mm centres.

CLEANING

- The brick veneer is to be thoroughly cleaned using fresh clean water, as the job progresses.
- Any staining on the brickwork is to be removed by the bricklayer in conjunction with the brick supplier if necessary. Remove all debris associated with bricklaying, unused materials, and elements, from the site upon completion.

INSPECTIONS AND COMPLETION

- It is the bricklayer's responsibility to ensure that all flashings have been installed correctly and inspected prior to being covered by the brickwork.
- A half-height inspection is to be called for at appropriate times along with a final inspection upon completion. T
- The veneer is to be 'Certified' in the Record of Works held by council as compliant with E2/AS1 Masonry and NZS4210 (along with any necessary 'Alternative Solutions' that have been approved by council), upon completion by a Licenced Building Practitioner - (Bricklaying).
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Signed as read.....Date..... Print name.....

Witnessed.....Date..... Print name.....



6. SURFACE PREPARATION

- **The brick surface should be checked** for nibs, protrusions, excess mortar or any irregularities. These should be removed prior to the bagging mix being applied.
- **All surfaces that receive an application of plaster** must be clean and free of debris, dirt, dust, efflorescence, grease, oils, curing agents, cleaning solutions, mould and algae or any other contaminants that may affect adhesion.
- **Seal very porous surfaces** with 1 coat of **Masons PlastaSeal** to control suction and create an even surface. Alternatively a proprietary paint sealer can also be applied with roller brush or spray and allow to dry.

7. PLASTER CARE

- **On site service;** Ensure all plaster is delivered dry & undamaged.
- **Storage;** Ensure dry storage on site, stack carefully, protect from the elements & any other damage.
- **Plastering conditions;** Carry out plastering to specification only.

8. MATERIALS APPLICATION

- **Mix and apply** a 1 to 3mm coat of **Masons Adobe** or **1mm Sponge** plaster. (Masons Adobe is smoother and flatter, **Masons 1mm sponge** will have a coarser texture.) Either by using; a sponge, Hessian bag material a brush or broom. The choice of plaster, application tool and plaster technique will create a unique finish.

It is advisable to apply a sample area of the bagged finish for clients or the building owner to approve. Each "bagged" job will be unique.

- **Typically, the bagging mix is applied to the wall** with a short steel trowel and is then rubbed over. Alternatively it is directly applied by hand using the sponge or piece of Hessian in the cup of the plasterer's hand to lift the mortar from the bucket, this material is then smeared over the bricks.
- **To produce a consistent appearance**, all the plasterers undertaking the work should adopt a similar technique, all working in the same direction.

9. PAINT

- One coat of a **premium lime lock sealer** must be applied, followed by 2 coats of premium elastomeric 100% acrylic paint in the chosen colour at the correct spread rate as specified by the paint manufacturer.
- The chosen paint system must have a **Light Reflective Value (LRV) of 25** or above.

10. LIMITATIONS

- DO NOT apply the chosen bagging mix plaster when the ambient or surface temperature is below 4°C or above 30°C or will be in that range for the 24-hour period after application.
- When hot, dry, or windy conditions exist protection must be provided.



11. CURING

- **All freshly applied material must be protected** from inclement weather for a minimum of 24 hours after application.
- **The curing time** of the applied bagging mix will vary due to: ambient temperature, relative humidity, surface temperature, surface porosity, application methods, and/or the thickness of the material.
- **It is the responsibility of the plaster** applicator to determine if the product is cured and/or dry prior to applying any additional coats that may be required.
- **Allowing the bagging to fully cure will** reduce the risk of blemishes being caused to the painted surface.

12. MAINTENANCE

- **Hold regular checks**, at least annually, of the wall cladding system to ensure that the weather resistant coating is maintained watertight, and that the sealant, flashings, and other joints continue to perform their function and do not allow water to penetrate. Failure to correctly maintain the system may void any long-term warranties offered with the system.
- **Any accidental damage** to the cladding must be repaired immediately.
- **Annually** the wall cladding system should be cleaned, by washing with clean water to remove dirt and to maintain its finished appearance.
- **Grime may be removed** with warm water and detergent.
- **Re-coat** all painted walls with approved paint system at 8 to 10 yearly intervals.
- **All weep-holes** at the bottom of the veneer should be checked at least annually to ensure they are not blocked by debris, spider's webs, grass etc. The Building Code requires minimum distances between the bottom plate and unfinished or paved ground to be maintained at all times.
- Provide the **Masons Plaster Maintenance Guide** to the building owner

13. WARRANTY

- **Please see the Bagged Brick Warranty Document**
- **Manufacturers Material Warranty;** Masons warrant this part of the work under normal environmental and use conditions against failure of materials and execution. The plaster system is warranted as follows: Materials: 7 years from date of practical completion issued by Masons.
- **Producer Statement;** The applicator is responsible to provide the Building Consent Authority with a Producer statement for the installation and application of the products.

14. SAFETY PRECAUTIONS

- **Avoid contact with eyes and prolonged contact with skin.** Wash thoroughly after handling all wet or dry plaster materials. In case of eye contact, flush immediately with running water for at least 15 minutes. Consult a physician immediately.
- **Do not take internally.** The potential irritant nature of the plaster dust (in dry powder form or from subsequent cutting of the hardened product) is recognised. Paper dust masks or a respirator must be worn always when the product is being mixed. Be sure to provide adequate ventilation when working in enclosed areas. The wet compound is alkaline and prolonged skin contact should be avoided. People with sensitive skin must wear rubber gloves when handling the product. Materials Safety Data Sheets are available on request
- Obtain from Masons the **Material Safety Data Sheets** for each product. Keep sheets on site and comply with the required safety procedures.
- **Follow OSH & ERMA Guidelines** at all times regarding site safety, regulations & guidelines.