



BRANZ Appraised
Appraisal No. 787 [2012]

SUPERIOR DOORS

Appraisal No. 787 (2012)

Amended 13 September 2016

BRANZ Appraisals

Technical Assessments of products for building and construction.



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Product

- 1.1 Superior Doors are a range of hollow and solid core doors for interior use and solid core entry porch doors.

Scope

- 2.1 Superior Doors have been appraised for use as interior doors and exterior entry doors within the following scope:
- in all classified uses of buildings where there are no specific fire requirements for doors; and,
 - in interior, protected environments, including domestic type wet areas; and
 - as entry doors when protected from the weather.

Building Regulations

New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, Superior Doors if designed, used, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet the following provisions of the NZBC:

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2, B1.3.4. Superior Doors meet the requirements from loads arising from self weight, imposed loads, and impact [i.e. B1.3.3 (a), (b), and (j)]. See Paragraph 9.1.

Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years, B2.3.1 (c) 5 years. Superior Doors meet these requirements. See Paragraphs 10.1 - 10.3.

Clause D1 ACCESS ROUTES: Performance D1.3.1 (b) and (c) and D1.3.4 (f). Superior Doors meet these requirements. See Paragraph 13.1.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Superior Doors meet this requirement and do not present a health hazard to people.

- 3.2 Superior Doors have been appraised as an **Acceptable Solution** in terms of New Zealand Building Code compliance.

Note: The NZBC has no requirements for doors other than specific fire performance requirements where required. NZBC Acceptable Solutions D1/AS1 and G1/AS1 specify prescriptive clearances required for door openings allowing for the swing of doors, visibility and door handles.

Product Information

Description

- 4.1 Superior Doors are available in four standard types. These are hollow core doors that use ribbed expanded polystyrene [EPS] core elements, solid core doors that use either EPS, or particleboard solid cores and Porch Doors. The doors have timber stiles, rails, and lock-blocks. The interior door skin material for most internal doors is medium density fibreboard [MDF]. The skins are available in a range of thicknesses and pattern finishes and are glued under compression to the frame and core to form the door blank. The Porch Door is manufactured using H3.1 treated timber components and is finished with oil tempered hardboard skin panels on each side. Some door types are available pre-primed.
- 4.2 The solid core range of doors can be further strengthened if required with 38 x 30 mm steel box section reinforcing inserts. These are recommended for oversize and slider doors for interior use.
- 4.3 The doors are supplied to door pre-hanging and building supply companies for supply to site pre-hung. Handle and lock hardware is normally fitted on site.

Handling and Storage

- 5.1 Refer to Superior Doors Product Care Guide. Doors must be inspected on delivery and Superior Doors Ltd notified immediately of any damage or defects. Doors must be stored flat on a level surface and kept dry and well ventilated. Storage of doors must be away from external doorways leading to the external atmosphere and must be at least two metres from a heating source or direct sunlight. Doors must not be stored in contact with fresh concrete or plaster as the moisture may migrate into the doors. Stored doors should be covered in such a way as to keep them clean, but at the same time allow good ventilation.
- 5.2 Avoid leaning doors at a steep angle at any more than 15° to the perpendicular. Avoid storing doors in an environment where high heat or humidity changes may occur. Ensure careful rotation of door stocks and handle doors with clean hands and equipment. Doors should not be delivered to site until the weathertightness envelope of the building is fully complete.

Technical Literature

- 6.1 Refer to the Appraisals listing on the BRANZ website for details of the current Technical Literature for Superior Doors. The Technical Literature must be read in conjunction with this Appraisal. All aspects of design, use, installation and maintenance contained in the Technical Literature and within the scope of this Appraisal must be followed.

Design Information

General

- 7.1 Superior Doors are available in a range of options and designs which cover many applications in buildings such as housing, residential, commercial, and industrial. They are suitable for access routes and accessible routes when the requirements of NZBC Acceptable Solution D1/AS1 are complied with.
- 7.2 Solid core doors should be used in locations where robust door leaves are required. Superior Doors are intended to be used in accordance with accepted trade practices. If required, details of these practices may be found in the following documents:
 - NZS 3604 for timber framing for door openings.
 - NZS 3610 for timber profiles and mouldings suitable for door frames.
 - AS/NZS 2311 for finishing and maintenance of door frames and leaves.
- 7.3 Superior Doors Porch Doors must be fitted with corrosion resistant hinges.

Usage

8.1 Superior Doors are intended for the following applications:

Interior Doors

- For use in interior locations, including wet areas such as domestic type kitchens, laundries, and bathrooms, but away from other more humid and warm interior building areas such as commercial kitchens, non-domestic wet areas, spa pools, swimming pools, and saunas.

Porch Doors

- For use as entry doors in external walls in locations completely sheltered from exposure to direct sunlight and driving rain. Any penetrations made in the doors (such as peep holes, cat flaps etc) must be fully sealed.

Finishing

- 8.2 On installation, all surfaces of Superior Doors, including top and bottom, edges must be sealed.
- 8.3 Compliance of Superior Doors Porch Doors with the NZBC durability provisions is dependent on proper finishing with a three coat paint system and on regular maintenance when signs of paint deterioration are evident.
- 8.4 Interior door skins should be completely finished by painting in order to improve appearance, further reduce the possibility of warping, etc, and to maximise durability. However, where the doors are not used for laundries, kitchens, and bathrooms, compliance with the minimum NZBC durability performance requirement is not dependent on this finishing or subsequent maintenance provided the doors have been sealed properly.
- 8.5 In all cases, light coloured paints or other finishes with a minimum Light Reflective Value [LRV] of 50% should be used, especially where the doors will be exposed to sunlight.

Structure

- 9.1 Protective ['kick'] plates should be used where there is a likelihood of repeated impacts causing damage, e.g. at the bottom of doors. Solid core doors should be used where there is potential for damage from hard body impacts.

Durability

- 10.1 With normal maintenance, Porch Doors will meet the performance requirements of NZBC B2.3.1 [b], 15 years when used as external wall entry doors installed in a protected environment. Interior doors will meet the performance requirements of NZBC B2.3.1 [c], 5 years in interior areas, as given in Table 1 of NZBC Acceptable Solution B2/AS1.

Serviceable Life

- 10.2 If properly maintained, Superior Doors will remain serviceable for a period similar to traditional solid and hollow core doors.

Maintenance

- 10.3 Porch Doors must be regularly inspected for any damaged areas or signs of deterioration, that may allow water ingress. Any compromised areas must be repainted including top and bottom edges. Paint finished interior doors may be repainted as required, to restore the decorative appearance.

Movement to Place of Safety

- 11.1 Where Superior Doors are used on escape routes, the relevant provisions of NZBC Clause C4 must be met. This may be achieved, for example, by meeting the relevant requirements of NZBC Acceptable Solutions C/AS1 – C/AS7 Part 3 for access, door fastenings, locking devices, direction of opening, degree and width of opening, hardware, and provision of vision panels.

Control of Internal Fire and Smoke Spread

- 12.1 Superior Doors must not be used where fire doors or smoke control doors are required by the NZBC.
- 12.2 Individual doorsets in Risk Group SH buildings are exempt from meeting the flame propagation criteria of AS1366 for foamed plastics and the surface finish requirements [Group Number]. Refer NZBC Acceptable Solution C/AS1, Paragraphs 4.2.2 and 4.2.2 g). Individual doorsets in other Risk Groups are also exempt from the flame propagation and surface finish requirements. Refer to NZBC Acceptable Solutions C/AS2 – C/AS6, Paragraph 4.17.2 and 4.17.6 g).

Access Routes

- 13.1 When Superior Doors are used on access routes, the relevant provisions of NZBC Performance Requirement D1.3.1 must be met. This may be achieved, for example, by meeting the relevant requirements of Acceptable Solution D1/AS1, Paragraph 7.0 for lobby and other doors, accessible door width, swing door visibility, and door handles.

External Moisture

- 14.1 When Porch Doors are used, the designer must ensure the requirements of NZBC E2 are met. Superior Doors must be installed in rebated door frames and should open outwards. In all cases, door jambs must have weather grooves and air seals. The sill must have a water stop in the form of a rebate or timber or metal upstand, and weatherstripping provided at the bottom of the door.

Installation Information

General

- 15.1 Installation and finishing must be in accordance with the instructions contained within the Superior Doors Product Care Guide and this Appraisal. The Product Care guide can be accessed on the BRANZ Appraisal website or is available from Superior Doors Ltd.

Basis of Appraisal

The following is a summary of the technical investigations carried out.

Investigations

- 16.1 A durability assessment has been completed by BRANZ technical experts.
- 16.2 BRANZ has inspected installed solid and hollow core doors and found their performance acceptable.
- 16.3 The use of solid and hollow core doors and their materials of manufacture over many years both in New Zealand and overseas has been noted.

Quality

- 17.1 The manufacture of Superior Doors has been examined by BRANZ and found to be satisfactory.
- 17.2 Quality of materials, components and accessories supplied to site is the responsibility of the pre-hung door supplier.
- 17.2 The quality of installation on site is the responsibility of the installer.

Sources of Information

- AS/NZS 2311: 2009 Guide to the painting of buildings.
- NZS 3604: 2011 Timber-framed buildings.
- NZS 3610:1979 Specification for profiles of mouldings and joinery.
- Ministry of Business, Innovation and Employment Record of Amendments for Compliance Documents and Handbooks.
- The Building Regulations 1992.

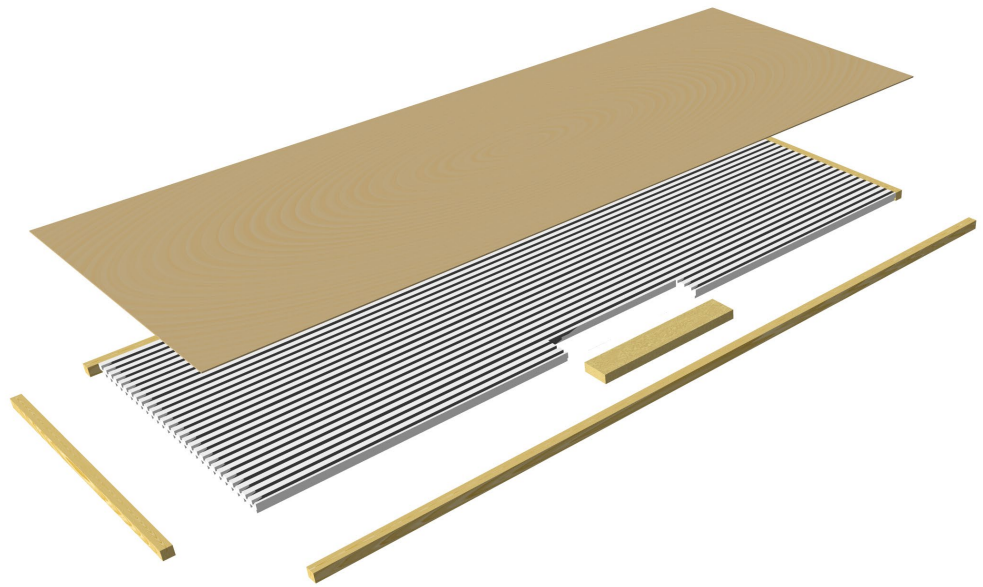
Amendments

Amendment No. 1, dated 7 June 2013.

This Appraisal has been amended to update clause changes as required by the introduction of NZBC Fire Clauses C1 – C6 Protection from Fire and A3 Building Importance Levels.

Amendment No. 2, dated 13 September 2016.

This Appraisal has been amended to update the cover photo.





In the opinion of BRANZ, **Superior Doors** are fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided they are used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **Superior Doors Ltd**, and is valid until further notice, subject to the Conditions of Appraisal.

Conditions of Appraisal

1. This Appraisal:
 - a) relates only to the product as described herein;
 - b) must be read, considered and used in full together with the Technical Literature;
 - c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
 - d) is copyright of BRANZ.
2. **Superior Doors Ltd**:
 - a) continues to have the product reviewed by BRANZ;
 - b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
 - c) abides by the BRANZ Appraisals Services Terms and Conditions.
 - d) Warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
3. BRANZ makes no representation or warranty as to:
 - a) the nature of individual examples of, batches of, or individual installations of the product, including methods and workmanship;
 - b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
 - c) any guarantee or warranty offered by **Superior Doors Ltd**.
4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
5. BRANZ provides no certification, guarantee, indemnity or warranty, to **Superior Doors Ltd** or any third party.

For BRANZ



Pieter Burghout
Chief Executive
Date of Issue:
18 October 2012