



BRANZ Appraised

Appraisal No.753 [2011]

BRANZ Appraisals

Technical Assessments of products
for building and construction

**BRANZ
APPRAISAL
No.753 (2011)**

**STEPSURE™
WINDERS**

Manufactured by:
**Slattery and Acquorff Holdings
Pty Ltd**
7 Edgecombe Court
Moorabbin
Victoria 3189

Tel: +61 3 9532 0224
Fax: +61 3 9532 0201
Email: sales@stairking.com.au
Web: www.stairking.com.au



BRANZ
BRANZ Limited
Private Bag 50 908
Porirua City
New Zealand
Tel: +64 4 237 1170
Fax: +64 4 237 1171
www.branz.co.nz



Product

1.1 StepSure™ Winders are either quarter or half winders to provide a change of direction in a stair flight for internal stairways.



Scope

2.1 StepSure™ Winders have been appraised for use as quarter or half winders for internal stairways in Class 1 or Class 10 buildings or sole-occupancy units in a Class 2, Class 3 or Class 4 building.

2.2 In Class 2, Class 3 or Class 4 buildings the StepSure™ Winders must only be used where the building has a maximum rise in storeys of 2.

2.3 Installation of components and accessories supplied by Slattery and Acquorff Holdings Pty Ltd must be carried out by Slattery and Acquorff Holdings Pty Ltd approved installers.

Building Regulations

National Construction Code Series (NCC 2011) Building Code of Australia (BCA)

3.1 In the opinion of BRANZ, StepSure™ Winders if designed, installed, used and maintained in accordance with the statements and conditions of this Appraisal, will meet or contribute to meeting the following provisions of the BCA:

NCC Volume One – Class 2 to Class 9 Buildings

Part B1 – Structural Provisions: Performance Requirement BP1.1. StepSure™ Winders meet the requirements for actions arising from the following imposed actions: permanent actions (dead loads) and imposed actions (live loads arising from occupancy and use) [i.e. BP1.1 (b) (i) and (ii)]. See Paragraph 8.1.

Part D – Access and Egress: Performance Requirement DP2. StepSure™ Winders will contribute to meeting this requirement. See Paragraph 11.1.

NCC Volume 2 – Class 1 and Class 10 Buildings

Part 2.1 – Structure: Performance Requirement P2.1. StepSure™ Winders meet the requirements for actions arising from the following imposed actions: permanent actions (dead loads) and imposed actions (live loads arising from occupancy and use) [i.e. P2.1 (b) (i) and (ii)]. See Paragraph 8.1.

Part 2.5 – Safe Movement and Access: Performance Requirement P2.5.1. StepSure™ Winders will contribute to meeting this requirement. See Paragraph 11.1.

3.2 This is an Appraisal of an **Alternative Solution** in terms of Building Code of Australia compliance.

Technical Specification

4.1 StepSure™ Winders are similar to standard winders except that the upper and lower steps, once they reach the going dimension, square off with the next stair above and below, respectively. This creates a small landing with the middle step of the winder. For a half winder two landings are created.

4.2 StepSure™ Winders incorporate 32 mm thick treads and stringers and 18 mm thick risers. These are manufactured either from solid timber or medium density fibreboard. Wedges, glueblocks, nails, screws and adhesive are used to assemble the StepSure™ Winders as part of a stairway in the conventional manner.

Handling and Storage

5.1 Handling and storage of all materials supplied by Slattery and Acquroff Holdings Pty Ltd is under the control of Slattery and Acquroff Holdings Pty Ltd. The StepSure™ Winders are supplied to site flat-packed. They must be kept dry at all times prior to installation, and stored off the ground on a level platform.

Technical Literature

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

Design Information

7.1 StepSure™ Winders are for use in dry, internal environments.

7.2 StepSure™ Winders must only be used in stairs that connect no more than 2 storeys, and in Class 2, Class 3 or Class 4 buildings, one of those storeys must be situated at a level at which there is direct egress to a road or open space.

Structure

8.1 StepSure™ Winders form part of a conventional staircase, and history of use has demonstrated that they perform satisfactorily under expected residential loadings.

Durability

Serviceable Life

9.1 StepSure™ Winders form part of a conventional staircase, and are made from the same materials as these. They are therefore expected to have a similar serviceable life as the rest of the staircase that they form a part of.

Maintenance

10.1 StepSure™ Winders, as part of a staircase, will require little maintenance. The slip resistant coating or non-skid strip near the nosing of each step, as required by the BCA, must be maintained.

Access

11.1 StepSure™ Winders will still allow for suitable access between floors of a building. The fact that the upper and lower steps of the winder do not continue on at a 30° angle does not adversely affect a person's ability to navigate the stairs.

Installation Information

12.1 StepSure™ Winder installations are all individually measured, manufactured and installed by Slattery Acquroff Holdings Pty Ltd.

Basis of Appraisal

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

Investigations

13.1 The history of use of StepSure™ Winders has been assessed by BRANZ and found to demonstrate suitable performance.

13.2 StepSure™ Winders held a CSIRO Appraisal No. 287, from 2001 to 2009, and this provided a basis for this BRANZ Appraisal.

13.3 The measuring, manufacture and installation systems used by Slattery and Acquroff Holdings Pty Ltd for the construction of the StepSure™ Winders have been reviewed by BRANZ and found to be satisfactory.

13.4 The Technical Literature for StepSure™ Winders has been examined by BRANZ and found to be satisfactory.

Quality

14.1 The manufacture of the medium density fibreboard used in StepSure™ Winders by Alpine MDF Industries Pty Ltd is certified under the Engineered Wood Products Association of Australasia certification scheme.

14.2 Building designers are responsible for incorporating StepSure™ Winders into the design of the building.

14.3 Slattery and Acquroff Holdings Pty Ltd are responsible for the quality of manufacture and installation of the StepSure™ Winders.

14.4 Building owners are responsible for the maintenance of StepSure™ Winders.

Sources of Information

- National Construction Code Series, Building Code of Australia 2011 Volumes One and Two, Australian Building Codes Board.



BRANZ

In the opinion of BRANZ, **StepSure™ Winders** 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 **Slattery and Acquorff Holdings Pty 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. **Slattery and Acquorff Holdings Pty 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 **Slattery and Acquorff Holdings Pty 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 **Slattery and Acquorff Holdings Pty Ltd** or any third party.

For BRANZ

P Burghout
Chief Executive

Date of issue: 20 July 2011