



BRANZ Appraised

Appraisal No. 882 [2015]

SPACE-IT PILE PAD

Appraisal No. 882 [2015]

Amended 26 May 2017

BRANZ Appraisals

Technical Assessments of products for building and construction.

SPACE-IT

Space-IT Products Ltd

Mangere Bridge
Auckland

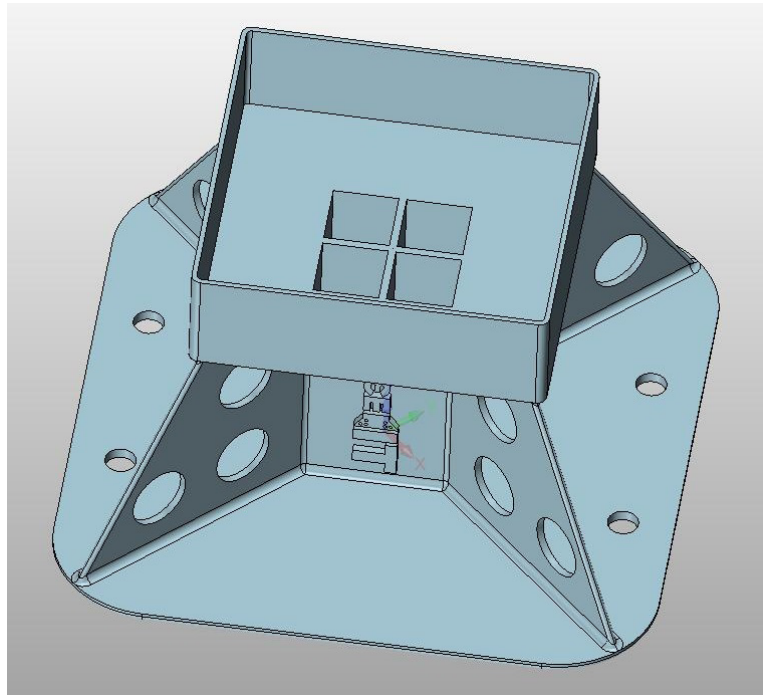
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Product

- 1.1 The Space-IT Pile Pad is a polypropylene, square timber pile locator and supporter for use prior to concreting.

Scope

- 2.1 The Space-IT Pile Pad has been appraised for use as a square timber pile locator prior to concrete being poured, for structures designed in accordance with NZS 3604.

Building Regulations

New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, the Space-IT Pile Pad, if designed, used installed and maintained in accordance with the statements of this Appraisal, will meet the following provisions of the NZBC:
Clause B1 STRUCTURE: Performance B1.3.1. The Space-IT Pile Pad meets this requirement. See Paragraph 8.1 - 8.2.
Clause B2 DURABILITY: Performance B2.3.1 (a), not less than 50 years. The Space-IT Pile Pad meets this requirement. See Paragraph 9.1.
Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. The Space-IT Pile Pad meets this requirement and will not present a health hazard to people.
- 3.2 This is an **Alternative Solution** in terms of New Zealand Building Code compliance.

Technical Specification

- 4.1 Space-IT Pile Pads are manufactured from recycled polypropylene. They have a 40 mm deep square cup on top for locating 125 x 125 mm timber piles. This cup sits on a 100 mm deep base that is 235 mm square.

Packaging Handling and Storage

- 5.1 Space-IT Pile Pads are packaged on pallets for delivery. They are reasonably robust, and are not affected by moisture. They should be stored in a dry area out of direct sunlight prior to use.

Technical Literature

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

Design Information

General

- 7.1 The Space-IT Pile Pads locate the base of 125 x 125 mm square timber piles 100 mm above the ground as required by NZS 3604 Clause 6.4.5.6. It allows concrete to be poured under and around piles in a single placement. It also provides adequate support allowing other work to proceed prior to concreting.

Structure

- 8.1 Space-IT Pile Pads are for use in good ground as defined by NZS 3604. Pile loads will be transferred to the ground through the concrete once it has cured, as required by NZS 3604.

Durability

- 9.1 Once Space-IT Pile Pads are encased in concrete they will not undergo any degradation, and will have an expected durable life of at least 50 years.

Maintenance

- 10.1 Space-IT Pile Pads will not require any maintenance once the concrete has been placed around them.

Installation Information

Installation Skill Level Requirement

- 11.1 Installation of Space-IT Pile Pads can be carried out by any building contractor.

Installation

- 12.1 The depth and plan size of the holes for the piles must be in accordance with NZS 3604, Clauses 6.4.5.4 and 6.4.5.5.
- 12.2 Footings shall bear upon a level solid bottom in accordance with NZS 3604, Clause 3.4. Space-IT Pile Pads must be placed on the solid bottom before concrete placement.
- 12.3 The Space-IT Pile Pads are attached to the base of the piles through the use of nails or screws.
- 12.4 Once the Space-IT Pile Pads and their associated piles have been installed further construction work can take place prior to the placement of the concrete. It is important that access is maintained for concrete placement, and that no foreign material enters the holes prior to the concrete being poured.
- 12.5 When the concrete is placed it is important to ensure that it is properly compacted around the Space-IT Pile Pads to ensure full support. Concrete must be in accordance with NZS 3604 requirements.

Health and Safety

- 13.1 Suitable protective clothing should be worn when handling and placing wet concrete as it is highly alkali.

Basis of Appraisal

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

Tests

- 14.1 A sample Space-IT Pile Pad, with attached pile, was installed as it would be on site to ensure that concrete was easy to place and able to be fully compacted around the pile. This was observed by BRANZ and found to be satisfactory.



Sources of Information

- NZS 3604: 2011 Timber-framed buildings.
- Ministry of Business, Innovation and Employment Record of Amendments for Compliance Documents and Handbooks.
- The Building Regulations 1992.

Amendments

Amendment No. 1, dated 26 May 2017.

This Appraisal has been amended to update Paragraph 12.2.



In the opinion of BRANZ, **Space-IT Pile Pad** is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **Space-IT Products 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. **Space-IT Products 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 **Space-IT Products 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 **Space-IT Products Ltd** or any third party.

For BRANZ



Chelydra Percy

Chief Executive

Date of Issue:

14 April 2015