



BRANZ Appraised

Appraisal No. 963 [2019]

MARKON SPACEMATE WASTE TRAPS



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BRANZ Appraisals

Technical Assessments of products for building and construction.



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Product

- 1.1 Markon Spacemate waste traps are low profile basin water traps manufactured of polypropylene in 32 mm and 40 mm sizes.

Scope

- 2.1 Markon Spacemate waste traps have been appraised for use as basin water traps for sanitary plumbing systems designed and installed in accordance with NZBC Acceptable Solution G13/AS1 or AS/NZS 3500.2.

Building Regulations

New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, Markon Spacemate waste traps, 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 B2 DURABILITY: Performance B2.3.1 [c], 5 years. Markon Spacemate waste traps meet this requirement. See Paragraph 9.1.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Markon Spacemate waste traps meet this requirement and will not present a health hazard to people.

Clause G13 FOUL WATER: Performance G13.3.1 [a], G13.3.1 [b], G13.3.1 [c], and G13.3.1 [d]. Markon Spacemate waste traps meet these requirements. See Paragraphs 8.1 to 8.3.

Technical Specification

- 4.1 Markon Spacemate waste traps are manufactured of polypropylene. The traps have a low-profile with an adjustable height inlet pipe. The inlet connection pipe to the basin is threaded with a seal. The outlet has a pipe compression seal connection. Connection seals are made from EPDM. The trap water seal is 50 mm with a capacity of 280 cc.
- 4.2 The Markon Spacemate waste trap models are:
 - LT.32.40 spacemate 32 nb x 40 nb waste trap [32 mm waste, 40 mm pipe].
 - LT.40.40 spacemate 40 nb x 40 nb waste trap [40 mm waste, 40 mm pipe].



Handling and Storage

- 5.1 Markon Spacemate waste traps are supplied with installation instructions. Products must be kept protected until installation takes place.

Technical Literature

- 6.1 Refer to the Appraisals listing on the BRANZ website for details of the current Technical Literature for Markon Spacemate waste traps. 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 Plumbing systems must be designed in accordance with either NZBC Acceptable Solution G13/AS1 or AS/NZS 3500.2.
- 7.2 Markon Spacemate waste traps are connected to a 32 or 40 mm waste fitting in the basin. They have a low profile and therefore take up less vertical space under basins reducing the need for slots and holes through vanity shelving and providing more uninterrupted storage space.

Foul Water Sanitary Plumbing

- 8.1 Markon Spacemate waste traps will avoid foul air and gases entering buildings and therefore meet code compliance NZBC Clause G13.3.1 [c]. Under normal operating conditions Markon Spacemate waste traps will retain a water seal depth of not less than 25 mm as required by NZBC Acceptable Solution G13/AS1, Paragraph 3.2.1 and AS/NZS 3500.2, Clause 6.4.2.
- 8.2 Plumbing systems must be designed and installed in accordance with NZBC Acceptable Solution G13/AS1 or AS/NZS 3500.2. Waste and discharge pipes must discharge and be vented in accordance with NZBC Acceptable Solution G13/AS1, Paragraph 4.5 or AS/NZS 3500.2.
- 8.3 Markon Spacemate waste traps are installed in an accessible place and can be easily serviced or replaced and therefore meet code compliance NZBC Clause G13.3.1 [d].

Durability

Serviceable Life

- 9.1 Markon Spacemate waste traps are manufactured from conventional polypropylene with EPDM seals and will have a serviceable life more than 5 years. They are expected to perform similar to conventional S and P traps provided they are installed in accordance with the instructions of this Appraisal.

Maintenance

- 9.2 Markon Spacemate waste traps do not require maintenance in normal operation. They can be easily removed for cleaning, clearing or replacement.



Installation Information

Installation Skill Level Required

10.1 Installation must be carried out by licensed and registered plumbers.

General

11.1 Markon Spacemate waste traps may be fitted to 32 mm and 40 mm basin outlets and 40 mm uPVC based waste water and discharge pipe systems.

11.2 The traps must be connected directly to the outlet of basins in an accessible place.

11.3 Sanitary plumbing systems must be pressure tested.

Inspections

12.1 Either NZBC Acceptable Solution G13/AS1 or AS/NZS 3500.2 must be referred to during inspections.

Health and Safety

13.1 There are no different health and safety issues associated with Markon Spacemate waste traps compared with conventional traps.

Basis of Appraisal

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

Tests

14.1 Tests have been carried out and observed by BRANZ. Tests have also been carried out by an Australian testing laboratory. The results of the tests and observations were compared to the requirements of AS 2887 and AS 2888.8. Tests covered retention of water seal depth under operating conditions, water flow, discharge, thermal cycling, waterseal, waterway and air tightness. The test results were reviewed by BRANZ experts and found to be satisfactory.

Other Investigations

15.1 Following thermal cycling the Markon Spacemate waste traps were examined by BRANZ and an assessment was made of the durability by BRANZ technical experts.

15.2 Installation inspections were carried out by BRANZ to examine the practicability of installation.

Quality

16.1 The manufacture of Markon Spacemate waste traps has been examined by BRANZ, and details of the quality and composition of the materials used were obtained and found to be satisfactory.

16.2 The quality of the product supplied to the market is the responsibility of Markon Holdings Ltd.

16.3 The quality of installation on site is the responsibility of the installing plumber.

Sources of Information

- AS 2887-1993 [R2017] Plastic waste fittings.
- AS 2888.8-2002 [R2017] Methods of testing plastics waste fittings Thermal cycling test.
- AS/NZS 3500.2:2018 Plumbing and drainage Sanitary plumbing and drainage.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.



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MARKON SPACEMATE WASTE
TRAPS



In the opinion of BRANZ, **Markon Spacemate waste traps** 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 **Markon Holdings 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. **Markon Holdings 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 **Markon Holdings 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 **Markon Holdings Ltd** or any third party.

For BRANZ

Chelydra Percy

Chief Executive

Date of Issue:

21 June 2019