

3monkeez Pty Ltd

Product Appraisal Report TWA 1103



WATER SERVICES ASSOCIATION
OF AUSTRALIA

Industrial Drains

Published - April 11

Overview of WSAA

The Water Services Association of Australia (WSAA) is the peak body of the Australian urban water industry. Its 30 members and 31 associate members provide water and wastewater services to approximately 16 million Australians and to many of our largest industrial and commercial enterprises. WSAA membership also includes two members and one associate member from New Zealand.

Urban water service providers have a critical role in ensuring that Australians have access to adequate and high quality water services. As Australia's population continues to grow, with most of this growth occurring in cities, that role becomes increasingly important.

WSAA's vision is for Australian urban water utilities to be valued as leaders in the innovative, sustainable and cost effective delivery of water services. WSAA strives to achieve this vision by promoting knowledge sharing, networking and cooperation amongst members. WSAA identifies emerging issues and develops industry-wide responses. WSAA is the national voice of the urban water industry, speaking to government, the broader water sector and the Australian community.

Copyright

This document is copyrighted. Apart from any use as permitted under the *Copyright Act 1968*, no part of this document may be reproduced or transmitted in any form or by any means, electronically or mechanical, for any purpose, without the express written permission of the Water Services Association of Australia Ltd.

© Water Services Association of Australia Ltd, 2011 ALL RIGHTS RESERVED

Table of Contents

Table of Contents.....	3
1. Executive Summary.....	4
2. Company Overview.....	4
3. Scope of this Appraisal.....	4
4. Appraisal Criteria.....	6
5. Quality Assurance Requirements.....	6
6. Compliance to the Appraisal Criteria.....	6
7. Specifications and Drawings.....	6
8. Installation Requirements.....	6
9. Product Maintenance.....	7
10. Identification.....	8
11. Warranty/Life Expectancy.....	8
14. Outcomes of WSAA Network Review.....	8
15. WSAA Member and Field Reports.....	8
16. Future Works.....	9
17. Discussion.....	9
18. Report Recommendation.....	9
19. Disclaimer.....	9
Appendix A Product Specifications.....	11
Appendix B Standard Drawings.....	14
Appendix C Engineers Reports.....	18
Appendix D Supplier Contacts.....	20

1. Executive Summary

It is recommended that WSAA Members and Associates, subject to any specific requirements of the Member or Associate, accept or authorise the 3Monkeez Pty Ltd product range as detailed in this report for use in sewer networks provided design, installation, acceptance testing and commissioning are in accordance with relevant WSAA Codes, WSAA Member Integrated Codes, and the manufacturer's requirements.

2. Company Overview

3Monkeez is an Australian owned and operated company. 3Monkeez aims to provide and develop effective product solutions to the plumbing, catering, building and civil industries.

The company commenced business in 1990 in the construction industry on many different and diversified building sites around the country. 3Monkeez has experience in the building industry and has a reputation as a market leader in quality and innovation.

In 2001 the company diversified out of the building industry, and a new company was formed Club Stainless..

In 2009 Club stainless has taken two new partners with diversified skills from the corporate plumbing and building industry. With this enhancement has come a new company name 3monkeez.

3. Scope of this Appraisal

The scope of products subject to this appraisal is as follows:

Metallic Floor wastes

1. Vinyl floor waste (code FW-100VR): Copper alloy floor waste outlet with 2 rubber ring seals fitted on outlet connection. Grate size = 120mm, outlet end = 100mm, designation = DN120xDN100
2. In Floor Bucket Trap (code FW-100BRL): Stainless steel floor waste outlet with removable strainer basket and fixed secondary strainer. Grate size = 100mm, outlet end = 100mm, designation = DN100xDN100
3. In Floor Bucket trap (code FW-150BS): Stainless steel floor waste outlet with removable strainer basket and fixed secondary strainer and two rubber ring seals fitted on the outlet connection. Grate size = 150mm, outlet end 100mm, designation = DN150xDN100
4. In Floor Bucket trap (code FW-150BR): Stainless steel floor waste outlet with removable strainer basket and fixed secondary strainer and two rubber ring seals fitted on the outlet connection. Grate size = 150mm, outlet end 100mm, designation = DN150xDN100

	FW-100VR Vinyl floor waste	FW-100BRL In Floor Bucket Trap	FW-150BS In Floor Bucket Trap	FW-150BR In Floor Bucket Trap
Material of construction	Copper Alloy	Stainless Steel	Stainless Steel	Stainless Steel
Size of drain bowl				
Floor Type	Vinyl	Concrete and tiled floors	Concrete and tiled floors	Concrete and tiled floors
Grate Size	120mm	100mm	100mm	150mm
Outlet size (mm)	120mm	100mm	100mm	100mm
Grate Size - Minimum Waterway area mm ²	3675	2760	8860	4320
Outlet Minimum Waterway area mm ²	2206	1380	1260	1260
Filter Basket	FW-100VR Vinyl floor waste	FW-100BRL In Floor Bucket Trap	FW-150BS In Floor Bucket Trap	FW-150BR In Floor Bucket Trap
Material of Construction	Copper Alloy	Stainless Steel	Stainless Steel	Stainless Steel
Volume mm ³	306mm squared	627mm Cubed	602mm Cubed	602mm Cubed
Hole Size	N/A	4mm	4mm	4mm
Number of Holes	N/A	1038	1007	1007
Flow area mm ²	6082mm Squared	13,037mm squared	12,647mm squared	12,647mm squared
Secondary Basket				
Material of Construction	N/A	Stainless Steel	Stainless Steel	Stainless Steel
Volume mm ³	N/A	1030mm Cubed	929mm cubed	929mm cubed
Hole Size	N/A	4mm	4mm	4mm
Number of Holes	N/A	120	105	100
Flow area mm ²	6082mm squared	1507.2mm squared	1318mm squared	1256mm squared
Filter Basket	FW-100VR Vinyl floor waste	FW-100BRL In Floor Bucket Trap	FW-150BS In Floor Bucket Trap	FW-150BR In Floor Bucket Trap
Material of Construction	Copper Alloy	Stainless Steel	Stainless Steel	Stainless Steel
Volume mm ³	306mm squared	627mm Cubed	602mm Cubed	602mm Cubed

4. Appraisal Criteria

This Appraisal Report has been compared against the requirements of the WSAA Specification WSA PS – 841 Floor Waste Arrestor.

5. Quality Assurance Requirements

The WSAA product appraisal network accepts system (ISO 9001) and product certification by a Certification Body at the manufacturing site of strategic products to appropriate Australian or internationally recognised standards. The Certification Body shall have relevant accreditation by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) or by an equivalent international accreditation system recognised by JAS-ANZ.

The manufacturer 3Monkeez Pty Ltd is not ISO9001:2002 compliant at this time.

3monkeez have Watermark certification by Global Mark to ATS 5200.040-2005: Technical Specification for plumbing and drainage products – Waste pipe connection outlets and gratings, separate or integral.

6. Compliance to the Appraisal Criteria

6.1. Materials of Construction

FW-100VR: Copper Alloy Floor waste with two rubber ring seals fitted to outlet connection

FW-100BRL: Stainless Steel Floor Waste outlet with basket trap

FW-150BS: Stainless Steel Floor waste outlet with basket trap and two rubber ring seals fitted on outlet connection

FW-150BR: Stainless Steel Floor waste outlet with basket trap and two rubber ring seals fitted on outlet connection.

7. Specifications and Drawings

The product specifications and drawings are included in Appendix B.

8. Installation Requirements

8.1. **General**

FW-100VR, FW-100BRL,FW-150BS, and FW-150BR are supplied as complete assembled units to reduce the chance of incorrect installation.

FW-100VR, FW-150BS and FW150BR are designed to push into 100mm drainage pipe and are sealed with rubber ring seals located in 2 grooves on the outlet of the waste

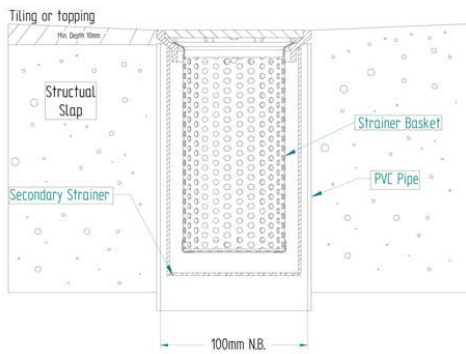
FW-100BRL is designed to drop into 100mm drainage pipe

The drainage pipe work should be positioned and cut on the normal manner to accommodate the installation of the floor wastes

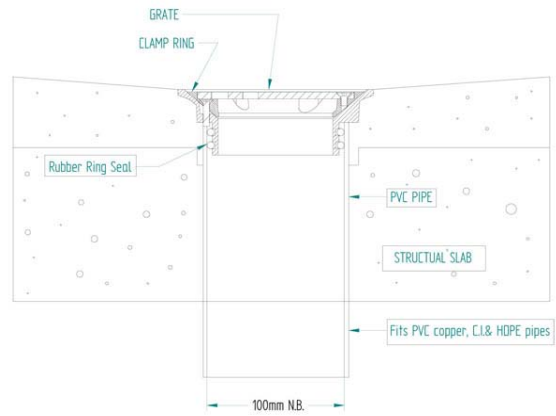
The top surface of the grate should be positioned to be level with the finished floor level

N.B. See supplied diagrams for more detail

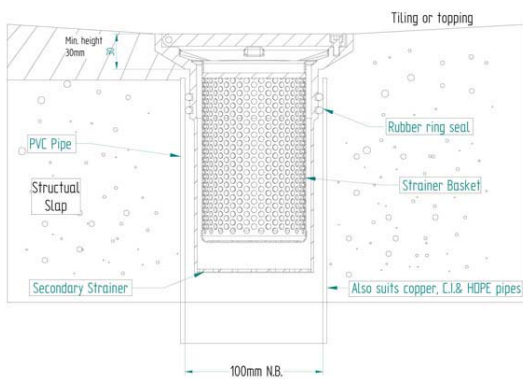
FW-100BRL



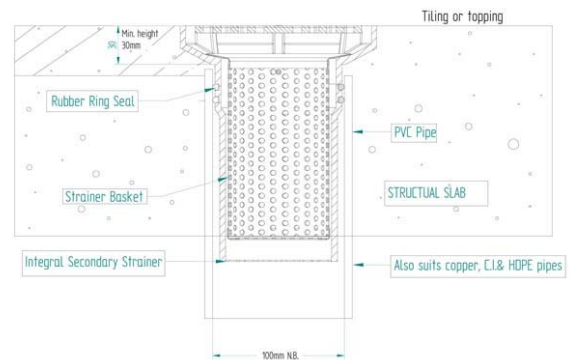
FW-100VR



FW-150BS



FW-150BR



9. Product Maintenance

FW-150BS – To empty the basket use a 4mm allen key to remove the socket head screw located on the top face of the grate. Lift the hinged grate by grasping the sides of the grate and lifting upward. Remove the basket by grasping the cross bar located across the top of the basket. Empty any material contained in the basket into a suitable receptacle. Check there is no material on top of the fixed secondary strainer, replace basket, close hinged grate and replace socket head screw and tighten.

FW-150BR – To empty the basket use a No.2 Phillips Head Screw driver to remove the 3 Phillips head screws located on the top face of the grate. Lift the grate by grasping the sides of the grate and lifting upward. Remove the basket by grasping the cross bar located across the top of the basket.

Empty any material contained in the basket into a suitable receptacle. Check there is no material on top of the fixed secondary strainer, replace basket, replace grate and replace Phillips head screws and tighten.

FW-100BRL To empty the basket remove grate by turning anti-clockwise. Lift the grate by grasping the sides of the grate and lifting upward. Remove the basket by grasping the cross bar located across the top of the basket. Empty any material contained in the basket into a suitable receptacle. Check there is no material on top of the fixed secondary strainer, replace basket, replace grate and turn clockwise to lock grate back into position.

FW-100VR - This product requires no ongoing maintenance

10. Identification

Sample Labels are attached; WSAA Appraisal Number will be added based on the outcome of this application



11. Warranty/Life Expectancy

Subject to the warranty conditions and exclusions 3monkeez Floor Wastes and Scrap Traps are warranted to be free from defects in material and/or workmanship for a period of 60 months service life as set out below. If the product is sold by a party other than 3monkeez then it is sold by that seller as principal and the seller has no authority from 3monkeez to give any additional warranty on behalf of 3monkeez.

The benefits of this warranty are in addition to all other rights and remedies which the purchaser may have under the trade practices act or similar laws of each state or territory in Australia.

14. Outcomes of WSAA Network Review

14.1. **TBA**

Answer –TBA

15. WSAA Member and Field Reports

At the time of publication a WSAA member field report was not available and this item has been referred as a future works and referenced in part 16 Future Works.

16. Future Works

- 16.1. Within one year of the publication of this report a field trial report is to be conducted and included in an update of this appraisal report.

17. Discussion

Examination of all of the submitted documented material provides an expectation that the products described here in sourced and distributed by 3Monkeez Pty Ltd are 'fit for purpose' in the applications described in this report subject to future works items.

18. Report Recommendation

It is recommended that WSAA Members and Associates, subject to any specific requirements of the Member or Associate, accept or authorise the 3Monkeez Pty Ltd product range as detailed in this report for use in sewer networks provided design, installation, acceptance testing and commissioning are in accordance with relevant WSAA Codes, WSAA Member Integrated Codes, and the manufacturer's requirements.

19. Disclaimer

This Appraisal Report is issued by the Water Services Association of Australia Ld. on the understanding that :

- a) This appraisal applies to the product(s) as submitted. Any changes to the product(s) either minor or major shall void this appraisal.
- b) To maintain the recommendations of this appraisal any such changes shall be detailed and notified to the Product Appraisal Manager for consideration and review of the appraisal report and appropriate action. Appraisals and their recommendations will be the subject of continuous review dependent upon the satisfactory performance of products.
- c) WSAA reserves the right to undertake random audits of product manufacture and installation. Where products fail to maintain appraised performance requirements the appraisal and its recommendations may be modified and reissued. Appraisal reports will be reviewed and reissued at regular intervals not exceeding five (5) years.
- d) The following information explains a number of very important limits on your ability to rely on the information in this Product Appraisal Report. Please read it carefully and take it into account when considering the contents of this Product Appraisal Report
- e) Any inquiries regarding this report should be directed to the Appraisal Project Manager, Grant Leslie, Phone: 02 9221 5966 - E-mail grant.leslie@wsaa.asn.au

19.1. Issue of Report

This Product Appraisal Report (Report) has been published and/or prepared by the Water Services Association of Australia, Inc and nominated Project Manager and peer group of technical specialists (the Publishers).

The Report has been prepared for use within Australia only by technical specialists that have expertise in the function of products such as those appraised in the Report (the Recipients).

By accepting this Report, the Recipient acknowledges and represents to the Publisher[s] and each person involved in the preparation of the Report that the Recipient has understood and accepted the terms of this Disclaimer.

19.2. Limits on Reliance on Information and Recommendations

19.2.1. Disclaimer of liability

Neither the Publisher[s] nor any person involved in the preparation of the Report accept[s] any liability for any loss or damage suffered by any person however caused (including negligence or the omission by any person to do any thing) relating in any way to the Report or the product appraisal criteria underlying it. This includes (without limitation) any liability for any recommendation or information in the Report or any errors or omissions.

19.2.2. Need for independent assessment

The information and any recommendation contained (expressly or by implication) in this Report are provided in good faith. However, you should treat the information as indicative only. You should not rely on that information or any such recommendation except to the extent that you reach an agreement to the contrary with the Publisher[s].

This Report does not contain all information that a person might require for the purposes of assessing any product discussed or appraised within it (Product). The product appraisal criteria used in preparing this Report may not address all relevant aspects of the Product.

Recipients should seek independent evidence of any matter which is material to their decisions in connection with an assessment of the Product and consult their own advisers for any technical information required. Any decision to use the Product should take into account the reliability of that independent evidence obtained by the Recipient regarding the Product.

Recipients should also independently verify and assess the appropriateness of any recommendation in the Report, especially given that any recommendation will not take into account a Recipient's particular needs or circumstances.

WSAA has not evaluated the extent of the product liability and professional indemnity insurance that the provider of the product maintains. Recipients should ensure that they evaluate the allocation of liability for product defects and any professional advice obtained in relation to the product or its specification including the requirements for product liability and professional indemnity insurance.

19.3. No updating

Neither the Publisher[s] nor any person involved in the preparation of this Report [has][have] any obligation to notify you of any change in the information contained in this Report or of any new information concerning the Publisher[s] or the Product or any other matter.

19.4. No warranty

The Publisher[s] do[es] not, in any way, warrant that steps have been taken to verify or audit the accuracy or completeness of the information in this Report, or the accuracy, completeness or reasonableness of any recommendation in this Report.

Appendix A Product Specifications

WATER SERVICES ASSOCIATION of Australia

PRODUCT SPECIFICATION

WSA PS – 841 FLOOR WASTE ARRESTOR

841.1 SCOPE

This specification is intended to provide a technical specification for the appraisal of floor waste arrestors.

841.2 REQUIREMENTS

- a) Floor waste arrestors must have WaterMark Certification to AS 3500:2003 – *Plumbing and Drainage*, and comply with the principals of the following standards:
 - i. AS 5200 - 2005 – *Procedures for certification of plumbing and drainage products*,
 - ii. AS/NZ 4494:1998 – *Discharge of commercial and industrial liquid waste to sewer – General performance requirements*.
 - iii. AS 3996:2006 – *Access Covers and Grates – Class D* (Third party certification or an engineers certificate must be provided)
- b) A removable basket must be supplied for use in conjunction with a fixed screen and/or a failsafe cut-off mechanism
- c) The fixed screen must be in place or failsafe mechanism used below the removable basket. The fixed screen and or the failsafe cut-off mechanism must be robust to prevent its removal and intentional damage or bypass.
- d) The basket should have a handle or other group to allow easy removal from the apparatus.
- e) The design of the top of the basket and apparatus should be such that the waste water flow will be into the basket rather than down the side of the basket.
- f) The flow rate through the removable basket in situ with the fixed screen must comply with AS/NZS 3500:2003 minimum waterway area (mm²). Where the grating has a waterway less than that identified in Table 1, the flow rate is to be greater than the maximum flow rate from a tap outlet as specified in AS/NZS 3500:2003

Table 1 Minimum Waterway Area (mm²)

Floor Outlet Nominal Size (DN)	Minimum Waterway Area (mm ²)
32	250
40	450
50	800
65	800
80	800
90	1000
100	1200
150	2000

- g) The hole size for the basket and fixed screen must not be greater than 4 mm
- h) Replacement screens must be available as part of the product range
- i) The surface of the device including the basket must not have any sharp edges
- j) The size of the basket must be sufficiently greater than a standard Floor strainer and be suitable to capture solids. The basket should hold at minimum of 0.2 L of strained material.
- k) The mode of operation of the in Floor basket trap shall be such that it can be easily mastered by maintenance personnel.
- l) The number and size/dimension of the holes is required for both the fixed screen and the removable basket.

841.3 FORMAT OF THE APPLICATION AND SUPPORTING INFORMATION

The appraisal application is to be presented in both hard and soft copy. The hard copy should be contained in a 3 ring binder and the soft copy on either a USB storage device or CD in files that are no larger than 2MB in size.

Your application should address the following in the order shown below:

- a) Introduction
 - a. An overview of the manufacturer and or distributor
 - b. Overview of the product
- b) Quality control
 - a. Quality Management System Certification
 - b. Evidence of conformance with the requirements (800.2) of this Specification
 - c. Any additional approvals
 - d. Any additional testing programmes and results.
- c) Applicability
 - a. Waste water generation activity applicable to the product
 - b. Provide a product schedule of all products in the range (e.g. 32mm to 150mm), which includes sizing, maximum nominal flow rate (litres/sec), and operational weight (kg) of each model.
- d) Specifications and Drawings
 - a. Detailed scale drawings of all components of the product in sufficient detail to permit accurate determination of all relevant volumes, internal/external diameters and air spaces, pipe connections, arrangement and dimensions of

screens and any other component essential to the operation of the product. All drawings are to be in millimetres.

- b. Materials of construction are to be provided.
- c. Detailed of the products means of connection is to be provided

- e) Installation Requirements
 - a. Details of the installation requirements for the product range is to be supplied, including, but not limited to product handling,
 - b. Location guidance for installations,
 - c. Details on any building code requirements
 - d. Drainage diagram for connection to discharge pipe work
 - e. Any non-standard installation applications.

- f) Operation and Maintenance
 - a. Operating Manual
 - b. Maintenance schedule detailing all maintenance procedures and frequency
 - c. Cleaning procedures

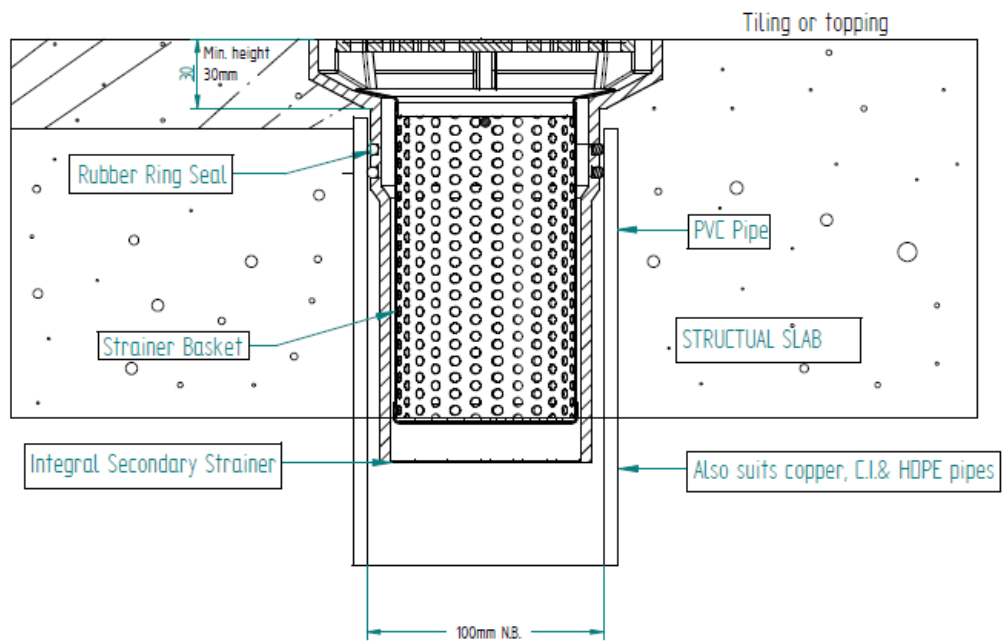
- g) Identification
 - a. Compliance Plate – A compliance plate must be fitted to each unit, constructed of a robust and durable material, placed in a location where it will remain visible after installation and legible for the life of the unit. The compliance plate must be fitted before leaving the factory and must contain the following information:
 - i. Brand or Manufacturers name
 - ii. Contact phone number of the manufacturer
 - iii. Model Number
 - iv. WSAA Appraisal Number
 - v. Date of Manufacture
 - vi. Rating per day

- h) Warranty
 - a. The product is to have a warranty of a minimum of 5 years

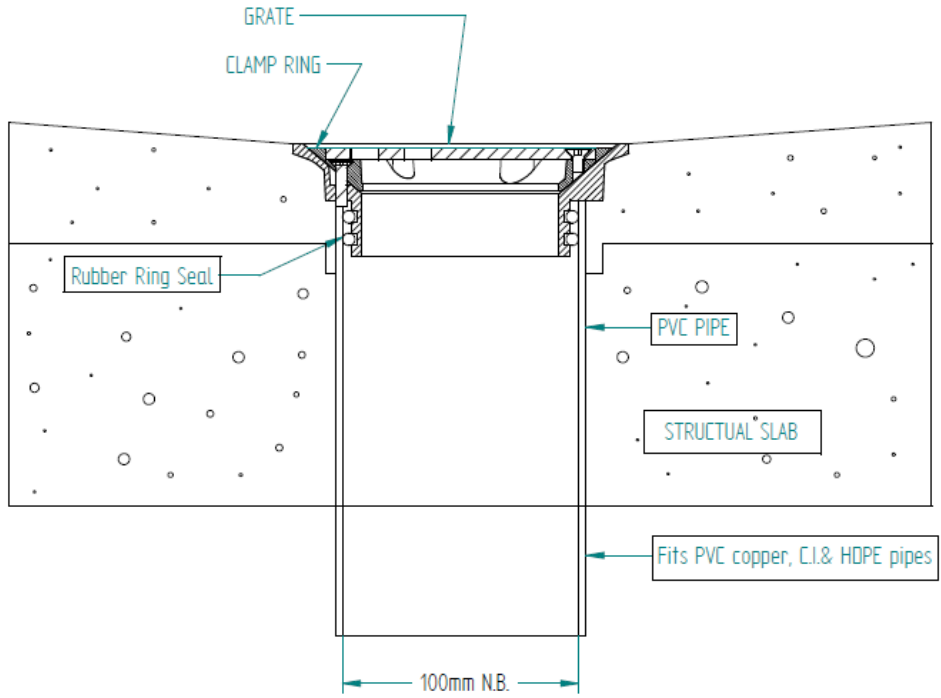
Documentary evidence of all aspects of this technical specification will be required to be provided for consideration by the WSAA product appraisal committee. The product appraisal committee is made up of technical experts drawn from WSAA members.

Appendix B Standard Drawings

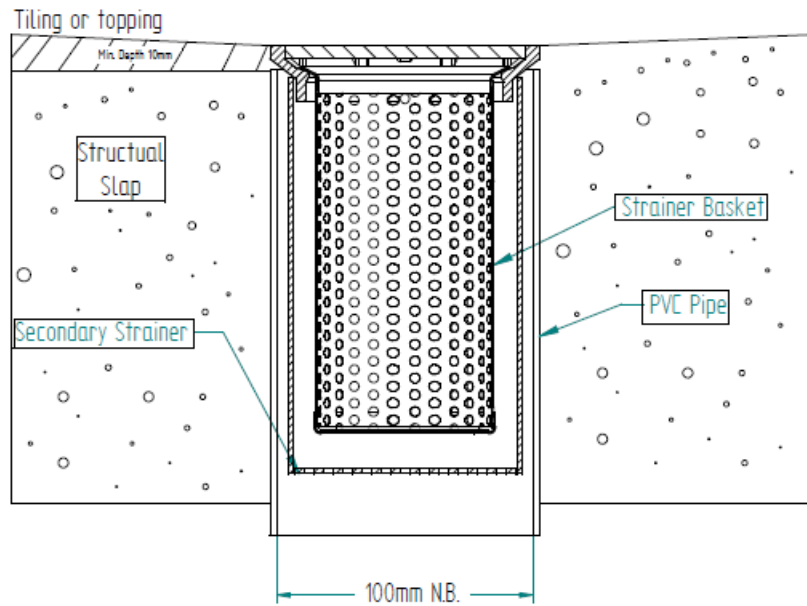
FW-150BR



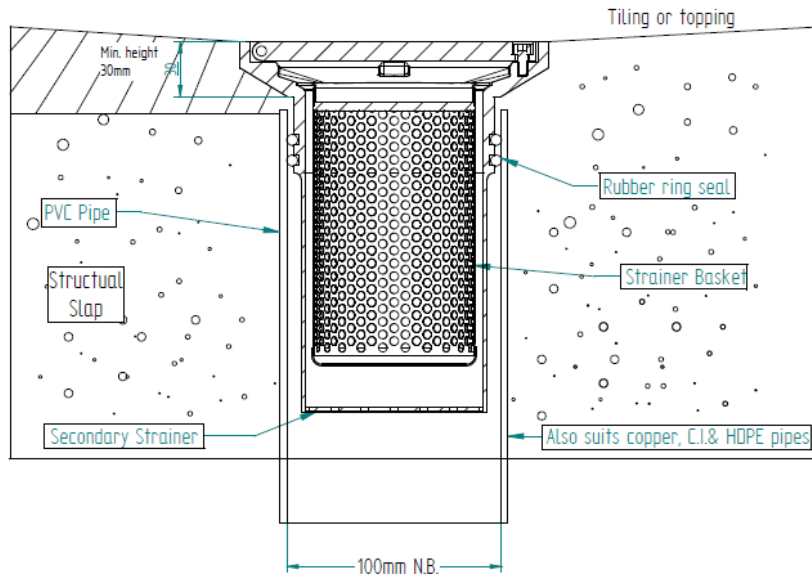
FW-100VR



FW-100BRL



FW-150BS





Certification Schedule

This Schedule should be read in conjunction with the Certificate of Approval issued to the company listed below:

<i>Company Name</i>	3 Monkeez Pty Ltd
<i>Company Other Name</i>	
<i>Client ID</i>	101094
<i>Document ID</i>	101094-Schedule 1 - Rev B
<i>Certification Standard</i>	ATS 5200.040-2005: Technical Specification for plumbing and drainage products - Waste pipe connection outlets and gratings, separate or integral
<i>Type of Certification</i>	Product Conformance
<i>Accreditation Status</i>	JAS-ANZ
	<i>Date of Issue:</i> 13/12/2009

New WaterMark licence number C of C: 40055

Model identification of the goods on which the WaterMark may be used

The use of the Accreditation Mark indicates accreditation by the Joint Accreditation System of Australia and New Zealand in respect to those activities covered by JAS-ANZ accreditation.

Refer to www.jas-anz.com.au/register for verification.

This certification remains valid until the expiry date presented on the Certificate of Approval (or Conformity) and subject to the organisation's continued compliance with the certification standard, and Global-Mark's Terms and Conditions.

This Certificate of Approval remains the property of Global-Mark Pty Ltd, Company Number: ACN.108-087-654



Certification Manager

Global-Mark Pty Ltd, Copyright 2005

Page 1 of 2



global-mark



Brand Name	Model Name	Model ID	Product Type	Product Description	Application	Nominal Size	Material
3 Monkeez	Sink Waste Arrestor	SSBW	Pipes and Fittings (Non-pressure); Non-plastic outlet	DN 90 mm sink waste arrestor, plastic and stainless steel sink waste with rubber plug	Non Pressure	DN90	Plastic and Stainless Steel
3 Monkeez	Sink Waste Arrestor	SSBW-1	Pipes and Fittings (Non-pressure); Non-plastic outlet	DN 127 mm sink waste arrestor, plastic and stainless steel sink waste with rubber plug	Non Pressure	DN127	Plastic and Stainless Steel
3 Monkeez	Sink Waste Arrestor	SCRAP-S-90	Pipes and Fittings (Non-pressure); Non-plastic outlet	DN 90 mm sink waste arrestor, stainless steel sink waste with stainless steel plug and rubber seal	Non Pressure	DN90	Stainless Steel
3 Monkeez	Sink Waste Arrestor	SCRAP-S	Pipes and Fittings (Non-pressure); Non-plastic outlet	DN 127 mm sink waste arrestor, stainless steel sink waste with stainless steel plug and rubber seal	Non Pressure	DN127	Stainless Steel
3 Monkeez	Floor Waste	FW-100VR	Pipes and Fittings (Non-pressure); Non-plastic outlet	100mm round Brass/Stainless Steel Floor waste	Non Pressure	DN 100mm	Brass and Stainless Steel
3 Monkeez	Floor Waste	FW-100BRL	Pipes and Fittings (Non-pressure); Non-plastic outlet	100mm round Stainless Steel Floor waste	Non Pressure	DN 100mm	Stainless Steel
3 Monkeez	Floor Waste	FW-150BS	Pipes and Fittings (Non-pressure); Non-plastic outlet	150mm square Stainless Steel Floor waste	Non Pressure	DN150mm	Stainless Steel
3 Monkeez	Floor Waste	FW-150BR	Pipes and Fittings (Non-pressure); Non-plastic outlet	150mm round Stainless Steel Floor waste	Non Pressure	DN 150mm	Stainless Steel

of the document



Certification Manager

Jane Hilde

Global-Mark Pty Ltd. Copyright 2005

Page 2 of 2

Appendix D

Supplier Contacts

3Monkeez
Unit 6
24 Wellington Street, Riverstone
New South Wales 2756

p 02 9627 6111

f 02 9627 3111

e enquiries@3monkeez.com.au



WATER SERVICES ASSOCIATION
OF AUSTRALIA

Melbourne Office

Level 8, 469 Latrobe Street
Melbourne VIC 3000

PO Box 13172
Law Courts Post Office
Melbourne VIC 8010

Phone: (03) 9606 0678
Fax: (03) 9606 0376

Sydney Office

Suite1, Level 30
9 Castlereagh St
Sydney NSW 2000

GPO Box 915
Sydney NSW 2001

Phone: (02) 9221 5966
Fax: (02) 9221 5977

www.wsaa.asn.au