PRODUCT MANUAL

Version 7.2

BASKET TRAP FLOOR WASTES

by



Speciality Plumbing Supplies Pty Ltd Unit 9L, 175 Gibbes Street Chatswood NSW 2067

ph. 02 9416 8031 fax. 02 9416 7614

info@spsdrains.com.au

A. Introduction

Speciality Plumbing Supplies Pty Ltd ("SPS") is a family-owned business (established 1978) that specialises in the design, manufacture and distribution of its own range of commercial and industrial roof and floor drain systems. We have worked extremely hard over 30 years to earn an enviable reputation for quality, service, expertise, value for money and reliability of supply. SPS products have been used extensively on major projects all around Australia but especially along the eastern seaboard, and particularly within the greater Sydney area.

SPS offers a large range of basket trap floor wastes for commercial and industrial trade waste applications.

B. Quality Control

SPS has attained quality management certification under ISO 9001:2008 – please see Appendix 4 for details. The main basket trap assemblies and optional grates have been certified under ATS5200:040 – please see appendix 5 for details.

SPS basket trap floor wastes are pre-assembled and pre-fitted to ensure proper fit and functionality. Grate assemblies and baskets are designed so that the basket sits snugly in the neck of the grate and does not permit any liquid to bypass the basket. Each component is manufactured in accordance with the relevant Australian standard.

SPS basket traps have been approved by Sydney Water since 2001 (approval number 2001-269).

SPS basket traps have gained a very high level of support from specifiers, plumbing merchants and contractors Australia-wide.

C. Applicability

SPS basket trap floor wastes are designed to intercept and contain debris, such as food particles, garbage scraps, rubbish etc. in industrial and commercial applications such as restaurants, food processing factories, food preparation areas, garbage rooms, bars etc. They are the first stage of the trade waste pre-treatment system and normally operate upstream from other devices (such as grease traps) to help ensure that trade waste output meets minimum discharge standards.

The essential feature of a basket trap floor waste is its **strainer system**. The strainer system is comprised of 2 components:

- 1. A strainer basket (removable); and
- 2. A secondary strainer (fixed).

SPS manufactures 5 different types of strainer systems as per the following table:

Strainer System	Compact	Push-in	Height- Adjustable (Shallow Body)	Height- Adjustable (Deep Body)	Smart Secondary Strainer
Removable Basket	ø75mm x 150mm	ø80mm x140mm	Ø80mm x 140mm	Ø125mm x 170mm	ø75mm x 140mm
Removable Basket Perforations	ø3mm x 4.5mm pitch	ø3mm x 4.5mm pitch	ø3mm x 4.5mm pitch	ø3mm x 4.5mm pitch	ø3mm x 4.5mm pitch
Removable Basket Code	SB75	SBV85	SB85	SB150	SB85M
Secondary Strainer	ø95mm disc, welded to base (integral to assembly)	ø90mm disc, welded to base (integral to assembly)	ø95mm x 100mm bucket, retrofitted during installation	ø128mm disc installed in base with M6 security screws	Movable plate, 24x ø1.5mm holes (integral to assembly)
Secondary Strainer Perforations	4mm x 6mm pitch*	4mm x 6mm pitch*	4mm x 6mm pitch*	4mm x 6mm pitch*	24 x Ø1.5mm drilled holes (grid pattern)
Capacity	750ml	750ml	750ml	2 000ml	600ml
Weight	1.06kg	3.3kg (max.)	6.9kg (max.)	Max. 16kg	2.6kg
Materials of Construction	304SS	304 or 316SS	Lower body: cast iron; grate assemblies: 304 or 316SS	Lower body: cast iron or 316SS; grate assemblies: 304 or 316SS	304 or 316SS (moveable plate: ferritic SS)

[&]quot;Pitch" refers to the distance between the midpoints of each hole. The smaller the pitch, the more holes.

Strainer systems 2, 3 and 4 can be combined with a variety of grates and bodies to form specific sub-assemblies (sometimes also referred to as "**bucket traps**"). The choice of which particular unit to use will depend upon the requirements of the application in which they are intended to be installed.

A generic diagram of each strainer system is illustrated in "Specifications and Drawings" below. Detailed data sheets for each particular basket trap assembly are contained in Appendix 1 (see pages 13 – 29).

Here are some considerations involved in the choice of which product to use:

- How deep is the slab?
- Is the structural slab suspended or "in ground"?
- Is a fresh concrete slab being poured or is it a "retro-fit" application?
- Is a waterproofing membrane involved?
- What size basket is desired?
- Is a square, hinged grate preferred, or a circular grate?
- Is there any topping or tiling being installed, and if so what kind of topping (e.g. tiles or sheet vinyl flooring)?

Inlet flow rates vary depending upon the size of the grate installed. The following <u>inlet</u> flow rates apply for unrestricted water flow:

Flow Rates of Grate Assemblies (assuming a 20mm head of water above grate)

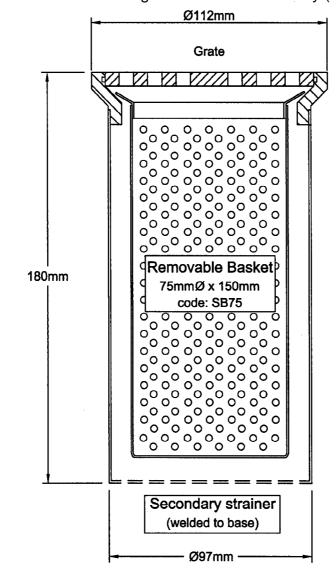
Round grates (litres per second)	Square grates (litres per second)
112mm: 0.95	150mm: 3.2
135mm: 1.9 (sheet vinyl)	200mm: 4.1
150mm: 2.2	225mm: 4.6
155mm: 2.0 (sheet vinyl)	300mm: 4.9
220mm: 3.9 (sheet vinyl)	
225mm: 4.2	

D. Specifications and Drawings

300mm: 4.7

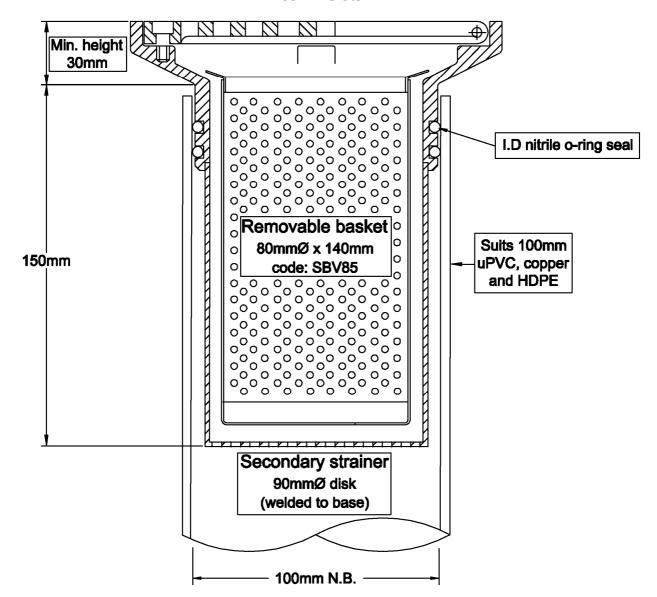
Strainer System 1 - "Compact"

Available in all-304 grade stainless steel only (refer p.13).



Strainer System 2 - "Push-in"

Push-in Grate

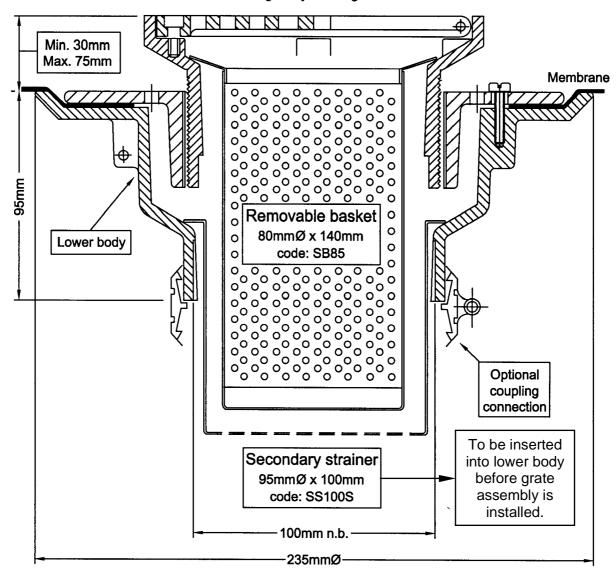


Grate Options

Туре	Ref	Available Materials	Load Rating AS3996-2006
Round 130mm	p.14	304 or 316 Stainless Steel	Class B
Round 150mm	p.15	304 or 316 Stainless Steel	Class B
Square 150mm	p.16	304 or 316 Stainless Steel	Class B
Vinyl 135mm	p.17	304 or 316 Stainless Steel	Class A

Strainer system 3 – "Height-adjustable (shallow body)"

Height-adjustable grate



Grate Options

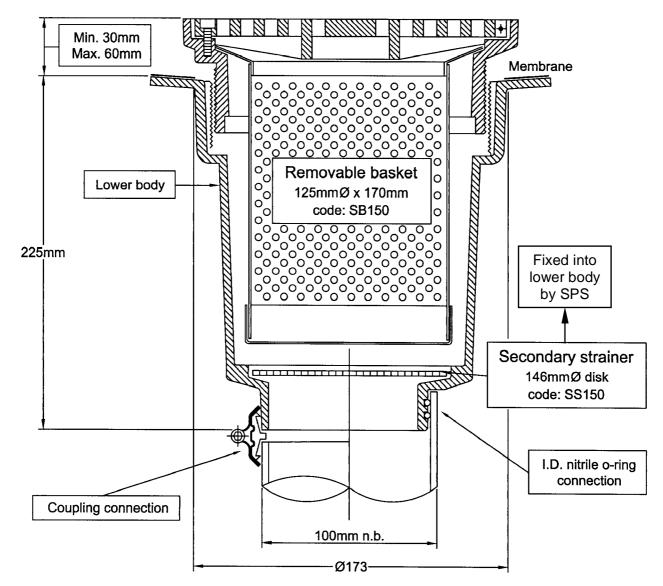
Туре	Ref	Available Materials	Load Rating AS3996-2006
Round 150mm	p.18	304 or 316 Stainless Steel	Class B
Round 225mm	p.19	304 or 316 Stainless Steel	Class B
Square 150mm	p.20	304 or 316 Stainless Steel	Class B
Square 200mm	p.21	304 or 316 Stainless Steel	Class C
Vinyl 155mm	p.22	304 or 316 Stainless Steel	Class B

Lower body Options

"Retro-fit" (for 1-stage installation)	Cast iron	316 stainless steel
"Deluxe" (for 2-stage installation)	Cas	t iron

Strainer System 4 - Height-adjustable (deep body)

Height-adjustable Grate



Grate Options

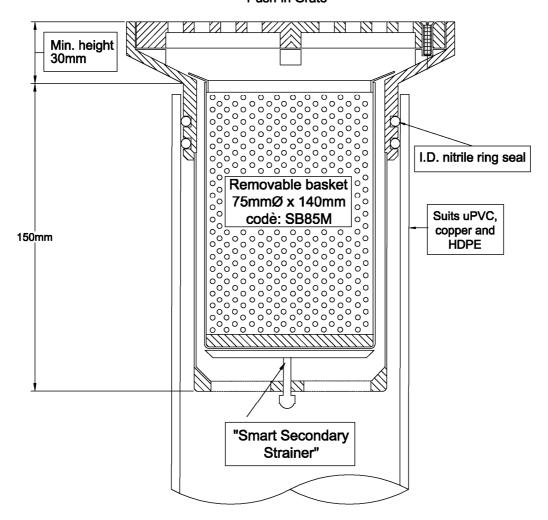
Туре	Ref	Available Materials	Load Rating AS3996-2006
Round 225mm	p.23	304 or 316 Stainless Steel	Class B
Round 300mm	p.24	304 or 316 Stainless Steel	Class C
Square 200mm	p.25	304 or 316 Stainless Steel	Class C
Square 225mm	p.26	AB2 Aluminium-bronze, 316 Stainless Steel	Class C
Square 300mm	p.27	304 or 316 Stainless Steel	Class C
Vinyl 220mm	p.28	304 or 316 Stainless Steel	Class B

Lower body Options

Spigot for coupling connection	Cast Iron	
Spigot for o-ring connection	Cast Iron	Stainless Steel

Strainer System 5 – "Smart Secondary Strainer"

Push-in Grate



Description of Smart Secondary Strainer:

The base of strainer basket SB85M houses a strong samarium-cobalt magnet. When the basket is in place it draws up the strainer plate (which is made from ferritic stainless steel) thereby rendering it inoperative – it is as if there is no secondary strainer. Any solids small enough to pass through the basket cannot therefore accumulate within the unit. When the basket is removed the strainer plate drops into place, providing a very solid, tamper-resistant secondary strainer. The plate contains very small perforations (1.5mmØ), thereby preventing virtually any solids from entering the waterway. But the holes are sufficiently numerous to prevent the system from completely blocking. The strainer plate cannot be bypassed by hand.

Special Maintenance Instructions

If the strainer plate gets sticky then there is a slight chance that it will not open when the basket is reinserted after cleaning. This risk can be eliminated if the basket is flushed every day with 1 litre of hot soapy water. This will ensure that sticky residues, grease etc cannot accumulate on the mechanism.

Grate Options

Туре	Ref	Available Materials	Load Rating AS3996-2006
Square 150mm	p.27	304 or 316 Stainless Steel	Class B

Engineers certifications (loading)

Many of the grate assemblies used in SPS basket trap floor wastes have been developed with heavy-duty load applications in mind, for example supermarket loading docks. Appendix 2 contains some examples of load tests carried out by *Pearl Street ETRS* of Auburn (a NATA-accredited testing laboratory). These particular grate assemblies have been tested to Class C of AS3996-2006.

E. Installation Requirements

- (i). When casting entire assembly into new concrete slab all systems (one-stage installation, no height-adjustment required)
- 1. Connect unit to the pipe by appropriate means (depending upon the specific arrestor and the pipe material involved. Always check that the secondary strainer is present and correctly installed.
- 2. Ensure unit is adequately secured to the reinforcing steel to prevent displacement during concrete pour.
- 3. Ensure unit is set up to the appropriate height, having regarding to the any topping to be applied to the slab.
- 4. Ensure that grate is protected during concrete pour, for example by covering with duct tape. The tape should be trimmed to upper edge of grate to ensure that when removed, the cement surrounding the grate is not damaged.
- (ii). When casting into new concrete slab height adjustable systems (two-stage installation possibly involving waterproofing of slab)
- 1. Connect lower body to the pipe by appropriate means, depending upon the pipe material involved.
- 2. Ensure lower body is adequately secured to the reinforcing steel to prevent it being displaced during concrete pour.
- 3. Ensure lower body is set up to the appropriate height having regard to the likely depth of the topping, the type of waterproofing membrane being used and the size of the grate assembly being installed.
- 4. [If applicable] the waterproofing membrane should be applied as far as possible into the lower body but without obstructing the weep holes or the female thread.
- 5. Prior to insertion of grate assembly, double check that secondary strainer is installed in lower body. *Do not insert the basket into the lower body!*
- 6. Screw the grate assembly into lower body to suit height of finished floor.

- 7. [If applicable] sheet vinyl flooring should be applied into the grate assembly and clamped securely with clamping ring (vinyl flooring to be installed by qualified professional).
- 8. Insert basket into grate assembly and re-secure grate.

(iii). Compact or Push-in systems (including Smart Secondary Strainer system)

- 1. Insert assembly into pipe using o-rings to suit pipe material (consult SPS for appropriate o-ring when ordering). If waterproofing is required, a leak control flange must be installed into pipe prior to the grate assembly. In this case do not use o-rings, as a space is required between the spigot and the inner wall of the leak-control flange so that any sub-surface liquid can escape.
- 2. Ensure unit is set up in the pipe to the appropriate height, having regard to the depth of the topping to be applied to the structural slab (e.g., cement screed, sheet vinyl, epoxy floor coating, tiles, etc.)
- 3. Check that the removable strainer basket is inside the grate assembly prior to the handing over of the job.

F. Operation and Maintenance

This is the most critical aspect of basket trap floor wastes. In order to function properly, basket trap floor wastes require <u>regular</u> cleaning of the basket and inspection of the secondary strainer. How often this needs to occur is a matter for the end-user, but we recommend that SPS basket traps be inspected <u>at least once per day</u>.

SPS basket trap floor wastes should not be used as in-floor garbage receptacles. The strainer system is only as good as the maintenance it receives. SPS recommends that the end-users be encouraged to implement proper cleaning and maintenance procedures.

For example, a large and well-known fast food chain stipulates that its restaurant floors be swept every hour and the baskets are cleaned out at the end of every shift.

Also, some larger and busier operations have invested in two sets of baskets. This allows the cleaning staff to efficiently replace clogged baskets with clean ones. This practice maximises the effectiveness of the floor wastes and minimises mess and the risk of clogging up secondary strainers.

The biggest problem we see in the field arises from users who destroy the secondary strainers and/or discard the baskets. The secondary strainers, if installed properly, are very difficult to remove. Also, the strainer baskets can be supplied with stainless steel fixing cable to help prevent them being discarded.

Cleaning procedures are listed below.

General Cleaning Procedures

- 1. Open the grate assembly (taking care not to lose any fixing screws).
- 2. Remove the strainer basket.
- 3. Check whether are any solids accumulating on the secondary strainer...
 - if no, proceed to 4;
 - if yes, remove solids and discard in rubbish.
- 4. Replace/close grate assembly for the time being (OH&S requirement).
- 5. Empty contents of strainer basket into the rubbish.
- 6. Re-open the grate assembly.
- 7. Replace strainer basket, taking care that it is sitting squarely and securely in its recess/groove.
- 8. Replace/close grate assembly and re-fit any fixing screws if necessary.

Special Maintenance Instructions – "Smart Secondary Strainer" Systems

If the valve mechanism gets very sticky then there is a slight risk that it may not open when the basket is reinserted after cleaning. This risk can be eliminated if the basket is flushed every day with 1 litre of hot soapy water. This will ensure that sticky residues, grease etc do not accumulate on the valve mechanism.

Replacement components

Replacement components (baskets, secondary strainers, grates and fasteners) are readily available from SPS. The relevant product codes are contained in the following tables:

Strainer System - Replacement Components

	Product Code		
Strainer system	Basket	Secondary strainer	
1. Compact	SB75	n/a*	
2. Push-in	SBV85	n/a*	
Height-adjustable (shallow body)	SB85	SS100S**	
4. Height-adjustable (deep body)	SB150	SS150	
5. Smart Secondary Strainer	SB85M	n/a*	

PLEASE NOTE: deliberate destruction of the secondary strainer will void the warranty.

- For systems 1, 2 and 5, if the secondary strainer is destroyed the whole unit will need to be replaced.
- ** For system 3, destruction of the secondary strainer will necessitate disassembly in order for a new unit to be installed. This will involve some excavation into the finished floor surface so that the grate assembly can be removed.

Replacement Grate Fastenings

Grate Type	Standard Fastening (all grade 304 stainless steel)	
Round 130 & 150mm	M5 x 12mm countersunk phillips head screw	
Round 225mm	M5 x 16mm countersunk phillips head screw	
Square 150mm	M5 x 20mm socket screw to suit 4mm Allen Key	
Square 200mm	M5 x 20mm socket screw to suit 4mm Allen Key	
Square 225mm	M5 x 20mm socket screw to suit 4mm Allen Key	
Square 300mm	M5 x 20mm socket screw to suit 4mm Allen Key	
Vinyl 135 & 155mm	3/16 x 3/8" BSW countersunk phillips head screw	
Vinyl 220mm	M5 x 12mm countersunk phillips head screw	
Strainer System Fastenings		
SS150 (see above)	M6 x 16mm pan head "torx" style anti-tamper screw	

Occupational Health and Safety

SPS basket trap floor wastes have been designed to be safe and without risks to health when properly used and installed. Grate assemblies are inspected prior to ensure no sharp edges. Grate assemblies are either linished or bead-blasted to provide an attractive slip-resistant satin finish.

SPS grates are designed for maximum free area – this maximises the speed that surface liquids can be discharged and also improves the grates' slip-resistant characteristics.

The following practices will help minimise risks to health:

- 1. The strainer system should be regularly inspected and cleaned to minimise the build-up of decaying food matter.
- 2. Grates should be scrubbed with detergent to minimise the build-up of grease and debris.
- 3. Grates should *never* be left open.

G. Identification

Each basket trap floor waste can have a "compliance plate" in the form of a heavy-duty waterproof sticker affixed to the inner body of each unit with the following information:

Speciality Plumbing Supplies Pty Ltd Telephone 02 9416 8031 "Basket Trap Floor Waste Arrestor" Model no. *** Date of assembly: *** TWA approval no. ***

F. Warranty

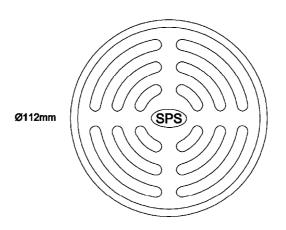
Appendix 3 (page 35) contains a copy of the standard SPS 5-year guarantee in respect of basket trap floor wastes.

Enquiries

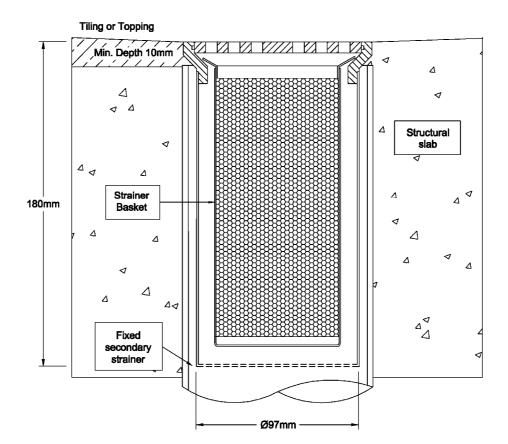
Please contact Tony Chapman at SPS on (02) 9416 8031 or 0411 079 762.

SPS 100mm Compact Bucket Trap Assembly (Drop-in)

Specification code: BA100S (304 stainless steel assembly)



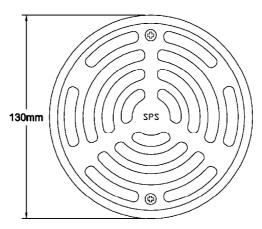
- Lift-out grate with bayonet fitting.
- Entire assembly in 304 stainless
- Includes removable sediment basket and fixed secondary strainer.
- Fits inside 100mm PVC, HDPE, CI and copper.
- May be installed into a leak control flange for waterproofed applications.



Strainer System 1: Compact

SPS 130mm Round Push-in Bucket Trap

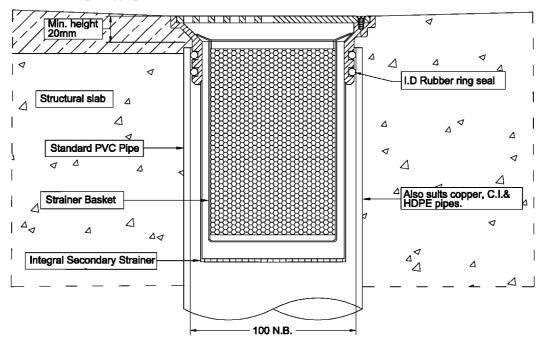
Specification code: R130SR-BT (304 stainless steel)



- Round grate in cast 304 stainless steel. Basket and strainer in 304 stainless steel sheet.
- Spigot fits inside 100mm PVC, copper, CI and HDPE.
- Includes stainless steel sediment basket and secondary strainer disk.
- Compatible with PVC leak control flanges for membraned applications.

Typical Application

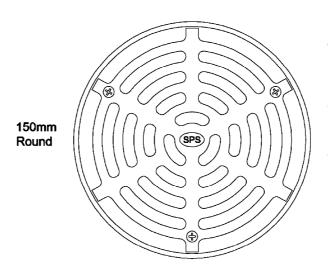
Tiling or topping



Strainer System 2: "Push-in" (130mm round grate)

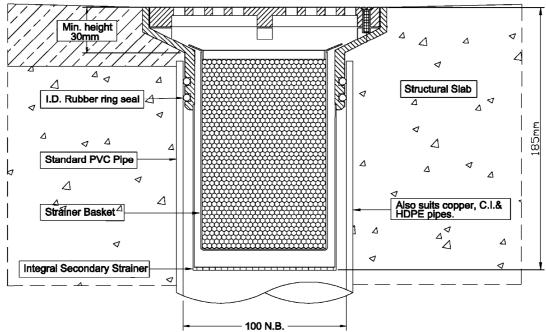
SPS 150mm Round Push-in Bucket Trap

Specification code: R150SR-BT (316 stainless steel grate)



- Round grate in cast 316 stainless steel. Basket and strainer in 304 stainless steel sheet.
- Spigot fits inside 100mm PVC, copper, CI and HDPE.
- Includes stainless steel sediment basket and secondary strainer disk.
- Compatible with PVC leak control flanges for membraned applications.

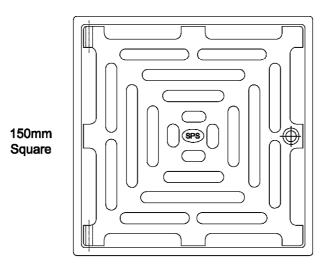
Tiling or topping



Strainer System 2: "Push-in" (150mm round grate)

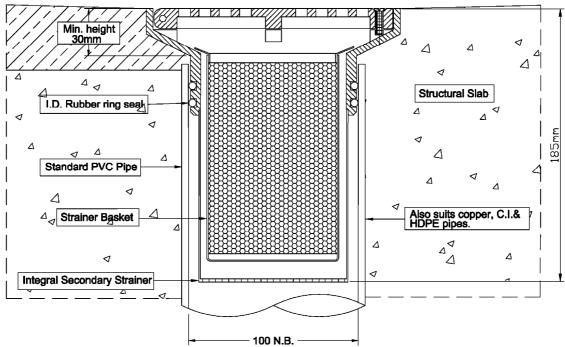
SPS 150mm Square Push-in Bucket Trap

Specification code: Q150SR-BT (316 stainless steel)



- Square grate in cast 316 stainless steel. Basket and strainer in 304 stainless steel sheet.
- Spigot fits inside 100mm PVC, copper, Cl and HDPE.
- Includes stainless steel sediment basket and secondary strainer disk.
- Compatible with PVC leak control flanges for membraned applications.



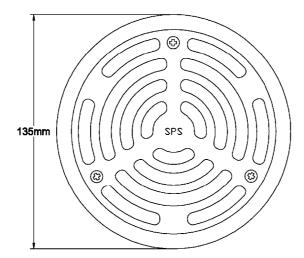


Strainer System 2: "Push-in" (150mm square grate)

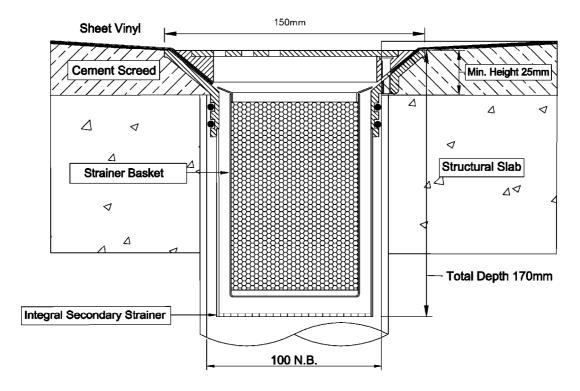
SPS 100mm Push-in Vinyl Floor Bucket Trap (New Compact Top Model)

Specification codes:

V100SA-BT (Brass body, polished 304 SS ring & grate) V100SSA-BT (Entire assembly in 316 stainless steel)



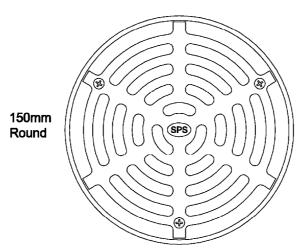
- Push-in bucket trap assembly for sheet vinyl flooring.
- Vinyl floor drain body available in brass or 316 stainless steel.
- Ring & grate available polished 304 or 316 stainless steel.
- O-rings adapt spigot to 100mm PVC, copper, HDPE and CI pipe.



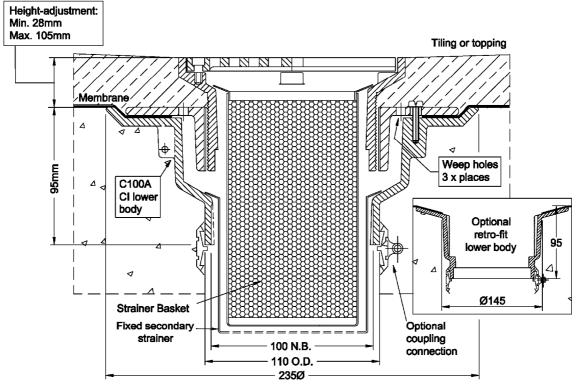
Strainer System 2: "Push-in" (135mm vinyl floor grate)

SPS 150mm Round Vari-Level Bucket Trap Specification codes:

R150SA (316 SS grate, CI retro-fit lower body) R150SSA (316 SS grate, 316 SS retro-fit lower body) R150SA2 (316 SS grate, C100A CI "deluxe" lower body) (Shallow Body)



- Height-adjustable bucket trap assembly with lift-out grate.
- · Grate assembly available in 316 stainless steel.
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional CI or SS retro-fit lower body fits inside 150mmØ core hole.



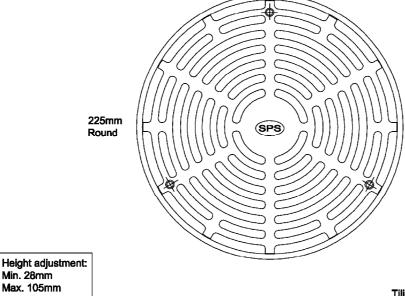
Strainer System 3: "Height-adjustable – Shallow Body" (150mm round grate)

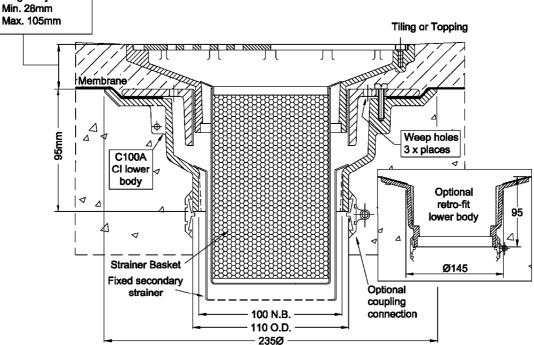
SPS 225mm Round Vari-Level Bucket Trap (Shallow Body)

Specification codes:

R225SA (316 SS grate, CI retro-fit lower body) R225SSA (316 SS grate, 316 SS retro-fit lower body) R225SA2 (316 SS grate, C100A CI "deluxe" lower body)

- Height-adjustable bucket trap assembly with lift-out grate.
- · Grate assembly available in 316 stainless steel.
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional CI or SS retro-fit lower body fits inside 150mmØ core hole.

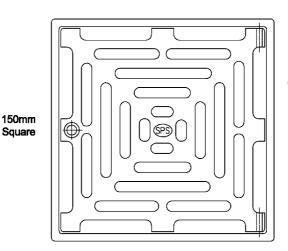




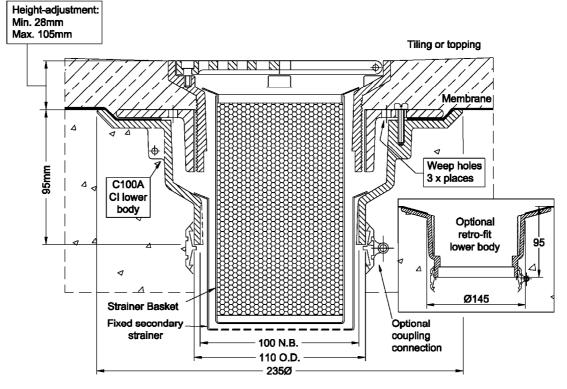
Strainer System 3: "Height-adjustable – Shallow Body" (225mm round grate)

SPS 150mm Square Vari-Level Bucket Trap Specification codes: O150SA (316 SS grate Clustro-fit lower body) (Shallow Body)

Q150SA (316 SS grate, CI retro-fit lower body)
Q150SSA (316 SS grate, 316 SS retro-fit lower body)
Q150SA2 (316 SS grate, C100A "deluxe" CI lower body)



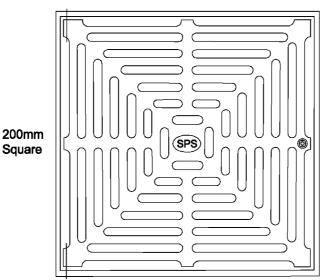
- Height-adjustable bucket trap assembly with hinged grate.
- Grate assembly available in 316 stainless steel (or nickel bronze and bronze as options).
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional Cl or SS retro-fit lower body fits inside 150mmØ core hole.



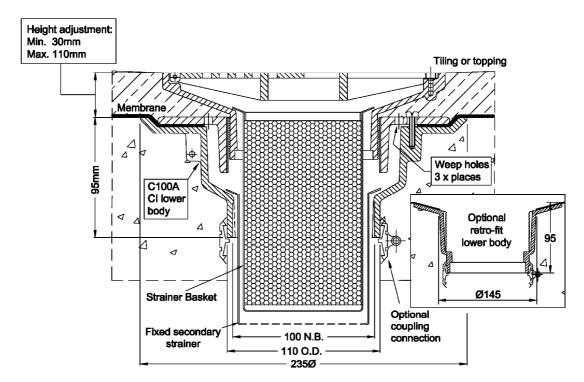
Strainer System 3: "Height-adjustable – Shallow Body" (150mm square grate)

SPS 200mm Square Vari-Level Bucket Trap

Specification codes:
Q200SA (316 SS grate, Cl retro-fit lower body)
Q200SSA (316 SS grate, 316 SS retro-fit lower body)
Q200SA2 (316 SS grate, C100A CI "deluxe" lower body)



- Height-adjustable bucket trap assembly with hinged grate.
- Grate assembly available in 316 stainless steel.
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional Cl or SS retro-fit lower body fits inside 150mmØ core hole.



Strainer System 3: "Height-adjustable – Shallow Body" (200mm square grate)

Specification codes:

Appendix 1 **Specification Drawings**

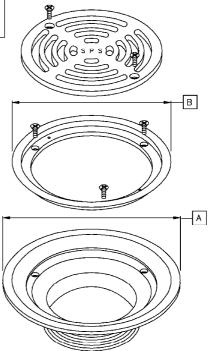
SPS 155mm Round Vinyl Floor Bucket Trap (Shallow Body)

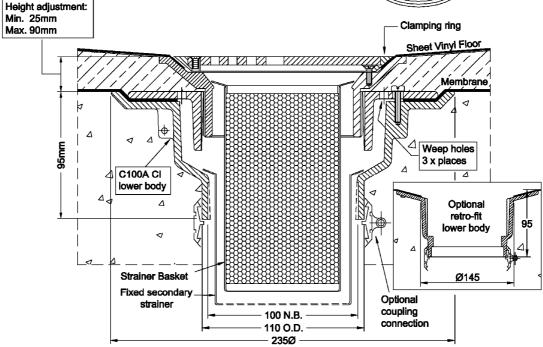
LG100A-SSA (316 SS ring grate & body, 316 SS retro-fit body) LG100A2-SS (316 SS ring, grate & body, CI "deluxe" body)

LG100A-SS (316 SS ring & grate & body, CI retro-fit body)

- Height-adjustable vinyl floor waste assembly.
- Drain body available in bronze as standard or in 316 stainless steel.
- Ring & Grate available in chrome-plated bronze, polished nickel bronze or 316 stainless steel.
- C100A CI "deluxe" lower body with reversible clamping collar.
- Optional CI or SS retro fit lower body fits inside 150mmØ core hole.

	DIMENSIONAL DATA				
		DIMENSION IN	MILLIMETRES		
I	OUTLET DIAMETER	øΑ	ØΒ		
I	100	175	155		



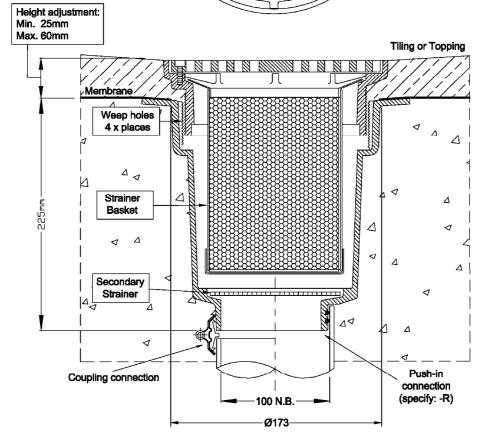


Strainer System 3: "Height-adjustable – Shallow Body" (155mm vinyl floor grate)

SPS 225mm Round Bucket Trap Assembly Specification code: R225SA3 (316 SS grate Cl lower body (regular or push-in)) (Deep Body)

R225SA3 (316 SS grate CI lower body (regular or push-in))
R22SSA3 (316 SS grate, 316 SS lower body (push-in only))

- 225mm Round SPS
- Height-adjustable bucket trap assembly with lift-out grate.
 - Grate assembly available in 316 stainless steel.
 - Q150/100Y bucket body fits inside 175mmØ core hole and is available in Cl (standard) or 316 stainless steel.

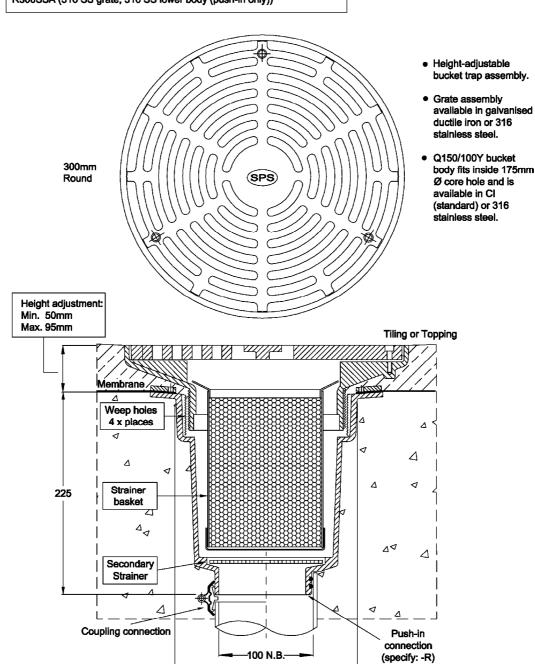


Strainer System 4: "Height-adjustable – Deep Body" (225mm round grate)

SPS 300mm Round Bucket Trap Assembly

Specification code:
R300DA (galvanised ductile iron grate, CI lower body (coupling or push-in))
R300SA (316 SS grate, CI lower body (coupling or push-in))
R300SSA (316 SS grate, 316 SS lower body (push-in only))

(Deep Body)

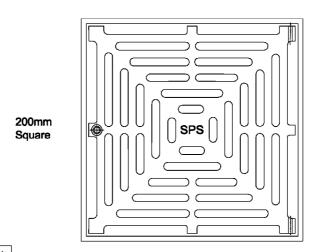


Strainer System 4: "Height-adjustable – Deep Body" (300mm round grate)

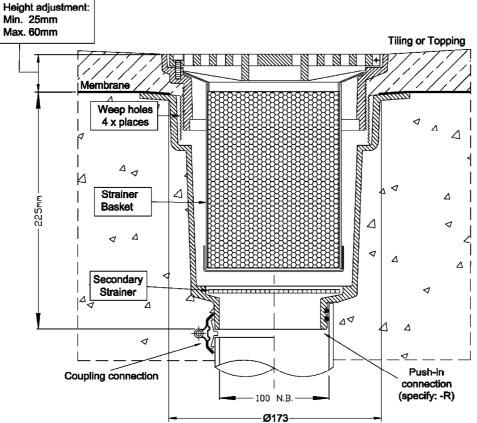
173Ø

SPS 200mm Square Bucket Trap Assembly Specification code:

Q200SA3 (316 SS grate CI lower body (regular or push-in)) Q200SSA3 (316 SS grate, 316 SS lower body (push-in only)) (Deep Body)



- Height-adjustable hinged bucket trap assembly.
- Grate assembly available in cast 316 stainless steel.
- Q150/100Y bucket body fits inside 175mmØ core hole and is available in CI (standard) or 316 stainless steel.



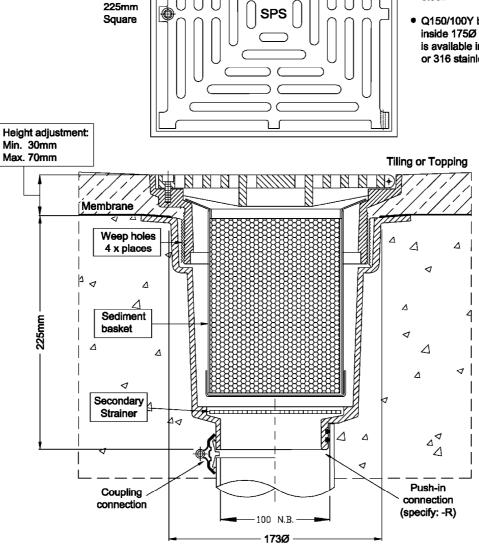
Strainer System 4: "Height-adjustable – Deep Body" (200mm square grate)

SPS 225mm Square Bucket Trap Assembly Specification code: Q225ABA (AB2 grate, Cl lower body (coupling or push-in)) (Deep Body)

Q225ABA (AB2 grate, CI lower body (coupling or push-in))
Q225SA (316 SS grate, CI lower body (coupling or push-in))
Q225SSA (316 SS grate, 316 SS lower body (push-in only))

Height-adjustable hinged bucket trap assembly.

- Grate assembly available in high-tensile aluminium -bronze or 316 stainless steel.
- Q150/100Y bucket body fits inside 175Ø core hole and is available in CI (standard) or 316 stainless steel.



Strainer System 4: "Height-adjustable – Deep Body" (225mm square grate)

300mm

Square

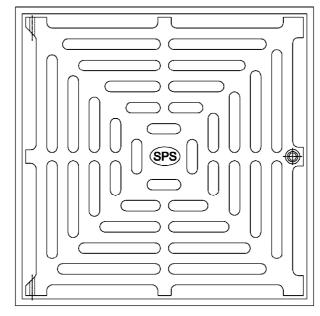
Height adjustment: Min. 50mm

Appendix 1 Specification Drawings

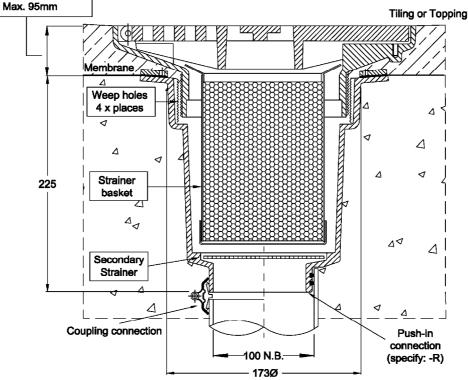
SPS 300mm Square Bucket Trap Assembly Specification codes:

Q300SA (316 SS grate, CI lower body (coupling or push-in)) Q300SSA (316 SS grate, 316 SS lower body (push-in only))

(Deep Body)



- Height-adjustable hinged bucket trap assembly.
- Grate assembly available in 304- or 316 grade stainless steel.
- Q150/100Y bucket body fits inside 175mm Ø core hole and is available in CI (standard) or 316 stainless steel.

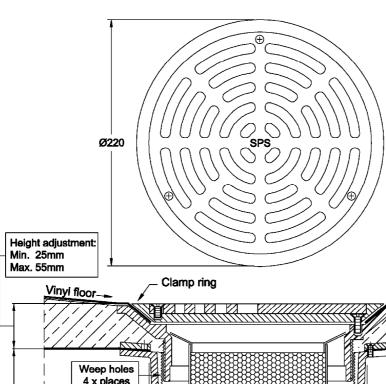


SPS 220mm Sheet Vinyl Floor Bucket Trap

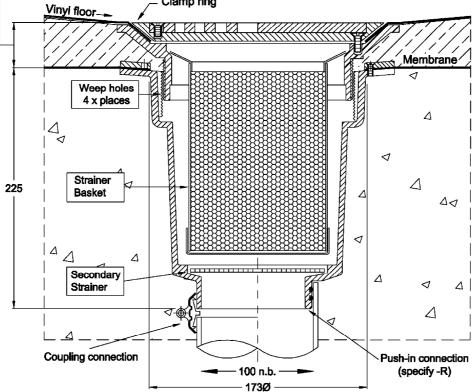
Specification codes:

LG150A/S (304 SS top, brass vinyl drain body, CI lower body) LG150A/SS (316 SS top & vinyl drain body, CI lower body) LG150A/SSA (entire assembly in 316 stainless steel)

(Deep Body)



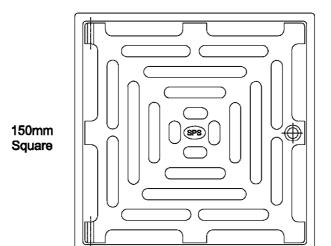
- Height-adjustable bucket trap assembly for sheet vinyl flooring.
- Vinyl floor drain body available in brass or 316 stainless steel.
- Ring & Grate available in polished 304 or 316 stainless steel.
- Q150/100Y bucket trap body fits inside 175Ø core hole and is available in CI (standard) or 316 stainless steel.



Strainer System 4: "Height-adjustable – Deep Body" (220mm sheet vinyl grate)

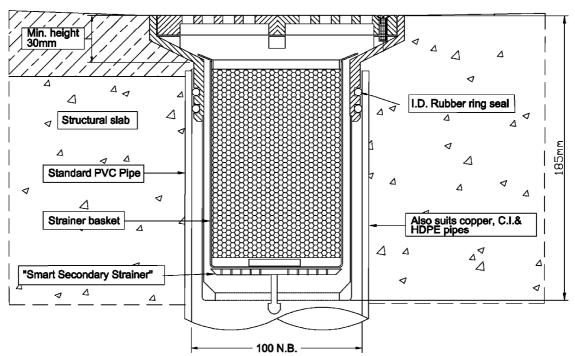
SPS 150mm Square Push-in Bucket Trap With "Smart Secondary Strainer"*

Specification code: Q150SR-BTM (316 stainless steel) * PATENT PENDING



- Square grate in cast 316 stainless steel. Basket and strainer in 304 stainless steel sheet.
- Spigot fits inside 100mm PVC, copper, CI and HDPE.
- Secondary strainer plate activates only when strainer basket is removed.
- Compatible with PVC leak control flanges for membraned applications.

Tiling or topping



Strainer System 5: "Smart Secondary Strainer" (150mm square grate)



PRODUCT TESTING REPORT

REPORT NUMBER:

27076145.5

Page 1 of 2

DATE:

17 October 2007

SPS Plumbing PO Box 159

KILLARA NSW 2071

CLIENT CONTACT:

Mr Ray Chapman

ORDER NUMBER:

Email of intent

DESCRIPTION:

The load testing of one stormwater grate identified as SPS

Q200S. Grate was identified and supplied by our client.

TEST SPECIFICATION:

AS3996-2006 Appendix C

TEST PROCEDURE:

A 1000kN Universal testing machine was used to apply the

nominated test loads to the grates in accordance with ETRS

Procedure SM 0.002.

TEST RESULTS:

TYPE Testing.

Circular Opening (CO) = 190mm

TEST Block size = $140 \times 140 \text{mm}$ Rectangular

Applied Test Load = 74kN

Grate ID.	Class	Deflection under load (mm) (Par. C4.5)	Permanent Deflection (mm) (Par. C4.6)	Comments and Observations
SPS Q200S	С	3.4mm	0.9mm	No failure or collapse evident.

Note: The above mentioned Grate Complies to the requirements of AS3996 Clause 4.2.1.2 (table 4.2)

Victor Konstantinoff **Branch Operations Approved Signatory**



This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC 17025. This document will not be reproduced except in full.

ETRS Pty Ltd ABN 21 006 353 046

TEL +61 (02) 9756 3388 FAX +61 (02) 9756 3359 SYDNEY OFFICE - 6 Nello Place, Wetherill Park NSW 2164 PO Box 6125, Wetherill Park NSW 2164

WWW.pearIstreetenergy.com.au

ASSET MANAGEMENT SERVICES
© Copyright - (2004) ETRS Limited - No part of this report may be reproduced by any process, stored in a retrieval system, transmitted nor disclosed to others without prior written permission of ETRS Limited, except that the client may reproduce the report for its own internal use. The report is issued free of alterations and subject to the foregoing, may only be reproduced in full. The results presented in this report relate exclusively to the samples selected by the client for the purpose of testing. No responsibility is taken for the representativeness of these samples



PRODUCT TESTING REPORT

REPORT NUMBER:

27076145.4

Page 1 of 2

DATE:

17 October 2007

SPS Plumbing PO Box 159

KILLARA NSW 2071

CLIENT CONTACT:

Mr Ray Chapman

ORDER NUMBER:

Email of intent

DESCRIPTION:

The load testing of one stormwater grate identified as SPS

Q200/150S. Grate was identified and supplied by our client.

TEST SPECIFICATION:

AS3996-2006 Appendix C

TEST PROCEDURE:

A 1000kN Universal testing machine was used to apply the

nominated test loads to the grates in accordance with ETRS

Procedure SMT.002.

TEST RESULTS:

TYPE Testing.

Circular Opening (CO) = 190mm

TEST Block size = 140 x 140mm Rectangular

Applied Test Load = 74kN

Grate ID.	Class	Deflection under load (mm) (Par. C4.5)	Permanent Deflection (mm) (Par. C4.6)	Comments and Observations
SPS Q200/150S	С	3.5mm	0.8mm	No failure or collapse evident.

Note: The above mentioned Grate Complies to the requirements of AS3996 Clause 4.2.1.2 (table 4.2)

Victor Konstantinoff **Branch Operations Approved Signatory**

This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC 17025. This document will not be reproduced except in full.

ETRS Pty Ltd ABN 21 006 353 046

TEL +61 (02) 9756 3388 FAX +61 (02) 9756 3359 SYDNEY OFFICE – 6 Nello Place, Wetherill Park NSW 2164 PO Box 6125, Wetherill Park NSW 2164

www.pearlstreetenergy.com_au
© Copyright - (2004) ETRS Limited - No part of this report may be reproduced by any process, stored in a retrieval system, transmitted nor disclosed to others without prior written permission of ETRS Limited, except that the client may reproduce the report for its own internal use. The report is issued free of alterations and subject to the foregoing, may only be reproduced in full. The results presented in this report relate exclusively to the samples selected by the client for the purpose of testing. No responsibility is taken for the representativeness of these samples



PRODUCT TESTING REPORT

REPORT NUMBER:

27076145.3

Page 1 of 2

DATE:

17 October 2007

SPS Plumbing PO Box 159

KILLARA NSW 2071

CLIENT CONTACT:

Mr Ray Chapman

ORDER NUMBER:

Email of intent

DESCRIPTION:

The load testing of one stormwater grate identified as SPS

Q225S. Grate was identified and supplied by our client.

TEST SPECIFICATION:

AS3996-2006 Appendix C

TEST PROCEDURE:

A 1000kN Universal testing machine was used to apply the

nominated test loads to the grates in accordance with ETRS

Procedure SMT.002.

TEST RESULTS:

TYPE Testing.

Circular Opening (CO) = 215mm

TEST Block size = 165mm x 165mm Rectangular

Applied Test Load = 94kN

Grate ID.	Class	Deflection under load (mm) (Par. C4.5)	Permanent Deflection (mm) (Par. C4.6)	Comments and Observations
SPS Q225S	С	2.5mm	0.7mm	No failure or collapse evident.

Note: The above mentioned Grate Complies to the requirements of AS3996 Clause 4.2.1.2 (table 4.2)

Victor Konstantinoff **Branch Operations Approved Signatory**

This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC 17025. This document will not be reproduced except in full.

ETRS Pty Ltd ABN 21 006 353 046

TEL +61 (02) 9756 3388 FAX +61 (02) 9756 3359 SYDNEY OFFICE - 6 Nello Place, Wetherill Park NSW 2164 PO Box 6125, Wetherill Park NSW 2164

WWW.pearlstreetenergy.com.au

© Copyright - (2004) ETRS Limited - No part of this report may be reproduced by any process, stored in a retrieval system, transmitted nor discipled to other written permission of ETRS Limited, except that the client may reproduce the report for its own internal use. The report is issued free of alterations and subject to the foregoing, may only be reproduced in full. The results presented in this report relate exclusively to the samples selected by the client for the purpose of testing. No responsibility is taken for the representativeness of these samples



PRODUCT TESTING REPORT

REPORT NUMBER:

27076145.2

Page 1 of 2

DATE:

17 October 2007

SPS Plumbing PO Box 159

KILLARA NSW 2071

CLIENT CONTACT:

Mr Ray Chapman

ORDER NUMBER:

Email of intent

DESCRIPTION:

The load testing of one stormwater grate identified as SPS Q300S. Grate was identified and supplied by our client.

TEST SPECIFICATION:

AS3996-2006 Appendix C

TEST PROCEDURE:

A 1000kN Universal testing machine was used to apply the

nominated test loads to the grates in accordance with ETRS

Procedure SMT.002.

TEST RESULTS:

TYPE Testing.

Circular Opening (CO) = 290mm

TEST Block size = 240mm Diameter

Applied Test Load = 150kN

Grate ID.	Class	Deflection under load (mm) (Par. C4.5)	Permanent Deflection (mm) (Par. C4.6)	Comments and Observations
SPS Q300S	С	5.0mm	0.8mm	No failure or collapse evident.

Note: The above mentioned Grate Complies to the requirements of AS3996 Clause 4.2.1.2 (table 4.2)

Victor Konstantinoff **Branch Operations Approved Signatory**

This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC 17025. This document will not be reproduced except in full.

Accreditation Site # 1263

ETRS Pty Ltd ABN 21 006 353 046

TEL +61 (02) 9756 3388 EAX +61 (02) 9756 3359 SYDNEY DIFFICIE – 6 Nello Place, Wetherill Park NSW 2164 PO Box 6125, Wetherill Park NSW 2164

WWW.pearlstreetenergy.com.au

ASSET MANAGEMENT SERVICES
© Copyright - (2004) ETRS Limited - No part of this report may be reproduced by any process, stored in a retrieval system, transmitted nor disclosed to others without prior written permission of ETRS Limited, except that the client may reproduce the report for its own internal use. The report is issued free of alterations and subject to the foregoing, may only be reproduced in full. The results presented in this report relate exclusively to the samples selected by the client for the purpose of testing. No responsibility is taken for the representativeness of these samples



PRODUCT TESTING REPORT

REPORT NUMBER:

27076145.8

Page 1 of 2

DATE:

17 October 2007

SPS Plumbing PO Box 159

KILLARA NSW 2071

CLIENT CONTACT:

Mr Ray Chapman

ORDER NUMBER:

Email of intent

DESCRIPTION:

The load testing of one stormwater grate identified as SPS

R300S. Grate was identified and supplied by our client.

TEST SPECIFICATION:

AS3996-2006 Appendix C

TEST PROCEDURE:

A 1000kN Universal testing machine was used to apply the nominated test loads to the grates in accordance with ETRS

Procedure SMT.002.

TEST RESULTS:

TYPE Testing.

Circular Opening (CO) = 290mm

TEST Block size = 240mm Diameter

Applied Test Load = 150kN

Grate ID.	Class	Deflection under load (mm) (Par. C4.5)	Permanent Deflection (mm) (Par. C4.6)	Comments and Observations
SPS R300S	С	4.1mm	0.8mm	No failure or collapse evident.

Note: The above mentioned Grate Complies to the requirements of AS3996 Clause 4.2.1.2

(table 4.2)

Victor Konstantinoff **Branch Operations Approved Signatory**



ETRS Pty Ltd ABN 21 006 353 046

TEL +61 (02) 9756 3388 FAX +61 (02) 9756 3359 SYDNEY OFFICE - 6 Nello Place, Wetherill Park NSW 2164 PO Box 6125, Wetherill Park NSW 2164

Www.pearlstreetenergy.com.au

© Copyright - (2004) ETRS Limited - No part of this report may be reproduced by any process, stored in a retrieval system, transmitted nor disclosed to others without prior written permission of ETRS Limited, except that the client may reproduce the report for its own internal use. The report is issued free of alterations and subject to the foregoing, may only be reproduced in full. The results presented in this report relate exclusively to the samples selected by the client for the purpose of testing. No responsibility is taken for the representativeness of these samples

Appendix 3 Standard Warranty

GUARANTEE

Speciality Plumbing Supplies Pty Ltd ("SPS") guarantees its products against defective components and faulty workmanship for a period of 5 years. Any defect in materials or workmanship occurring within **5 years** from the date of purchase subject to the following conditions will be rectified free of charge.

Conditions:

- 1. The guarantee only applies to faults caused by defective components or faulty workmanship on the part of the manufacturer.
- 2. The guarantee does not cover failures by
 - a. misuse
 - b. neglect
 - c. normal wear and tear
 - d. accidental breakage
 - e. use of the product in an inappropriate application
 - f. faulty installation
 - g. unauthorized modifications to the product.
- 3. Reasonable evidence must be supplied to indicate that the product was purchased no more than 5 years prior to any claim.
- 4. In the event of a failure, SPS shall be under no liability for any injury or any loss or damage caused to property or products other than the product under guarantee.

This guarantee does not prejudice the rights and remedies available to the purchaser and/or owner under the Trade Practices Act or any other Commonwealth or State laws.

Appendix 4 Quality Management System Certification



DAS Certification

Quality Management System

Certificate of Approval

This is to certify that the Quality Management System of:

Company name: SPECIALITY PLUMBING SUPPLIES PTY LTD

Located: 16 Kardella Ave, Killara, New South Wales, 2701 Australia

has been assessed by DAS Certification Ltd and found to meet the requirements of:

ISO 9001:2008

Clause 7 Permissible Exclusions: 7.5.4 Customer Property and 7.6 Control and Monitoring of Measuring Devices.

The certificate is valid for the following scope of operation:

Design and Provision of Roof and Floor Drain Systems

Nace/EA: 45:33 Plumbing

Date of Certificate Issue: 30th August 2009 Certificate Valid until: 15th June 2012 Certificate Number: AS/NZ - 021

Authorized:

Date:

25th August 2009

This certificate is the property of DAS Certification and is valid from 30 August 2009 until 14 June 2012 and remains valid subject to satisfactory surveillance audits and a re-certification audit before 15 June 2012.

DAS Certification Ltd

Company Number: 3384526 I Wellington Close, Horndean, Hampshire POS 0UR Telephone & Fax: +44 (0) 2392 597888 Web: www.dascertification.co.uk Email: office@dascertification.co.uk







123

Appendix 5 Product Certification



Certificate of Conformity

Australian Certification Services Pty Ltd grants to the WaterMark User:

Speciality Plumbing Supplies Pty Ltd

the right to use the WaterMark as shown above in conjunction with the Certificate No. on product/s as identified in the WaterMark Schedule and as listed on the WaterMark database www.watermark.standards.org.au which have been shown to comply with the relevant Standard/s and level of certification referred to below. The WaterMark User is granted a licence to use the WaterMark subject to the rules governing the use of the WaterMark.

Product Type:

Waste Fittings

Evaluated to:

ATS 5200:2005 Technical Specification for plumbing and drainage products

Part 040: Waste pipe connection outlets and gratings, separate or integral

Level of Certification:

WaterMark Level 2

Issue Date:

28th August 2009

Expiry Date:

27th August 2012

General Manager

Paul Greig

Certificate No.: 20052

This certificate remains the property of Australian Certification Services Pty Ltd







Appendix 5 **Product Certification**



WaterMark Certification Schedule

The WaterMark User	Speciality Plumbing Supplies Pty Ltd	
	16 Kardella Ave, Killara Sydney NSW 2071 AUSTRALIA	
Certificate Number	20052	
Level of Certification	WaterMark Level 2	

Certification Standards:	ATS 5200.040:2005 Technical Specification for plumbing and drainage products Part 040: Waste pipe connection outlets and gratings, separate or integral	
Issue Status:	Issue 1 28th August 2009 Raw Spery	

Model Identification	Brand Name	Product Description	Product Type
V80	SPS	DN80 Push in Floor Waste for Sheet Vinyl	Waste Fitting
V1005SA	SP5	DN100 Push In Floor Waste for Sheet Vinyl	Waste Fitting
Q150SR-BTM	SPS	DN150sq x DN100 Push in Basket Floor Waste with included shut off	Waste Fitting
Q150SR-BT	SP5	DN150sq x DN100 Push in Basket Floor Waste	Waste Fitting
Q2005A3	SPS	DN200sq x DN100 Push in Basket Floor Waste	Waste Fitting
BA1005	SPS	DN100sq x DN100 Push In Basket Floor Waste	Waste Fitting
DG1005Q	SP5	DN100 Domestic Style Floor Waste - Round Frame	Waste Fitting
DG100SQ2	SPS	DN100 Domestic Style Floor Waste - Square Frame	Waste Fitting
DG1005G	SPS	DN100 Domestic Style Floor Waste - Round Frame	Waste Fitting
DG1005G2	SPS	DN100 Domestic Style Floor Waste - Square Frame	Waste Fitting
R1305R	SPS	DN130 x DN100 Push in Floor Waste	Waste Fitting
R130SRQ	SPS	DN130 x DN100 Push In Floor Waste - Square Hole Pattern	Waste Fitting
Q2255	SPS	225mm sq x 150mm BSP Hinged Floor Drain	Waste Fitting
Q300SL	SPS	300mm sq x 150mm BSP Hinged Floor Drain	Waste Fitting
LG150SAT	SPS	200mm x 150mm 8SP Floor Waste for Sheet Vinyl	Waste Fitting
LG150SSA	SPS	200mm x 150mm Push In Floor Waste for Sheet Vinyl	Waste Fitting
LG150SAT	SPS	150mm sq x 150mm Vari Level Basket Trap Floor Waste	Waste Fitting
R130SR-BT	SPS	130mm x 100mm Push In Basket Trap Floor Waste	Waste Fitting
R225/150S	SPS	200mm x 150mm BSP Floor Waste	Waste Fitting
V100SSA-BT	5PS	100mm Push In Basket Trap for Sheet Vinyl	Waste Fitting
V100CPA	SPS	100mm Push In Floor Waste for Sheet Vinyl - Chrome Plated Zinc Alloy	Waste Fitting
V1005VYR	5PS	100mm Push In Floor Waste for Sheet Vinyl - 304SS Top/ABS Body	Waste Fitting

Page 1 of 1



Certificate Number: 20052