PRODUCT CATALOG – REVISION 5

All SPS drains have been designed in Australia for Australian conditions and for Australian construction methods.

CONTENTS:

Section 1: Rainwater Outlets ("RWOs")
Section 2: Domestic, Push-in and Retro-fit Drains
Section 3: Vari-level Drains - Vertical Outlets
Section 4: Vari-level Drains - Balcony & Side Outlets
Section 5: Vinyl Floor Wastes
Section 6: Basket Trap Floor Wastes
Section 7: Cleanouts - Inspection Points - Boundary Traps
Section 8: Security Drains
Section 9: Specials / Miscellaneous
Appendix: Flow Rate Information

Disclaimer:

All information contained in this catalogue is current as at 1 July 2017. SPS reserves the right to change product specifications - designs - components or associated services at any time without notice. The information contained in this catalogue does not form part of the terms of any contract of sale or constitute the description of any product or service supplied by SPS. Prior to purchasing or specifying - please contact SPS for any updates or modifications to current products or services. These drawings are for illustrative purposes only and are not to scale.
## SECTION 1
Rainwater Outlets (RWO’s)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>To suit pipe (mm):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01</td>
<td>Truflo vertical – All-purpose RWO</td>
<td>80, 100 &amp; 150</td>
</tr>
<tr>
<td>1.02</td>
<td>Truflo vertical – Class D Flat Grate</td>
<td>80, 100 &amp; 150</td>
</tr>
<tr>
<td>1.03</td>
<td>Truflo vertical – Flat Grate &amp; Membrane Clamp</td>
<td>80, 100 &amp; 150</td>
</tr>
<tr>
<td>1.04</td>
<td>Truflo vertical – Dome Grate &amp; Membrane Clamp</td>
<td>80, 100 &amp; 150</td>
</tr>
<tr>
<td>1.05</td>
<td>Truflo vertical – Planter Box Assembly</td>
<td>80, 100 &amp; 150</td>
</tr>
<tr>
<td>1.06</td>
<td>Truflo 90° – Class D Flat Grate</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>1.07</td>
<td>Truflo 90° – Flat Grate &amp; Membrane Clamp</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>1.08</td>
<td>Truflo 90° – Dome Grate &amp; Membrane Clamp</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>1.09</td>
<td>Truflo 90° – Planter Box Assembly</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>1.10</td>
<td>Superflo – Class D Flat Grate</td>
<td>150</td>
</tr>
<tr>
<td>1.11</td>
<td>Superflo – Flat or Dome Grate &amp; Membrane Clamp</td>
<td>150</td>
</tr>
<tr>
<td>1.12</td>
<td>“Shallow-flo” Push-in RWOs (USE WITH CAUTION)</td>
<td>100</td>
</tr>
<tr>
<td>1.13</td>
<td>Parapet Drain</td>
<td>50, 80 &amp; 100</td>
</tr>
</tbody>
</table>
The SPS All-Purpose "Truflo" RWO Body

If a 100mm or 150mm Truflo RWO body is cast into the slab, it can be adapted for the following 5 applications:

1. With Class D flat grate, for non-waterproofed slabs (eg car park decks).

2. With flat grate and membrane ring, for membraned slabs (eg roof decks & some plant rooms).

3. With dome grate and membrane ring, for roof slabs (note: optional gravel guard partially illustrated).

4. With special PVC "planter box" fitting, for planter boxes.

5. With 100mm or 150mm reversible clamping collar, for vari-level floor drains.

### Dimensions (mm)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>110</td>
<td>98</td>
<td>28</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>150</td>
<td>260</td>
<td>240</td>
<td>160</td>
<td>90</td>
<td>28</td>
<td>37</td>
<td>25</td>
</tr>
</tbody>
</table>
SPS Truflo 100mm & 150mm RWO with Class D Heavy-Duty Flat Grate

Specification codes:
TIA100F (100mm CI body, galvanised flat grate)
TIA150F (150mm CI body, galvanised flat grate)
TBS100F (100mm bronze body, 316SS flat grate)
TBS150F (150mm bronze body, 316SS flat grate)
- for 80mm outlet, use "100/80" instead of "100"

Suggested applications:
- Car park decks
- Plant rooms

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

Dimensions (mm)

<table>
<thead>
<tr>
<th>N.B</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>82</td>
<td>106</td>
<td>28</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>103</td>
<td>106</td>
<td>28</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>150</td>
<td>260</td>
<td>240</td>
<td>151</td>
<td>86</td>
<td>28</td>
<td>37</td>
<td>25</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.
SPS Truflo 80, 100 & 150mm RWO with Flat Grate & Membrane Clamp

Specification codes:
TIA100F2 (CI body, aluminium flat grate & membrane ring)
TIB100F2 (CI body, bronze flat grate & membrane ring)
TBA100F2 (all-bronze assembly)
- for 80mm outlet, use "100/80" instead of "100"
- for 150mm outlet, use "150" instead of "100"

Suggested application:
Membraned floors or roofs with no further topping, eg planter boxes, plant rooms, roof decks.

Membrane ring fastens to body independently of grate to allow access to sump without breaking membrane seal.

Load Class A - AS 3996-2006

Integral puddle flange with weep holes 4 x places

Structural slab

E-series PVC in-pipe adapter (suffix "E")

Optional coupling connector (suffix "P")

Dimensions (mm)

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>82</td>
<td>106</td>
<td>28</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>103</td>
<td>106</td>
<td>28</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>150</td>
<td>260</td>
<td>240</td>
<td>151</td>
<td>86</td>
<td>28</td>
<td>37</td>
<td>25</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS Truflo 100mm & 150mm RWO with Dome Grate & Membrane Clamp

Specification codes:
TIA100D2 (CI body, aluminium dome grate & membrane ring)
TIB100D2 (CI body, bronze dome grate & membrane ring)
TBA100D2 (all-bronze assembly)
- for 80mm outlet, use "100/80" instead of "100"
- for 150mm outlet, use "150" instead of "100"

Suggested application:
Roof decks

Membrane ring fastens to body independently of grate to allow access to sump without breaking membrane seal.

Optional 100mm high 304 SS gravel guard for built-up roofs
- code - GG105 (100mm high)
- or GG105H (150mm high)

Integral puddle flange with weep holes 4 x places

Optional tailpiece connector (suffix “E”)

N.B.

Optional coupling connector (suffix “P”)

Dimensions (mm)

<table>
<thead>
<tr>
<th>N.B</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>82</td>
<td>106</td>
<td>28</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>103</td>
<td>106</td>
<td>28</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>150</td>
<td>260</td>
<td>240</td>
<td>151</td>
<td>86</td>
<td>28</td>
<td>37</td>
<td>25</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS Truflo 100mm & 150mm RWO with All-purpose Planter Box Adapter

Specification code:
TIA100PB (100mm CI body with planter box adapter)
TIA150PB (150mm CI body with planter box adapter)

Integral puddle flange with weep holes 4 x places

Adapter made from heavy-duty ABS plastic and features an integral 100mm socket suitable for slotted PVC riser.

Dimensions (mm)

<table>
<thead>
<tr>
<th>N.B</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>103</td>
<td>106</td>
<td>28</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>150</td>
<td>260</td>
<td>240</td>
<td>151</td>
<td>86</td>
<td>28</td>
<td>37</td>
<td>25</td>
</tr>
</tbody>
</table>

Specality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS Truflo 80mm & 100mm 90° RWO with Class D Heavy-Duty Flat Grate

Specification code:
TIA80/90F (80mm CI body, galvanised steel flat grate)
TIA100/90F (100mm CI body, galvanised steel flat grate)

Suggested applications:
Car park decks
Plant rooms

Flat grate in heavy duty, hot-dipped galvanised mid-carbon steel

Integral puddle flange with weep holes 4 x places

Load-tested to Class D of AS3996-2006

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS Truflo 80mm & 100mm 90° RWO with Flat Grate & Membrane Clamp

Specification codes:
- TIA80/90F2 (80mm CI body, aluminium clamp ring & grate)
- TIB80/90F2 (80mm CI body, bronze ring & grate)
- TIA100/90F2 (100mm CI body, aluminium clamp ring & grate)
- TIB100/90F2 (100mm CI body, bronze ring & grate)

Suggested application:
Membraned floors or roofs with no further topping, eg planter boxes, plant rooms, roof decks.

Membrane ring fastens to body independently of grate to allow access to sump without breaking membrane seal.

Integral puddle flange with weep holes 4 x places

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
Integral puddle flange with weep holes 4 x places

Optional 100mm high 304 SS gravel guard for built-up roofs - code - GG105 (100mm high) or GG105H (150mm high)

Membrane ring fastens to body independently of grate to allow access to sump without breaking membrane seal.

Suggested applications:
Roof decks with pipe cast in

N.B.
100
80
260
240
62
115
28

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to the appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS Truflo 80mm & 100mm 90° RWO with All-purpose Planter Box Adapter

Specification code:
TIA80/90PB (80mm CI body with planter box adapter)
TIA100/90PB (100mm CI body with planter box adapter)

Adapter made from heavy-duty ABS plastic and features an integral 100mm socket suitable for slotted PVC riser.

Integral puddle flange with weep holes 4 x places

Outside edge of PVC pipe

Structural Slab

Table:

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 150mm Superflo RWO with Class D Heavy Duty Flat Grate

Specification codes:
SIA150F (150mm Superflo CI body, galvanised flat grate)

Suggested applications:
Car park decks, especially roof top car parks

Flat grate in heavy duty, hot-dipped galvanised mid-carbon steel

Load-tested to class D of AS3996-2006

Integral puddle flange with weep holes 4 x places

Optional tailpiece connector (suffix “E”)

Optional coupling connector (suffix “P”)

Structural slab

N.B.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150</td>
<td>400</td>
<td>356</td>
<td>151</td>
<td>150</td>
<td>66</td>
<td>39</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.
SPS 150mm Superflo Flat or Dome RWO (with Membrane Clamp Ring)

Specification codes:
SIA150F2 (150mm Superflo CI body, galvanised cast iron flat grate & aluminium membrane clamp ring)
SIA150D2 (150mm Superflo - CI body, aluminium dome grate & membrane clamp ring)

Suggested applications:
Large concrete roofs with heavy membrane
Sprinkler/hydrant test areas

Optional coupling connector (suffix "P")
Optional tailpiece connector (suffix "E")

Integral puddle flange with weep holes 4 x places

N.B.

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>400</td>
<td>356</td>
<td>151</td>
<td>150</td>
<td>66</td>
<td>39</td>
<td>38</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS "Shallowflo" 100mm Push-in RWO
(Variation Based on Truflo System)

Specification codes:
SF100F (CI body, galvanised flat grate class D)
SF100F2 (CI body, LM-6 flat grate & membrane ring)
SF100D2 (CI body, LM-6 dome grate & membrane ring)

Suggested applications:
Applications where regular Truflo is too deep to fit, but not requiring normal "Truflo" flow rates

USE WITH CAUTION: Flow rates are only a fraction of those of regular Truflo

Hot-dipped galvanised mid-carbon steel flat grate, load class D per AS 3996-2006
FLOW RATE max 3 l/s

LM-6 dome grate and membrane ring, for roof slabs (note: optional gravel guard partially illustrated)
FLOW RATE MAX 3 l/s

LM-6 flat grate and membrane ring, for waterproofed slabs (eg roof decks & plant rooms).
FLOW RATE MAX 3 l/s

Min depth: 32mm
Grate O.D. 240mm
Body O.D. 260mm
60mm
I.D. 86mm
O.D. 97mm
N.B. 100mm
O-rings to suit 100mm PVC, HDPE & Copper

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

1.12
SPS Parapet or Scupper Drains

Specification Codes:
- PD50CS (50mm CI body, 316 SS grate)
- PD80CA (80mm CI body, aluminium grate)
- PD80CS (80mm CI body, 316 SS grate)
- PD100CA (100mm CI body, aluminium grate)
- PD100CS (100mm CI body, 316 SS grate)

- Body made from hot-dipped galvanised cast iron
- O-rings available for push-in connection to PVC, copper and 100mm HDPE
- Grates available in aluminium and 316 stainless steel
- Optional bronze and nickel-bronze grates available by special order only

Body made from hot-dipped galvanised cast iron
O-rings available for push-in connection to PVC, copper and 100mm HDPE
Grates available in aluminium and 316 stainless steel
Optional bronze and nickel-bronze grates available by special order only

---

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

N.B.

*For flow rate data please refer to appendix.

1.13
## SECTION 2
Domestic, Push-in & Retro-fit Drains

<table>
<thead>
<tr>
<th>Push-in &amp; Retro Fit Drains</th>
<th>To suit pipe (mm):</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.01 100mm Domestic Floor Waste (fine pattern)</td>
<td>100</td>
</tr>
<tr>
<td>2.02 100mm Round - Push-in</td>
<td>50 &amp; 80</td>
</tr>
<tr>
<td>2.03 100mm Square - Push-in</td>
<td>50 &amp; 80</td>
</tr>
<tr>
<td>2.04 130mm Round - Push-in</td>
<td>80, 90 &amp; 100</td>
</tr>
<tr>
<td>2.05 130mm Round (Grid Pattern) - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>2.06 130mm Square - Push-in</td>
<td>80, 90 &amp; 100</td>
</tr>
<tr>
<td>2.07 130mm Square (Grid Pattern) - Push-in</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>2.08 130mm Square - 100mm (round insert version) - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>2.09 150mm Round - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>2.10 150mm Square - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>2.11 150mm Square Hybrid - Push-in - Unifin</td>
<td>100</td>
</tr>
<tr>
<td>2.12 150mm Square (Grid Pattern) - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>2.13 200mm Square - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>2.14 200mm Square (Grid Pattern) - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>2.15 200mm Square - Push-in (150 outlet)</td>
<td>150</td>
</tr>
<tr>
<td>2.16 225mm Round - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>2.17 225mm Round - Push-in (150 outlet)</td>
<td>150</td>
</tr>
<tr>
<td>2.18 110mm Square Floor Waste w/- Lo-profile Puddle Flange</td>
<td>100</td>
</tr>
<tr>
<td>2.19 130mm Round Floor Waste w/- Lo-profile Puddle Flange</td>
<td>100</td>
</tr>
<tr>
<td>2.20 130mm Square Floor Waste w/- Lo-profile Puddle Flange</td>
<td>100</td>
</tr>
<tr>
<td>2.21 150mm Square (Hybrid) w/- Lo-Profile Puddle Flange</td>
<td>100</td>
</tr>
<tr>
<td>2.22 150mm Round - Retro-fit Lower Body</td>
<td>100</td>
</tr>
<tr>
<td>2.23 150mm Square - Retro-fit Lower Body</td>
<td>100</td>
</tr>
<tr>
<td>2.24 150mm Square (Grid Pattern) - Retro-fit Lower Body</td>
<td>100</td>
</tr>
<tr>
<td>2.25 200mm Square - Retro-fit Lower Body</td>
<td>100</td>
</tr>
<tr>
<td>2.26 200mm Square (Grid Pattern) Retro-fit Lower Body</td>
<td>100</td>
</tr>
<tr>
<td>2.27 225mm Round - 100mm Retro-fit Lower Body</td>
<td>100</td>
</tr>
</tbody>
</table>
Specification codes:
DG100SF (round frame)
DG100SF2 (square frame)

- Made from cast 304-grade polished stainless steel. Satin 316 grade non-stock option.
- Features traditional bayonet-type grate fitting and 5x5mm heel-friendly pattern.
- Slip-in to 100mm PVC pipe or leak control flange insert (by others) eg WonderCap

SPS 100mm Domestic Floor Waste
(New Heel-Friendly Pattern)

Side View

100mm N.B.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Round Push-in Floor Drain

50mm outlet
80mm outlet

Specification codes:
R100SR (50mm, satin 316SS)
R100SR4 (50mm, polished 304SS)
R100/80SR (80mm, satin 316SS)
R100/80SR4 (80mm, polished 304SS)

- Round grate available in 316 stainless steel. 304 grade available by special order.
- O-ring spigot pushes into 50mm or 80mm PVC pipe only.

Typical Applications

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50mm</td>
<td>25</td>
<td>46</td>
<td>42</td>
<td>50</td>
</tr>
<tr>
<td>80mm</td>
<td>18</td>
<td>50</td>
<td>64</td>
<td>72</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Square Push-in Floor Drain

50mm outlet
80mm outlet

Specification codes:
Q100SR (50mm, satin 316SS)
Q100SR4 (50mm, polished 304SS)
Q100/80SR (80mm, satin 316SS)
Q100/80SR4 (80mm, polished 304SS)

- Square grate available in 316 stainless steel. 304 grade available by special order.
- O-ring spigot pushes into 50mm or 80mm PVC pipe only.

100mm Square

Typical Applications

Min. Height "A" mm

<table>
<thead>
<tr>
<th>N.B</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50mm</td>
<td>25</td>
<td>46</td>
<td>42</td>
<td>50</td>
</tr>
<tr>
<td>80mm</td>
<td>18</td>
<td>50</td>
<td>64</td>
<td>72</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.*
SPS 130mm Round Push-in Floor Drain

80mm outlet
90mm outlet
100mm outlet

- Round grate available in 304 or 316 Stainless Steel.
- O-ring spigot pushes into pipe. See below for specific size & material compatibility.

### Specification codes:
- R130/80SR4 (80mm - polished 304SS)
- R130/80SR (80mm - satin 316SS)
- R130/85SR (90mm - satin 316SS)
- R130SR4 (100mm - polished 304SS)
- R130SR (100mm - satin 316SS)

### Typical Applications

- **Structural Slab**
  - Cast into slab
  - I.D. rubber rings to suit various pipe types (see below)

### Pipe compatibility

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Pipe compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>80mm</td>
<td>20</td>
<td>49</td>
<td>64</td>
<td>72</td>
<td>PVC and copper</td>
</tr>
<tr>
<td>90mm</td>
<td>20</td>
<td>49</td>
<td>75</td>
<td>85.5</td>
<td>PVC stormwater only</td>
</tr>
<tr>
<td>100mm</td>
<td>17</td>
<td>41</td>
<td>90.5</td>
<td>97</td>
<td>PVC, HDPE and copper</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.*
SPS 130mm Round Push-in Floor Drain

100mm Outlet
(Grid Pattern)

Specification code:
R130SRQ4 (polished 304 stainless steel)
R130SRQ (satin 316 stainless steel)

SPECIAL ORDER ONLY

Grid Pattern (8mm sq. holes)

130mm Round

Installation with puddle flange

Typical Applications

Tiling or topping

Cast into slab

Structural Slab

Standard PVC Pipe

With topping/tiling

100 N.B.

I.D. rubber rings to suit 100mm PVC, HDPE & copper

Min. height 20mm

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 130mm Square Push-in Floor Drain

80mm outlet
90mm outlet
100mm outlet

- Square grate available in 304 or 316 stainless steel.
- O-ring outlet pushes into pipe. See below for specific size & material compatibility.

130mm Square

High-heel friendly pattern (6mm gaps)

Typical Applications

80mm outlet
90mm outlet
100mm outlet

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Pipe compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>80mm</td>
<td>20</td>
<td>49</td>
<td>64</td>
<td>72</td>
<td>PVC and copper</td>
</tr>
<tr>
<td>90mm</td>
<td>20</td>
<td>49</td>
<td>75</td>
<td>85.5</td>
<td>PVC stormwater only</td>
</tr>
<tr>
<td>100mm</td>
<td>17</td>
<td>44</td>
<td>90.5</td>
<td>97</td>
<td>PVC, HDPE and copper</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.
SPS 130mm Square Push-in Floor Drain

80mm outlet
100mm outlet
(Grid Pattern)

Specification code:
Q130/80SRQ4 (80mm, polished 304SS) *special order*
Q130/80SRQ (80mm, satin 316SS)
Q130SRQ4 (100mm, polished 304SS) *special order*
Q130SRQ (100mm, satin 316SS)

Square grate available in 304 or 316 stainless steel.
O-ring outlet pushes into pipe. See below for specific size & material compatibility.

Grid Pattern (8mm sq. holes)

Pipe compatibility

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Pipe compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>80mm</td>
<td>20</td>
<td>49</td>
<td>64</td>
<td>72</td>
<td>PVC and copper</td>
</tr>
<tr>
<td>100mm</td>
<td>17</td>
<td>44</td>
<td>90.5</td>
<td>97</td>
<td>PVC, HDPE and copper</td>
</tr>
</tbody>
</table>

Typical Applications

With topping/tiling

Cast into slab

N.B.
SPS 130mm Square Push-in Floor Drain
100mm outlet
(circular grate insert)

Specification code:
Q130SR24 (polished 304SS)
Q130SR26 (satin 316SS *special order*)

Suggested match for square cleanout model Q130SCR
(see section 7)

Installation with puddle flange

Typical Applications

- I.D. rubber rings to suit 100mm PVC, HDPE & copper
- Structural Slab
- Standard PVC Pipe
- Tiling or topping
- With topping/tiling
- Cast into slab

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 150mm Round Push-in Floor Drain

100mm Outlet

Specification codes:
R150GR (linished bronze) *special order*
R150NR (linished nickel bronze) *special order*
R150SR (satin 316 stainless steel)
R150SR4 (polished 304 stainless steel)

High-heel friendly pattern (5mm gaps)

Installation with puddle flange

Typical Application

Tiling or topping

Min. height 25mm

55mm

88mm

97mm

100 N.B.

I.D. rubber rings to suit 100mm PVC, HDPE & copper

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 150mm Square Push-in Floor Drain
100mm Outlet

Specification codes:
Q150GR (linished bronze) *special order*
Q150NR (linished nickel bronze) *special order*
Q150SR4 (polished 304 stainless steel)
Q150SR (satin 316 stainless steel)

Installations methods:
- Standard PVC Pipe
  - With topping/tiling Cast into slab
- Installation with puddle flange

Typical Applications:
- Structural Slab
  - I.D. rubber rings to suit 100mm PVC, HDPE & copper

Min. height: 28mm

Tiling or topping:
- High-heel friendly pattern (6mm gaps)

With topping/tiling:
- 100mm N.B.

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 150mm Square Hybrid Floor Waste
With 100mm "Unifin" Outlet (SS/PVC)

Specification codes:
QH150S4F (Polished 304SS grate)
QH150S6F (Satin 316SS grate) *special order*

- 150mm Square Floor Waste with "Unifin" connector to suit all known 100mm pipes
- Polished 304 stainless steel hinged grate with PVC underframe ("hybrid" style).
- Satin 316 stainless steel available as special order.

Typical Application

Min. height 30mm

100mm PVC Pipe

100mm N.B.

PVC under-frame

I.D. 81mm

I.D. Unifin Seal

Also suits copper, C.I. & HDPE pipes.

Structural Slab

Topping or Tiling

High-heel friendly pattern (6mm gaps)
SPS 150mm Square Push-in Floor Drain

100mm Outlet
(Grid Pattern)

Specification code:
Q150SRQ (316 stainless steel)

Installation with puddle flange

Grid Pattern (8mm sq. holes)

Typical Applications

Standard PVC Pipe

I.D. rubber rings to suit 100mm PVC, HDPE & copper

Structural Slab

Tiling or topping

Min. height 28mm

65mm

88mm

97mm

100mm N.B.
**SPS 200mm Square Push-in Floor Drain**

100mm Outlet

**Specification code:**
- Q200SR (satin 316 stainless steel)
- Q200SR4 (polished 304 stainless steel)

**High-heel friendly pattern (6mm gaps)**

**Installation with puddle flange**

**Load Class C per AS3996-2006**

**Typical Applications**

- **Min. height 30mm**
- **88mm**
- **97mm**
- **100 N.B.**

*For flow rate data please refer to appendix.*

**Standard PVC Pipe**

**I.D. rubber ring seals to suit 100mm PVC, HDPE & copper**

**Structural Slab**

**Tiling or topping**

**With topping/tiling**

**Cast into slab**

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 200mm Square Push-in Floor Drain

100mm Outlet
(Grid Pattern)

Specification code:
Q200SRQ (satin 316 stainless steel)

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

Installation with puddle flange

Grid Pattern (8mm sq. holes)

Typical Applications

With topping/tiling

Min. height 30mm

Standard PVC Pipe

I.D. rubber ring to suit 100mm PVC, HDPE & copper

Structural Slab

Cast into slab

100mm N.B.

Tiling or topping

68mm

88mm

97mm
SPS 200/150mm Square Push-in Floor Drain

**Specification code:**
Q200/150SR (satin 316 stainless steel)

**Typical Applications**
- Rubber ring seal
- Min. Height 30mm
- 146mm
- 138mm
- 146mm
- 150 N.B.

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
**SPS 225mm Round Push-in Floor Drain**

100mm Outlet

**Specification code:**
R225SR (satin 316 stainless steel)

**High-heal friendly pattern (5.5mm gaps)**

**Installation with puddle flange**

**Typical Applications**

**With topping/tiling**

**Standard PVC Pipe**

**Structural Slab**

**Min. height 30mm**

**100mm N.B.**

*For flow rate data please refer to appendix.*

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 225mm Round Push-in Floor Drain
150mm Outlet

Specification code:
R225/150SR (satin 316 stainless steel)

High-heel friendly pattern (5.5mm gaps)

Typical Applications

Tiling or topping

Min. height
25mm

Structural Slab

Standard PVC Pipe

I.D. 138mm
O.D. 146mm

150mm NB

Rubber ring seal

Also suits copper, C.I. & HDPE pipe

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS Special Square Floor Waste with 100mm Lo-profile Retro-fit Puddle Flange

Specification codes:
DG100SL2B/PF (Polished 316 Stainless Steel)
Includes 100mm retro-fit puddle flange in ABS plastic

- Retro-fit puddle flange with ultra-thin face.
- Domestic-style floor waste assembly with PVC tail slips inside I.D. of flange. 1mm spacer fins allow for proper leak control.
- Currently available in polished 316 stainless steel only.

Typical Application

1mm spacer fins (x4)
1mm spacer fins (x8)
I.D. Rubber ring seal

Flange OD
180mm

Height 18mm - 70mm

Screed/Tiling
Structural Slab
Standard PVC Pipe

Waterproof membrane

1.87m

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
Specification codes:
R130/87S/PF (satin 316 SS floor waste)
R130/87SP/PF (satin 316 SS clean out) *special order*
Includes 100mm retro-fit puddle flange in ABS plastic

- Retro-fit puddle flange with ultra-thin face.
- Floor waste assembly slips inside I.D. of flange. 1mm spacer fins allow for proper leak control.
- Floor waste available satin 316 stainless steel.
- Satin 316 SS cleanout (solid top) also available by special order.

Typical Application

Min. Height 25mm

Screed

Structural Slab

Standard PVC Pipe

100mm N.B.

1mm spacer fins (x4)

1mm spacer fins (x8)

I.D Rubber ring seal

Also suits copper, C.I. & HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 130mm Square Floor Waste with 100mm Lo-profile Retro-fit Puddle Flange

Specification codes:
Q130/87S/PF (Polished 304 Stainless Steel)
Q130/87S6/PF (Satin 316 Stainless Steel)
Includes 100mm retro-fit puddle flange in ABS plastic

- Retro-fit puddle flange with ultra-thin face.
- Floor waste assembly slips inside I.D. of flange. 1mm spacer fins allow for proper leak control.
- Available in polished 304 or satin 316 stainless steel.
- Cleanouts also available - polished and non-slip.

Typical Application

Min. Height 25mm

Screed

Structural Slab

Standard PVC Pipe

Waterproof membrane

1mm spacer fins (x4)

1mm spacer fins (x8)

I.D Rubber ring seal

Also suits copper, C.I. & HDPE pipes.
SPS 150mm Square Floor Waste with
100mm Lo-profile Retro-fit Puddle Flange

Specification codes:
QH150/87S4/PF (Polished 304 Stainless Steel)
QH150/87S6/PF (Satin 316 Stainless Steel)
Includes 100mm retro-fit puddle flange in ABS plastic
*Note: underframe of grate assembly is PVC plastic

- Retro-fit puddle flange with ultra-thin profile.
- Floor waste assembly slips inside I.D. of flange. 1mm spacer fins allow for proper leak control.
- Available in polished 304 or satin 316 stainless steel.

Flange OD
180mm

150mm Square

High-heel friendly pattern
(6mm gaps)

Typical Application

Height 35 - 85mm

Screed

PVC under-frame

100mm N.B.

Waterproof membrane

I.D Rubber ring seal

1mm spacer fins (x8)

Also suits copper, C.I. & HDPE pipes.

Standard PVC Pipe

Structural Slab

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 150mm Round Retro-fit Floor Drain

**100mm outlet**
- Height-adjustable high-heel friendly grate assembly.
- Available in bronze, nickel bronze, 304 and 316 stainless steel.
- Q100Y2B cast iron retro-fit body fits inside a Ø150mm core hole. *316 SS lower body available by special order*

**Specification codes:**
- R150G/Q (bronze grate, CI retro-fit body) *special order*
- R150N/Q (nickel bronze grate, CI retro-fit body) *special order*
- R150S4/Q (polished 304 stainless steel grate, CI retro-fit body)
- R150S/Q (satin 316 stainless steel grate, CI retro-fit body)

**Typical Applications**
- Ø145mm Cast into slab
- With topping/tiling
- Weep holes x 4 Places
- E100 PVC adapter (suffix "E")
- Optional coupling connector (suffix "P")
- **Optional Extension Piece**

**Height Adjustment**
Min: 22mm
Max: 45mm**

**Min:** 22mm
**Max:** 45mm**

**Optional Extension Piece**

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au

2.22
SPS 150mm Square Retro-fit Floor Drain

100mm Outlet

Specification codes:
Q150G/Q (bronze grate, CI retro-fit body) *special order*
Q150N/Q (nickel bronze grate, CI retro-fit body) *special order*
Q150S4/Q (polished 304 stainless steel grate, CI retro-fit body)
Q150S/Q (satin 316 stainless steel grate, CI retro-fit body)

- Height-adjustable hinged grate & frame.
- Square top available in bronze, nickel bronze, 304 and 316 stainless steel.
- Q100Y2B cast iron retro-fit body fits inside a Ø150mm core hole.
  *316 SS lower body available by special order*

Typical Applications

- Membrane
- 150mm Square
- Tiling/topping
- Weep holes x 4 Places
- Ø145mm cast into slab
- 100mm BSP
- E100 PVC adapter (suffix "E")
- Optional coupling connector (suffix "P")
- 100mm N.B. cast into slab
- Ø190mm (flange diameter)

Height Adjustment
Min: 23mm
Max: 46mm**

High-heel friendly pattern (6mm gaps)

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

2.23
SPS 150mm Square Retro-fit Floor Drain

100mm Outlet (Grid Pattern)

**Typical Applications**

- Height-adjustable hinged grate & frame.
- Square top available in 316 stainless steel (304 stainless steel non-stock option).
- Q100Y2B cast iron retro-fit body fits inside a Ø150mm core hole.

*316 SS lower body available by special order*

**Specifications**

- **Q150SQ/Q** (satin 316 stainless steel grate, Cl retro-fit body)
- Min: 23mm
- Max: 46mm

**Grid Pattern (8mm sq. holes)**

**Optional Extension Piece**

---

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 200mm Square Retro-fit Floor Drain

100mm Outlet

Typical Applications

- Height-adjustable high-heel friendly grate assembly.
- Available in bronze, nickel bronze and stainless steel (SS model is hinged).
- Q100Y2B cast iron retro-fit body fits inside a Ø150mm core hole. *316 SS lower body available by special order*

200mm Square

Specification codes
- Q200G/Q (bronze grate, CI retro-fit body) *special order*
- Q200N/Q (nickel bronze grate, CI retro-fit body) *special order*
- Q200S4/C (polished 304 stainless steel grate, CI retro-fit body)
- Q200S/Q (satin 316 stainless steel grate, CI retro-fit body)

E100 PVC adapter (suffix "E")

With topping/tiling

6mm Gaps

Membrane

77mm

30

40

**Optional Extension Piece

Tiling/topping

Weep holes x 4 Places

Ø145mm

100mm N.B.

Ø190mm (flange diameter)

100mm Outlet

Height Adjustment
Min: 25mm
Max: 45mm**

Specialty Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au 2.25
SPS 200mm Square Retro-fit Floor Drain

100mm Outlet
(Grid Pattern)

Specification codes:
Q200SQ/Q (316 stainless steel grate, CI retro-fit body)

- Height-adjustable hinged grate assembly.
- Available in 316 stainless steel.
- Q100Y2B cast iron retro-fit body fits inside a Ø150mm core hole.
  *316 SS lower body available by special order*

*Optional Extension Piece

Typical Applications

**Optional Extension Piece

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

2.26
SPS 225mm Round Retro-fit Floor Drain

100mm Outlet

- Height-adjustable high-heel friendly grate assembly.
- Available nickel bronze and 316 stainless steel.
- Q100Y2B cast iron retro-fit body fits inside a Ø150mm core hole. *316 SS lower body available by special order*

High-heel friendly pattern (5.5mm gaps)

Typical Applications

SPS

Weep holes
x 4 Places

Membrane

Tiling/topping

Height Adjustment
Min: 30mm
Max: 55mm**

With topping/tiling

E100 PVC adapter (suffix "E")

Optional coupling connector (suffix "P")

Cast into slab

Q100Y2B CI retro-fit lower body

100mm Outlet

100mm N.B.

Ø145mm

95mm

77mm

**Optional Extension Piece

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
# SECTION 3
Vari-level Drains – Vertical Outlets

| 3.01 | 100mm Round | 50 / 65 |
| 3.02 | 100mm Square | 50 / 65 |
| 3.03 | 130mm Round | 50 / 65 |
| 3.04 | 130mm Square | 50 / 65 |
| 3.05 | 130mm Square (Grid Pattern) | 50 / 65 |
| 3.06 | 130mm Round | 100 |
| 3.07 | 130mm Square | 100 |
| 3.08 | 130mm Square (Grid Pattern) | 100 |
| 3.09 | 150mm Round | 100 |
| 3.10 | 150mm Square | 100 |
| 3.11 | 150mm Square (Grid Pattern) | 100 |
| 3.12 | 200mm Square | 100 |
| 3.13 | 200mm Square (Grid Pattern) | 100 |
| 3.14 | 225mm Round | 100 |
| 3.15 | 100m Truflo – Vari-Level Floor Drains | 100 |
| 3.16 | 200mm Square (150 outlet) | 150 (or 100) |
| 3.17 | 225mm Round (150 outlet) | 150 (or 100) |
| 3.18 | 225mm Square (150 outlet) | 150 (or 100) |
| 3.19 | 300mm Round (150 outlet) | 150 (or 100) |
| 3.20 | 300mm Square (150 outlet) | 150 (or 100) |
| 3.21 | 300mm Square - Special Fine Pattern (150 outlet) | 150 (or 100) |
**SPS 100mm Round Vari-Level Vertical Drain**

65/50mm Outlet

**Specification code:**
- R100G/C65 (bronze grate, CI lower body) *special order*
- R100N/C65 (nickel bronze grate, CI lower body) *special order*
- R100S4/C65 (polished 304 stainless steel grate, CI lower body)
- R100S/C65 (satin 316 stainless steel grate, CI lower body)

**Typical Application**

- **65mm BSP**
- **'B'**
- **N.B.

**Height adjustment:**
- Min. 20mm
- Max. 65mm

**Tiling/Paving/Topping**

- **Weep slots 3 x places**

**Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC / HDPE with no-hub coupling.**

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au

---

- Round grate available in polished 304 & satin 316 Stainless Steel. Bronze and nickel-bronze available by special order order.
- Cast iron lower body and reversible membrane clamp collar with female 65mm BSP thread.
SPS 100mm Square Vari-Level Vertical Drain

65/50mm Outlet

Specification code:
Q100G/C65 (bronze grate, CI lower body) *special order*
Q100N/C65 (nickel bronze grate, CI lower body) *special order*
Q100S4/C65 (polished 304 stainless steel grate, CI lower body)
Q100S/C65 (satin 316 stainless steel grate, CI lower body)

- Square grate available in polished 304 & satin 316 stainless steel. Bronze & nickel-bronze available by special order only.
- Cast iron lower body and reversible membrane clamp collar with female 65mm BSP thread.

Typical Application

Height adjustment:
Min. 20mm
Max. 65mm

Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC / HDPE with no-hub coupling.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 130mm Round Vari-Level Vertical Drain

65/50mm Outlet

Specification code:
R130S/C65 (satin 316 stainless steel grate, CI lower body)
R130S4/C65 (polished 304 stainless steel grate, CI lower body)

- Round grate available in polished 304 or satin 316 stainless steel.
- Cast iron lower body and reversible membrane clamp collar with female 65mm BSP thread.

Height adjustment:
Min. 22mm
Max. 68mm

Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC / HDPE with no-hub coupling.

Typical Application

Membrane

Tiling/Paving/Topping

Weep slots 3 x places

C50A CI lower body

N.B. A B
50 90 180
65 60 180
SPS 130mm Square Vari-Level Vertical Drain

65/50mm Outlet

**Specification code:**
- Q130S/C65 (satin 316 stainless steel grate, CI lower body)
- Q130S4/C65 (polished 304 stainless steel grate, CI lower body)

**Height adjustment:**
- Min. 22mm
- Max. 68mm

- Square grate available in polished 304 or satin 316 stainless steel.
- Cast iron lower body and reversible membrane clamp collar with female 65mm BSP thread.

**Typical Application**

- Tiling/Paving/Topping

**Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC / HDPE with no-hub coupling.**

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>90</td>
<td>180</td>
</tr>
<tr>
<td>65</td>
<td>60</td>
<td>180</td>
</tr>
</tbody>
</table>
Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

SPS 130mm Square Vari-Level Vertical Drain
(Square Hole Pattern)
65/50mm Outlet

Specification code:
Q130S/C65 (satin 316 stainless steel grate)
Q130S4/C65 (polished 304 stainless steel grate)
Includes 65/50mm cast iron lower body

- Square grate available in polished 304 or satin 316 stainless steel.
- Cast iron lower body and reversible membrane clamp collar with female 65mm BSP thread.

Height adjustment:
Min. 25mm
Max. 68mm

Typical Application

Tiling/Paving/Topping

Membrane

Weep slots 3 x places

Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC / HDPE with no-hub coupling.

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>90</td>
<td>180</td>
</tr>
<tr>
<td>65</td>
<td>60</td>
<td>180</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

3.05
SPS 130mm Round Vari-Level Vertical Drain

### Specification codes:
- R130S4/C (polished 304 stainless steel grate)
- R130S/C (satin 316 stainless steel grate)
- Includes 100mm cast iron lower body

- Height-adjustable grate assembly.
- Available in polished 304 or satin 316 stainless steel.
- C100A CI "deluxe" lower body with reversible clamp collar.

### Height adjustment:
- Min. 20mm
- Max. 55mm**

### Typical Application
- Tiling/Paving/Topping

- C100A CI lower body
- Weep slots 3 x places
- Optional coupling connection
- Push-in connection (specify: -R)

### Optional Extension Piece

**Optional Extension Piece

Membrane flange 235Ø

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
Specification codes:
Q130S4/C (polished 304 stainless steel grate)
Q130S/C (satin 316 stainless steel grate)
Includes 100mm cast iron lower body

- Height-adjustable grate assembly.
- Available in polished 304 or satin 316 stainless steel.
- C100A CI "deluxe" lower body with reversible clamp collar.

130mm Square

Height adjustment:
Min. 20mm
Max. 55mm**

Typical Application

Tiling/Paving/Topping

Membrane

C100A CI lower body

Weep slots
3 x places

Optional coupling connection

Push-in connection (specify: -R)

100mm N.B.

Membrane flange 235Ø

**Optional Extension Piece

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

3.07
SPS 130mm Square Vari-Level Vertical Drain

100mm Outlet
(Grid Pattern)

**Specification codes:**
Q130SQ4/C (polished 304 stainless steel grate)
Q130SQ/C (satin 316 stainless steel grate)
Includes 100mm cast iron lower body

- Height-adjustable grate assembly.
- Available in polished 304 or satin 316 stainless steel.
- C100A CI "deluxe" lower body with reversible clamp collar.

**Height adjustment:**
Min. 20mm
Max. 55mm**

**Typical Application**

- Tiling/Paving/Topping

---

**Optional Extension Piece**

---

**Optional coupling connection**

---

**Membrane flange 235Ø**

---

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 150mm Round Vari-Level Vertical Drain

100mm Outlet

Height adjustment:
Min. 25mm
Max. 60mm**

Specification codes:
R150G/C (bronze grate, CI lower body) *special order*
R150N/C (nickel bronze grate, CI lower body) *special order*
R150S4/C (polished 304 stainless steel, CI lower body)
R150S/C (satin 316 stainless steel grate, CI lower body)

- Heigh-adjustable high-heel friendly grate assembly.
- Available in polished 304 & satin 316 stainless steel. Bronze and nickel-bronze available by special order only.
- C100A "deluxe" CI lower body with reversible clamp collar.

Typical Application

Tiling/Paving/Topping

Membrane

Weep slots
3 x places

C100A CI lower body

Optional coupling connection

Push-in connection (specify: -R)

Membrane flange 235Ø

100mm N.B.

95mm

65mm

3.09

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au

**Optional Extension Piece

*For flow rate data please refer to appendix.
SPS 150mm Square Vari-Level Vertical Drain

100mm Outlet

**Specification codes:**
- Q150G/C (bronze grate, CI lower body - non-stock option)
- Q150N/C (nickel bronze grate, CI lower body)
- Q150S4/C (polished 304 stainless steel, CI lower body)
- Q150S/C (satin 316 stainless steel grate, CI lower body)

- Height-adjustable hinged grate assembly.
- Available in polished 304 & satin 316 stainless steel. Bronze and nickel-bronze available by special order only.
- C100A CI "deluxe" lower body with reversible clamp collar.

Typical Application

**Height adjustment:**
Min. 25mm
Max. 60mm**

**Optional Extension Piece**

**Optional coupling connection**

Membrane flange 235Ø

*For flow rate data please refer to appendix.*

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

3.10
SPS 150 Square Vari-Level Vertical Drain

100mm Outlet (Grid Pattern)

Specification codes:
Q150SQ/C (316 stainless steel grate, CI lower body)

- Height-adjustable hinged grate assembly.
- Available in satin 316 stainless steel only.
- C100A CI "deluxe" lower body with reversible clamp collar.

Typical Application

Tiling/Paving/Topping

C100A CI lower body

Weep slots 3 x places

Optional coupling connection

Push-in connection (specify: -R)

Membrane flange 235Ø

Optional Extension Piece

** Height adjustment:
Min. 25mm
Max. 60mm**

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 200mm Square Vari-Level Vertical Drain

100mm Outlet

Specification codes:
Q200G/C (brass grate, CI lower body) *special order*
Q200N/C (nickel-brass grate, CI lower body) *special order*
Q200S4/C (polished 304 stainless steel, CI lower body)
Q200S/C (satin 316 stainless steel grate, CI lower body)

Height adjustment:
Min. 30mm
Max. 70mm**

Weep slots
3 x places

High-heel friendly pattern (6mm gaps)

- Height-adjustable hinged grate assembly.
- Available in polished 304 & satin 316 stainless steel. Bronze and nickel-brass available by special order only.
- C100A CI "deluxe" lower body with reversible clamp collar.
- Load Class C per AS3996-2006

Typical Application

Tiling/Paving/Topping

Membrane

Weep slots
3 x places

Optional coupling connection

100mm N.B.

Membrane flange 235Ø

**Optional Extension Piece

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 200mm Square Vari-Level Vertical Drain
(Grid Pattern)
100mm Outlet

Specification codes:
Q200SQ/C (satin 316 stainless steel grate, CI lower body)

- Height-adjustable hinged grate assembly.
- Available in satin 316 stainless steel only.
- C100A CI "deluxe" lower body with reversible clamp collar.

Grid Pattern (8mm square holes)

200mm Square

Height adjustment:
Min. 30mm
Max. 70mm**

Typical Application

Tiling/Paving/Topping

Membrane

Weep holes
3 x places

C100A CI lower body

Optional coupling connection

100mm N.B.

Membrane flange 235Ø

Optional Extension Piece

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
High-heal friendly pattern (5.5mm gaps)

225mm Round

Typical Application

Height adjustment:
Min. 30mm
Max. 70mm**

**Optional Extension Piece

Specification codes:
R225N/C (nickel bronze grate, CI lower body) *special order*
R225S/C (satin 316 SS grate, CI lower body)

- Height-adjustable high-heal friendly grate assembly.
- Available in satin 316 stainless steel. Polished 304SS and nickel-bronze available by special order only.
- C100A "deluxe" CI lower body with reversible clamp collar.

SPS 225mm Round Vari-Level Vertical Drain

100mm Outlet

Typical Application

C100A CI lower body

Weep slots 3 x places

Tiling/ Paving/ Topping

40

100mm N.B.

110 O.D.

Optional connection

Membrane flange Ø235

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
Further to page 1.01 - the 100mm Truflo RWO can be converted into a vari-level drain body with a CC100 reversible clamp collar. The following 100mm BSP grate assemblies can then be installed:

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Model Code</th>
<th>Material</th>
<th>Height Adjustment</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>130mm Round</td>
<td>R130S</td>
<td>316SS</td>
<td>n/a</td>
<td>20mm / 50mm</td>
</tr>
<tr>
<td>130mm Square</td>
<td>Q130S</td>
<td>304SS</td>
<td>n/a</td>
<td>20mm / 50mm</td>
</tr>
<tr>
<td>130mm Square*</td>
<td>Q130SQ</td>
<td>Ni-Br</td>
<td>n/a</td>
<td>20mm / 50mm</td>
</tr>
<tr>
<td>150mm Round</td>
<td>R150S</td>
<td>Bronze</td>
<td>R150N</td>
<td>25mm / 60mm</td>
</tr>
<tr>
<td>150mm Square</td>
<td>Q150S</td>
<td>316SS</td>
<td>Q150N</td>
<td>25mm / 60mm</td>
</tr>
<tr>
<td>150mm Square*</td>
<td>Q150SQ</td>
<td>304SS</td>
<td>Q150G</td>
<td>25mm / 60mm</td>
</tr>
<tr>
<td>200mm Square</td>
<td>Q200S</td>
<td>R130S</td>
<td>Q200N</td>
<td>30mm / 70mm</td>
</tr>
<tr>
<td>200mm Square*</td>
<td>Q200SQ</td>
<td>Q130S</td>
<td>Q200G</td>
<td>30mm / 70mm</td>
</tr>
<tr>
<td>225mm Round</td>
<td>R225S</td>
<td>Q130SQ</td>
<td>R225N</td>
<td>30mm / 70mm</td>
</tr>
</tbody>
</table>

* = grid pattern  ** = EP100 extension piece available to extend height

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 200mm Square Vari-Level Vertical Drain

150mm Outlet or 100mm Outlet

**For additional height, use EP150 extension piece**

**Specification code:**
Q200S4/C150 (polished 304 stainless steel grate, Cl lower body)
Q200S/C150 (satin 316 stainless steel grate, Cl lower body)
For a 100mm outlet, use suffix "C100" not "C150"

**Height adjustment:**
Min. 25mm
Max. 70mm**

**Load Class C per AS3996-2006**

- Height-adjustable hinged grate & frame.
- Grate assembly available in polished 304 and satin 316 stainless steel.
- 150mm or 100mm Truflo CI lower body with 150mm BSP reversible clamp collar.

Typical Application

- Integral puddle flange Ø270
- 150 or 100mm N.B.
- 150mm outlet shown with PVC tailpiece (in-pipe connector)
- 100mm outlet shown with optional coupling connector
- **For additional height, use EP150 extension piece**
- *For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
**For additional height, use EP150 extension piece**

*For flow rate data please refer to appendix.*

Speciality Plumbing Supplies Pty Ltd

Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

3.17
SPS 225mm Square Vari-Level Vertical Drain

150mm Outlet or 100mm Outlet

Specification code:
Q225N/C150 (nickel-bronze grate, CI lower body) *special order*
Q225S/C150 (316 stainless steel grate, CI lower body)
For a 100mm outlet, use suffix "C100" not "C150"

Load Class C per AS3996-2006

- Height-adjustable hinged grate & frame.
- Grate assembly available in satin 316 stainless steel. Nickel-bronze available by special order only.
- 150mm or 100mm Truflo CI lower body with 150mm BSP reversible clamp collar.

Height adjustment:
Min. 32mm
Max. 80mm**

**For additional height, use EP150 extension piece

For a 100mm outlet, use suffix "C100" not "C150"

Typical Application

Integral puddle flange Ø270

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 300mm Round Vari-Level Vertical Drain

150mm Outlet or 100mm Outlet

Specification code:
R300D/C150 (galvanised ductile iron grate, CI lower body)
R300S/C150 (satin 316 stainless steel grate, CI lower body)
For a 100mm outlet, use suffix "C100" not "C150"

Load Class C per AS3996-2006

Height adjustment:
Min. 50mm
Max. 90mm**

- Height-adjustable round grate & frame.
- Grate assembly available in galvanised ductile iron, nickel-bronze, and 316 stainless steel.
- 150mm or 100mm Truflo CI lower body with 150mm BSP reversible clamp collar.

Typical Application

**For additional height, use EP150 extension piece

Integral puddle flange Ø270

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 300mm Square Vari-Level Vertical Drain

150mm Outlet or 100mm Outlet

Specification codes:
Q300D/150C (galvanised ductile iron grate, CI lower body)
Q300S4/150C (polished 304 stainless steel grate, CI lower body)
Q300S/150C (satin 316 stainless steel grate, CI lower body)
For a 100mm outlet, use suffix "C100" not "C150"

Load Class C per AS3996-2006

- Height-adjustable hinged grate & frame.
- Grate assembly available in nickel bronze, ductile iron and 316 stainless steel.
- 150mm or 100mm Truflo CI lower body with 150mm BSP reversible clamp collar.

Height adjustment:
Min. 50mm
Max. 90mm**

Typical Application

**For additional height, use EP150 extension piece

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 300mm Square Fine Pattern Vertical Drain

(Vari-Level)

Specifiﬁcation code:
Q300S24/C150 (polished 304 SS grate, 150mm CI lower body)
Q300S2/C150 (satin 316 SS grate, 150mm CI lower body)

For a 100mm outlet, use sufﬁx "C100" not "C150"

- Special high-heel friendly grate pattern.
- Available in polished 304 and satin 316 stainless steel.
- 150mm or 100mm Truflo CI lower body with 150mm BSP reversible clamp collar.

Height adjustment:
Min. 50mm
Max. 90mm**

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
## SECTION 4
Vari-level Drains – 90° Outlets

<table>
<thead>
<tr>
<th>Vari-Level Drains - Side Outlet</th>
<th>To suit pipe size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.01 100mm Round</td>
<td>50 / 65</td>
</tr>
<tr>
<td>4.02 100mm Square</td>
<td>50 / 65</td>
</tr>
<tr>
<td>4.03 130mm Round</td>
<td>50 / 65</td>
</tr>
<tr>
<td>4.04 130mm Square</td>
<td>50 / 65</td>
</tr>
<tr>
<td>4.05 130mm Square (Grid Pattern)</td>
<td>50 / 65</td>
</tr>
<tr>
<td>4.06 150mm Round</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>4.07 150mm Square</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>4.08 150mm square (Grid Pattern)</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>4.09 200mm Square</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>4.10 200mm Square (Grid Pattern)</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>4.11 225mm Round</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>4.12 225mm Square</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>4.13 300mm Round</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>4.14 300mm Square</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>4.15 300mm Square (Fine Pattern)</td>
<td>80 &amp; 100</td>
</tr>
</tbody>
</table>
**SPS 100mm Round Vari-Level Side Outlet Drain**

**65/50mm outlet**

**Specification code:**
- R100G/C90 (bronze grate, ABS lower body) *special order*
- R100N/C90 (nickel-bronze grate, ABS lower body) *special order*
- R100S4/C90 (polished 304 stainless steel, ABS lower body)
- R100S/C90 (satin 316 stainless steel grate, ABS lower body)

- Round grate available in polished 304 & satin 316 stainless Steel. Bronze and nickel-bronze available by special order only.
- ABS 90° Body and Reversible Membrane Clamp Collar with female 65mm BSP thread.

**Height adjustment:**
- Min. 20mm
- Max. 65mm

**Typical Application**

Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC/HDPE with no-hub coupling.

<table>
<thead>
<tr>
<th>N.B</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>100</td>
<td>40</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>65</td>
<td>105</td>
<td>37</td>
<td>180</td>
<td>200</td>
</tr>
</tbody>
</table>

*N.B. For flow rate data please refer to appendix.*

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
Speciation code:
Q100G/C90 (bronze grate, ABS lower body) *special order*
Q100N/C90 (nickel bronze grate, ABS lower body) *special order*
Q100S4/C90 (polished 304 stainless steel, ABS lower body)
Q100S/C90 (satin 316 stainless steel grate, ABS lower body)

- Square grate available in polished 304 & satin 316 stainless steel.
  Bronze and nickel-bronze available by special order only.
- ABS 90° Body and Reversible Membrane Clamp Collar with female 65mm BSP thread.

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>100</td>
<td>40</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>65</td>
<td>105</td>
<td>37</td>
<td>180</td>
<td>200</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.
SPS 130mm Round Vari-Level Side Outlet Drain

65/50mm outlet

**Specification code:**
- R130S4/C90 (polished 304 stainless steel, ABS lower body)
- R130S/C90 (satin 316 stainless steel grate, ABS lower body)

- Round grate assembly available in polished 304 or satin 316 stainless steel.
- ABS 90° Body and Reversible Membrane Clamp Collar with female 65mm BSP thread.

**Typical Application**

- Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC/HDPE with no-hub coupling.

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>100</td>
<td>40</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>65</td>
<td>105</td>
<td>37</td>
<td>180</td>
<td>200</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 130mm Square Vari-Level Side Outlet Drain

65/50mm outlet

Specification code:
Q130S4/C90 (polished 304 stainless steel, ABS lower body)
Q130S/C90 (satin 316 stainless steel grate, ABS lower body)

- Square grate assembly available in polished 304 or satin 316 stainless steel.
- uPVC 90° Body and Reversible Membrane Clamp Collar with female 65mm BSP thread.

Typical Application

Height adjustment:
Min. 25mm
Max. 68mm

Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC/HDPE with no-hub coupling.

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>100</td>
<td>40</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>65</td>
<td>105</td>
<td>37</td>
<td>180</td>
<td>200</td>
</tr>
</tbody>
</table>

*For flow rate data please refer to appendix.*
SPS 130mm Square Vari-Level Side Outlet Drain

Specification code:
Q130SQ4/C90 (polished 304 stainless steel, ABS lower body)
Q130SQ/C90 (satin 316 stainless steel grate, ABS lower body)

65/50mm outlet

Square grate assembly available in polished 304 or satin 316 stainless steel.

ABS 90° Body and Reversible Membrane Clamp Collar with female 65mm BSP thread.

Height adjustment:
Min. 25mm
Max. 68mm

Typical Application

Tiling/Paving/Topping

Outlet pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC/HDPE with no-hub coupling.

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>100</td>
<td>40</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>65</td>
<td>105</td>
<td>37</td>
<td>180</td>
<td>200</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 150mm Round Vari-Level Floor Drain With Side-Outlet Lower Body

**Height adjustment:**
- Min. 25mm
- Max. 60mm*

* EP100 extension piece available to increase max. height

**Typical Application**

- **CC100 clamp collar with weep holes 6 x places**

**Specification codes:**
- R150G/C109 (bronze grate, CI lower body) *special order*
- R150N/C109 (nickel bronze grate, CI lower body) *special order*
- R150S4/C109 (polished 304 SS grate, CI lower body)
- R150S/C109 (satin 316 SS grate, CI lower body)

“C109” = 100mm; “C89” = 80mm

- **Height-adjustable grate assembly.**
- Available polished 304 and 316 stainless steel. Bronze and nickel-bronze available by special order only.
- CI "Truflo" side-outlet lower body with 100mm BSP reversible clamp collar.

**N.B.**

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 150mm Square Vari-Level Floor Drain
With Side-Outlet Lower Body

**Specification codes:**
- Q150G/C109 (bronze grate, CI lower body) *special order*
- Q150N/C109 (nickel bronze grate, CI lower body) *special order*
- Q150S4/C109 (polished 304SS, CI lower body)
- Q150S/C109 (satin 316SS grate, CI lower body)

**Side outlet** - "C109" = 100mm; "C89" = 80mm

- Height-adjustable hinged grate assembly.
- Available in polished 304 and satin 316 stainless steel. Bronze and nickel-bronze available by special order only.
- CI "Truflo" side-outlet lower body with 100mm BSP reversible clamp collar.

**Typical Application**

- **Height adjustment:**
  - Min. 25mm
  - Max. 60mm

- **Outside edge of PVC pipe**
- **Topping / Tiling / Paving**
- **Structural Slab**
- **Membrane**
- **CC100 clamp collar with weep holes 6 x places**

*EP100 extension piece available to increase max. height*

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 150mm Square Vari-Level Floor Drain
Side-Outlet Lower Body (Grid Pattern)

Specification codes:
Q150SQ/C109 (satin 316SS grate, CI lower body)
Side outlet - "C109" = 100mm; "C89" = 80mm

100mm outlet
80mm outlet

Grid Pattern (8mm sq. holes)

- Height-adjustable hinged grate assembly. Grate pattern 8mm square holes.
- Available in satin 316 stainless steel only.
- CI "Truflo" side-outlet lower body with 100mm BSP reversible clamp collar.

Typical Application

CC100 clamp collar with weep holes 6 x places

N.B.

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 200mm Square Vari-Level Floor Drain With Side-Outlet Lower Body

**Specification codes:**
- Q200G/C109 (bronze grate, Cl lower body) *special order*
- Q200N/C109 (nickel bronze grate, Cl lower body) *special order*
- Q200S4/C109 (polished 304SS grate, Cl lower body)
- Q200S/C109 (satin 316 SS grate, Cl lower body)

Side outlet - "C109" = 100mm; "C89" = 80mm

- Height-adjustable hinged grate assembly.
- Available in polished 304 and satin 316 stainless steel. Bronze and nickel-bronze available by special order only.
- CI "Truflo" side-outlet lower body with 100mm BSP reversible clamp collar.

High-heel friendly pattern (6mm gaps)

Height adjustment:
- Min. 30mm
- Max. 70mm

**Typical Application**
- Structural Slab
- Membrane
- Topping / Tiling / Paving.

CC100 clamp collar with weep holes 6 x places

N.B.

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

* EP100 extension piece available to increase max. height

Outside edge of PVC pipe

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 200mm Square Vari-Level Floor Drain
Side-Outlet Lower Body, Grid Pattern

**Specification code:**
Q200SQ/C109 (satin 316 SS grate, 100mm CI lower body)
Q200SQ/C89 (satin 316 SS grate, 80mm CI lower body)
Side outlet - "C109" = 100mm; "C89" = 80mm

- Height - adjustable grate assembly. Grate pattern 8mm square holes.
- Available in satin 316 stainless steel only.
- CI "Truflo" side-outlet lower body with 100mm BSP reversible clamp collar.

**Grid Pattern (8mm sq. holes):**

**Typical Application:**
- Membrane
- Structural Slab
- CC100 clamp collar with weep holes 6 x places

**Height adjustment:**
Min. 30mm
Max. 70mm

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

**N.B.**
- EP100 extension piece available to increase max. height
- Outside edge of PVC pipe

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>
SPS 225mm Round Vari-Level Floor Drain
With Side-Outlet Lower Body

Specification codes:
R225N/C109 (nickel bronze grate, CI lower body) *special order*
R225S/C109 (satin 316 SS grate, CI lower body)
Side outlet - "C109" = 100mm; "C89" = 80mm

100mm outlet
80mm outlet

- Height-adjustable heel-friendly grate assembly.
- Available in satin 316 stainless steel. Nickel-bronze and polished 304SS available by special order only.
- CI "Truflo" side-outlet lower body with 100mm BSP reversible clamp collar.

Typical Application

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 225mm Square Vari-Level Floor Drain With Side-Outlet Lower Body

Specification codes:
Q225N/C109 (nickel bronze grate, CI lower body) *special order*
Q225S/C109 (satin 316 SS grate, CI lower body)
Side outlet - "C109" = 100mm; "C89" = 80mm

100mm outlet
80mm outlet

- Height-adjustable hinged grate assembly.
- Available in satin 316 stainless steel. Nickel-bronze available by special order only.
- CI "Truflo" side-outlet lower body with 150mm BSP reversible clamp collar.
- Load tested to Class C of AS3996-2006.

**EP150 extension piece available to increase max. height

Typical Application

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
**EP150 extension piece available to increase max. height**

**N.B.**
- **Structural Slab**
- **Membrane**
- **CC150 clamp collar with weep holes 6 x places**
- **Typical Application**
- **Outside edge of 100mm PVC**

**Height adjustment:**
- Min. 50mm
- Max. 90mm**

**Specification codes:**
- R300D/C109 (galvanised ductile iron grate, CI lower body)
- R300S/C109 (satin 316 SS grate, CI lower body)
- Side outlet - "C109" = 100mm; "C89" = 80mm

- **100mm outlet**
- **80mm outlet**

- Height-adjustable grate assembly.
- Available in galvanised ductile iron and 316 stainless steel.
- CI "Truflo" side-outlet lower body with 150mm BSP reversible clamp collar.
- Load tested to Class C of AS3996-2006.

**Typical Application**

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 300mm Square Vari-Level Floor Drain With Side-Outlet Lower Body

**Specification codes:**
- Q300D/C109 (galvanised ductile iron grate, CI lower body)
- Q300S4/C109 (polished 304 SS grate, CI lower body)
- Q300S/C109 (satin 316 SS grate, CI lower body)

Side outlet - "C109" = 100mm; "C89" = 80mm

- **Height-adjustable hinged grate assembly.**
- **Available in galvanised ductile iron and 316 stainless steel.**
- **CI "Truflo" side-outlet lower body with 150mm BSP reversible clamp collar.**
- **Load tested to Class C of AS3996-2006.**

**Typical Application**

- **CC150 clamp collar with weep holes 6 x places**
- **N.B.**
- **80**
- **260**
- **240**
- **62**
- **115**
- **28**

**EP150 extension piece available to increase max. height**

**Outside edge of 100mm PVC**

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 300mm Square Fine Pattern Drain
With Side-Outlet Lower Body

Specsification code:
Q300S24/C109 (polished 304 SS grate, 100mm CI lower body)
Q300S2/C109 (satin 316 SS grate, 100mm CI lower body)
Side outlet - "C109" = 100mm; "C89" = 80mm

- Height-adjustable grate assembly with high-heel-friendly pattern.
- Available in polished 304 and satin 316 stainless steel.
- CI "Truflo" side-outlet lower body with 150mm BSP reversible clamp collar.

Typical Application

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
# SECTION 5

## Vinyl Floor Wastes

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Pipe Size (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.01</td>
<td>110mm Round - Push-in</td>
<td>50</td>
</tr>
<tr>
<td>5.02</td>
<td>117mm Round - Push-in</td>
<td>80</td>
</tr>
<tr>
<td>5.03</td>
<td>135mm Round - Push-in - Unifin</td>
<td>100</td>
</tr>
<tr>
<td>5.04</td>
<td>135mm Round - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>5.05</td>
<td>135mm Round - Push-in - with 1.25&quot; socket for portable baths</td>
<td>100</td>
</tr>
<tr>
<td>5.06</td>
<td>125mm Round - Low-profile - with retro-fit puddle flange</td>
<td>100</td>
</tr>
<tr>
<td>5.07</td>
<td>125mm Round - Low-profile - Unifin</td>
<td>100</td>
</tr>
<tr>
<td>5.08</td>
<td>125mm Round - Low-profile</td>
<td>100</td>
</tr>
<tr>
<td>5.09</td>
<td>220mm Round - Push-in (150 outlet)</td>
<td>150</td>
</tr>
<tr>
<td>5.10</td>
<td>125mm Round - Low-profile - Vari-level</td>
<td>100</td>
</tr>
<tr>
<td>5.11</td>
<td>155mm Round - Vari-level</td>
<td>100</td>
</tr>
<tr>
<td>5.12</td>
<td>220mm Round - Vari-level (150 outlet)</td>
<td>150</td>
</tr>
<tr>
<td>5.13</td>
<td>155mm Round - Vari-level - 90° Outlet</td>
<td>80 &amp; 100</td>
</tr>
<tr>
<td>5.14</td>
<td>220mm Round - Vari-level - 90° Outlet</td>
<td>80 &amp; 100</td>
</tr>
</tbody>
</table>
SPS 50mm Push-In Sheet Vinyl Floor Waste

- Push-in floor waste assembly for sheet vinyl flooring.
- Available in all 304 stainless steel. 316 stainless steel top available by special order only.
- O-ring adapts outlet to 50mm PVC.

<table>
<thead>
<tr>
<th>NOMINAL OUTLET DIAMETER</th>
<th>DIMENSION IN MILLIMETRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ØA</td>
<td>ØB</td>
</tr>
<tr>
<td>50</td>
<td>112</td>
</tr>
</tbody>
</table>

Specification codes:
LG50SSA4 (entire assembly in 304 stainless steel)
LG50SSA6 (316 SS ring/grate, 304 SS body) *special order*

Typical Application

- Base centred in core hole
- Steel trowel screed flush with rim
- I.D. rubber ring seal

Speciality Plumbing Supplies Pty Ltd
Tel:(02) 9417 1900  Fax:(02) 9417 0108  E-mail: info@spsdrains.com.au
Specification codes:
V80SVA (304 stainless steel ring & grate, ABS body)
V80SVA6 (316 stainless steel ring & grate, ABS body)
V80SSA4 (All-304 stainless steel assembly)
V80SSA6 (316 SS ring/grate, 304SS body) *special order*

- Push-in floor waste assembly for sheet vinyl flooring.
- Vinyl floor drain body available in ABS and 304. 316SS body available by special order.
- Ring & grate available in polished 304 and 316 stainless steel.
- O-rings adapt outlet to 80mm PVC & copper pipe.

Typical Application

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Push-in Vinyl Floor Waste & Cleanout with Universal Fin-Seal

Specification codes:
VH87CPA (ABS body, chrome-plated zinc-alloy top)
VH87SVA (ABS body, polished 304SS top)*
Cleanout (polished) VH87SPA (ABS body, 304SS* top)
Cleanout (non-slip) VH87SPNA (ABS body, 304SS* top)
* for 316, use "6" as suffix, eg "VH87SVA6"

- Vinyl floor waste slips inside 100mm PVC, HDPE and copper with the same Universal Fin-Seal connector.
- Grates/rings available in chrome-plated zinc-alloy, polished 304SS and satin 316SS.
- Cleanout tops available in polished or non-slip 304SS. 316SS non-stock option.

*5mm bar x 5mm gap heel friendly design*

Typical Application

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Push-in Sheet Vinyl Floor Waste

Specification codes:
- V100SVA (ABS body, polished 304 SS ring & grate)
- V100SVA6 (ABS body, polished 316 SS ring & grate)
- V100SSA4 (Assembly in polished 304 stainless steel)
- V100SSA6 (Assembly in polished 316 stainless steel)

- Push-in floor waste assembly for sheet vinyl flooring.
- Drain body available in ABS, zinc-alloy and 304 grade stainless steel. 316SS available by special order.
- Ring & grate available in chrome-plated zinc-alloy or polished 304 grade stainless steel. 316SS available by special order.
- O-rings adapt outlet to 100mm PVC, copper, HDPE or CI pipe.
- Watermarked under ATS5200:040 (ref: 20052)

*5mm bar x 5mm gap heel friendly design*

○ — Tamper-proof screws optional

Typical Application

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Push-in Sheet Vinyl Floor Waste (with 1.25" socket for portable bath outlet)

Specification codes:
V100SVA-HP (ABS body, polished 316 SS ring & grate)
V100SSA6-HP (polished 316 SS ring & grate, drain body 304SS)

- Push-in floor waste assembly for sheet vinyl flooring.
- Grate includes a hose pipe socket suitable for 1.25" i.d. hose, to enable direct connection into floor grate.
- Ring & grate available in polished 316SS only. Drain body available in ABS plastic or 304SS.
- O-rings adapt spigot to 100mm PVC, copper, HDPE and CI pipe.

Tamper-proof screws optional

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
Specification codes:
Floor waste: LG87SVAP (ABS body, 304SS top)
Cleanout (polished) LG87SVPAP (ABS body, 304SS top)
Cleanout (non-slip) LG87SVPNAP (ABS body, 304SS top)
Includes PF100 puddle flange

- Retro-fit puddle flange with ultra-thin face.
- Low profile vinyl floor waste slips inside I.D. of flange. 1mm spacer fins allow for proper leak control.
- Polished 304-grade stainless steel ring and grate.
- Cleanouts also available - polished and non-slip.
- Watermarked under ATS5200:040 lic. no. 20052

Typical Application

Do not block spacer fins with liquid membrane or leak control will not work!

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Extra Compact Push-in Vinyl Floor Waste/Cleanout with Uni-Fin

Specification codes:
Floor waste: LG87SVAF (ABS body, 304SS top)
Cleanout (polished) LG87SVPF (ABS body, 304SS top)
Cleanout (non-slip) LG87SVPNF (ABS body, 304SS top)

- Lo-profile vinyl floor waste slips inside 100mm PVC, HDPE and copper with the new Uni-fin adapter.
- Polished 304-grade stainless steel ring and grate, ABS plastic lower body
- Cleanout tops also available - polished or non-slip 304SS/

Typical Application

Drain body OD 142mm

Min. Height 22mm
Sheet vinyl flooring

I.D. 81mm
I.D. Uni-fin Seal
Also suits copper, C.I. & HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Ultra Compact Push-in
Vinyl Floor Waste/Cleanout

Specification codes:
Floor waste: LG810SVA (ABS body, 304SS top)
Cleanout (polished) LG810SPA (ABS body, 304SS top)
Cleanout (non-slip) LG810SPNA (ABS body, 304SS top)

- Lo-profile vinyl floor waste slips inside 100mm PVC, HDPE and copper with appropriate o-rings.
- Polished 304-grade stainless steel ring and grate, ABS plastic lower body
- Cleanout tops also available – in polished or non-slip 304SS.

Ultra-compact: Vinyl Clamp
OD 125mm

Screed

125mm

Drain body OD 142mm

Typical Application

Min. Height 20mm

Sheet vinyl flooring

Structural Slab

100mm PVC Pipe

Ø87

Ø97

ID Rubber Ring Seal

Also suits copper, C.I.& HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 220mm Sheet Vinyl Floor Waste
(150mm Push-in)

 Specification codes:
LG150SSA4 (All-304 stainless steel)
LG150SSA6 (All-316 stainless steel)

- Push-in floor waste assembly for sheet vinyl.
- Drain body available in 304 stainless as standard or 316 stainless steel as non-stock option.
- Ring & Grate available in polished 304 and 316 stainless steel.

Min. height: 25mm

Typical Application

- Vinyl floor
- Clamp ring
- Standard PVC Pipe
- Structural Slab
- 150mm NB
- O.D. 146mm
- I.D. 138mm
- Cement screed
- Rubber ring seal
- Also suits copper, C.I. & HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
Specifications:

- Height-adjustable vinyl floor waste assembly.
- Vinyl floor drain body available in 304 stainless steel; 316 stainless steel available by special order.
- Ring & grate available in polished 304 stainless steel; 316 stainless steel available by special order.
- C100A CI "deluxe" lower body with reversible clamping collar (/C*).
- Q100Y optional CI retro fit lower body fits inside 150mmØ core hole (/Q*).

Specification codes:

- LG810S4/C (304 SS vinyl floor waste, CI lower body)
- LG810S6/C (316 SS top, 304 SS drain body, CI lower body)
* for retro-fit body use "/Q" instead of "/C"

Typical Application:

- SPS 100mm Ultra Compact Vari-Level Sheet Vinyl Floor Drain - Ø125mm Inlet

Options:

- Optional extension piece
- Optional coupling connection (specify: -R)
- Weep slots: 3 x places

Contact Information:

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
**Height-adjustable vinyl floor waste assembly.**

- Vinyl floor drain body available in 304 stainless steel; 316 stainless steel available by special order.
- Ring & grate available in polished 304 stainless steel; 316 stainless steel available by special order.
- C100A CI "deluxe" lower body with reversible clamping collar ("/C").
- Q100Y optional CI retro fit lower body fits inside 150mmØ core hole ("/Q").

**Typical Application**

- Cement screed
- Sheet Vinyl Floor
- Membrane
- Weep slots 3 x places
- Clamping ring
- Push-in connection (specify: -R)

**Dimensional Data**

<table>
<thead>
<tr>
<th>NOMINAL DIAMETER</th>
<th>ØA</th>
<th>ØB</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>175</td>
<td>155</td>
</tr>
</tbody>
</table>

**Speciation codes:**

- LG100S4/C (304 SS vinyl floor waste, CI lower body)
- LG100S6/C (316 SS top, 304 SS drain body, CI lower body)

* for retro-fit body use "/Q" instead of "/C"
SBS 150mm Vari-Level Sheet Vinyl Floor Drain

Ø220mm Inlet
150mm Outlet
or 100mm Outlet

**For additional height, use EP150 extension piece**

**Specification codes:**
LG150S4/C150 (polished 304SS ring/grate, 304SS drain body)
LG150S/C150 (satin 316SS grate, 304SS drain body)
Includes 150mm Truflo CI cast-in lower body
For a 100mm outlet, use suffix “C100” not “C150”

- Height-adjustable vinyl floor waste assembly.
- Drain body available in 304 stainless steel.
- Ring & Grate available in polished 304 stainless steel. Satin 316 stainless steel available by special order.
- 150 or 100mm “Truflo” CI lower body with 150mm clamp collar.

**Height adjustment:**
Min. 30mm
Max. 72mm**

**Typical Application**

Vinyl floor

Clamp ring

Cement Screed

Membrane

Structural

Slab

Ø220

86mm

150mm outlet shown with PVC tailpiece (in-pipe connector)

100mm outlet shown with optional coupling connector

150 or 100 N.B.

Integral puddle flange Ø270

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
155mm Round Sheet Vinyl Floor Drain
Vari-Level Side-Outlet Lower Body

Specification codes:
LG100S4/C109 (polished 304 SS floor waste, CI lower body)
LG100S6/C109 (satin 316 SS floor waste, CI lower body)
For 80mm outlet, use suffix "C89" not "C109"

- Height-adjustable, side outlet vinyl floor waste assembly.
- Drain body available in 304 stainless steel. 316 stainless steel available by special order.
- Grate & ring available in polished 304. Satin 316 stainless steel available by special order.
- CI Truflo 90° lower body with 100mm reversible clamp collar & i.d. rubber ring for 100mm PVC, HDPE & copper pipe; or 80mm PVC.

Typical Application

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>260</td>
<td>240</td>
<td>62</td>
<td>115</td>
<td>28</td>
</tr>
<tr>
<td>100</td>
<td>260</td>
<td>240</td>
<td>83</td>
<td>140</td>
<td>28</td>
</tr>
</tbody>
</table>

Height adjustment:
Min. 30mm
Max. 50mm *

CC100 clamp collar with weep holes 6 x places

* EP100 extension piece available to increase max. height

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

5.13
220mm Round Sheet Vinyl Floor Drain

Vari-Level Side-Outlet Lower Body

Specification codes:
LG150S4/C109 (polished 304 SS grate, CI lower body)
LG150S6/C109 (satin 316 SS grate, CI lower body) *special order*
Side outlet - "C109" = 100mm; "C89" = 80mm

100mm outlet
80mm outlet

- Height-adjustable vinyl floor waste assembly.
- Drain body available in 304 stainless steel. 316 stainless steel available by special order.
- Grate & ring available in polished 304 stainless steel. Satin 316 stainless steel available by special order.
- CI Truflo 90° lower body with 150mm reversible clamp collar & i.d. rubber ring for 100mm PVC, HDPE & copper pipe; or 80mm PVC.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

5.14
SECTION 6
Basket Trap Floor Wastes

6.01 100mm Compact - Drop-in 100
6.02 130mm Round - Push-in 100
6.03 135mm Vinyl - Push-in 100
6.04 150mm Round - Push-in 100
6.05 150mm Square - Push-in 100
6.06 200mm Square - Push-in 100
6.07 200mm Square - Push-in 150 150
6.08 225mm Round - Push-in 100
6.09 225mm Round - Push-in 150 150
6.10 220mm Vinyl - Push-in 150 150
6.11 150mm Round - Vari-level - Shallow Body 100
6.12 150mm Square - Vari-level - Shallow Body 100
6.13 155mm Vinyl - Vari-level - Shallow Body 100
6.14 200mm Square - Vari-level - Shallow Body 100
6.15 225mm Round - Vari-level - Shallow Body 100
6.16 200mm Square - Vari-level - Deep Body 100
6.17 225mm Round - Vari-level - Deep Body 100
6.18 225mm Square - Vari-level - Deep Body 100
6.19 300mm Square - Vari-level - Deep Body 100
6.20 220mm Vinyl - Vari-level - Deep Body 100
6.21 350mm Square - Special Custom-made 100
6.22 Coles-Spec. Basket Trap Floor Trough 100
6.23 150mm Square - Push-in - “Smart Secondary Strainer” 100

To suit pipe size (mm):
SPS 100mm Compact Basket Trap Assembly
(Drop-in)

**Specification code:**
- BA100S (304 stainless steel assembly)
- BA100SL (Shallow version, 100mm deep**)

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

**Typical Application**

- Ø112mm
- Ø97mm
- Min. Depth 10mm
- 180mm**
- Tiling or Topping
- Cast in to slab
- Structural slab
- Tiled surface
- Strainer Basket Code: SB75
  - 3mm holes
- Fixed secondary strainer
  - 4mm holes

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
Typical Application

- Spigot fits inside 100mm PVC, copper, CI and HDPE.
- Includes stainless steel removable basket and fixed secondary strainer.
- Compatible with PVC leak control flanges for waterproofed applications.

**Specification code:**
- R130SR-BT (304 stainless steel)
- R130SR6-BT (316SS grate assembly) *special order*
- Shallow version: use suffix -BTS *special order*

---

**SPS 130mm Round Push-in Basket Trap**

**130mm Round**

**Typical Application**

- I.D. Rubber ring seal
- Standard PVC Pipe
- Fixed secondary strainer - 4mm holes
- Strainer Basket Code: SBV85 3mm holes
- Min. height 20mm

**Also suits copper, CI> & HDPE pipe**

**Structural slab**

**160mm**

**41mm**

**100 N.B.**

**91mm**

* shallow version: 85mm deep

---

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

6.02
SPS 100mm Push-in Vinyl Floor Basket Trap

135mm Round Inlet

Specification code:
V100SSA-BT (304 stainless steel)
V100SSA-BTS (304SS shallow version *special order*)

- Push-in basket trap assembly for sheet vinyl flooring.
- Vinyl floor drain body available 304 stainless steel.
- Ring & grate available polished 304 (316 stainless steel *special order*).
- O-rings adapt outlet to 100mm PVC, copper, HDPE and CI pipe.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 150mm Round Push-in Basket Trap for 100mm pipe

Specification code:
R150SR-BT (304 stainless steel grate)
R150SR-BTS (304SS shallow version) *special order*

- Push-in grate assembly in cast 304 stainless steel. 316 stainless steel available by special order.
- Spigot fits inside 100mm PVC, copper, CI and HDPE.
- Includes stainless steel strainer basket and fixed secondary strainer.
- Compatible with PVC leak control flanges for membraaned applications.

Tiling or topping

Min. height 30mm

I.D. Rubber ring seal

Standard PVC Pipe

Fixed secondary strainer - 4mm holes

Strainer Basket
Code: SBV85
3mm holes

Structural Slab

55mm

185mm*

Also suits copper, CI & HDPE pipes.

* shallow version: 95mm deep

150mm Round

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 150mm Square Push-in Basket Trap for 100mm pipe

Tiling or topping

- Push-in bucket trap assembly in 304 stainless steel. 316 stainless steel grate assembly is non-stock option.
- Outlet fits inside 100mm PVC, copper, CI and HDPE.
- Includes stainless steel removable basket and fixed secondary strainer.
- Compatible with PVC leak control flanges for membraned applications.

Min. height 30mm

I.D. Rubber ring seal

Standard PVC Pipe

Fixed secondary strainer - 4mm holes

Strainer Basket
Code: SBV85
3mm holes

Structural Slab 185mm*

Also suits copper, CI & HDPE pipes.

* shallow version: 105mm deep

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 200mm Square Push-in Basket Trap
for 100mm pipe

**Specification code:**
Q200SR1-BT (304 stainless steel)
Q200SR6-BT (grate assembly in heel-friendly 316SS)
Shallow version: use suffix -BTS *special order*

- Push-in grate assembly in 304 stainless steel. 316 stainless steel grate assembly available by special order.
- Outlet fits inside 100mm PVC, copper, CI and HDPE.
- Includes stainless steel removable basket and fixed secondary strainer.
- Compatible with PVC leak control flanges for membraned applications.
- Load Class C per AS3996-2006

**Typical Application**

- **Support Bars**
  - Load Class C
  - AS3996-2006

- **Strainer Basket**
  - Code: SBV85
  - 3mm holes

- **Fixed secondary strainer - 4mm holes**

- **I.D Rubber ring seal**

- **Standard PVC Pipe**

- **Tiling or topping**
  - Min. height 30mm

- **Structural Slab**
  - 185mm*

- **Outlet fits inside 100mm PVC, copper, CI and HDPE.**

- **Also suits copper, C.I. & HDPE pipes.**

- **91mm**

- **65mm**

- **100 N.B.**

- **91mm**

- **65mm**

- **185mm* shallow version: 105mm deep**

---

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 200mm Square Push-in Basket Trap
for 150mm pipe

Specification code:
Q200/150SR-BT (316 stainless steel)

- Push-in bucket trap assembly - 316 stainless steel grate assembly.
- Includes stainless steel removable basket and fixed secondary strainer.
- Outlet fits inside 150mm PVC, copper, CI and HDPE.
- Grate assembly load-tested to Class C of AS3996-2006.

Typical Application

Min. Height 30mm

Structural Slab

Standard PVC Pipe

Fixed secondary strainer - 4mm holes

Strainer Basket
Code: SB150S
3mm holes

Rubber ring seal

Also suits copper, CI & HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 225mm Round Push-in Bucket Trap
for 100mm pipe

Specification code:
R225SR-BT (grate assembly in heel-friendly 316SS)
Shallow version: use suffix -BTS *special order*

- Outlet fits inside 100mm PVC, copper, CI and HDPE.
- Includes stainless steel removable basket and fixed secondary strainer.
- Compatible with PVC leak control flanges for membraned applications.

225mm Round

I.D. Rubber ring seal

100mm PVC Pipe

Min. height 30mm

Fixed secondary strainer - 4mm holes

Strainer Basket
Code: SBV85
3mm holes

Structural Slab

Also suits copper, CI and HDPE pipes.

* shallow version: 105mm deep

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 225mm Round Push-in Basket Trap
for 150mm pipe

Specification code:
R225/150SR-BT (316SS grate assembly)

- Push-in bucket trap assembly - 316 stainless steel heel-friendly grate assembly.
- Includes stainless steel removable basket and fixed secondary strainer.
- Outlet fits inside 150mm PVC, copper, CI and HDPE.
- Grate assembly load-tested to Class C of AS3996-2006.

225mm Round

Min. Height
30mm

Tiling or Topping

Structural Slab

Standard PVC Pipe

O.D. 146mm

150 N.B.

Strainer Basket
Code: SB150S
3mm holes

Fixed secondary strainer - 4mm holes

Rubber ring seal

118mm

Also suits copper, CI.& HDPE pipes.

Typical Application

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

6.09
SPS 220mm Sheet Vinyl Floor Basket Trap
push into 150mm pipe

Specification codes:
LG150SSA-BT (All-304 stainless steel)

- Push-in basket trap assembly for sheet vinyl.
- Includes stainless steel removable basket and fixed secondary strainer.
- Drain body available in 304 stainless. 316 stainless steel available by special order.
- Ring & Grate available in polished 304 stainless steel. Satin 316 stainless steel available by special order.

Typical Application

Typical Application

Min. height: 25mm

Vinyl floor

Structural Slab

Standard PVC Pipe

Strainer Basket
Code: SB150S
3mm holes

Fixed secondary strainer - 4mm holes

O.D. 146mm

150mm NB

Ø240mm (floor drain body)

Clamp ring

Cement screed

Rubber ring seal

Also suits copper, C.I.& HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 150mm Round Vari-Level Basket Trap
(Shallow Body)

Specification codes:
R150SA (304 SS grate, CI retro-fit lower body)
R150SSA (304 SS grate, 316 SS retro-fit lower body)
R150SA2 (304 SS grate, C100A CI "deluxe" lower body)
For 316SS grate add "6" eg "R150SA26"

- Height-adjustable bucket trap assembly with lift-out grate.
- Grate assembly available in 304 stainless steel. 316 stainless non-stock option.
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional Q100Y2B CI retro-fit lower body fits inside 150mmØ core hole.

Height adjustment:
Min. 25mm
Max. 60mm**

Typical Application

SPS 150mm Round Vari-Level Basket Trap

Strainer Basket Code: SB90
3mm holes

Weep slots
3 x places

Fixed Secondary Strainer
4mm holes

C100A CI lower body

Q100Y2B retro-fit lower body (optional)

Optional E100 PVC tailpiece

** Use EP100 extension piece for additional height

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 150mm Square Vari-Level Basket Trap
(Shallow Body)

Specification codes:
Q150SA (304 SS grate, CI retro-fit lower body)
Q150SSA (304 SS grate, 316 SS retro-fit lower body)
Q150SA2 (304 SS grate, C100A "deluxe" CI lower body)
For 316SS grate, add "6" eg "Q150SA26"

Height-adjustable, hinged basket trap assembly to suit 100mm pipe.

Grate assembly available in 304 or 316 stainless steel.

Includes stainless steel removable basket and fixed secondary strainer.

C100A CI "deluxe" lower body with reversible clamp collar (pictured).

Optional Q100Y2B CI retro-fit lower body fits inside 150mmØ core hole.

Typical Application

Height adjustment:
Min. 25mm
Max. 60mm**

** Use EP100 extension piece for additional height

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 155mm Round Vinyl Floor Bucket Trap
(Shallow Body)

**Use EP100 extension piece for additional height**

**Height adjustment:**
- Min. 25mm
- Max. 50mm**

- Ø235mm

- Optional E100 PVC tailpiece

- **Use EP100 extension piece for additional height**

- Ø110 O.D.

- Specified codes:
  - LG100A-S (304 SS ring & grate & body, CI retro-fit body)
  - LG100A-SS (304 SS ring grate & body, 316 SS retro-fit body)
  - LG100SA2 (304 SS ring, grate & body, CI "deluxe" body)

- Height-adjustable basket trap for sheet vinyl floor to suit 100mm pipe.

- Drain body available in 304 stainless as standard or 316 stainless steel as a non-stock option.

- Ring & Grate available in polished 304 or 316 stainless steel.

- Includes stainless steel removable basket and fixed secondary strainer.

- C100A CI "deluxe" lower body with reversible clamping collar.

- Optional CI or SS retro fit lower body fits inside 150mmØ core hole.

**Typical Application**

- Cement screed
- Membrane
- Sheet Vinyl Floor
- Weep slots 3 x places
- Q100Y2B retro-fit lower body (optional)
- Clamp ring

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

6.13
SPS 200mm Square Vari-Level Basket Trap  
(Shallow Body)

** Use EP100 extension piece for additional height

- Height-adjustable, hinged basket trap assembly to suit 100mm pipe.
- Grate assembly available in 304 stainless steel; optional 316 stainless steel.
- Includes stainless steel removable basket and fixed secondary strainer.
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional CI or SS retro-fit lower body fits inside 150mmØ core hole.
- Load Class C per AS3996-2006

** Specification codes:**
Q200SA (304 SS grate, CI retro-fit lower body)
Q200SSA (304 SS grate, 316 SS retro-fit lower body)
Q200SA2 (304 SS grate, C100A CI "deluxe" lower body)
For 316SS grate, add "6" eg "Q200SA26"

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 225mm Round Vari-Level Basket 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 high-heel friendly grate.
- Grate assembly available in 316 stainless steel.
- Includes stainless steel removable basket and fixed secondary strainer.
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional CI or SS retro-fit lower body fits inside 150mmØ core hole.

Height adjustment:
Min. 30mm
Max. 70mm**

Typical Application

- ** Use EP100 extension piece for additional height
- Typical Application
- Ø235mm
- Tiling or Topping
- Strainer Basket Code: SB85 3mm holes
- Fixed Secondary Strainer 4mm holes
- Optional E100 PVC tailpiece
- Optional coupling connection
- Weep slots 3 x places
- C100A CI lower body
- Q100Y2B retro-fit lower body (optional)
- Membrane
- Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 200mm Square Basket Trap Assembly
(Deep Body)

**Specification code:**
- Q200SA3 (304 SS grate, CI deep body)
- Q200SSA3 (316 SS grate, 316 SS deep body)
- Q200SA3-S (304 SS grate, CI shallow body)
- Q200SSA3-S (316SS grate, 316SS shallow body)

**Height adjustment:**
- Min. 25mm
- Max. 50mm**

- Use EP150 for additional height
- **UNI-FIN connector suits 100mm PVC HDPE & Copper

**Typical Application**

- Height-adjustable hinged basket trap assembly.
- Grate assembly available in cast 304 or 316 stainless steel. Load tested to Class C of AS3996-2006.
- Q150/100Y deep basket body fits inside 175mmØ core hole and is available in CI (standard) or 316 stainless steel.
- Q150/100YL shallow body saves 100mm in depth - used for thinner slabs or invert level problems. *suffix -S*
- Secondary strainer affixed with M5 security screws.

**Dimensions:**
- Ø175mm
- 202mm
- I.D. 79mm
- 100mm N.B.

**Secondary Strainer 4mm holes**

**Strainer Basket Code:** SB150
- 3mm holes

**Membrane Weep holes 4 x places**

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
**SPS 225mm Round Bucket Trap Assembly**

*(Deep Body)*

### Specification code:
- R225SA3 (304 SS grate Cl deep body)
- R225SSA3 (316 SS grate, 316 SS deep body)
- R225SA3-S (304 SS grate, Cl shallow body)
- R225SSA3-S (316 SS grate, 316 SS shallow body)

- Height-adjustable basket trap assembly - heel-friendly fine pattern.
- Grate assembly available in cast 316 stainless steel. Load tested to Class C of AS3996-2006.
- Q150/100Y deep basket body fits inside 175mmØ core hole and is available in Cl (standard) or 316 stainless steel.
- Q150/100YL shallow body saves 100mm in depth - used for thinner slabs or invert level problems. *suffix -S*
- Secondary strainer affixed with M5 security screws.

### Typical Application

- **Height adjustment:**
  - Min. 25mm
  - Max. 55mm**

- **Strainer Basket Code:** SB150 (3mm holes)

- **Secondary Strainer:** 4mm holes

- **Q150/100YL Shallow body** (102mm deep)

- **UNI-FIN connector** suits 100mm PVC HDPE & Copper

---

**Speciality Plumbing Supplies Pty Ltd**

Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

6.17
**Use EP150 for additional height**

**Specification code:**
- Q225SA (316 SS grate CI deep body)
- Q200SSA3 (316 SS grate, 316 SS deep body)
- Q200SA3-S (3164 SS grate, CI shallow body)
- Q200SSA3-S (316SS grate, 316SS shallow body)

- Height-adjustable hinged bucket trap assembly.
- Grate assembly available in cast 316 stainless steel. Load tested to Class C of AS3996-2006.
- Q150/100Y deep basket body fits inside 175mmØ core hole and is available in CI (standard) or 316 stainless steel.
- Q150/100YL shallow body saves 100mm in depth - used for thinner slabs or invert level problems. *suffix -S*
- Secondary strainer affixed with M5 security screws.

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

6.18
SPS 300mm Square Basket Trap Assembly (Deep Body)

Specification code:
Q300DA (galvanised ductile iron grate, CI lower body)
Q300SA (304 SS grate, CI lower body)
Q300SSA (316 SS grate, 316 SS lower body)
For shallow version add suffix "-S" to above codes

- Height-adjustable hinged basket trap assembly.
- Grate assembly available in cast 316 stainless steel. Load tested to Class C of AS3996-2006.
- Q150/100Y deep basket body fits inside 175mmØ core hole and is available in CI (standard) or 316 stainless steel.
- Q150/100YL shallow body saves 100mm in depth - used for thinner slabs or invert level problems. *suffix -S*
- Secondary strainer affixed with M5 security screws.

Typical Application

Height adjustment:
Min. 50mm
Max. 75mm**

Q150/100YL Shallow body (102mm deep)

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au

6.19
SPS 220mm Sheet Vinyl Floor Basket Trap
(Deep Body)

Specification code:
LG150A/S (304 SS grate assembly, CI deep body)
LG150A/SSA (316 SS grate assembly, 316 SS deep body)
LG150A/S-S (304 SS grate assembly, CI shallow body)
LG150A/SSA-S (316 SS grate assembly, 316 SS shallow body)

- Height-adjustable basket trap assembly for sheet vinyl flooring.
- Grate assembly available in cast 304 and 316 stainless steel.
- Q150/100Y deep basket body fits inside 175mmØ core hole and is available in CI (standard) or 316 stainless steel.
- Q150/100YL shallow body saves 100mm in depth - used for thinner slabs or invert level problems. *suffix -S*
- Secondary strainer affixed with M5 security screws.

Typical Application

Strainer Basket
Code: SB150
3mm holes

Secondary Strainer
4mm holes

** Use EP150 for additional height

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS Square Special Basket Trap
(Custom made)

Specification code:
Q300BTA (300mm square full 304SS)
Q350BTA (350mm square full 304SS)
Q450BTA (450mm square full 304SS)

- All-304 stainless steel basket trap assembly.
- Load rated to Class C of AS3996.
- Lift-out grate made from heavy-duty 10x10mm square bar, with 10mm gaps.
- 5mm x 5mm wedge wire (high heel friendly) grating available as option.

350mm Square

Typical application

105mm

100mm PVC or HDPE

Concrete ties x 4

50mm

Structural slab

Fixed Secondary Strainer

Strainer basket
SPS Coles-Style Basket Trap Floor Trough

With Class "C" slip-resistant wedge wire grating

Specification codes:
BTT125C1 - standard wedge-wire grating
BTT125C2 - composite grating

Outlet 89mm Ø x 100mm long. Fitted with removable strainer basket and fixed secondary strainer.

- HEELGUARD slip resistant grating
- Class 'C' loading
- Removable basket and fixed secondary strainer
- Full 304-grade s/s construction [316-grade also available at extra cost]
- Cross-break or built-in fall to outlet

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 150mm Square Push-in Bucket Trap
With "Smart Secondary Strainer"*

Specification code:
Q150SR-BTM (All-304 stainless steel)

- Square grate in cast 304 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.

150mm Square

Tiling or topping

Min. height 30mm

Structural slab

Standard PVC Pipe

Strainer basket

"Smart Secondary Strainer"

I.D. Rubber ring seal

Also suits copper, C.I.& HDPE pipes

100 N.B.

185mm

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
## SECTION 7
Cleanouts - Inspection Points - Boundary Traps

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>To suit pipe size (mm):</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.01</td>
<td>130mm Round - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>7.02</td>
<td>150mm Round - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>7.03</td>
<td>130mm Square - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>7.04</td>
<td>117mm Vinyl - Push-in</td>
<td>80</td>
</tr>
<tr>
<td>7.05</td>
<td>135mm Vinyl - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>7.06</td>
<td>135mm Vinyl - Push-in – Special Plug Insert</td>
<td>100</td>
</tr>
<tr>
<td>7.07</td>
<td>130mm Round - Vari-level</td>
<td>100</td>
</tr>
<tr>
<td>7.08</td>
<td>150mm Round - Vari-level</td>
<td>100</td>
</tr>
<tr>
<td>7.09</td>
<td>125mm Vinyl - Vari-level</td>
<td>100</td>
</tr>
<tr>
<td>7.10</td>
<td>155mm Vinyl - Vari-level</td>
<td>100</td>
</tr>
<tr>
<td>7.11</td>
<td>200mm Round - Push-in 150 (Boundary Trap)</td>
<td>150</td>
</tr>
<tr>
<td>7.12</td>
<td>220mm Vinyl - Push-in 150</td>
<td>150</td>
</tr>
<tr>
<td>7.13</td>
<td>220mm Vinyl - vari-level - for sheet vinyl floor</td>
<td>150 (or 100)</td>
</tr>
<tr>
<td>7.14</td>
<td>150mm Square - Push-in – Special Trap Screw</td>
<td>100</td>
</tr>
<tr>
<td>7.15</td>
<td>150 &amp; 200mm Square Inspection Covers</td>
<td>100</td>
</tr>
</tbody>
</table>
SPS 130mm Round Push-in Cleanout

100mm outlet

- Light-duty cleanout in cast 304 and 316 stainless steel.
- Gas-tight lid.
- Security screws also available.

Typical Application

Tiling or topping

Min. height 20mm

Structural Slab

Standard PVC Pipe

I.D. 87mm

O.D. 97mm

Cast into slab

I.D. Rubber ring seal

Also suits copper, C.I.& HDPE pipes.

100 N.B.

Specifications codes:
R130SCR4 (Polished 304 stainless steel)
R130SCR6 (Satin 316 stainless steel)
R130SCRN6 (Non-slip 316 stainless steel)

For security screws, use suffix /SEC
**SPS 150mm Round Push-in Cleanout**

**100mm Outlet**

- Heavy-duty cleanout in cast 316 stainless steel.
- Security screws also available.

**Typical Application**

- Tiling or topping
- Cast into slab

**Dimensions:**
- I.D. 88mm
- O.D. 97mm
- Min. height 20mm
- 100 N.B.

**Specification codes:**
- R150SCR (Satin 316 stainless steel)

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 130mm Square Push-in Cleanout
100mm Outlet

Specification codes:
Q130SCR4 (Polished 304 stainless steel)
Q130SCRN6 (Non-slip 316 stainless steel)
For security screws, use suffix /SEC

- Light-duty cleanout in cast 304 and 316 stainless steel.
- Gas-tight lid.
- Security screws also available.

Typical Application

- Tiling or topping
- Cast into slab

Min. height 20mm
 Structural Slab
 Standard PVC Pipe

I.D. 87mm
 O.D. 97mm

I.D. Rubber ring seal

Also suits copper, C.I.& HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 80mm Push-in Sheet Vinyl Floor Cleanout

Specification codes:
VH80SPA (304 stainless steel ring & grate, ABS body)
V80SPA (All-304 stainless steel assembly)
For bead-blast (slip resistant) finish, use suffix -N

- Push-in cleanout assembly for sheet vinyl flooring.
- Vinyl floor drain body available in ABS and 304. 316SS body available by special order.
- Ring & grate available in polished 304, which can be bead-blasted for slip-resistant finish.
- O-rings adapt outlet to 80mm PVC & copper pipe.

Typical Application

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Push-in Sheet Vinyl Floor Cleanout (New Compact Top Model)

Specification codes:
V100SPA (304SS body, polished 304 SS ring & lid)
V100SPNA (304SS body, non-slip 304 SS ring & lid)
For 316SS tops, add "6" to the above codes
For ABS plastic body, use "VH" instead of "V"

- Push-in floor cleanout assembly for sheet vinyl flooring.
- Drain body available in 304 stainless steel - ABS and 316 stainless steel options.
- Vinyl clamp ring & lid available in polished and non-slip 304 stainless steel. 316 stainless steel non-stock option.
- O-rings adapt outlet to 100mm PVC, copper, HDPE and CI pipe.

Typical Application

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Push-in Sheet Vinyl Floor Cleanout (special "plug insert" version)

Specification codes:
V100SP26A (316SS body, satin 316 SS ring & lid)
For ABS plastic body, use "VH" instead of "V"

- Removal of fixing screws for cleanliness in lab environments
- Push-in floor cleanout assembly for sheet vinyl flooring.
- Drain body available in 316 stainless steel or ABS plastic. Vinyl clamp ring & lid available in polished or satin 316 stainless steel.
- Cleanout insert seals into clamp ring with internal o-ring seal.
- O-rings adapt spigot to 100mm PVC, copper, HDPE and CI pipe.

Typical Application

Sheet Vinyl
Cement Screed
Structural Slab

100mm Pipe

Internal o-ring seal
Lever point for plug removal

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 130mm Round Vari-Level Cleanout

100mm Outlet

- Light-duty cleanout assembly made from 316 stainless steel. 304 stainless steel non-stock option.
- Satin finish standard with optional special non-slip finish (concentric ridges).
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional Q100Y CI retro-fit lower body fits inside 150mmØ core hole.

Specification codes:
R130SC/Q (316 SS cleanout, Q100Y retro-fit lower body)
R130SC/C (316 SS grate, C100A CI "deluxe" lower body)
For non-slip finish, add suffix "N" eg "R130SPN/C"

Height adjustment:
Min. 20mm
Max. 50mm**

Typical Application

Tiling/Paving/Topping

WEEP SLOTS
3 x places

Membrane

130mm Round

Typical Application

Width
95mm

Push-in connection
(specify: -R)

Optional coupling connection

Membrane flange 235Ø

**Optional Extension Piece

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au

7.07
Specification codes:
R150SC/Q (304 SS cleanout, Q100Y retro-fit lower body)
R150SC/C (304 SS grate, C100A CI "deluxe" lower body)
For non-slip finish*, add suffix "N" eg "R150SPN/C"
*316SS and non-slip finish both available by special order

- Cleanout assembly made from 304 stainless steel. 316 stainless steel non-stock option.
- Satin finish standard with optional non-slip finish (concentric ridges).
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional CI retro-fit lower body fits inside 150mmØ core hole.

Typical Application

Height adjustment:
Min. 25mm
Max. 60mm**

SPS 150mm Round Vari-Level Cleanout
100mm Outlet

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au

7.08
Specifcations codes:
LG810SP4/C (304 SS vinyl floor cleanout, CI lower body)
LG810SP6/C (316 SS top, 304 SS drain body, CI lower body)
* for retro-fit body use */Q" instead of "/C"

- Height-adjustable vinyl floor cleanout assembly.
- Vinyl floor body available in 304 stainless steel; 316 stainless steel available by special order.
- Ring & cover available in polished 304 stainless steel; 316 stainless steel available by special order.
- Q100Y optional CI retro fit lower body fits inside 150mmØ core hole */Q".

Height adjustment: Min. 20mm Max. 50mm**

Typical Application

Cement screed

Vinyl Sheet

Clamping ring

Weep slots 3 x places

Quarter Turn Y2B retro-fit lower body (optional)

Optional coupling connection

Push-in connection (specify: -R)

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 155mm Round Sheet Vinyl Floor Cleanout (Vari-Level)

Specification codes:
LG100SP4/C (Polished 304SS top & drain body, CI lower body)
LG100SP6/C (Satin 316SS top, 304SS drain body, CI lower body)
For retro-fit body use suffix "/Q"

- Height-adjustable vinyl floor cleanout assembly.
- Drain body available in 304 stainless steel. 316 stainless steel available by special order.
- Top available in polished 304 stainless steel. Satin 316 stainless steel available by special order.
- C100A CI "deluxe" lower body with reversible clamping collar ("/C").
- Optional CI retro fit lower body fits inside 150mmØ core hole ("/Q").

Height adjustment:
Min. 25mm
Max. 50mm**

Typical Application

Wall connection
Optional extension piece

Cement screed
Push-in connection (specify: -R)
Membrane flange 235Ø

Membrane
Optional coupling connection

Clamping ring

S P S

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 200mm Round Push-in Cleanout (150mm outlet)

Specification codes:
R200/150SCR4 (Polished 304 stainless steel)
R200/150SCR (Satin 316 stainless steel) *SPECIAL*
R200/150SCRN (Non-slip 316 stainless steel)

- Heavy-duty cleanout in cast 304SS and non-slip 316SS. Satin 316SS available by special order.
- Security screws also available.

Min. height: 25mm

Typical Application

Also suits copper, C.I.& HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 220mm Sheet Vinyl Floor Cleanout
(150mm Push-in)

Specification codes:
LG150SPA (Polished 304 stainless steel top)
LG150SPNA (Non-slip 304 stainless steel top)
For 316 stainless steel, add "6" eg "LG150SPNA6"

- Push-in floor cleanout assembly for sheet vinyl.
- Drain body available in 304 stainless steel; 316 stainless steel non-stock option.
- Lid available in polished or non-slip 304 stainless steel. 316 stainless steel non-stock option.

Min. height: 25mm

Typical Application:

- Vinyl floor
- Clamp ring
- Structural Slab
- Standard PVC Pipe
- Rubber ring seal
- Cement screed
- Also suits copper, C.I.& HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9419 0108  E-mail: info@spsdrains.com.au
SPS 220/150mm Sheet Vinyl Floor Cleanout (Vari-Level)

150mm Outlet or 100mm Outlet

- Height-adjustable vinyl floor cleanout assembly.
- Drain body available in 304 stainless steel. 316 stainless steel available by special order.
- Lid available in polished or non-slip 304 stainless steel. 316 stainless steel available by special order.
- 150 or 100mm "Truflo" CI lower body with 150mm clamp collar.

Specification codes:
LG150SP/C150 (Polished 304 Stainless steel)
LG150SPN/C150 (Non-slip 304 stainless steel)
- includes cast iron "Truflo" lower body assembly
* for 316 stainless steel use suffix "6" eg "LG150SP6/C150"
* for 100mm outlet, use suffix "C100" instead of "C150"

Height adjustment:
Min. 28mm
Max. 72mm**

Typical Application

** Use EP150 for additional height

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 150mm Square Special Trap Screw

100mm Outlet

150mm Square

- Push-in trap screw / inspection opening available in 304 stainless steel. 316 stainless steel non-stock option.
- 3mm thick plate compatible with 3mm vinyl tiling commonly used in supermarkets.

Typical Application

4 x countersunk holes as standard

3mm thick Vinyl Tiling...

... or topping

Structural Slab.

Standard PVC Pipe

I.D. Rubber ring seal

Also suits copper, C.I. & HDPE pipes.

Specification code:
Q150IOS (304 stainless steel - slip resistant finish)
SPS 150mm & 200mm Square Inspection Cover

Specification code:
IO150S (304 stainless steel)
IO200S (304 stainless steel)

- Inspection opening cover available in 304 stainless steel. 316 stainless steel non-stock option.
- 3mm thick plate compatible with 3mm vinyl tiling commonly used in supermarkets.

150mm or 200mm Square

4 x countersunk holes as standard

Typical Application

3mm thick Vinyl Tiling...
... or topping

Structural Slab.

Standard PVC Pipe

Also suits copper, C.I. & HDPE pipes.

100 N.B.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
### SECTION 8
Security Floor Drains

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>To suit pipe size (mm):</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.01</td>
<td>130mm Round - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>8.02</td>
<td>150mm Round - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>8.03</td>
<td>135mm Vinyl - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>8.04</td>
<td>130mm Round - Vari-level</td>
<td>100</td>
</tr>
<tr>
<td>8.05</td>
<td>150mm Round - Vari-level</td>
<td>100</td>
</tr>
<tr>
<td>8.06</td>
<td>155mm Vinyl - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>8.07</td>
<td>120mm Round - Vari-level - Anti-ligature</td>
<td>100</td>
</tr>
<tr>
<td>8.08</td>
<td>120mm Round - Vari-level - 90° Outlet - Anti-ligature</td>
<td>50 / 65</td>
</tr>
<tr>
<td>8.09</td>
<td>125mm Vinyl - Vari-level - Anti-ligature</td>
<td>100</td>
</tr>
<tr>
<td>8.10</td>
<td>125mm Vinyl - Vari-level - 90° Outlet - Anti-ligature</td>
<td>50 / 65</td>
</tr>
<tr>
<td>8.11</td>
<td>125mm Vinyl - Integral Puddle Flange - Anti-ligature</td>
<td>100</td>
</tr>
</tbody>
</table>
**SPS 130mm Round Push-in Prison Drain**

**100mm Outlet**

- **Floor waste includes security screws and 6mm holes for improved tamper-resistance.**
- **Grate assembly available in 304 stainless steel. 316 stainless steel available by special order.**
- **Pushes into 100mm PVC, copper, HDPE or cast iron.**

**Specification code:**
R130SHR4 (satin 304 stainless steel)
316SS available by special order

**Typical Applications**

- **Tiling or topping**
- **With topping/tiling**
- **Cast into slab**

**Installation with puddle flange**

130mm round grate with 6mm holes and "hex-head" or "torx" security screws

**Minimum height 20mm**

I.D. 87mm

O.D. 97mm

100 N.B.

**I.D. rubber rings to suit 100mm PVC, HDPE & copper**

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
Floor waste includes special tamper-resistant features for prisons and safe cells.

Grate assembly available in 304 stainless steel.

Pushes into 100mm PVC, copper, HDPE or cast iron.

150mm round grate with 6mm holes and "hex-head" or "torx" security screws.

Typical Application

Minimum height 30mm

Tiling or topping

Structural Slab

Standard PVC Pipe

I.D Rubber ring seal

100 N.B.

Also suits copper, C.I. & HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au

8.02
SPS 100mm Push-in Sheet Vinyl Floor Waste
(Compact Security/Prison Model)

Specifications:
- Push-in floor waste assembly for sheet vinyl flooring.
- Grate features security screws and 5mm holes.
- O-rings adapt spigot to 100mm PVC, copper, HDPE and CI pipe.

Typical Application:
- Sheet Vinyl
- Cement Screed
- Structural Slab
- 100mm Pipe

Dimensions:
- O.D. 97mm
- I.D. 88mm
- 135mm
- 50mm
- 150mm
- 25mm
- 50mm

Specification codes:
- VH100SHA (ABS body, 304 stainless steel top)
- V100SSHA4 (Assembly in 304 stainless steel)

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 130mm Round Prison / Safe Cell Drain

(Vari-Level)

- Floor waste includes security screws and 6mm holes for improved tamper-resistance.
- Grate assembly available in 304 stainless steel. 316SS available by special request.
- C100A CI "deluxe" lower body with reversible clamp collar (pictured).
- Optional Q100Y2B CI retro-fit lower body fits inside 150mmØ core hole.

**Specification codes:**
- R130SH4/E (304SS grate with PVC adapter *not shown*)
- R130SH/Q (304SS grate, Q100Y2B retro-fit lower body)
- R130SH/C (304SS grate, C100A CI "deluxe" lower body)

- Height adjustment:
  Min. 20mm
  Max. 50mm**

- Weep slots
  3 x places

- Tiling/Paving/Topping

- Speciality Plumbing Supplies Pty Ltd
  Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
**SPS 150mm Round Prison / Safe Cell Drain**

(Vari-Level)

100mm outlet

- Floor waste includes special tamper-resistant features for prisons and safe cells.
- Grate assembly available in 304 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.

**Typical Application**

- Tiling/Paving/Topping
- Membrane
- Optional coupling connection
- Push-in connection (specify: -R)
- Optional retro-fit lower body
- Weep slots 3 x places

**Specification codes:**
R150SH/E (304 SS grate with PVC adapter *Not shown*)
R150SH/Q (304 SS grate, CI retro-fit lower body)
R150SH/SQ (304 SS grate, SS retro-fit lower body)
R150SH/C (304 SS grate, C100A CI "deluxe" lower body)

**Height adjustment:**
Min. 25mm
Max. 60mm**

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Sheet Vinyl Prison Floor Waste (Vari-Level)

**Specification codes:**
LG100SH/E (304 SS grate with PVC adapter *Not shown*)
LG100SH/C (304 stainless steel floor waste, CI lower body) for retro-fit lower body, use "/Q" instead of "/C"

- Height-adjustable vinyl floor waste assembly.
- High-security features: 7mm holes and tamper-resistant screws.
- Drain body available in bronze or 316 stainless steel.
- Ring & Grate available in 304 grade stainless steel. 316 stainless steel non-stock option.
- C100A CI "deluxe" lower body with reversible clamping collar.

**Typical Application**

- Clamping ring
- Sheet Vinyl Floor
- Membrane
- Weep slots 3 x places
- Optional retro-fit lower body

**Clamping ring**

**Sheet Vinyl Floor**

**Membrane**

**Weep slots 3 x places**

**Optional retro-fit lower body**

**Height adjustment:**
Min. 25mm
Max. 50mm**

**Dimensional Data (mm)**

<table>
<thead>
<tr>
<th>NOMINAL DIAMETER</th>
<th>ØA</th>
<th>ØB</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>175</td>
<td>155</td>
</tr>
</tbody>
</table>

**Optional extension piece**

**Optional coupling connection**

**Push-in connection (specify: -R)**

**100mm N.B.**

**235Ø**

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 120mm Round Prison Floor Waste
(100mm Vari-Level) "ACR"

**Specification codes:**
- R120S-ACR/E (304 SS grate with PVC adapter "Not shown")
- R120S-ACR/C (with C100A cast iron "deluxe" lower body)
- R120S-ACR/Q (with Q100Y2B cast iron retro-fit body)

- Heavy-duty, long-lasting all-304 stainless steel floor waste assembly.
- New "Anti-Crocodile-Roll" features, including concealed waterways with no anchor points.
- Includes "Pin-Hex" style security screws. Other versions optional, including "Toro" and "Snake-eye" style.
- C100A Cl "deluxe" lower body with reversible clamp collar.
- Q100Y2B retro-fit lower body for in-slab leak control

**Height adjustment:**
Min. 25mm
Max. 60mm**

Typical Application

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS R120mm Round "ACR" Side Outlet Prison

Floor Waste
(100x65/50mm)

Specification codes:
R120S-ACR4/C90 (Satin 304 stainless steel)
Includes Q165/90Y 65/50mm CI side outlet lower body

- Heavy-duty, long-lasting all 304 stainless steel floor waste assembly.
- New "Anti-Crocodile-Roll" features, including concealed waterway and no anchor points.
- Several types of security screw are available, including "torx" style and "snake-eye" style.
- Q165/90Y cast iron side outlet lower body connects to 65mm and 50mm pipe.

Min. height 25mm

Typical Applications

Spigot pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC/HDPE with no-hub coupling.

Dimensions (mm)

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>95</td>
<td>18</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>65</td>
<td>100</td>
<td>15</td>
<td>180</td>
<td>200</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 100mm "ACR" Ultra Compact Prison Vinyl Floor Waste (100mm Vari-Level)

**Specification codes:**
LG810SSA-ACR4/E (304 SS grate with PVC adapter *Not shown*)
LG810SSA-ACR4/C (with C100A "deluxe" CI lower body)
LG810SSA-ACR4/Q (with Q100Y2B retro-fit CI lower body)

- Heavy-duty, long-lasting all 304 stainless steel vinyl floor waste assembly.
- New "Anti-Crocodile-Roll" features, including concealed waterway and no anchor points.
- Several types of security screw are available, including "torx" style and "snake-eye" style.
- C100A CI "deluxe" lower body with reversible clamp collar.
- Q100Y2B retro-fit lower body for in-slab leak control

Typical Application

Cement screed

Min. height 18mm

Membrane flange 235Ø

95mm

65mm

125mm

5mm slot

Sheet Vinyl Floor

** Optional extension piece

Optional coupling connection

Push-in connection (specify: -R)

Weep slots

3 x places

Concealed waterway

Q100Y2B retro-fit lower body (optional)

100mm N.B.

** Optional extension piece

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 100mm "ACR" "Ultra Compact" Prison Vinyl Floor Waste Side Outlet

(100x65/50mm)

Specification codes:
LG810SSA-ACR4/C90 (Satin 304 stainless steel)
Includes Q165/90Y 65/50mm Cl side outlet lower body

- Heavy-duty, long-lasting all 304 stainless steel floor waste assembly.
- New "Anti-Crocodile-Roll" features, including concealed waterway and no anchor points.
- Several types of security screw are available, including "torx" style and "snake-eye" style.
- Q165/90Y cast iron side outlet lower body connects to 65mm and 50mm pipe.

Typical Applications

Drain body OD
142mm

Min. height 18mm

Spigot pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC/HDPE with no-hub coupling.

- Dimensions (mm)

<table>
<thead>
<tr>
<th>N.B</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>95</td>
<td>18</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>65</td>
<td>100</td>
<td>15</td>
<td>180</td>
<td>200</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 100mm Retro-fit Puddle Flange with Slip-in "ACR" Prison Vinyl Floor Waste

Specification code:
LG87SVA-ACR4/PF (ABS body, Satin 304SS top)
Includes PF100 lo-profile puddle flange

- Retro-fit puddle flange with ultra-thin face.
- Lo-profile vinyl floor waste slips inside I.D. of flange. 1mm spacer fins provides adequate leak control.
- Satin 304-grade stainless steel ring and grate.
- "ACR" security features include concealed waterway and "hex-head" security screws.

Flange OD 180mm

Drain body OD 142mm

Typical Application

Min. Height 20mm

Sheet vinyl flooring

Screed

Structural Slab

Standard PVC Pipe

I.D. 81mm

1mm spacer fins (x4)

1mm spacer fins (x8)

100mm N.B.

HDPE pipes.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
### SECTION 9
**Specials & Miscellaneous**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.01</td>
<td>100mm Drop-in Balcony Drains</td>
<td>65</td>
</tr>
<tr>
<td>9.02</td>
<td>Retro-fit Membrane Flange with Flat or Dome Grate</td>
<td>100</td>
</tr>
<tr>
<td>9.03</td>
<td>Special 90° Balcony Drain with Flat or Dome Grate</td>
<td>50 / 65</td>
</tr>
<tr>
<td>9.04</td>
<td>200mm Square Downpipe Drain - Push-in</td>
<td>100</td>
</tr>
<tr>
<td>9.05</td>
<td>200mm Square Downpipe Drain - Vari-level</td>
<td>100 (or 150)</td>
</tr>
<tr>
<td>9.06</td>
<td>225mm Round Downpipe Drain - Vari-level</td>
<td>100 (or 150)</td>
</tr>
<tr>
<td>9.07</td>
<td>225mm Square Downpipe Drain - Vari-level</td>
<td>150</td>
</tr>
<tr>
<td>9.08</td>
<td>100mm Truflo RWO – recessed flat grate for under downpipes</td>
<td>100 &amp; 150</td>
</tr>
<tr>
<td>9.09</td>
<td>The Balcony Box</td>
<td>100</td>
</tr>
<tr>
<td>9.10</td>
<td>Custom Stainless Steel Grate &amp; Trough - Standard</td>
<td>100</td>
</tr>
<tr>
<td>9.11</td>
<td>Custom Stainless Steel Grate &amp; Trough - Vinyl Clamp</td>
<td>100</td>
</tr>
</tbody>
</table>

*To suit pipe size (mm):*
Round or square grate available in 316 stainless steel. 304 stainless steel non-stock option.

50mm spigot drops inside 65mm pipe after liquid membrane has been applied into pipe.

To be employed only with the approval of the waterproofing contractor.

Extra precautions must be employed to prevent tile bedding / grout from blocking the outlet.

**Specification codes:**
- R100S2 (Round 316 stainless steel grate)
- Q100S2 (Square 316 stainless steel grate)

**Typical Application**
- **Structural Slab**
- **Membrane**
- **Tiling or Topping**
- **Ø65mm PVC or copper bend**
- **120 Min.**

**Min. Height 20mm**

**Speciality Plumbing Supplies Pty Ltd**
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 100mm Retro-fit Dome/Flat Grate & Flange

Specification code:
RC100AD (304 s/s flange, aluminium dome
RC100AF (304 s/s flange, aluminium flat grate

Weep slots x 3
Clamping flange 190mm O.D.
Domed grate 155mm O.D.

Typical Application

Membrane
Structural Slab
Standard PVC Pipe
I.D Rubber ring seal
Also suits copper, C.I & HDPE pipes

SPS

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS Special Dome/Flat 90° Balcony Drain
65/50mm outlet

Specification code:
C50/90AD (ABS lower body, LM6 aluminium dome)
C50/90AF (ABS lower body, LM6 aluminium flat grate)

- Special flat or dome grate adapts to side outlet balcony drain body.
- Suitable for waterproofed balconies / podia with timber decking or suspended paver systems.

Typical Application

Spigot pushes into 65mm PVC or copper with o-ring connection, or connects to 50mm PVC/HDPE with no-hub coupling.

<table>
<thead>
<tr>
<th>N.B.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>100</td>
<td>40</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>65</td>
<td>105</td>
<td>37</td>
<td>180</td>
<td>200</td>
</tr>
</tbody>
</table>

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
**SPS 200mm Square Push-in Floor Drain**

100mm Outlet

**Downpipe Version**

**Specification code:**
- Q200SRDP (satin 316 stainless steel) *Non stock option*
- Q200SRDP4 (polished 304 stainless steel)

**High-heel friendly pattern (6mm gaps)**

**Installation with puddle flange**

**Typical Applications**

- Structural Slab
- Standard PVC Pipe
- With topping/tiling

- **Min. height 30mm**
- **Structural Slab**

- **I.D. rubber ring seals to suit 100mm PVC, HDPE & copper**

- **Cast into slab**

**SPS Recommends the HI-FLOW version Q200/150SDP4**

****Suitable for LOW-FLOW applications only**
**SPS 200mm Square Downpipe Drain**

**Specification code:**
- Q200SDP4/C100 (Polished 304 SS grate assembly, CI lower body)
- Q200SDP6/C100 (Satin 316 SS grate & frame ass'ly, CI lower body)

For 150mm outlet, use suffix "C150" not "C100"

---

### 100mm Outlet

- Height-adjustable high-heel friendly grate assembly.
- Grate assembly features 120Ø hole to allow insertion of 110mm downpipe.
- Double-hinge design for ease of access and maintenance.
- Available in 304 or 316 stainless steel.
- 100mm or 150mm Truflo CI lower body with 150mm reversible clamp collar.

---

### Height adjustment:

- Min. 30mm
- Max. 95mm*

---

### Integral puddle flange Ø270

---

### 150mm outlet shown with optional tailpiece connector

---

### 100mm outlet shown with optional coupling connector

---

**Speciality Plumbing Supplies Pty Ltd**

Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au
SPS 225mm Round Special Downpipe Drain

**Specification code:**
- R225SDP4/C100 (Polished 304 SS grate assembly, CI lower body)
- R225SDP6/C100 (Satin 316 SS grate & frame ass'y, CI lower body)

For 150mm outlet, use suffix "C150" not "C100"

100mm Outlet or 150mm Outlet

- Height-adjustable high-heel friendly grate assembly.
- Grate assembly features 120Ø hole to allow insertion of 110mm downpipe.
- Available in 304. Note 316 is available on request.
- 100mm or 150mm Truflo CI lower body with 150mm reversible clamp collar.

Height adjustment:
- Min. 30mm
- Max. 70mm

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900  Fax: (02) 9417 0108  E-mail: info@spsdrains.com.au

Integral puddle flange Ø270
SPS 225mm Square Special Downpipe Drain

150mm outlet or 100mm outlet

Height adjustment:
Min. 30mm
Max. 95mm*

Specification code:
Q225SDP4/C150 (Polished 304 SS grate assembly, Cl lower body)
Q225SDP6/C150 (Satin 316 SS grate & frame ass'y, Cl lower body)
For 100mm outlet, use suffix /C100
*316SS version is SPECIAL ORDER*

Height-adjustable high-heel friendly grate assembly.

Grate assembly features 170mmØ hole to allow insertion of 160mm downpipe.

Double-hinge design for ease of access and maintenance.

Available in 304 stainless steel; 316 stainless steel available by special order.

100mm or 150mm Truflo CI lower body with 150mm reversible clamp collar.

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 100 & 150mm Truflo Special Downpipe Discharge Drain

 Specification codes:
 T3150/100FE (Aluminium grate, galvanised CI body, 100mm outlet)
 T3150FE (Aluminium grate, galvanised CI body, 150mm outlet)

 Suggested application:
 Rainwater inlet to be installed beneath the downpipes.

 Flat grate in LM-6 aluminium

 Optional concrete surround (by others)

 HD stainless steel fixing screws (x2)

 Grate recessed 16mm inside body

 150mm PVC spigot adapter

 100mm PVC spigot adapter

 N B

 Speciality Plumbing Supplies Pty Ltd
 Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS 100mm Dual Inlet Balcony Box

Specification codes:
BB100 (injection-moulded uPVC plastic)

100mm Downpipe (hole cut on-site)
100mm Floor waste (hole cut on-site)

Standard 100mm Socket Outlet

Typical Application

Downpipe and floor waste inlets cut on site to fit as needed
Weep holes cut on site by installer

Membrane
Tiling / Topping
Structural Slab

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 Email: info@spsdrains.com.au
SPS S/S Custom size grate & trough
With S/S wedge wire grating

Specification codes:
SSTCUST - standard wedge-wire grating and channel

- Available with standard outlet or dual strainer basket trap
- HEELGUARD 304 s/s grating - 3mm wedgwire x 5mm gap
- Load Class 'B' under AS3996
- Dimpled non slip 316 s/s wedgewire available at extra cost
- Full 304-grade s/s construction
- 316-grade also available at extra cost
- Cross-break to outlet standard

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spsdrains.com.au
SPS S/S Custom grate & trough with wedge wire grate - vinyl clamp edge

Specification codes:
SSTVCUST - standard wedge-wire grating

- HEELGUARD slip resistant grating
- Class 'B' loading rating to AS3996-2006
  Higher load ratings available on request
- Removable dual strainer basket trap or
  standard outlet available
- Full 304-grade s/s construction. 316 s/s
  available on request
- Cross-break to outlet or fall to outlet
  available
Appendix
Flow Characteristic Curve – TIA100F

Observation Comments:

- Flow rates from 0-7.0 L/s (30mm Head) produced a linear characteristic curve with stable water head levels.
- At 8.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 10mm.
- At 10.0 – 14.0 L/s the flow surcharged with the water head fluctuating 30mm.
- The maximum flow limit to maintain weir flow conditions is 7.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher: 
Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016

Weir Flow – 7 L/s (30mm)
Flow Characteristic Curve – TIA150F

**Observation Comments:**
- Flow rates from 0-6.0 L/s (35mm Head) produced a linear characteristic curve with stable water head levels.
- At 8.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 10.0 – 14.0 L/s the flow surcharged characterised by the water level fluctuating 10 – 20 mm.
- The maximum flow limit to maintain weir flow conditions is 6.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016

---

TRANSITION FLOW REGION
Please note that the water depth levels in this shaded area of the chart were observed to fluctuate continuously between maximum and minimum levels due to the transition between weir and orifice flow conditions occurring at the outlet. Only the maximum observed water levels are plotted on this chart.
Flow Characteristic Curve – TIA100F2

Observation Comments:

- Flow rates from 0-8.0 L/s (30mm Head) produced a linear characteristic curve with the exception of open outlet which increased water head level rapidly at 6.0 L/s.
- At 10.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 20mm.
- At 12.0 – 14.0 L/s the flow surcharged with the water head fluctuating 40mm.
- The maximum flow limit to maintain weir flow conditions is 8.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher: Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016 Date: 16th November 2016
Flow Characteristic Curve – TIA150F2

Observation Comments:

- Flow rates from 0-6.0 L/s (30mm Head) produced a linear characteristic curve with stable water head levels.
- At 8.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 10.0 – 14.0 L/s the flow surcharged characterised by the water level fluctuating 10 - 20mm.
- The maximum flow limit to maintain weir flow conditions is 6.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – TIA100D2

<table>
<thead>
<tr>
<th>Flow Rate (L/s)</th>
<th>Water Head Level (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>11</td>
<td>110</td>
</tr>
<tr>
<td>12</td>
<td>120</td>
</tr>
</tbody>
</table>

**Observation Comments:**
- Flow rates from 0-8.0 L/s (37mm Head) produced a linear characteristic curve with the exception of open outlet which increased water head level rapidly at 8.0 L/s.
- At 10.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 20mm.
- Above 12.0L/s the flow surcharged.
- The maximum flow limit to maintain weir flow conditions is 8.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Mark Alexander,
Chief Researcher: AHSCA Foundation Chairman:

Date: 7th June 2017 Date: 7th June 2017
Flow Characteristic Curve – TIA150D2

Observation Comments:

- Flow rates from 0-8.0 L/s (30mm Head) produced a linear characteristic curve with stable water head levels.
- At 10.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 10.0 – 14.0 L/s the flow surcharged characterised by the water level fluctuating 10 - 20mm.
- The maximum flow limit to maintain weir flow conditions is 8.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher: Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016  Date: 16th November 2016
Flow Characteristic Curve – TIA80/90F

**Observation Comments:**

- Flow rates from 0-1.5 L/s (6mm Head) produced a flat characteristic curve with stable water head levels.
- At 2.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 3.0 – 4.0 L/s the flow surcharged with the water head rising rapidly to 90mm.
- The maximum flow limit to maintain weir flow conditions is 1.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – TIA100/90F

**Observation Comments:**
- Flow rates from 2.0-3.0 L/s (15mm Head) produced a flat characteristic curve with stable water head levels.
- At 4.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 5.0 – 7.0 L/s the flow surcharged with the water head rising rapidly to 100mm.
- The maximum flow limit to maintain weir flow conditions is 3.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – TIA80/90F2

Observation Comments:

- Flow rates from 0-1.5 L/s (8mm Head) produced a flat characteristic curve with stable water head levels.
- At 2.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 3.0 – 4.0 L/s the flow surcharged with the water head rising rapidly to 90mm.
- The maximum flow limit to maintain weir flow conditions is 1.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher: Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016 Date: 16th November 2016
**Flow Characteristic Curve – TIA100/90F2**

**Observation Comments:**
- Flow rates from 2.0-3.0 L/s (13mm Head) produced a flat characteristic curve with stable water head levels.
- At 4.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 5.0 – 7.0 L/s the flow surcharged with the water head rising rapidly to 90mm.
- The maximum flow limit to maintain weir flow conditions is 3.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  

Mark Alexander,  
AHSCA Foundation Chairman:

Date: 16th November 2016
Flow Characteristic Curve – TIA80/90D2

Observation Comments:
- Flow rates from 0-1.5 L/s (7mm Head) produced a flat characteristic curve with stable water head levels.
- At 2.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 3.0 – 4.0 L/s the flow surcharged with the water head rising rapidly to 90mm.
- The maximum flow limit to maintain weir flow conditions is 1.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – TIA100/90D2

<table>
<thead>
<tr>
<th>Flow Rates (L/s)</th>
<th>Water Head Level (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 - 3.0</td>
<td>0 - 10</td>
</tr>
<tr>
<td>4.0</td>
<td>20 - 80</td>
</tr>
<tr>
<td>5.0 - 7.0</td>
<td>80</td>
</tr>
</tbody>
</table>

**Observation Comments:**
- Flow rates from 2.0-3.0 L/s (12mm Head) produced a flat characteristic curve with stable water head levels.
- At 4.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 5.0 – 7.0 L/s the flow surcharged with the water head rising rapidly to 80mm.
- The maximum flow limit to maintain weir flow conditions is 3.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – SIA150F

Observation Comments:

- Flow rates from 0-10.0 L/s (25mm Head) produced a flat characteristic curve with stable water head levels.
- At 12.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow, then choking between 14.0-20.0 L/s and the water head rising to 50mm.
- The maximum flow limit to maintain weir flow conditions is 10.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Mark Alexander,
Chief Researcher: AHSCA Foundation Chairman:

Date: 24th January 2017 Date: 24th January 2017
Flow Characteristic Curve – SIA150D2

**Observation Comments:**

- Flow rates from 0-18.0 L/s (42mm Head) produced a flat characteristic curve with stable water head levels.
- At 20.0 – 22.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- The maximum flow limit to maintain weir flow conditions is 18.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 17th January 2017  

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 17th January 2017
Flow Characteristic Curve – PD50CS

- Flow rates from 0-0.75 L/s (22mm Head) produced a flat characteristic curve.
- At 1.0 L/s the weir flow transitioned to surcharged flow with the water head rising rapidly to 60mm at 1.5 L/s.
- The maximum flow limit to maintain weir flow conditions is 0.75 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher: 
Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016
Flow Characteristic Curve – PD80CS

Observation Comments:
- Flow rates from 0-2.0 L/s (50mm Head) produced a flat characteristic curve with weir flow conditions.
- At 2.5 L/s the weir flow transitioned to vortex flow, then to surcharged flow at 3.5 L/s (120mm) characterised by a sudden priming of the outlet and water level fluctuating 50mm.
- The maximum flow limit to maintain weir flow conditions is 2.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher:  
Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016  
Date: 16th November 2016
Flow Characteristic Curve – PD100CS

Observation Comments:

- Flow rates from 0-4.0 L/s (80mm Head) produced a flat characteristic curve with weir flow conditions.
- At 5.0 L/s the weir flow transitioned to vortex flow, and remained in vortex flow up to 10.0 L/s (115mm).
- The maximum flow limit to maintain weir flow conditions is 4.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, 
Chief Researcher: 
Date: 16th November 2016

Mark Alexander, 
AHSCA Foundation Chairman: 
Date: 16th November 2016
Flow Characteristic Curve - Q100/80SR

Observation Comments:
- Flow rates from 0 - 0.75 L/s (14 mm Head) produced a linear characteristic curve.
- At 1.0 L/s the weir flow transitioned to orifice flow conditions.
- Flow rates between 1.0 - 2.0 L/s were observed to fluctuate between weir and orifice conditions. The maximum stable water level achieved was 70 mm at a flowrate of 2.0L/s. Increasing the flowrate beyond this value caused the tank to surcharge.
- The maximum flow limit to maintain weir flow conditions was 0.75 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher: Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016 Date: 16th November 2016
Flow Characteristic Curve - R130SR4

- **Weir flow - 1 L/s (40mm)**
- **Orifice Flow - 3.0 L/s (80mm)**

**Observation Comments:**

- A concentric swirl pattern and air core was observed which indicated weir flow conditions, with the water head level stabilising at each flow rate setpoint from 0-2.0 L/s producing a linear characteristic curve for all outlet pipe connections.
- At 3.0 L/s a transition from swirl motion to vortex flow was observed, as the air core decreased and moved to the side of the grate. At 3.0 L/s the vortex surcharged and transitioned to orifice conditions were characterised by the water level surging down 10 -20mm.
- The maximum flow limit to maintain weir flow conditions is 2.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – Q130SR4

<table>
<thead>
<tr>
<th>Water-Head Level (mm)</th>
<th>Flow Rate (L/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>40</td>
<td>4</td>
</tr>
<tr>
<td>50</td>
<td>5</td>
</tr>
</tbody>
</table>

**Weir flow - 1 L/s (20mm)**

**Surcharged flow – 3 L/s (65mm)**

**Observation Comments:**

- Flow rates from 0-2.5 L/s (55mm Head) produced a linear characteristic curve. At 3.0 - 3.5 L/s the weir flow transitioned to vortex flow, then surcharged with the head level stabilising at 55mm.
- From 3.5 - 5 L/s the flow conditions cycled between vortex and surcharged flow characterised by the water level fluctuating 20mm.
- The maximum flow limit to maintain weir flow conditions is 2.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher:  
Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016  
Date: 16th November 2016
**Flow Characteristic Curve - R150SR4**

<table>
<thead>
<tr>
<th>Water Head Level (mm)</th>
<th>Flow Rate (L/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>40</td>
<td>4</td>
</tr>
<tr>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>60</td>
<td>6</td>
</tr>
<tr>
<td>70</td>
<td>7</td>
</tr>
<tr>
<td>80</td>
<td>8</td>
</tr>
<tr>
<td>90</td>
<td>9</td>
</tr>
<tr>
<td>100</td>
<td>10</td>
</tr>
</tbody>
</table>

**Observation Comments:**

- Flow rates from 0-2 L/s (60mm Head) produced a linear characteristic curve. At 2.5 L/s the weir flow transitioned to vortex flow with the head level stabilising at 55-60mm.
- Flow rates from 3-5 L/s the vortex surcharged and transitioned to orifice conditions, characterised by the water level fluctuating 10 -20mm.
- The maximum flow limit to maintain weir flow conditions is 2.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – Q150SR4

Observation Comments:

- Flow rates from 0-2.0 L/s (35mm Head) produced a linear characteristic curve. At 2.5 - 3.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 20mm.
- At 4.0 L/s the flow surcharged and stabilised at 30mm head level.
- Flowrates between 5-6 L/s produced surcharged flow conditions with the water head rising steadily and stabilising.
- The maximum flow limit to maintain weir flow conditions is 2.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – Q200SR4

Observation Comments:
- Flow rates from 0-2.0 L/s (20mm) produced a linear characteristic curve which began to flatten at 2.5 L/s.
- At 3.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 10mm.
- At 4.0 L/s the flow surcharged.
- Flowrates between 5-8 L/s produced surcharged flow conditions with the water head rising rapidly or fluctuating 40mm with the vertical pipe.
- The maximum flow limit to maintain weir flow conditions is 2.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – Q200/150SR

Observation Comments:

- Flow rates from 0-4.0 L/s (25mm Head) produced a linear characteristic.
- At 5.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 10mm.
- Flowrates between 6.0-12.0 L/s produced surcharged flow conditions with the water head rising rapidly to 80mm.
- The maximum flow limit to maintain weir flow conditions is 4.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher: [Signature]  
Mark Alexander, AHSCA Foundation Chairman: [Signature]

Date: 16th November 2016  Date: 16th November 2016
Flow Characteristic Curve – R225SR4

<table>
<thead>
<tr>
<th>Flow Rate (L/s)</th>
<th>Water-Head Level (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>60</td>
</tr>
</tbody>
</table>

Observation Comments:

- Flow rates from 0-2.5 L/s (35mm Head) produced a linear characteristic curve.
- At 3.0 L/s the weir flow transitioned to vortex flow, then surcharged. From 3.5 - 6 L/s the flow conditions cycled between vortex and surcharged flow characterised by the water level fluctuating 10 -20mm.
- The maximum flow limit to maintain weir flow conditions is 2.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher: 
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman: 
Date: 16th November 2016
**Flow Characteristic Curve – Q225/150SR4**

**Observation Comments:**

- Flow rates from 0-2.0 L/s (20mm Head) produced a linear characteristic curve which began to flatten at 2.5 L/s.
- At 3.0-4.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 5mm.
- Flow rates between 5-10 L/s produced surcharged flow conditions with the water head rising rapidly to 90mm.
- The maximum flow limit to maintain weir flow conditions is 2.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – R150S4/C

Observation Comments:

- Flow rates from 0-2.5 L/s (50mm) produced a linear characteristic curve which began to flatten at 2.5 L/s.
- At 3.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 20mm.
- At 4.0 L/s the flow surcharged and stabilised at 30mm head level.
- Flowrates between 5-6 L/s produced surcharged flow conditions with the water head fluctuating 40mm.
- The maximum flow limit to maintain weir flow conditions is 2.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,                           Mark Alexander,
Chief Researcher:                        AHSCA Foundation Chairman:

Date: 16th November 2016                  Date: 16th November 2016
Flow Characteristic Curve – Q200S4/C

**Observation Comments:**

- Flow rates from 0-2.0 L/s (20mm Head) produced a linear characteristic curve which began to flatten at 2.5 L/s.
- At 3.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 10mm.
- At 4.0 L/s the flow surcharged.
- Flow rates between 5.0-8.0 L/s produced surcharged flow conditions with the water head rising rapidly or fluctuating 40 mm with the vertical pipe.
- The maximum flow limit to maintain weir flow conditions is 2.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, 
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – R225S4C

Observation Comments:
- Flow rates from 0-2.5 L/s (15mm Head) produced a linear characteristic curve which began to flatten at 2.5 L/s.
- At 3.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 10mm.
- At 4.0 L/s the flow surcharged and stabilised at 30mm head level.
- Flowrates between 5-8 L/s produced surcharged flow conditions with the water head fluctuating 40mm.
- The maximum flow limit to maintain weir flow conditions is 2.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Weir Flow – 4 L/s (25mm)  
Orifice Flow – 6 L/s (30mm)

**Observation Comments:**

- Flow rates from 0-4.0 L/s (25mm Head) produced a linear characteristic.
- At 5.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 10mm.
- Flow rates between 6.0-12.0 L/s produced surcharged flow conditions with the water head rising rapidly to 80mm.
- The maximum flow limit to maintain weir flow conditions is 4.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – R225S4/C150

Observation Comments:

- Flow rates from 0-2.0 L/s (20 mm Head) produced a linear characteristic curve which began to flatten at 2.5 L/s.
- At 3.0 - 4.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow characterised by the water level fluctuating 5 mm.
- Flowrates between 5-10 L/s produced surcharged flow conditions with the water head rising rapidly to 90 mm.
- The maximum flow limit to maintain weir flow conditions is 2.5 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher:  
Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016  
Date: 16th November 2016
Flow Characteristic Curve – Q225S/C150

Observation Comments:

- Flow rates from 0-6.0 L/s (18mm Head) produced a linear characteristic curve which began to level out at 8.0 L/s.
- At 8.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 10.0 – 14.0 L/s the flow surcharged with the water head rising to rapidly to 75mm.
- The maximum flow limit to maintain weir flow conditions is 6.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher:  
Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016  
Date: 16th November 2016
Flow Characteristic Curve – R300S/C150

**Observation Comments:**
- Flow rates from 0-7.0 L/s (25mm Head) produced a linear characteristic curve which began to level out at 7.0 L/s.
- At 8.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 10.0 – 14.0 L/s the flow surcharged with the water head rising to rapidly to 60mm.
- The maximum flow limit to maintain weir flow conditions is 7.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher:  
Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016  
Date: 16th November 2016
Flow Characteristic Curve – Q300D/150C

**Observation Comments:**
- Flow rates from 0-7.0 L/s (18mm Head) produced a linear characteristic curve which began to level out at 7.0 L/s.
- At 8.0 L/s the weir flow transitioned to vortex flow, cycling between vortex and surcharged flow.
- At 10.0 – 14.0 L/s the flow surcharged with the water head rising to rapidly to 50mm.
- The maximum flow limit to maintain weir flow conditions is 7.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  
Date: 16th November 2016

Mark Alexander,  
AHSCA Foundation Chairman:  
Date: 16th November 2016
Flow Characteristic Curve – R100S4/C90

Observation Comments:

- A concentric swirl pattern was observed which indicated weir flow conditions, with the water head level stabilising at each flow rate setpoint from 0-2.0 L/s.
- At 2.5 L/s a transition from swirl motion to vortex flow was observed, as the air core decreased to approximately 20mm Diameter, followed by a sudden increase in water head level as the vortex collapsed to surcharged orifice flow.
- The maximum flow design limit to maintain weir flow conditions is 2.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher:  
Mark Alexander, AHSCA Foundation Chairman:  

Date: 16th November 2016  Date: 16th November 2016
Flow Characteristic Curve – R130S4/C90

Observation Comments:

- A concentric swirl pattern and air core was observed which indicated weir flow conditions, with the water head level stabilising at each flow rate setpoint from 0-2.0 L/s.
- At 2.5 L/s a transition from swirl motion to vortex flow was observed, as the air core decreased to approximately 10mm Diameter and moved to the side of the grate. At 3-3.5 L/s the vortex surcharged and transitioned to orifice conditions characterised by the water level surging between 40-100mm at constant flow rates above 3 L/s.
- The maximum flow limit to maintain weir flow conditions is 2.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,  
Chief Researcher:  

Mark Alexander,  
AHSCA Foundation Chairman:

Date: 16th November 2016  

Date: 16th November 2016
Flow Characteristic Curve – Q130S4/C90

Observation Comments:

- A concentric swirl pattern was observed which indicated weir flow conditions, with the water head level stabilising at each flow rate setpoint from 0-2.0 L/s.
- At 2.5 L/s a transition from swirl motion to vortex flow was observed, as the air core decreased to approximately 10mm Diameter and moved to the side of the grate. At 3.0 L/s the vortex surcharged and transitioned to orifice conditions were characterised by the water level surging between 30-90mm.
- The maximum flow limit to maintain weir flow conditions is 2.0 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke, Chief Researcher:  
Mark Alexander, AHSCA Foundation Chairman:

Date: 16th November 2016  
Date: 16th November 2016