

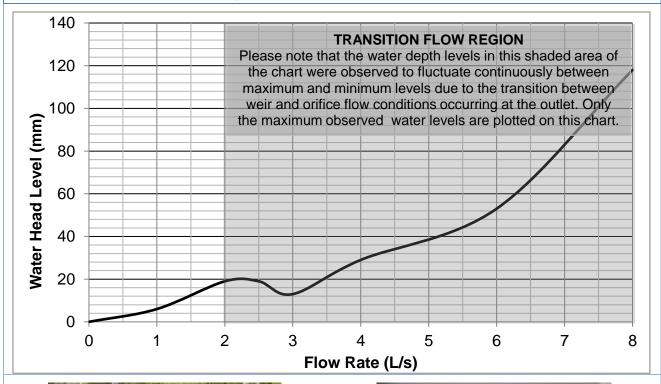
OUTLET PERFORMANCE CERTIFICATE ID: SPS015 - Q200S4/C

Test Results	ID: SPS015
Description	SPS Vari-Level Vertical Drain
Drain Type	200mm Square
Model	Q200S4/C
Outlet Size	100NB
Test Date	19/09/2016
Grate Drawing	High-heel friendly pattern (6mm gaps) Height-adjustable hinged grate assembly. Available in nickel bronze, 304 & 316 stainless steel. Bronze non-stock option. C100A CI "deluxe" lower body with reversible clamp collar.
	Typical Application SPS Catalogue Ref: 3.12
Housing Drawing	Optional coupling connection (specify: -R) **Optional Extension Piece
Drain Pipe Configuration	Standard pipe configuration as shown in figures 3-6 of test procedure. C100A Body with threaded tail piece connection.

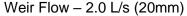


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Flow Characteristic Curve - Q200S4/C









Orifice flow – 4.0 L/s (30mm)

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.
- Flowrates 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:

Mark Alexander,

AHSCA Foundation Chairman:

MMMW.

Date: 16th November 2016

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