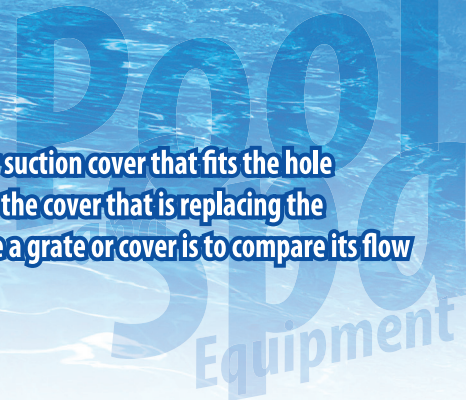




Everyone wants to make sure they comply with the new **VGB 2008 Pool and Spa Safety Act**. However, just having a drain or suction cover that fits the hole doesn't mean it will fulfill all of the requirements of the Safety Act. It is equally or even more important to make sure that the cover that is replacing the existing system also "fits" the existing flow requirements of the system as originally designed. The easiest way to compare a grate or cover is to compare its flow rate at a constant velocity. **The purpose of this worksheet is to simplify that issue for you.**



Pool Drain Covers and Grates

Manufacturer	Part Number	Description	Size	Floor Flow Rate GPM @ Velocity (fps)	Wall Flow Rate GPM @ Velocity (fps)	GPM @ 1.5 fps	Open Area (sq. in.)	Replaces
Waterway	640-231x V	Anti-Vortex	8"	100 @ 2.72 ft/sec	64 @ 1.73 ft/sec	55	11.83	Waterway, Hayward ¹ , Pentair, American Products, AquaStar, CMP
Waterway	640-311x V	Anti-Vortex	10"	180 @ 4.04 ft/sec	100 @ 2.24 ft/sec	67	14.34	Waterway, AquaStar
Waterway	640-470x V	Grate	9" x 9"	289 @ 2.33 ft/sec	198 @ 1.59 ft/sec	186	39.9	Waterway, Hayward, Pentair, American Products
Waterway	640-472x V	Grate	12" x 12"	356 @ 1.83 ft/sec	280 @ 1.44 ft/sec	292	62.4	Waterway, Hayward, Pentair ² , American Products

Spa Suctions

Manufacturer	Part Number	Description	Size	Floor Flow Rate GPM @ Velocity (fps)	Wall Flow Rate GPM @ Velocity (fps)	GPM @ 1.5 fps	Open Area (sq. in.)	Replaces
Waterway	640-358x V	SPC-3 V	5" Round	N/A	180 @ 6.42 ft/sec	42	9.02	Waterway

NOTES:

¹ Replaces Hayward's vinyl frame & cover (requires Waterway P/N 642-209x)

² Replaces Pentair / PacFab #2 Model

- Flow Rate Formula - 3.12 GPM x 1 sq.in. of open area x 1 ft per sec (fps)
- Industry standard velocities for commercial grates is rated @ 1.5 fps

