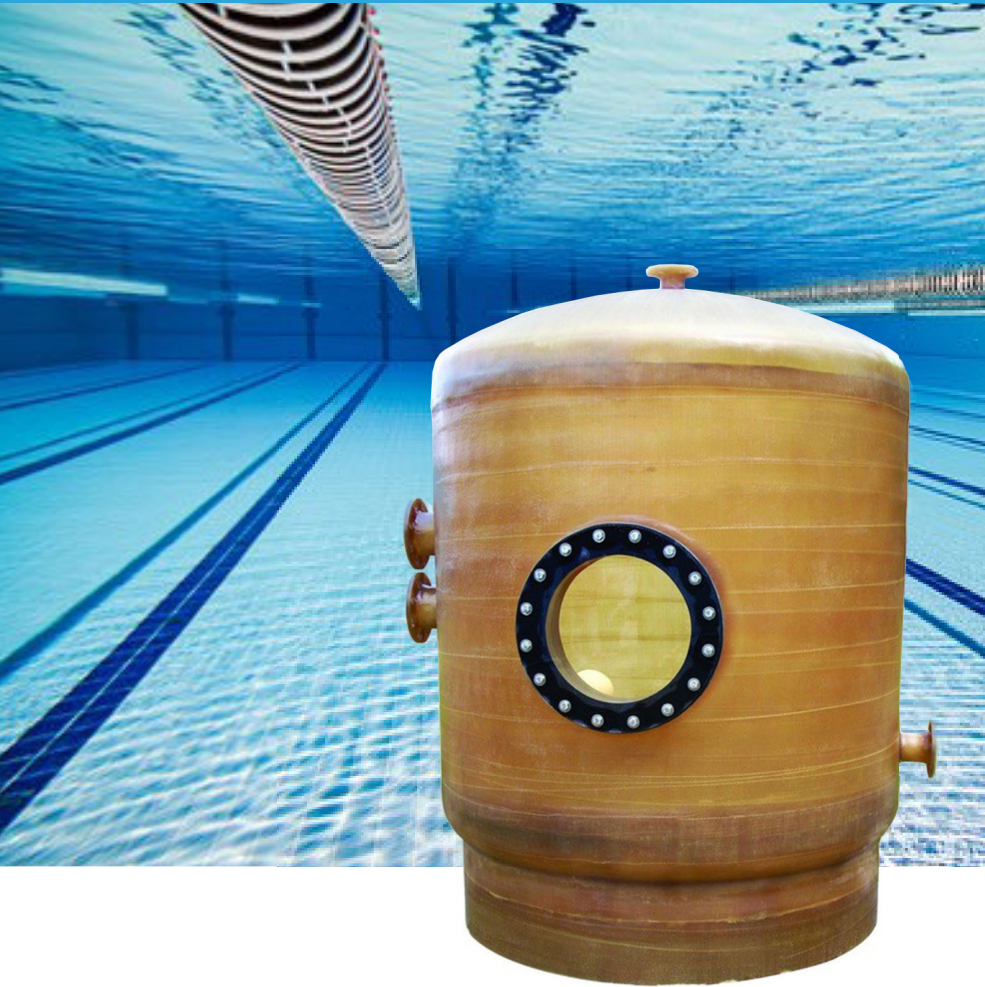


Crystal Clear Water Starts Here



Surge tanks are generally required on gutter pools to allow a “storage” space (surge capacity) for water displaced by swimmers

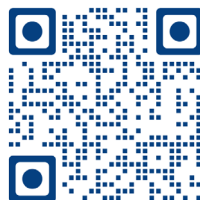
The preferred arrangement is to hold back (modulate) the water from the main drain line so that water entering the gutters can flow to the surge tank and not back-up in the pool.

This is done with a float ball control on a butterfly type modulating valve, mounted on the main drain line.

Vertical and horizontal closed top tanks, as well as custom open top rectangular tanks are available. In addition, segmented tanks with body flanges can be provided to accommodate installation restrictions.

A tanks surge capacity is defined as the volume of the portion of the tank that is above the centerline of the main drain line connection. As dictated by health department codes, a common surge capacity requirement is one gallon per sq. ft. of pool surface area.

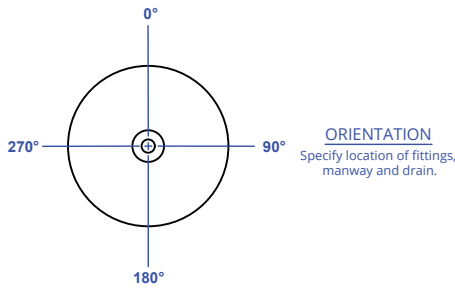
Swimming Pool Balance or Collector tank are smaller tanks that accept water from the main drain and gutter lines with an exit connection to the pump suction. They are usually not big enough to meet any surge capacity code requirement.



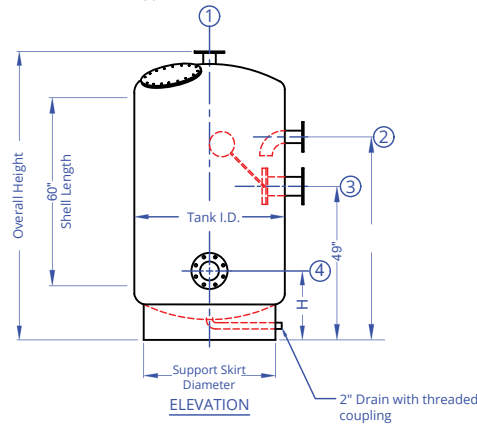
For pricing and additional information please contact us.

803.793.4265
sales@mermade.com

Vertical Surge Tank



ORIENTATION
Specify location of fittings, manway and drain.



MER-MADE VERTICAL SURGE / BALANCE TANK										
TANK DIAMETER	30"	36"	42"	48"	54"	60"	66"	72"	84"	96"
TANK OUTSIDE DIAMETER	31.25"	37.25"	43.25"	49.25"	55.25"	61.25"	67.25"	73.25"	85.5"	97.5"
OVERALL HEIGHT	87"	88.25"	89.25"	92"	95"	95.25"	101"	102"	106"	111.5"
SUPPORT SKIRT DIAMETER	24"	30"	36"	42"	48"	54"	60"	66"	72"	84"
"H" PUMP SUCTION ELEV.	20"	20"	20"	22"	24"	24.25"	26"	28"	32"	32"
MANWAY SIZE	16"	16"	16"	18"	18"	18"	18"	18"	18"	18"
TOTAL CAPACITY	202	297	412	547	705	885	1091	1320	1850	2500
SURGE CAPACITY	95	142	214	272	353	428	590	721	1050	1675
ESTIMATED WEIGHT, LBS.	300	350	400	425	485	550	600	630	1000	1150
SPECIFY FITTING SIZE										
1 - VENT										
2 - GUTTER										
3 - MAIN DRAIN										
FLOAT VALVE STYLE										
4 - PUMP SUCTION										

STANDARD FEATURES

- RESIN: CORROSION RESISTANT ISOPHTHALIC POLYESTER FOR PROVEN USE IN THE COMMERCIAL POOL INDUSTRY.
- CONTACT MOLDED CONSTRUCTION INCORPORATING A 100 MIL CORROSION LINER WITH HEAVY DUTY FIBERGLASS FABRIC REINFORCEMENT LAYERS.
- CONSTRUCTION STANDARDS: ASTM D-4097 AND NBS PS15-69.
- EXTERNAL SURFACE PROTECTED WITH ULTRAVIOLET LIGHT INHIBITORS.
- FIBERGLASS FLANGED FITTINGS LOCATED AS REQUIRED WITH ANSI 150 LB. STANDARD DRILLING PATTERNS.
- MAIN DRAIN PROVIDED WITH MER-MADE MODULATING FLOAT VALVE.
- DEFAULT MANWAY IS LOCATED ON TOP DOME.
- SIDE MANWAY IS OPTIONAL.
- ADDITIONAL FITTING MAY BE REQUESTED.
- TANK HYDRO-STATICALLY TESTED AT FACTORY PRIOR TO SHIPMENT.

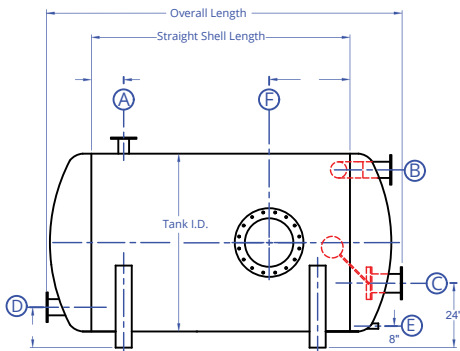
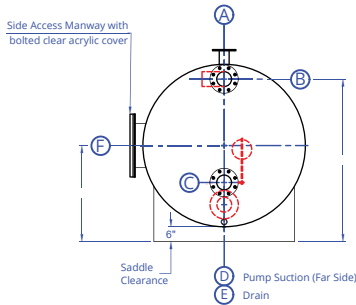
DESIGN CONSIDERATIONS

- EACH TANK INDIVIDUALLY ENGINEERED.
- DESIGNED FOR USE BELOW POOL DECK LEVEL.
- TANK IS SELF CONTAINED FOR FULLY FLOODED SERVICE.
- TANK MUST BE VENTED ABOVE WATER LEVEL OF POOL. VENT MUST BE NO LESS THAN ONE PIPE SIZE SMALLER THAN PUMP SUCTION. VENT CANNOT BE REDUCED IN SIZE OR OBSTRUCTED.

OPTIONS

- TANK MAY BE MADE IN MULTIPLE SECTIONS USING BOLTED BODY FLANGES.
- INTERNAL PIPING AND ELBOWS AVAILABLE.
- INTERNAL VORTEX BREAKER AVAILABLE.
- SIGHTGLASS OR PROBE CHAMBER AVAILABLE.
- WATER LEVEL CONTROLLER SYSTEM AVAILABLE.

Horizontal Surge Tank



MER-MADE HORIZONTAL SURGE / BALANCE TANK										
TANK DIAMETER	30"	36"	42"	48"	54"	60"	66"	72"	84"	96"
SHELL LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"
OVERALL LENGTH	6'-0"	6'-2"	6'-4"	6'-5"	6'-7"	6'-10"	7'-2"	7'-2"	7'-6"	8'-0"
TOTAL CAPACITY	203	297	412	548	705	886	1090	1320	1855	2501
SURGE CAPACITY	67	138	244	362	516	682	872	1070	1598	2219
MANWAY SIZE	16"	16"	16"	18"	18"	18"	18"	18"	18"	18"
ESTIMATED WEIGHT, LBS.	500	565	625	725	900	990	1135	1375	1620	1875
EXTRA CAPACITY PER 1' SHELL	36	53	72	94	119	147	178	211	288	376
EXTRA SURGE PER 1' SHELL	12	24	42	62	87	113	141	173	246	331

EXAMPLE CONFIGURATION:

SADDLE DETAILS:

- Base tank uses two saddles.
- Saddles permanently bonded to exterior.
- Saddle height = 6" clearance above floor.
- Contact surface is 120°.

COMMENTS:

- Fittings may be located as required by site conditions.
- Fittings may be located on top, on domes, on side wall.
- Additional fittings may be requested.
- Surge capacity calculated based on elevation shown.
- Change in elevation will modify surge capacity.

STANDARD FEATURES

- EACH TANK INDIVIDUALLY ENGINEERED.
- BASIC CAPACITIES AND DIMENSIONS IN CHART USE 5 FEET SHELL LENGTH.
- RESIN: CORROSION RESISTANT ISOPHTHALIC POLYESTER FOR PROVEN USE IN THE COMMERCIAL POOL INDUSTRY.
- CONTACT MOLDED CONSTRUCTION INCORPORATING A 100 MIL CORROSION LINER WITH HEAVY DUTY FIBERGLASS FABRIC REINFORCEMENT LAYERS.
- CONSTRUCTION STANDARDS: ASTM D-4097 AND NBS PS15-69.
- EXTERNAL SURFACE PROTECTED WITH ULTRAVIOLET LIGHT INHIBITORS.
- FIBERGLASS FLANGED FITTINGS LOCATED AS REQUIRED WITH ANSI STANDARD 150 LB. DRILLING PATTERNS.
- MAIN DRAIN PROVIDED WITH MER-MADE MODULATING FLOAT VALVE.
- DEFAULT MANWAY IS LOCATED ON SIDEWALL USING FLANGED AND GASKETED CLEAR ACRYLIC COVER TO OBSERVE FLOAT VALVE OPERATION. LOCATION MAY BE MOVED TO TOP OF TANK OR DOME.
- TANK HYDRO-STATICALLY TESTED AT FACTORY PRIOR TO SHIPMENT.

DESIGN CONSIDERATIONS

- DESIGNED FOR INSTALLATION BELOW POOL DECK LEVEL.
- TANK IS SELF CONTAINED FOR FULLY FLOODED SERVICE.
- STANDARD TANK MUST NOT BE USED FOR BURIED SERVICE.
- TANK MUST BE VENTED ABOVE WATER LEVEL OF POOL. VENT MUST BE NO LESS THAN ONE PIPE SIZE SMALLER THAN PUMP SUCTION. VENT PIPING MUST BE UNOBSTRUCTED.
- STACKED CONFIGURATION FOR MULTIPLE TANKS AVAILABLE.
- MULTIPLE TANKS JOINED WITH EQUALIZATION FITTINGS.

OPTIONS

- EACH TANK MAY BE FULLY CUSTOMIZED PER CUSTOMER'S NEEDS: CUSTOM SHELL LENGTH, SURGE OR TOTAL CAPACITIES AVAILABLE.
- TANK MAY BE MADE IN SECTIONS WITH BODY FLANGES.
- INTERNAL PIPING AND ELBOWS AVAILABLE.
- INTERNAL VORTEX BREAKER AVAILABLE.
- SIGHTGLASS OR PROBE CHAMBER AVAILABLE.
- WATER LEVEL CONTROLLER SYSTEM AVAILABLE.

Mark	ID	OD	BC	Holes	Hole Ø	Thk.	Description
A							Vent
B							Gutter w/ elbow
C							Main Drain
							Float Valve Installed in tank:
D							Pump Suction
E	2"						Drain
F							Manway & Cover

Mer-Made Filter

Division of North American Filtration inc.
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