

PO Box 306 · 11746 Charleston –Augusta Road Denmark, SC 29112 Phone: 803-793-4265 E-mail: <u>irp@mermade.com</u>

# Bottom Drain Leaves

& Accessories

# **PRODUCT SPECIFICATIONS**

## LEAVES

The bottom drain rectangular Mer-Made filter leaf shall consist of a filter chamber connected to a bottom discharge outlet both of which shall be fitted with a filter cover.

The filter chamber shall be (A) high X (B) wide fabricated of high impact styrene. Leaf filtering area shall be a nominal (C) square feet and (D) square feet as rated by NSF. It shall be vacuum formed in two identical halves which are butted and joined over the entire contact area to form a rigid, non-warping structure. Each half shall contain (E) drainage channels parallel to the (A) side. There shall be (F) drainage holes of 3/16" diameter, one at the base of each channel. These drainage holes shall be drilled through the side wall of a (G) X (H) closed tubular collection channel which shall carry the unrestricted flow to the leaf outlet.

The leaf outlet shall be blow-molded of high impact ABS plastic. It shall be bonded to the outer edge at the mid-point of that closed tubular collection channel that has been drilled with drainage holes. This bottom drain outlet shall have a diameter of (I). 1-3/8 of an inch up from the edge outlet there shall be a bulbous flange, which when fitted with a flat synthetic gasket 1/4 of an inch wide, provides a positive seal against the clear water discharge manifold. Recognizing proper design practice of not exceeding 6 FPS, the outlet velocity is (J) FPS at a maximum flow rate of two GPM per square foot of filter area.

#### FILTER COVERS

For vacuum filtration the filter cover shall be made of woven monofilament linear polyethylene style #6112. A synthetic collar shall be sewn to the cover and placed over the bulbous portion of the outlet permitting the cover to lie completely flat on all points of the filter chamber. The cover shall be sewn on two sides with Dacron thread. The sides opposite the outlet shall have an easy opening Velcro closure for on-site installation, maintenance or replacement.

#### MANIFOLD

The Mer-Made clear water discharge manifold shall consist of a pipe with an open flanged end and a closed end. The manifold shall contain one manifold to outlet adapter for each vacuum filter leaf which is to be installed, and be held firmly in place by means of support clamps along its length. The manifold shall be schedule 80 PVC pipe. At a maximum flow rate of two gallons per minute per square foot of filter area, 6" pipe shall be used up to 300 square feet of filter, 8" pipe up to 500 square feet, and 10" up to 1120 square feet, the flange shall be a 150# slip ring style, shipped loose for final field adjustment.

#### ADAPTERS

For use with (A) high X (B) wide Mer-Made leaves, adapters shall be placed on (K) inch centers, solvent cemented to the manifold. They shall be molded ABS plastic and have an inside diameter of (L). Each adapter shall contain a flat 11/16 of an inch wide flange which shall surround the leaf outlet and provide a sealing surface for the outlet gasket.

## ADJUSTABLE MANIFOLD SUPPORTS

One Mer-Made support clamp shall be installed for every eight (8) leaves along the length of the manifold. These clamps shall serve to support, hold down and stabilize the manifold to assure proper sealing at the leaf outlet. Each support clamp shall contain a cradle support and clamping rod whose radius shall be suitable for the pipe size being used. The center line of this support clamp shall be adjustable from 6" to 13-1/2" to facilitate installation in sloped bottom filter tanks. Supports to be manufactured of fiberglass or 304 stainless steel.

#### HOLD DOWN ASSEMBLY

The leaf hold down assembly shall serve to pressure seat the leaf outlet and outlet washer in the discharge manifold and assure uniform spacing between leaf faces. It shall consist of two stainless steel angle bars with holes drilled over the location of each leaf. Inserted in each hole is an individual adjustable clamp for each leaf. Clamp to consist of a PVC clip with a threaded stainless steel rod. The end of each bar shall be bolted to a stainless steel wall clip mounted permanently on a suitable vessel wall. Each wall clip shall be provided with stainless steel bolts, wall lags and shields for mounting.

CHART FOR FILLING IN MER-MADE SPECIFICATIONS											
А	В	С	D	Е	F	G	Н	I	J	К	L
24	36	12	-	34	68	1-1/2	1-3/8	1-3/4	3.1	4	1-25/32
36	24	12	-	22	44	1-1/2	1-3/8	1-3/4	3.1	4	1-25/32
30	36	15	12.8	34	68	1-1/2	1-3/8	1-3/4	3.9	4	1-25/32
24	45	15	13.1	43	86	1-1/2	1-3/8	1-3/4	3.9	4	1-25/32
38	48	25	23	45	90	1-7/8	1-11/16	2-11/16	2.8	5	2-23/32
30	60	25	22.5	57	114	1-7/8	1-11/16	2-11/16	2.8	5	2-23/32
48	60	40	37.5	57	114	1-7/8	1-3/4	2-11/16	4.4	5	2-23-32