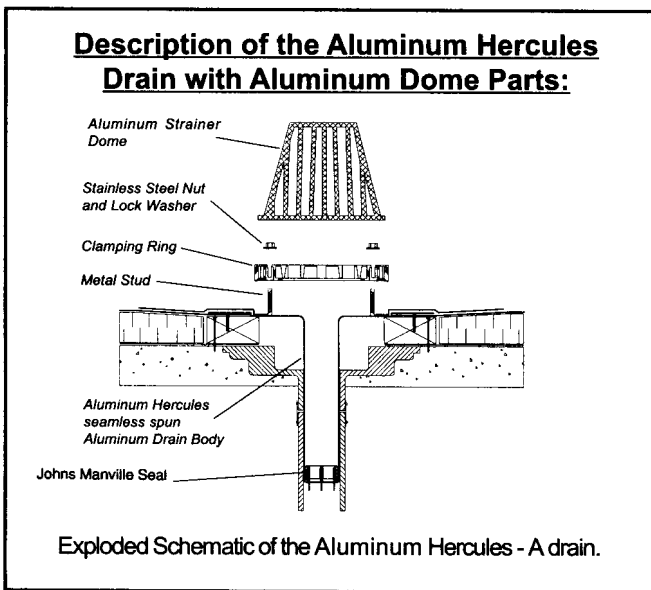


Aluminum or Copper Hercules® Drain with Aluminum Dome

Installation Procedure

For Use With: All types of roof membranes.

Job Preparation: Remove existing strainer dome and clamping ring. Remove other existing drain components as required to enable Aluminum or Copper Hercules Drain flange to lie flush on roof membrane. (in case of a conversion to an inverted roof assembly, cutting off the existing drain bowl flush with the deck may be required). Remove any debris or constricting material that may have built up on the interior of the existing drain pipe which would interfere with proper installation of the Hercules Drain.



Model Selection Chart:

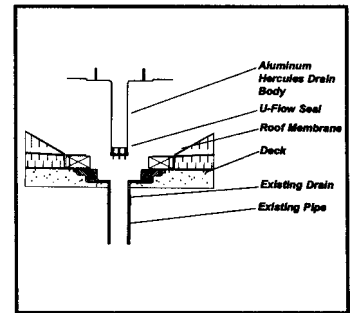
To Fit Existing Schedule 40 Pipes (I.D.) - A	Hercules RetroDrain Model Ubr.	Hercules RetroDrain (O.D.) - B	Hercules RetroDrain (O.D.) - C
3"	HD-AL-3/HD-CU-3	3"	2.85
4"	HD-AL-4/HD-CU-4	4"	3.74
5"	HD-AL-5/HD-CU-5	5"	4.73
6"	HD-AL-6/HD-CU-6	6"	5.76

Maintenance:

Debris should be regularly removed from strainer dome area to prevent excessive water build-up on the roof. No other maintenance is required.

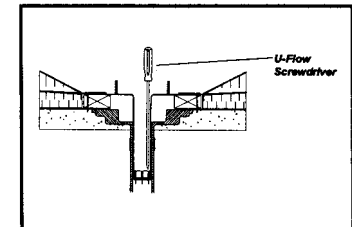
STEP 1.

Examine existing drain pipe for an elbow which prevents the Hercules Drain stem from being fully inserted into pipe. If such an elbow is present, cut stem of the drain to a length which permits the Johns Manville Seal to expand approximately 25 mm (1") or more above the point where the drain pipe joins the elbow. Insert Johns Manville Seal into end of drain stem and tighten screws enough to hold the seal in place during insertion into the existing drain pipe. Insert assembled drain into existing pipe until flange lies on roof membrane.



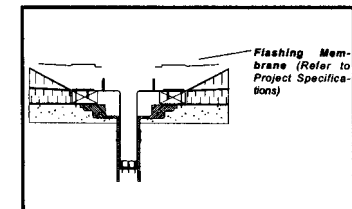
STEP 2.

Alternately tighten seal compression ring screws with Johns Manville Screwdriver until hand tight. Hercules Drain Body is correctly installed when pressure placed on drain body results in no verticle movement. Care must be taken not to over-tighten the screws.



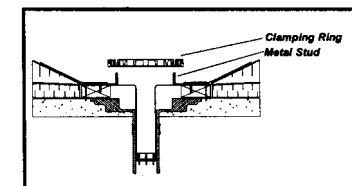
STEP 3.

Secure the drain flange to the roof deck/ nailer using a minimum of 3 "pan-headed" fasteners, evenly spaced around the flange. The flashing membrane must cover and extend past the fastener head. Flashing membrane is to be installed as per roof membrane manufacturer's installation detail.



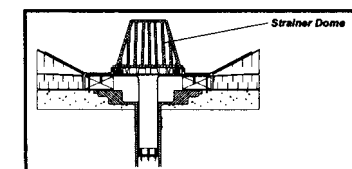
STEP 4.

Place clamping ring over studs. Install stainless steel nut and lock washers tightening clamping ring against membrane flashing until secure.



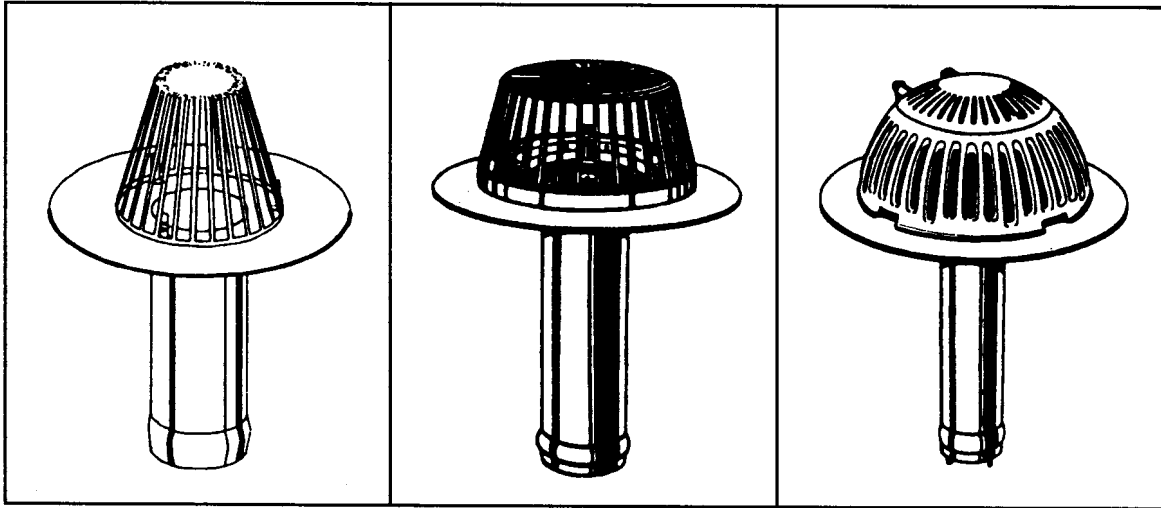
STEP 5.

Install strainer dome by aligning screw holes with the holes in the clamping ring. Secure with screws provided. Installation is now complete.





The Aluminum Hercules® Roof Drain



Aluminum Hercules - A

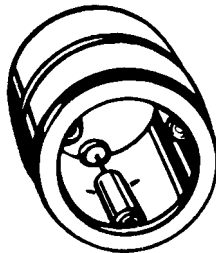
Aluminum Hercules - P

Aluminum Hercules - SD

Accessories And Installation Aids

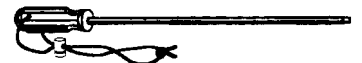
Johns Manville Seal

For use with other insert type drains and to shorten the Johns Manville PC/PET RetroDrain to create a positive watertight connection.



Johns Manville Screwdriver

Extra long screwdriver fitted with a square socket tip for tightening the special recess-head screws in the RetroDrain. 13" shaft for easy installation. Comes complete with loss-prevention cord.



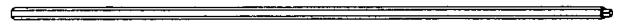
Johns Manville Hole Punch

Hole cutter used to punch holes in flashing membranes to allow for positioning the flashing over the clamping ring posts.



Johns Manville Power Bit

Extra long 13" steel power bit fitted with a square socket tip for tightening the special recess-head screws in the RetroDrain.



For more information, please call:

(207)-784-0123 (inside Maine)

1-(800)-445-1500 (Outside Maine, including Canada)

Fax: (207)-784-0125