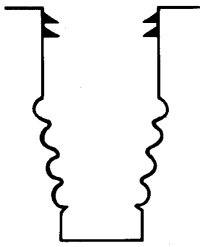
Johns Manville

U.S. PATENT 3909412

Flex-I-Drain® *Flexible Roof Drain System*

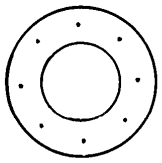
INSTALLATION INSTRUCTIONS FOR ALL ROOFING SYSTEMS

PART I



ROOF DECK FLANGE

PART II



FLASHING CLAMPING RING

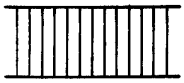
PART III

GRAVEL STOP FLANGE

PART IV

STRAINER

PART V



STRAINER EXTENSION (Optional)

Suggested for use in conjunction with Ballasted Roofing Systems.

Note: Drain flashing material not supplied.
Flashing should be compatible with roofing system. See Step #3.

C-A-U-T-I-O-N **PART I and PART III MUST NOT BE PREASSEMBLED (Part III Inserted Into Part I) As They Cannot Be Separated!**

GENERAL INSTRUCTIONS

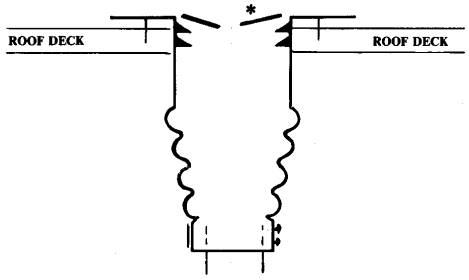
PART I THE DECK FLANGE WITH THE ATTACHED FLEXIBLE BELLOWS HAS TO BE INSTALLED BEFORE ANY ROOFING OR VAPORSEAL MEMBRANE.

PART III GRAVEL STOP FLANGE

The connector tube which is an integral part of the Gravel Stop is 4½" long and will accommodate ***insulation thickness up to 3½".***

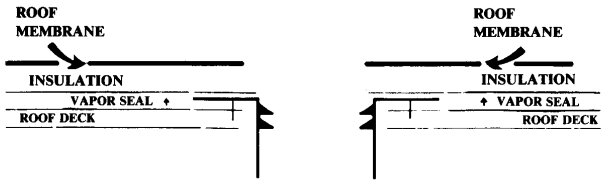
1. *For single layer thicknesses over 3½" we suggest tapering the insulation to the drain. This also serves to prevent water ponding and winter freeze ups.* ***(See Step 2)***
2. *For multi layer insulation the deck flange* ***(Part I)*** *may be installed over the bottom layer of insulation.*
3. *A combination of the two procedures will allow for Flex-I-Drain installation in most roofing systems.* ***(See Step 2)***

STEP 1 INSTALLATION



STEP 2 ROOFING

Install vapor seals, insulation and complete roof membrane to inside edge of roof deck flange opening.

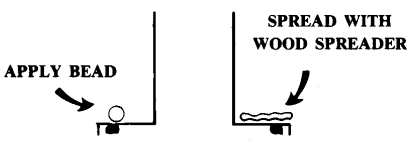


Install ***(Part I)*** *roof deck flange into opening and fasten with screws, or anchors, to deck. Slip sleeve over pipe and tighten drawband. (Install Rubber-Adaptor Bushing for 3" and 5") NOTICE: Use of the 3" and 5" rubber adaptors in the state of Ohio is not approved. In Ohio only a state approved transitional fitting must be used.*

* *Fiber board ring is to prevent roofing Bitumen from flowing over the seal rings, and* ***should not be removed*** *until all layers of roofing are installed. Middle portion may be removed to allow water drainage if installation is not to be immediately completed.*

STEP 3 APPLICATION OF SEALANT TO GRAVEL STOP (PART III)

Only *Johns Manville sealant as furnished should be used for this application. Any other method of adhesive must have prior approval from Johns Manville.*



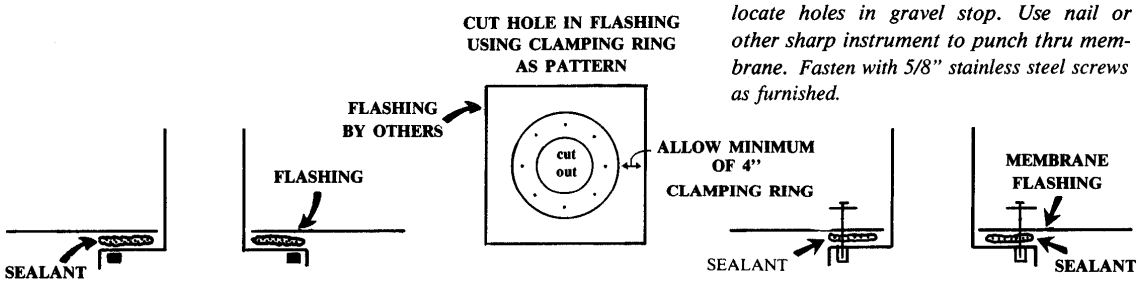
Apply sealant to under part of gravel stop ***(Part III)*** *using all of large tube and then spread evenly with the wood spreader.*

STEP 3 (Cont.)

INSTALLATION OF MEMBRANE FLASHING MATERIAL TO GRAVEL STOP FLANGE

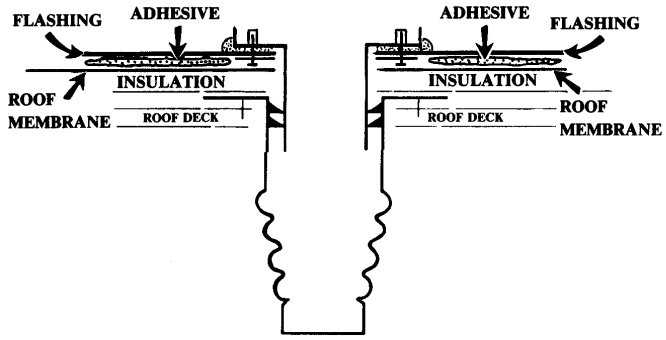
Flashing material to be used is left to the discretion of the architect or the roof membrane manufacturer. ***Membrane should be compatible with particular system being installed.*** *For built up roofing use reinforced base flashing material.*

Install flashing over tube pressing firmly into sealant. Set clamping ring over flashing, lining up with lines on tube to locate holes in gravel stop. Use nail or other sharp instrument to punch thru membrane. Fasten with 5/8" stainless steel screws as furnished.

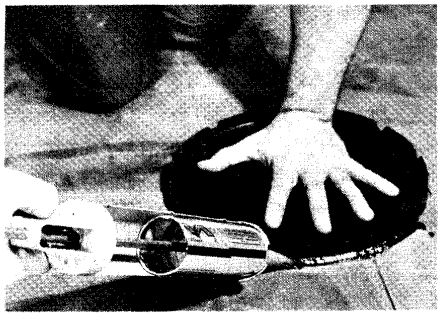


STEP 4 INSTALLATION OF GRAVEL STOP (PART III)

Remove protective fiberboard ring from deck flange and install gravel stop by centering over deck flange and pressing down firmly to a firm contact with the ***roof membrane.***



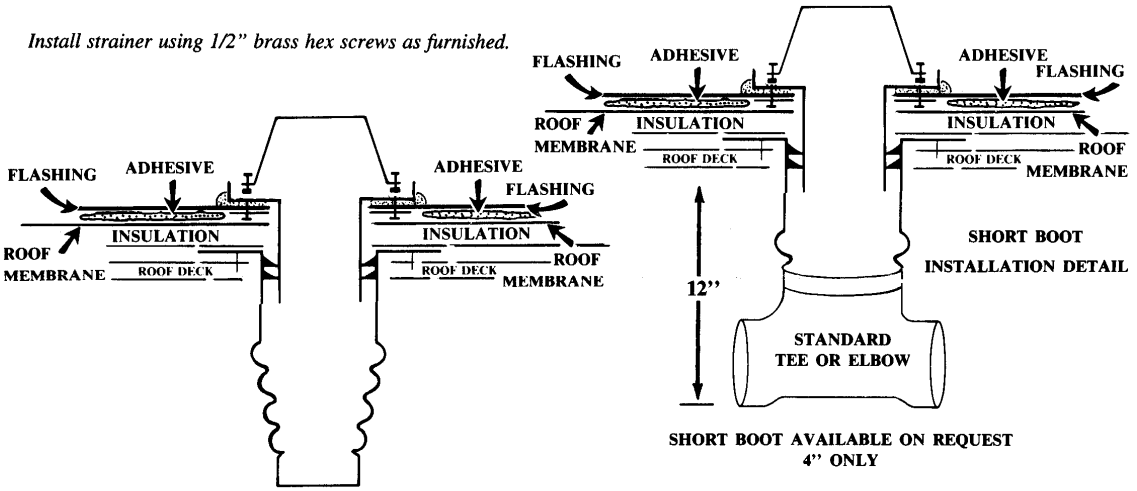
Flashing to be adhered to membrane using adhesive as specified for roofing system being used.



Use small tube to seal perimeter of gravel stop

STEP 5 INSTALLATION OF STRAINER (PART IV)

Install strainer using 1/2" brass hex screws as furnished.



Drains Are Furnished in 4" and 6" Sizes.
For 3" and 5" Drains, Adapter Bushings Are Furnished Separately.
Deck Openings Are 7" for 3" and 4" Drains, and 9" for 5" and 6" Drains.

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