M-WELD™ Standard M-Drain™

Updated: 8/16
Description
Standard M-Drain™ is a spun-aluminum or copper roof drain with gravel guard, strainer caps, and water-proofing plumbing seal attached. M-Drain™ is pre-flashed with either APP or SBS smooth-surface modified bitumen membranes, and is available in full and insert sizes to accommodate new construction and retrofit applications. Unflashed M-Drain™ is also available.

- Aluminum and copper M-Drains are available in the following sizes.
  1 1/2" (38 mm), 2" (50 mm), 2 1/2" (64 mm), 3" (76 mm), 3 1/2" (89 mm), 4" (100 mm), 4 1/2" (114 mm), 5" (127 mm), 5 1/2" (140 mm), 6" (152 mm).
- 2", (50 mm), 3" (76 mm), and 4" (100 mm) M-Drains, aluminum and copper, are listed by the Uniform Plumbing Code (UPC), file #3299.
- Packaging: 3 flashed or 5 unflashed per box, regardless of drain size.

Uses
- Whole sized M-Drain™ [2" (51 mm), 3" (76 mm), 4" (102 mm), 5" (127 mm) or 6" (152 mm)] can be used on new construction and directly attached to new plumbing with a flexible coupling.
- Half-inch (12.7 mm) sized M-Drain™ [1 1/2" (38 mm), 2 1/2" (63.5 mm), 3 1/2" (89 mm), 4 1/2" (114 mm), and 5 1/2" (140 mm)] can be used as retrofit drains by inserting an M-Drain™ sized 1/2" (13 mm) smaller than the drain pipe being fitted (for a 4" [102 mm] drain pipe, use a 3 1/2" [89 mm] M-Drain™).

Advantages
- No special tools needed for installation.
- Spun-aluminum design eliminates seams and soldered joints.
- Wide range of sizes allow for proper fit into any size roofing drain.
- Installation is quick and easy because no clamping ring is required for retrofit drains.
- All hardware, including strainer and gravel guard, come complete with M-Drain™.
- Positive drainage is ensured by flat design of M-Drain™.
- M-Seal™ watertight expanding seal for retrofit drains is included, making plumbing tie-in quick and easy.

Technical Data
Drain Material Available:
- 0.064 Aluminum
- 0.072 Copper

Flashing Material Available:
- APP Smooth
- SBS Smooth

Component Material:
- Cast aluminum gravel guard and strainer.
- M-Seal™ expanding seal.
M-Drain™ New Construction Installation:
1. Install base sheet as required by manufacturer’s specifications to existing drain leader.
2. Select appropriate size M-Drain™ to match the plumbing pipe. Use a flexible coupling to connect the M-Drain™ to the plumbing pipe.
3. Choose appropriate M-Drain™ material:
   • For heat-welded membranes, use APP flashing material.
   • For hot mop or cold-applied membranes, use SBS flashing materials.
4. Installations with APP membranes:
   • Heat the bottom of the M-Drain™ flashing to a glossy sheen. Insert the drain (expandable seal fully compressed) into existing drain leader, until the two heated surfaces fit flush. While torching, work the flashing with a trowel until a 1/4" (6 mm) to 3/8" (9 mm) bleed-out occurs around the outside of the flashing.
   • The tape will expand to seal off the M-Drain™ to the drain pipe.
5. Installations with SBS membranes:
   • Follow same procedures as for APP, except set M-Drain™ in hot asphalt or SBS adhesive.
6. Install field sheet per manufacturer’s specification over installed M-Drain™. Use the bottom of the strainer cap provided as a template to cut a hole in the field membrane.
7. Install strainer cap by lining up the tabs, pushing down, and twisting cap into place.

M-Drain™ Retrofit Installation Instructions:
1. Before you begin installation:
   • Be sure that the “old” drain pipe is as clean as possible.
   • Remove cellophane tape around black expanding seal of retrofit M-Drain™.
   • Remove and discard existing gravel guard, strainer, and studs.
2. Install base sheet as required by manufacturer’s specifications to existing drain leader.
3. When inserting M-Drain™ into existing pipe or drain bowl, choose an M-Drain™ 1/2" (13 mm) smaller than the inside diameter of the existing opening.
4. Choose appropriate M-Drain materials:
   • For heat-welded membranes, use APP flashing material.
   • For hot mop or cold-applied membranes, use SBS flashing materials.
5. Installations with APP membranes:
   • Heat the bottom of the M-Drain™ flashing to a glossy sheen. Insert the drain (expandable seal fully compressed) into existing drain leader, until the two heated surfaces fit flush. While torching, work the flashing with a trowel until a 1/4" (6 mm) to 3/8" (9 mm) bleed-out occurs around the outside of the flashing.
6. Installations with SBS membranes:
   • Follow same procedure as for APP, except set M-Drain™ in hot asphalt or SBS adhesive.
7. Install field sheet per manufacturer’s specification over installed M-Drain™. Use the bottom of the strainer cap provided as a template to cut a hole in the field membrane.
8. Install strainer cap by lining up the tabs, pushing down, and twisting cap into place.

Note: Sufficient roof drainage is essential for good roof performance and to avoid overloading the roof under heavy rainfall conditions. Ensuring that the size and number of drains is adequate for the roof area and location is the responsibility of the building owner or their roofing consultant.