

**ROOF DRAIN SERIES**
**HEAVY DUTY ONE-PIECE SPUN ALUMINUM DRAIN  
RETROFIT**
**PRODUCT INFORMATION**

**DESCRIPTION:**

Aluminum is known for its strength and resistance to corrosion. A one-piece aluminum roof drain is less likely to suffer from rust or deterioration over time, which can extend its lifespan and reliability. Since a one-piece design has no joints or seams, it minimizes the risk of leaks. This can be particularly important in maintaining the integrity of the roof and preventing water damage. All components Made from **HEAVY DUTY 1100-O ALUMINUM**. These drains are designed to handle the flow of water more efficiently, reducing the risk of blockages and ensuring that water is directed away from the roof effectively.

**FEATURES & BENEFITS:**

- Available in 3", 4", 5", & 6" leader diameters to meet a range of field conditions
- Heavy-duty cast Aluminum flip-top dome with a powder-coated finish for enhanced vandal resistance
- The flip top dome lid can also be entirely removed by unscrewing the hinges which gives 6.5" opening
- 12" Stem & 18"dech made out of 0.125" Aluminum grade 1100-O (min. thickness 0.090")
- Each roof drain includes a QR code laser marked on the dome lid for quick registration & maintenance history access
- 4-stud design for efficient installation

**APPLICATION:**

Designed for all types of low sloped roofs, suitable for both conventional roof membrane systems (without ballast guard) and inverted roof membrane systems (with ballast guard). Compatible with PVC, cast iron, steel, copper, & other types of leaders.

**STANDARDS & APPROVALS:**

All Platinum drains are certified by QAI Laboratories to meet **ASME 112.6.4 & CSA-B79-08** standards, along with **IPC & UPC** codes. They also exceed the **ANSI/SPRI RD-1** national performance standard, which requires the seal to endure a 10-ft. (3 m) water column for 24 hours without any leaks.


**WHY 1100 – O Aluminum?**

- 1100-O Aluminum provides strength and corrosion resistance, extending the drain's lifespan
- The seamless, one-piece design minimizes leak risks, protecting the roof from water damage
- Fewer parts mean quicker and simpler installation, reducing labor time and costs.

**MAINTENANCE:**

According to the CRCA/NRCA guidelines, all drains should be checked twice a year in spring & fall, with any debris cleared from both around & inside the strainer.

**WARRANTY:**

Our 20-year warranty offers comprehensive coverage against leaks & defects in both materials & manufacturing processes. This warranty ensures that you receive long-term reliability & performance from your product.

**PARTS LIST**

ITEM	QTY	DESCRIPTION
1	1	Heavy duty Cast Aluminum flip-top dome lid
2	1	Heavy duty 4-bolt cast aluminum dome strainer
3	1	Heavy duty Aluminum clamping ring
4	1	spun Aluminum flow control
5	1	Heavy duty one-Piece spun aluminum flat deck drain with stem
6	4	3/8 - 16" X 2.25" UNC Aluminum stud
7	8	3/8 – 16" Stainless Steel hex nut
8	3	#8 * 1/2" Stainless Steel Philips rounded head machine Screws

**PACKAGING INFO**

SKU	SIZE	PACKAGE QTY.	DIMENSIONAL WEIGHT LBS. (kg)
MCSAFR3	2 3/4" in. (69.8) mm	1	
MCSAFR4	3 3/4" in. (95.25) mm		
MCSAFR5	4 3/4" in. (120.65) mm		
MCSAFR6	5 3/4" in. (140.05) mm		

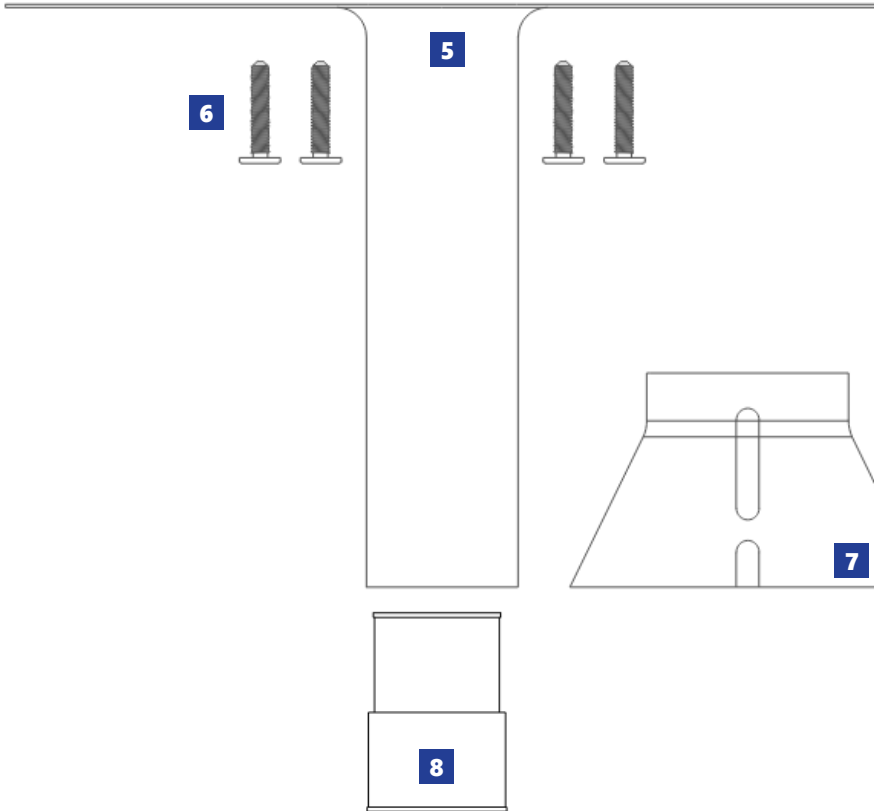
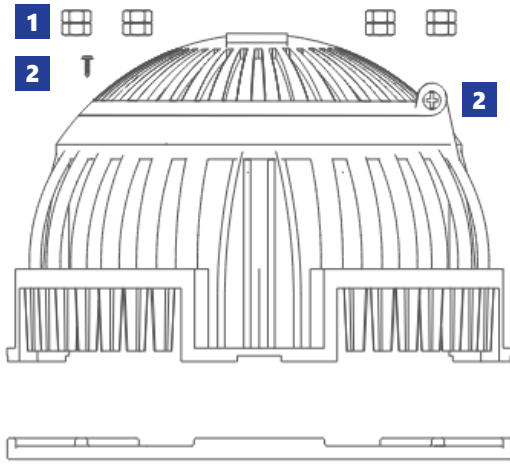

**REGISTER YOUR DRAIN**

Scan the QR code on your drain dome lid, follow the link and allow location permission, fill in the form & register.

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## PART'S SPECIFICATION



- 1 HEX NUTS**  
Super corrosion resistant 3/8"-16 stainless steel hex nut
- 2 MACHINE SCREWS**  
#8 \* 1/2" Stainless Steel Philips rounded head machine Screws
- 3 DOME & DOME LID**  
Heavy-duty cast aluminum powder coated dome, crafted for maximum corrosion resistance, features a flip-top lid that can be remove entirely by unscrewing the hinge screws which gives a total of 6.5" opening. The design incorporates 40 weir slots to ensure maximum water flow. This dome is both vandal-resistant & contractor-friendly.
- 4 CLAMPING RING**  
Heavy Duty dye cast powder coated aluminum for maximum corrosion resistance. 8 drainage channels to allow full drainage. Flange designed for optimum seal with roof flashing.
- 5 18" DIAMETER DECK & 12" STEM**  
Made of 0.125" Aluminum grade 1100-O (min. thickness 0.090") Seamless body with an extra-large 18 in. flange for positive attachment of the roof flashing membrane.
- 6 ALUMINUM STUDS**  
Welded 3/8"-16 x 2.25" UNC aluminum stud ensure a hermetic seal to prevent water leakage.
- 7 FLOW CONTROL RESTRICTOR**  
Made out of .007" heavy duty spun aluminum, Simple & easy to install. Fits all styles & sizes of Platinum drains. (see the performance chart below)
- 8 DRAIN SEAL**  
Constructed from premium nylon and EPDM rubber, these seals offer exceptional durability & resistance to environmental conditions.(see physical chart below)

## FLOW CONTROL RESTRICTOR PERFORMANCE CHART

WATER HEAD LEVEL	FLOW CONTROL (GPM)
0"	Minimal Flow
1" Head of water	8 GPM
2" Head of water	12 GPM
3" Head of water	20 GPM
4" Head of water	30 GPM

## SEAL PHYSICAL DATA CHART

SEAL SIZE (in)	SMALL END O.D.(in)	LARG END O.D.(in)	LARGE END MIN. EXPANSION(in)
3	2.62±0.001"	2.87±0.001"	>3.34"
4	3.50±0.002"	3.74±0.001"	>4.13"
5	4.55±0.002"	4.81±0.002"	>5.39"
6	5.44±0.002"	5.76±0.002"	>6.22"

## LEADER DIAMETER IN DIFFERENT SKU'S

ITEM	MCSAFR3	MCSAFR4	MCSAFR5	MCSAFR6
INNER DIMENSION – ØX (in)	2.686" ± 0.15	3.590" ± 0.15	4.625" ± 0.15	5.563" ± 0.15
OUTER DIMENSION – ØY (in)	2.866" ± 0.030	3.770" ± 0.30	4.805" ±0.30	5.743" ± 0.30

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## RETROFIT

## INCLUDED IN THE BOX



DRAIN BODY



DOME STRAINER



HEX NUTS



CLAMPING RING



DRAIN SEAL



FLOW CONTROL WEIR

## DRAIN INSTALLATION INSTRUCTIONS

**A BUILT-UP ROOFING MEMBRANES**

- Ensure membrane surface is dry, prepared and cleaned for the install of the new retro fit drain.
- Coat the top and bottom of the drain flange with asphalt primer. Allow to dry. Apply a continuous bed of asphalt mastic on the bottom side of the drain flange. Install the drain turning it slightly while applying sufficient pressure to ensure a good seal with the existing roof membrane.
- Connect new drain stem to existing plumbing lines with a Drain Seal. Tighten screws uniformly to ensure a tight fit.
- Plug the drain with a rag or plumbers plug so roofing debris does not block the plumbing lines.
- Apply a minimum two 2 plies of #15 asphalt perforated felts and one ply of type IV glass felts in Type 2 asphalt. The first ply is to extend a minimum of 6" (152 mm) beyond outside flange of drain. Each additional ply shall extend a further 4" (102 mm) beyond underlying ply.
- Cut an opening in the new plies the circumference of the drain throat to remove the rag/plumbers plug and to active the drain.
- Install clamping ring and tighten nuts to achieve constant compression. Install drain screen. Secure in place. Close and tighten screw on Flip top.
- Flood and gravel in asphalt to new clamping ring and dome
- Ensure roof drains are clear of debris and free draining at project completion.

**C EPDM MEMBRANES**

- Ensure membrane surface is dry, prepared and cleaned for the install of the new retro fit drain. Use a weathered membrane cleaner to ensure old membrane is ready.
- Cut a hole in the membrane for the drain stem. Clean both top and bottom sides of the drain flange. Apply a continuous bed of water cut off mastic on the bottom side of the drain flange. Install the drain turning it slightly while applying sufficient pressure to ensure a good seal with the existing roof membrane.
- Connect new drain stem to existing plumbing lines with a Drain Seal. Tighten screws uniformly to ensure a tight fit.
- Plug the drain with a rag or plumbers plug so roofing debris does not block the plumbing line
- For a target patch, cut a 3'x3' piece of EPDM with rounded corners and a hole 0.5" to 0.75" larger than the drain throat. Make bolt holes but avoid cutting around them.
- Add 3" seam tape to all the underside edges of the target patch.
- Apply bonding adhesive to the top flange and underside of the patch. Reinstall the patch, release film for the seam tape and roll out patch to ensure good bonding.
- Cut an opening in the target patch the circumference of the drain throat to remove the rag/plumbers plug and to active the drain.
- Seal all cut edges (outside of target patch) with lap sealant.
- Seal around the drain bolts and drain throat with water cut off mastic
- Install clamping ring and tighten nuts to achieve constant compression. Install drain screen. Secure in place. Close and tighten screw on Flip top.
- Ensure roof drains are clear of debris and free draining at project completion

**B MODIFIED BITUMEN MEMBRANES**

- Ensure membrane surface is dry, prepared and cleaned for the install of the new retro fit drain. For torch applied membrane, ensure the poly film has been burned off to expose the bitumen if on base ply. If on cap ply, please ensure that cap sheet has been de-granulated to receive the new adhesive or torch applied membrane.
- Coat the top and bottom of the drain flange with asphalt primer. Allow to dry. Apply a continuous bed of asphalt mastic on the bottom side of the drain flange. Install the drain turning it slightly while applying sufficient pressure to ensure a good seal with the existing roof membrane.
- Connect new drain stem to existing plumbing lines with a Drain Seal. Tighten screws uniformly to ensure a tight fit.
- Plug the drain with a rag or plumbers plug so roofing debris does not block the plumbing lines.
- Install a base sheet membrane over the drain flange. Extend the sheet at least 6" (152mm) beyond the flange.
- Install cap sheet membrane minimum 4" past base ply. 3'x3' target patch is preferred.
- Cut an opening in the new plies the circumference of the drain throat to remove the rag/plumbers plug and to active the drain.
- Apply seal around each bolt with rubberized asphalt mastic.
- Install clamping ring and tighten nuts to achieve constant compression. Install drain screen. Secure in place. Close and tighten screw on Flip top.
- Ensure roof drains are clear of debris and free draining at project completion.

**D TPO MEMBRANES**

- Ensure membrane surface is dry, prepared and cleaned for the install of the new retro fit drain. Use a weathered membrane cleaner to ensure old membrane is ready.
- Cut a hole in the membrane for the drain stem. Clean both top and bottom sides of the drain flange. Apply a continuous bed of water cut off mastic on the bottom side of the drain flange. Install the drain turning it slightly while applying sufficient pressure to ensure a good seal with the existing roof membrane.
- Connect new drain stem to existing plumbing lines with a Drain Seal. Tighten screws uniformly to ensure a tight fit.
- Plug the drain with a rag or plumbers plug so roofing debris does not block the plumbing line
- For a target patch, cut a 3'x3' TPO piece with rounded corners and a hole 0.5" to 0.75" larger than the drain throat. Make bolt holes but avoid cutting around them.
- Dry install the target patch marking the flange's outline.
- Apply bonding adhesive to the top flange and underside of the patch. Reinstall the patch, weld it to the field membrane, and seal the edges.
- Remove the rag/plumbers plug and to active the drain.
- Seal all cut edges with cut edge sealant. Seal around the drain bolts and drain throat with water cut off mastic
- Install clamping ring and tighten nuts to achieve constant compression. Install drain screen. Secure in place. Close and tighten screw on Flip top.
- Ensure roof drains are clear of debris and free draining at project completion.

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## QR TECHNOLOGY



Introducing the latest innovation from Platinum Roofing Technologies: our advanced Aluminum QR drains, designed to transform your roofing experience.†

Our cutting-edge drains feature an integrated QR code that provides instant access to all essential roof information. At Platinum Roofing Technologies, we are dedicated to setting new industry standards with our innovative approach. Simply scan the QR code to effortlessly retrieve comprehensive details about your roof, making vital information easily accessible whenever you need it.



## BENEFITS:

**Instant Access to Information:**

Users can quickly scan the QR code with a smartphone to access essential details about the drain, such as installation instructions, maintenance schedules, and manufacturer information.

**Streamlined Maintenance:**

Maintenance personnel can access specific maintenance logs, troubleshooting guides, and service histories directly from the QR code, improving efficiency and accuracy.

**Enhanced Documentation:**

The QR code can link to digital records, including installation dates, inspection reports, and compliance certificates, providing a comprehensive history of the drain's usage.

**Reduced Paper Use:**

By providing digital access to information, the QR code reduces the need for physical documentation, promoting a more eco-friendly approach.

**Future-Proofing:**

As technology evolves, the QR code can be updated to link to new resources or information, keeping the data relevant and useful over time.

## TO REGISTER:

- 1 Ensure your phone or tablet has GPS enabled and a mobile data connection.
- 2 Open the camera app and scan the QR code located on the drain dome lid.
- 3 Follow the link that appears after scanning the QR code.
- 4 Allow location permissions to the website to register your roof's position.
- 5 Complete the comprehensive form with detailed information about your roof.
- 6 Provide extensive property details such as installation specifics, warranty information, and roofing system particulars.
- 7 Click "Register"\* to finalize the process.\*\*

## TO ACCESS:

To view your registered drain installation & maintenance records, scan the QR code to create an account and access all your roof specs and maintenance details. All step-by-step instructions for registration & access to the drain maintenance records are included in the product package.

† Private label options available.

\* For details on how PLATINUM handles your information, please refer to the PLATINUM Privacy Policy section.

\*\* Message and data rates may apply.

There is no equal to **PLATINUM!**

Please note that PLATINUM products may be periodically updated & are subject to change without prior notice.

For additional information, contact PLATINUM ROOFING PRODUCTS at 1-800-538-7767 or [info@platinumroofingproducts.com](mailto:info@platinumroofingproducts.com)