

RD-300-R

EXTRA LARGE AREA CAST IRON ROOF DRAIN

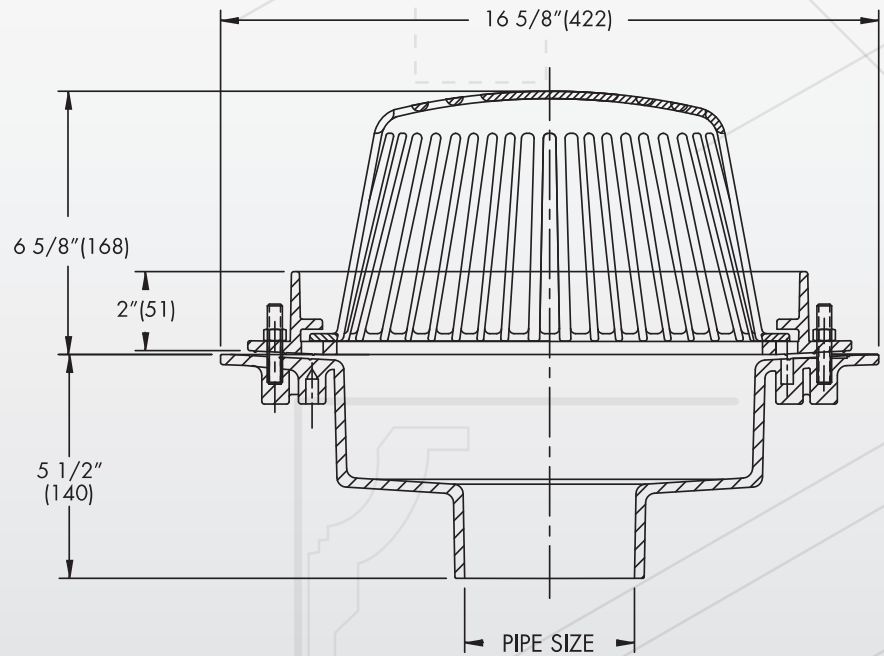
RD-300 epoxy coated cast iron roof drain with flashing clamp with integral 2" (51) external water dam, self-locking polyethylene dome (standard), and no hub (standard) outlet.

FEATURES

- Engineered with cast iron for long life and durability
- Self-locking polyethylene dome (standard) and no hub (standard) outlet simplify installation and maintenance
- Flashing clamp and integral gravel stop ensure reliable drainage
- Available in 2" 3", 4", 5", 6", 8" and 10"

OPTIONS

- Sump receiver
- Underdeck clamp
- Adjustable extension flange
- Cast iron strainer
- Aluminum strainer



Free Area Sq. In. 137

Deck opening 14-1/2" (368)
with sump receiver 18" (457)

Roof Drain Selection Factors

Sizing:

- 1.) Calculate roof area (sq. ft.) to be drained.
- 2.) Determine the maximum hourly rainfall rate for your area. This information is available from your local weather bureau or code authority.
- 3.) Select leader (drain pipe) size. In general, increasing leader size will decrease the number of drains required.
- 4.) Reference leader size with hourly rainfall rate, to determine the roof area drained by each leader (Chart B).
- 5.) Divide roof area (1.) by area per leader (4.) to determine the number of drains required.

Chart A

Leader Pipe Size Inches	Maximum Allowable Horizontal Projected Roof Areas Square Feet at Various Rainfall Rates					
	1 in./hr.	2 in./hr.	3 in./hr.	4 in./hr.	5 in./hr.	6 in./hr.
2	2176	1088	725	544	435	363
3	6440	3220	2147	1610	1288	1073
4	13840	6920	4613	3460	2768	2307
5	25120	12560	8373	6280	5024	4187
6	40800	20400	13600	10200	8160	6800
8	88000	44000	29333	22000	17600	14667

Chart A is based on Table 11-1 from the Uniform Plumbing Code (UPC) - 2006 Edition

Chart B

Pipe Size Inches	Vertical Leader	Allowable Flow (GPM) for Vertical Leaders and Horizontal Storm Drains ²		
		Horizontal Storm Drain / Slope		
		1/8"/ft.	1/4"/ft.	1/2"/ft.
2	23	10	15	20
3	67	34	48	68
4	144	78	110	156
5	261	139	196	278
6	424	222	314	445
8	913	478	677	956
10	-	860	1214	1721
12	-	1384	1953	2768
15	-	2473	3491	4946

Chart B is based on Table 11-2 from the Uniform Plumbing Code (UPC) - 2006 Edition

Materials

Cast iron epoxy coated*

Industrial grade cast iron, finished with gray acid resistant epoxy coating. *NOTE: Marathon drainage standard epoxy coating is designed for interim protection of iron components during processing, shipping, and construction. It is not intended to protect surfaces subject to traffic, or environmental conditions. Exposed iron surfaces should be expected to show surface oxidation (rusting) after a short period of time.*

PVC or ABS

Select roof drains can be specified with optional PVC (-60) or ABS (-61) plastic bodies for direct sch. 40 solvent weld connection.

Poly domes

UV stabilized high density polyethylene, high resistance to breakage and weathering.

Pipe Connections

No Hub (standard)

Butt connection using a no hub or neoprene coupling. Suitable for cast iron, plastic, and most other piping applications.

Push-on (-P)

ASTM C-564 gasket connection, with pipe stop. Suitable for no hub or service weight cast iron, sch. 40 plastic, and steel pipe. Not recommended for above grade.

Inside Caulk (-X)

Used for lead and oakum joints, pipe is inserted through a caulk ring on the drain outlet.

PVC (-60) or ABS (-61) socket

For direct solvent weld connection to sch. 40 plastic pipe.

Threaded (-THD)

Female threaded outlet for connection to IPS threaded pipe.

Commonly Specified Options

Galvanized body and flashing clamp

Standard zinc galvanizing, typically specified in coastal environments.

85 4" High Perforated SS Extension

For IRMA roof applications, allows drainage through insulation area.

B Sump Receiver

Receives roof drain flange for installation flush with the roof deck, eliminating stress on the roofing membrane, and potential puddling around the drain.

D Underdeck Clamp

Install on the underside of the roof deck, securely fastens the roof drain to the deck.

F Deck Flange / Adjustable Extension

10 ga. zinc plated steel flange creates a structurally sound mounting surface over the roof penetration, and enables drain to be elevated to insulation height.

Note: a separate sump receiver is not required when the drain is specified with a -F Deck Flange / Adjustable Extension.

GSS Stainless Steel Ballast Guard

4" high perforated stainless steel, protects drain area and dome in ballasted roof areas.

K Ductile Iron Dome

Superior impact resistance compared to standard cast iron. Finished with standard grey epoxy coating.

K13 Galvanized Ductile Iron Dome

Hot-dipped galvanized, superior impact resistance. Typically specified in coastal environments.

K40 Ductile Iron Low Dome

Low profile, superior impact resistance compared to standard cast iron. Finished with standard grey epoxy coating.

K80 Aluminum Dome

Corrosion resistant, finished with standard grey epoxy coating.

K83 Stainless Steel Mesh Covered Aluminum Dome

Corrosion resistant, mesh prevents small debris from entering the drain.

L Vandal Proof Dome

Dome secured with Allen head bolts.

R 2" High External Water Dam

For emergency roof overflow drains, restricts drainage on roof surface below 2".

US Buy American Compliant

Product will be supplied with minimum 51% domestic content, in compliance with FAR 52.225-9 Buy American Act.

W 4" High Internal Water Dam

For emergency roof overflow drains, restricts drainage on roof surface below 4".