

# SpeedTite® Roof Drains



## Overview

Carlisle's SpeedTite Roof Drains with built-in Vortex Breaker technology are designed to provide improved flow performance, are "drop-in-ready" for installation, and feature a mechanical seal that exceeds the ANSI/SPRI RD-1 Standard for back-flow prevention.

## Features and Benefits

- » Vortex Breaker disrupts the slow draining effect of the vortex, providing a smoother, more consistent flow rate and eliminating the "chugging" that can damage plumbing systems
- » Can be installed and made watertight in minutes without special tools
- » One-piece seamless body with extra-large 17" flange for positive attachment to roof flashing
- » Durable cast aluminum strainer dome and clamping ring will not rust
- » Exceeds ANSI/SPRI RD-1

## Performance Values

Water Head Level (in.)	3" SpeedTite Volumetric Flow Rate (gpm)	4" SpeedTite Volumetric Flow Rate (gpm)
4	267	288
5	346	469
6	347	560

Testing was performed as described in ASPE/IAPMO/ANSI Z1034-2015 Test Method for Evaluating Roof Drain Performance and conducted in accordance with Section 4.1 "Vertical – Pipe Roof – Drain Test." Contact Carlisle for a copy of the test results.

## Ordering Information

Size	Dome Type	Packaging	Dimensional Wt.
3" (75 mm)	Aluminum	Each	32 lbs. (14.53 kg)
4" (100 mm)	Aluminum	Each	32 lbs. (14.53 kg)

## Installation

### Job Preparation

Remove existing strainer dome and clamping ring. Remove other existing drain components as required to enable the SpeedTite Roof Drain flange to lie flush on roof membrane. Remove any debris or construction materials in the existing drain pipe that interfere with proper installation. It is recommended to wire brush the interior leader in the area of seal contact to be as smooth as possible.

1. Examine the existing water leader to make sure there are no elbows that prevent the drain stem from being fully inserted into the pipe (if an elbow is present, see "How to Shorten the SpeedTite Roof Drain Stem"). Insert assembled drain into existing leader pipe until flange lies flush on roof membrane.
2. Tighten the wing nut on the top of the Vortex Breaker until hand tight. The drain is correctly installed when pressure placed on the drain body results in no vertical movement.
3. Secure the drain flange to the roof deck/nailer using a minimum of three pan-head fasteners, evenly spaced around the flange. The flashing membrane must cover and extend past the fastener head. Flashing membrane must be installed per Carlisle specifications and details.
4. Install Water Cut-Off Mastic and place clamping ring over metal studs. Install stainless steel nut and lock washers, tightening clamping ring against membrane flashing until secure.
5. Install strainer dome by aligning screw holes with the holes in the clamping ring. Secure the screws provided.

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## How to Shorten the SpeedTite Roof Drain Stem

Make sure there is at least 4" (100 mm) of clear vertical distance in the existing pipe to accommodate the drain. Remove the wing nut and lock washer in order to remove the SpeedTite mechanical seal and seal expander from the drain body. Cut drain stem as evenly as possible to desired length and re-assemble the SpeedTite mechanical seal and seal expander. **Note: Leave at least 2.5" (65 mm) of the drain stem to accommodate the seal.** Trim the threaded rod on the seal expander accordingly, as the cut stem may cause interference with the strainer, but leave enough room for the wing nut. To ensure that the strainer dome fits properly, do not cut the threaded rod until after the lock washer and wing nut have been reassembled and secured in place on the drain stem. Once the drain and seal have been reassembled, insert into the existing water leader and complete the assembly, following installation steps 2 through 5.

*Review Carlisle specifications and details for complete installation information.*

## Precautions

- » Be sure the drain leader is thoroughly cleared of buildup and debris.
- » When installing the metal clamping ring, do not overtighten the provided lock nuts.

## Typical Properties and Characteristics

Drain Body	11-gauge (.125"/3.18 mm) spun aluminum
Flange	17" (432 mm) diameter with sump area
Stem	10" (254 mm) length
Seal	Carlisle SpeedTite Mechanical Seal
Strainer Dome	Cast aluminum
Clamp Ring	Cast aluminum

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

## LEED® Information

Pre-consumer Recycled Content	<5%
Post-consumer Recycled Content	<5%
Manufacturing Location	Canada
Solar Reflectance Index (SRI)	N/A