

1. DESCRIPTION

This bulletin describes the Viking Cold Storage Bracket, hereafter referred to as "cold storage bracket," including the product overview, technical details, and installation instructions. Always refer to the sprinkler's technical data for important installation information.

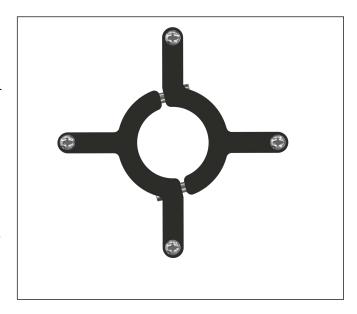
2. LISTINGS AND APPROVALS

For Listing and Approval specifications, refer to the sprinkler's technical data sheet.

3. INTENDED USE

The large cold storage bracket is intended for use with the following sprinklers: VK502, VK504, VK512, VK544, VK545, VK546, VK547, VK548, and VK549.

The small cold storage bracket is intended for use with all Viking standard and extended coverage dry sprinklers, as well as the Residential Dry Sprinkler VK449.



4. TECHNICAL SPECIFICATIONS

4.1 Ordering Information

Cold storage bracket kit part numbers: large inner diameter - 27678; small inner diameter - 27734

4.2 Components, Dimensions, and Materials

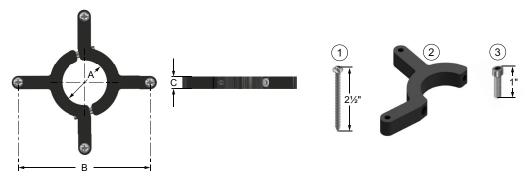


Figure - 1: Components and Dimensions

Ref Description	Value	
	Part Number 27678	Part Number 27734
Inner diameter	1-5/8"	1-5/16"
Nominal centerline to centerline	5"	5"
Thickness	1/2"	1/2"
Description	Quantity in Kit	Material
Screw, #10 x 2-1/2", self-tapping 1,2	4	Stainless steel
Bracket (half)	2	UNS-G10180
Screw, 1/4-20 x 1"	2	UNS-S31600
	Inner diameter Nominal centerline to centerline Thickness Description Screw, #10 x 2-1/2", self-tapping 1,2 Bracket (half)	Description Part Number 27678 Inner diameter 1-5/8" Nominal centerline to centerline 5" Thickness 1/2" Description Quantity in Kit Screw, #10 x 2-1/2", self-tapping 1.2 4 Bracket (half) 2

^{1.} Assembly kit screws may vary.

^{2.} Ensure the screw length is the correct size before installing.

4.3 Bracket Pre-Installation Recommendations

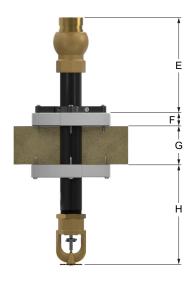


Figure - 2: Sprinkler Assembly with Boots and Bracket (VK512 Shown for reference)

Prior to installing the bracket, the following should be completed:

- Install all piping and applicable upstream devices.
- Prepare the ceiling structure (G) for the dry sprinkler installation.
- Determine the appropriate deflector distance from the ceiling (H), then measure and mark the following on the dry sprinkler barrel: boot location (F) and bracket location.
- Install the flexible sprinkler connection into the branch line fitting.
- Orient the sprinkler frame arms to be parallel with the piping, then attach the dry sprinkler barrel inlet to the flexible sprinkler connection.

NOTE: The ESFR sprinkler barrels have a white marking near the inlet to indicate where the sprinkler frame arms are located. (ELO sprinkler barrels do not have this marking.)

• Install the boot (F) on the dry sprinkler barrel above the ceiling, drilling the screws in cross pattern. (See Figure 3) The boot location marking should appear just above the boot.

NOTE: The top boot is required when installing the bracket. The bottom boot is optional.

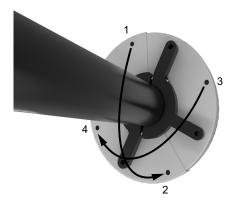


Figure - 3: Cross Pattern

4.4 Bracket Installation

A CAUTION

Falling object hazard. An unsupported sprinkler assembly could fall and strike personnel in the space below. Ensure the sprinkler assembly is supported or secured by holding it, installing it into the branch line fitting, or by using the boot during installation.

1. Partially assemble the bracket on one side.



Figure - 4: Partially Assemble the Bracket

- 2. Once the sprinkler assembly is secured, rotate one half of the bracket assembly 180°, opening the bracket assembly, and place the other half on the dry sprinkler barrel.
- 3. Swing the open half of the bracket assembly to the closed position around the barrel. (See Figure 5)

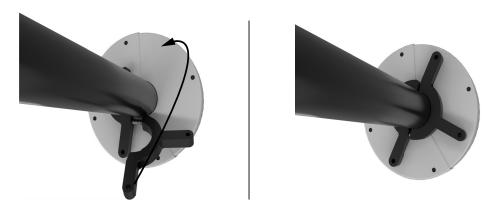


Figure - 5: Install the Bracket on the Barrel

4. Align the bracket end holes and loosely hand-thread a screw through the holes. (See Figure 6)

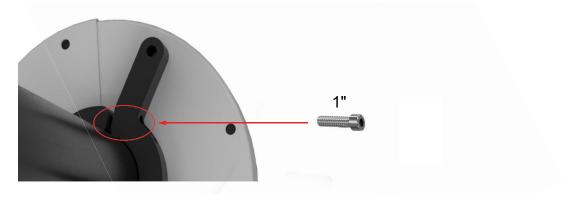


Figure - 6: Thread Screw to Close Bracket

5. Using a hex key (3/16"), complete the threading process by alternately tightening the 1" screws. Apply a half turn to each screw until the bracket is securely in place.

NOTE: Torque the screws between 36 in-lb (minimum) to 72 in-lb (maximum).

6. Rotate the bracket assembly so that the bracket screw holes and the boot screw holes do not interfere with each other.

NOTE: Align the frame arms with other sprinklers or the piping.

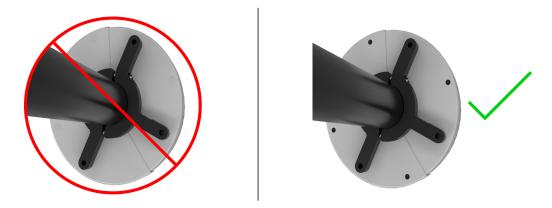


Figure - 7: Rotate Bracket Screw Holes Away from Boot Screw Holes

7. Install the 2-1/2" self-tapping screws through each bracket assembly hole and through the boot. (See Figure 8)

NOTE: To ensure proper installation, tighten the screws in a cross pattern. The screws will puncture through the boot. (See Figure 3)

NOTICE

Risk of product damage or penetration seal damage. If the correct 2-1/2" screws are not used to install the bracket, the sprinkler assembly or the penetration seal may shift out of place due to connected pipe or flexible hose movement upstream of the sprinkler assembly. This movement can damage the sprinkler assembly or compromise the seal. Verify that the 2-1/2" screws are being used to install the bracket.



Figure - 8: Thread 2-1/2" Screws into Bracket

5. CONTACT

The cold storage bracket is available through Viking distributors only. Contact your local Viking sales office, which can be found on our website:

Americas and Asia: www.vikinggroupinc.com/locations OR Europe, Middle East, Africa (EMEA): www.viking-emea.com/contact

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