

Inflatable Duct Sealing Device Selection



1. Scope

This work practice provides guidance in selecting a Raychem “Rayflate” inflatable duct sealing system for use in the Seattle City Light (SCL) electrical system.

2. Application

The Raychem Rayflate Duct Sealing System (RDSS) is designed to provide a waterproof seal around power cables in ducting systems. It helps to prevent flooding in cable vaults, access manholes, substation basements, and customer feeds. The system may be used with plastic, concrete or steel ducting systems.

The RDSS consists of an inflatable bladder of flexible metallic laminate and a sealing clip. The system comes in different kits, corresponding to number of cables and cable diameter. The number of cables determines the system size, as well as the number of clips to use. See Section 3.

Depending on the duct diameter, most Rayflate bladders seal vacant ducts and ducts containing up to two cables.

Sealing of three or more cables can be achieved by inserting a mastic sealant clip between the cables. The clip is made from a high-temperature mastic mounted on an installation stick.

Two inflation tools are available, one for use with a 16 gr. CO₂ gas cylinder and one for use with a customer's own source of compressed air.

Complete installation instructions are provided by the manufacturer. See Rayflate Duct Sealing System Product Installation Instructions, PII-54832.

3. Selection Guide

Number of Cables in Duct	Duct ID ¹ Range (in)	Max. Cable or Cable Bundle Diameter (in)	Raychem Inflation Kit	SCL Stock No.	Clip Part No. / No. of clips	SCL Stock No.
0, 1, or 2	1.75 to 2.25	0.7 to 1.6	RDSS-60	737530	none	-
	2.50 to 3.00	1.5 to 2.2	RDSS-75	737531	none	-
	3.25 to 4.50	2.2 to 3.5	RDSS-100	737532	none	-
	4.75 to 5.00	3.8 to 4.1	RDSS-125	737533	none	-
3 or 4	1.75 to 2.25	0.5 to 1.4	RDSS-60	737530	RDSS-CLIP-75 (1)	737541
	2.50 to 3.00	1.3 to 2.0	RDSS-75	737531	RDSS-CLIP-75 (1)	737541
	3.25 to 4.50	2.0 to 3.3	RDSS-100	737532	RDSS-CLIP-100 (1)	737542
	4.75 to 5.00	3.6 to 4.9	RDSS-125	737533	RDSS-CLIP-125 (1)	737543
5, 6, or 7	1.75 to 2.25	0.3 to 1.2	RDSS-60	737530	RDSS-CLIP-75 (2)	737541
	2.50 to 3.00	1.1 to 1.8	RDSS-75	737531	RDSS-CLIP-75 (2)	737541
	3.25 to 4.50	1.8 to 3.1	RDSS-100	737532	RDSS-CLIP-100 (2)	737542
	4.75 to 5.00	3.4 to 3.7	RDSS-125	737533	RDSS-CLIP-125 (2)	737543

¹ Inner Diameter

4. Sources

Raychem Rayflate Duct Sealing System Product Installation Instructions, PII-54832, Rev AF, DCR C58697, PCN 380543-000; Effective Date December 24, 1997

Raychem Rayflate Duct Sealing System Product Brochure EPP 0569; Tyco Electronics Raychem, 2013