

Rope, 12-Strand, Class 1, Red/Black



1. Scope

This standard covers the requirements for red/black, Class 1, 12-strand rope.

This standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No.	Size (in)
014786	3/8
014785	1/2
014799	1

2. Application

Red/black, Class 1, 12-strand rope is for use on aerial trucks, jibs, winches, and material handlers.

12-strand, Class 1 rope offers high strength with low stretch, outstanding abrasion resistance, and easy splicing. Product is coated to enhance wear life and snag resistance.

Two-color rope provides visual twist indication.

The improper use of rope may be dangerous. Rope will fail if worn-out, overloaded, misused, damaged, or improperly maintained or abused. Rope failure may cause death, serious injury, or property damage.

This rope should be secured to the drum with a minimum of four wraps.

Standard Coordinator
John Shipek

Standards Engineering Supervisor
John Shipek

Division Director
Andrew Strong



3. Industry Standards

Rope shall meet the requirements of the latest revision of either of the following industry standards:

Cordage Institute International Standard CI 1500; “Test Methods for Fiber Rope”

ISO 2307 (en); “Fibre Ropes; Determination of Certain Physical and Mechanical Properties”

4. Requirements

Rope shall meet the requirements of Tables 4.1a–d.

Table 4.1a. General Requirements

Fiber	Polyester
Color	Red/black
Class	1
Construction	12-strand
Other	Coated and UV-resistant
Lay	None

Table 4.1b. 3/8-Inch Size Requirements

Diameter, nominal (in)	3/8
Breaking strength, average (lb)	5600
Breaking strength, minimum (MBS) (lb)	4800
Working load limit (WLL), minimum (lb)	960

Table 4.1c. 1/2-Inch Size Requirements

Diameter, nominal (in)	1/2
Breaking strength, average (lb)	10,400
Breaking strength, minimum (MBS) (lb)	8800
Working load limit (WLL), minimum (lb)	1760

Table 4.1d. 1-Inch Size Requirements

Diameter, nominal (in)	1
Breaking strength, average (lb)	39,200
Breaking strength, minimum (MBS) (lb)	33,300
Working load limit (WLL), minimum (lb)	6660

Strength ratings shall be based on spliced rope.

Working load limit shall be based on the minimum breaking strength, employing a safety factor of 5:1.

5. Testing

Test data that establishes compliance with the requirements of either CI 1500 or ISO 2307, and this standard shall be provided upon request.

6. Packaging

Rope shall be packaged on reels to prevent damage during shipping, handling, and inside storage.

Rope shall be packaged on 600-foot reels.

Each length shall be continuous throughout, containing no splices, hockles, kinks, or loose ends.

Each reel shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- Length, nominal
- Seattle City Light stock number

Each shipping container shall be legibly marked with the following information:

- Manufacturer identification
 - Seattle City Light purchase order number
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7. Issuance

Stock Unit: FT

8. Approved Manufacturers

Manufacturer	Product Family	Product Code
Samson	TW-12, red/black	821 (coated)

9. Sources

Shipek, John; SCL Standards Supervisor, originator, and subject matter expert for 7272.31

Atkins, Dustin; SCL Capital Projects Coordinator Senior, Fleet, subject matter expert for 7272.31

Hutchison, Will; Capital Projects Coordinator, Fleet, subject matter expert for 7272.31

SamsonRope.com

Samson Utility Product Guide, 2016/2017, YGS:MSW 109598 500 8/2017