

Head Protection Systems, MSA



1. Scope

This standard covers the requirements for MSA head protection systems, consisting of a safety helmet, more commonly known as a hard hat, and compatible accessories. This standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No.	Description
014697	Safety helmet, non-vented, yellow
014698	Half-face spectacle, clear

For partial brim “caps” or full brim style systems, see SCL 4006.30.

2. Application

A head protection system consists of a hard hat shell and an internal suspension manufactured by the same company and designed to work together. Half-face spectacles are available as an option.

A head protection system:

- Reduces the force of an impact.
- Guards against penetration.
- May provide protection from electric shock.

Safety helmet with half-face spectacles are intended to provide protection from forward facing or overhead projectile hazards.

With the spectacles in the working position, safety glasses shall be worn under the spectacles if there are gaps between your face and the spectacles that could let external agents intrude and cause damage to your eyes.

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Half-face spectacles are not suitable in situations where a CAT 2 face shield is required.

The manufacture recommends replacing the suspension after no more than 12 months of use and replacing the shell after no more than five (5) years of use.

Safety helmet has a maximum 7-year product life; storage life of 2 years from the date of manufacture and 5 years of service life.

3. Industry Standards

Head protection systems shall meet the applicable requirements of the latest revision of the following industry standards:

ANSI/ISEA Z89.1; American National Standard for Industrial Head Protection

ANSI/ISEA Z87.1; Occupational and Educational Personal Eye and Face Protection Devices

Color designations shall be consistent with the Pantone Matching System (PMS), the standardized color reproduction numbering system of the Pantone Corporation.

4. Requirements

Head protection systems shall meet the standard Type I, Class E performance requirements as defined in ANSI/ISEA Z89.1.

Half-face spectacles shall meet the requirements of ANSI/ISEA Z87.1 including the high impact rating of ANSI/ISEA Z87.1+.

4.1 Helmets, Stock No. 014697

Helmets shall have the following attributes:

Style	Non-vented
Size	Standard 6-1/2 to 8 (head circumference)
Shell material	High-density polyethylene (HDPE)with UV inhibitor
Color	Yellow
Interior foam	Polystyrene
Suspension assembly	Ratchet, 4-points, adjustable, Fas-Trac III Pivot, Nylon and polypropylene, replaceable
Chin strap	4-point, multiple adjustable point, polyester and acetal, replaceable
Sweatband	Breathable foam, polyester, moisture wicking, Velcro attachment, replaceable
Customized logo	SCL Logo as specified in section 4.2
Temperature rating	-22 to 140-degree F

4.2 Customized Logo

The SCL logo shall be in accordance with the Seattle City Light Branding Guidelines. The two-line Chief Seattle logo shall be printed on the front of each helmet in a three-color application process using SCL Blue (PMS 293) and Black, with the background of the medallion printed in White, as depicted in Figures 4.2a and 4.2b.

Figure 4.2a. Chief Seattle Logo Color Scheme



Figure 4.2b. Chief Seattle Logo Dimensions



Dimensions in Figure 4.2b have a tolerance of +/- 0.06 inch.

4.3 Half-Face Spectacles, Stock No. 014698

Half-face spectacles shall be compatible with the helmet (SCL Stock No. 014697) with no additional frames or adapters required.

Half-face spectacles shall have the following attributes:

Style	Contoured spectacles, frameless
Material	Polycarbonate
Impact Resistant	High, (per ANSI Z87.1-year+)
Color	Clear
Coating	Anti-fog and anti-scratch
Helmet Attachment	Dual pivot hinges, push button

5. Marking

Helmets shall be marked according to the requirements of ANSI/ISEA Z89.1 and shall include:

- Manufacturer name or identification mark
- Date of manufacture
- ANSI/ISEA Z89.1 designation
- Applicable Type and Class designations followed by applicable optional criteria markings
- Appropriate head size range

Half-face spectacles shall be marked according to the requirements of ANSI Z87.1+. This indicates that the lenses meet the ANSI high impact criteria rating.

6. Packaging

Helmets and compatible accessories shall be packaged to prevent damage during shipping, handling, and inside storage.

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- SCL stock number
- Quantity

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

- SCL purchase order number
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7. Issuance

Stock unit: EA

8. Approved Manufacturers

Stock No.	Description	Manufacturer	Catalog No.
014697	Safety Helmet, Yellow	MSA	10194795-BL-78469 (Rev.1)
014698	Half-face Spectacle, Clear	MSA	10194820

9. References

SCL Brand Guidelines; February 2018

SCL Material Standard 4006.30; "Head Protection Systems"

10. Sources

Davis, Kevin, SCL Field Safety Manager and subject matter expert for 4006.23

MSA, V-Gard H1 Safety Helmet Technical Specifications, 0637-010-MC/ 03.2020

MSA, V-Gard H1 Safety Helmet, 0637-001-MC / 10.2019

MSA, Operating Manual, V-Gard H1 Safety Helmet Eye and Face Protection, Print Spec. 10000005389(F), 2019

SCL Material Standard 4008.19; "Safety, Goggles, Face Shields and Accessories"

SCL Material Standard 4013.31; "Arc Flash Protection Accessories"

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