Safety Equipment Institute

SEI Certification Program Manual

Section 21: Eye and Face Protection Program

21.0 Eye and Face Protection Program Standards

- **ANSI/ISEA Z87.1-2020** Eye and Face Protection
- **ANSI/ISEA Z358.1-2014 (R2020)** Eyewash
- **CAN/CSA Z94.3-2020** Eye and Face Protection

21.1 Certification Submittal Package

A Certification Submittal Package shall include an SEI Certification Submittal form *(see Form 8.0: SEI Certification Submittal Form*) and a Components & Materials Description Checklist form (*see Section 21B: Safety Eyewear Components & Materials Description Checklist* or *Section 21C: General Components & Materials Description Checklist)* for each product model, variant or accessory being submitted. Completion of the submittal package serves four primary purposes:

1. The submittal package provides SEI and the SEI Quality Assurance Auditor with a description of new, modified and continued products to be selected during the audit.
2. The information provided by the manufacturer in the full submittal package confirms to SEI the product design and components remain unchanged since the submitted product was last tested and certified.
3. Receipt of the submittal package by the testing laboratory, from SEI, serves as the laboratory's authorization to begin testing the product(s) and allows laboratory personnel to verify that the correct product samples have been received.
4. The return of a signed copy of the submittal form from the testing laboratory provides SEI with a record of the date testing was completed on the product model.

Over the life of the product, subsequent submittal packages shall document that the product model submitted for certification testing is identical to samples **previously** tested, except where Class I model changes have been tested and documented through the submission of additional SEI submittal packages or documented Class II changes have been made. It is therefore necessary that each submittal to SEI include sufficient product description information, which is achieved by a complete components and materials listing to uniquely and unambiguously identify the product model in question (see *Section 14: Product Changes*).

<u>SEI Certification Submittal Form</u>

Each submittal form must be identified on the submittal form as either (1) initial certification, (2) annual recertification, (3) Class I change, or (4) Class II change. Finished product manufacturing facilities (assembly) located at a different address (i.e. suppliers or company-owned factories) shall be identified in Section 3 of the submittal form. The SEI Certification Submittal Form shall be signed by the authorized manufacturer representative within the participating company having the authority to authorize expenditures for testing.

Components and Materials Description List

The product description information may be (a) listed on the Component & Materials Description Checklist form, (b) provided as a separate listing by the manufacturer (i.e., Bill of Materials), or (c) appropriate engineering drawings/ specification sheets. *Use of Section 21B: Safety Eyewear Components and Materials Description Checklist* form or *Section 21C: General Components & Materials Description Checklist* is recommended. The following information is to be included on each Components & Materials List.

A. Description of Major Components
   All 2major components and materials shall be identified and described. Where possible, include brand name and part number, supplier name and location.
B. Primary Materials
   Materials used in the construction of major components shall be identified. Identification shall include trade names, if applicable. All changes shall be reported to SEI for evaluation and possible action.
C. Manufacturing Locations
   All locations in which the product model is manufactured or assembled must be identified on the SEI Certification Submittal Form. If major components are manufactured by another company and purchased by the SEI participants, the name and address of the manufacturing facility and contact name shall be identified on the Components & Materials Description Checklist.
D. Specification Sheets or Technical Bills of Materials
   Product specification sheets or technical bills of materials (BOM) may be included with the SEI Certification Form in addition to the Components & Materials description checklist to fulfill some or all other requirements noted above. In the case of annual recertification, the appropriate documents (i.e., submittal form and components & materials listing or BOM) shall be prepared prior to the sample selection audit and available to the auditor during the audit for reference and confirmation of product.
E. Confidentiality
   All product information received by SEI staff, the SEI Quality Assurance Auditor, or the SEI testing laboratory shall be considered confidential and shall not be released to any third party without written authorization to do so (with the exceptions noted *Section 3: Manufacturer's Agreement* for response to a subpoena, court order or other compulsory process).

21.2 Eye and Face Protection Program Codes

SEI utilizes SEI Reference Numbers internally to identify each SEI participant and their unique models and variants. The first set of two or three letters/numbers indicates which standard program code the model/variant is being certified against. The second set of three letters indicates the SEI participant's unique identification. The third set of numbers is assigned by SEI to identify each model (see definition below) being certified.

e.g.: BBH ABC 03
e.g.: BBH ABC V03

Where BBH identifies the standard program code
Where ABC identifies the unique participant identification
Where 03 identifies the model submitted for certification
Where V03 identifies the model as the third variant (V03) for this Participant Identification (ABC)

SEI Reference Program Code	Standard Description	Product Type	Standard
EF	American National Standard for Occupational and Educational Personal Eye and Face Protection Devices	Eye and Face Protection	ANSI/ISEA Z87.1
WS	American National Standard for Emergency Eyewash and Shower Equipment	Eyewash	ANSI/ISEA Z358.1
EFC	Standard for Eye and Face Protectors	Eye and Face Protection	CAN/CSA Z94.3

21.3 Definition of a "Model"

"Model" is the collective term used to identify a group of protective devices of the same basic design and components from a single applicant produced by the same manufacturing and quality assurance procedures that are covered by the same certification. Any change that affects the device's performance under the limits of the current certification standards constitutes a different model.

For purposes of the SEI Certification Program, the above definition of the term "model" uses performance characteristics as the basic criteria. The following examples will provide the applicant with guidelines in order to determine when a new model designation is required. These examples are illustrations and are not intended to be all inclusive.

21. Annual Certification Fees

Testing shall be performed annually. When an initial submittal package is submitted to SEI, the Annual Participation Fees (*See Section 7: Annual Participation Fees*) and Annual Model Certification Fees are due. The following is a schedule of annual model certification fees that apply to the Eye and Face Protection Products Program:

Program Code	Model Type	Annual Model Certification Fees
EF, EFC	Base Model	$618
	Variant Model	$257
	Accessory Model	$139
WS	Base Model	$515
	Variant Model	$232
	Accessory Model	$139

21.5 ANSI-ISEA Z87.1 Eye and Face Protection

A. Definition of Model

Both plastic and glass lenses used in eye and face protection devices may be submitted for component model certification, so that when such lenses are used in several products, the repetition of all tests will not be necessary. In general, a change from one certified lens to another is considered a Class II change, one that should not require a new model designation.

If the manufacturer of a certified component model elects to place the SEI certification mark on the component, the mark shall be as shown below, distinctive from the SEI certification mark used on product models. The component model certification mark shall emphasize that the entire product is not necessarily an SEI certified model. For example:

Lens Certified Model- Z87.1-2020(with or without +) or
Lens Cert. Mod. - Z87.1-2020, (with or without +).

An SEI lens certified model shall be a complete component which does not require further processing prior to insertion into a protective device. If, however, a certified component model is altered in any way prior to inclusion in the finished product, further tests shall be required. In general, if a participating manufacturer purchases lenses that are SEI certified component models for use in spectacles, it would not be necessary to have the lens-only testing repeated.

a. Plano Lenses – Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Shape
    2. Material

    Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Shade
    2. Size

b. Filter Plates - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Size
    2. Material

    Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Shade

c. Spectacles - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Front configuration, i.e., universal or fitted bridge, lens shape, frame design, etc.
    2. Manufacturing process, i.e., injection molding, sheet stock, fabrication, metal fabrication, etc.

    Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Type of side shield
    2. Adjustable nose pads
    3. Lenses
    4. Eye and bridge size
    5. Temple style and size
    6. Color
    7. Another certified material
    8. With or without side shield flange

d. Goggles - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Cup or body configuration
    2. Manufacturing process, i.e., compression molding, injection molding, vacuum forming, etc.

    Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Another certified material
    2. Ventilation method
    3. Bridge
    4. Lenses and plates
    5. Color
    6. Accessories or attachments

e. Faceshield - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Window attachment system
    2. Suspension

    Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Headgear color
    2. Size of crown protector
    3. Another certified material
    4. Visor dimensions, color and material

f. Welding Helmets - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Manufacturing process, i.e., compression molding, injection molding, etc.
    2. Shell configuration

    Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Size of window opening
    2. Stationary or lift fronts

3. Suspension method including hand shields
4. Another certified material
5. Color
6. Accessories or attachments

g. Respirator Facepiece - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Manufacturing process,
    2. Facepiece configuration/shape/field of view dimensions

    Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Accessories or attachments
    2. Stationary or lift fronts
    3. Color

B. Definition of Major Components with Respect to Markings
    a. Spectacles
    Lens, Front, Temple (at least one if plano and both if non-plano), removable side shields
    b. Goggles
    Frame, Lens, and Lens Housing or Carrier
    c. Faceshield
    Headgear/ Adapter, Crown, and Window
    d. Welding Helmets and Hand shields
    Lens, Headgear, Shell, and Lens Housing or Carrier

D. Laboratory Testing Fees/ Attributes and Variables
SEI currently has approved three (3) laboratories that may conduct testing to this standard. The schedule of rates for testing at these laboratories can be found on the SEI website and can be used to estimate the total cost of testing for all the models that are to be certified.

21.5 ANSI/ISEA Z358.1 Emergency Eyewash and Shower Equipment

A. Definition of Model

a. Emergency Shower - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Design of shower head, i.e., single head or multiple head

   Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Materials
    2. Methods of mounting

b. Plumbed Eyewash - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Design of discharge head

   Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Bowl
    2. Actuator design
    3. Material
    4. Valve design
    5. Contaminant cover

c. Self-Contained Eyewash - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Pressurized
    2. Non-pressurized
    3. Method of actuation

   Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Heating
    2. Materials
    3. Size
    4. Contaminant Cover

d. Eye/ Face Wash - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Design of discharge heads
    2. Configuration of spray

    Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Material
    2. Bowl
    3. Actuator design
    4. Contaminant

e. Hand-Held Drench Hose - Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:
    1. Method of actuation
    2. Design of discharge head

    Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard and therefore would not require a new model designation:
    1. Length
    2. Type of hose

f. Combination Units
    Components of combination units shall meet all the requirements of the standard. They will be considered separate models for certification.

B. Laboratory Testing Fees/ Attributes and Variables
SEI currently has approved one (1) laboratory that may conduct testing to this standard. The schedule of rates for testing at these laboratories can be found on the SEI website and can be used to estimate the total cost of testing for all the models that are to be certified.

21.6 CAN/CSA Z94.3 Industrial Eye and Face Protection

A. Definition of a Model
    a. Class I Protectors – Spectacles

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:

1. Front configuration, i.e.2, universal or fitted bridge, lens shape, frame design, etc.
2. Manufacturing process, i.e., injection molding, sheet stock, fabrication, metal fabrication, etc.

Characteristics that should not affect the model's ability to meet the performance requirements of the standard and therefore would not require a new model designation:

1. Type of side shield
2. Adjustable nose pads
3. Lenses
4. Eye and bridge size
5. Temple style and size
6. Color
7. With or without side shield flange

b. Class 2 Protectors – Goggles

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:

1. Cup or body configuration
2. Manufacturing process, i.e., compression molding, injection molding, vacuum forming, etc.

Characteristics that should not affect the model's ability to meet the performance requirements of the standard and therefore would not require a new model designation:

1. Another certified material
2. Ventilation method
3. Bridge
4. Lenses and plates
5. Color
6. Accessories or attachments

c. Class 3 Protectors – Welding Protection – Helmets

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:

1. Manufacturing process, i.e., compression molding, injection molding, etc.
2. Shell configuration

Characteristics that should not affect the model's ability to meet the performance requirements of the standard and therefore would not require a new model designation:

1. Size of window opening
2. Stationary or lift fronts
3. Suspension method

4. Color
5. Accessories or attachments

d. Class 4 Protectors – Welding Protection – Hand Shields

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:

1. Manufacturing process, i.e., compression molding, injection molding, etc.
2. Shell configuration

Characteristics that should not affect the model's ability to meet the performance requirements of the standard and therefore would not require a new model designation:

1. Size of window opening
2. Stationary or lift fronts
3. Suspension method
4. Color
5. Accessories or attachments

e. Class 5 Protectors – Welding Protection – Hoods

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:

1. Window attachment system
2. Manufacturing process

Characteristics that should not affect the model's ability to meet the performance requirements of the standard and therefore would not require a new model designation:

1. Dimensions, color and material
2. Stationary or lift fronts

f. Class 6 Protectors- Face Shields

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:

1. Window attachment system
2. Suspension

Characteristics that should not affect the model's ability to meet the performance requirements of the standard and therefore would not require a new model designation:

1. Headgear color
2. Size of crown protector
3. Visor dimensions, color and material

g. Respirator Facepiece

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard and therefore require a new model designation:

1. Manufacturing process
2. Facepiece configuration/shape/field of view dimensions

Characteristics that should not affect the model's ability to meet the performance requirements of the standard and therefore would not require a new model designation:

1. Accessories or attachments
2. Stationary or lift fronts
3. Color

B. Attributes and Variables

SEI currently has approved two (2) laboratories that may conduct testing to this standard. The schedule of rates for testing at these laboratories can be found on the SEI website and can be used to estimate the total cost of testing for all the models that are to be certified.

For the CSA requirements note that Section 1 is to be added to all Classes of protective products in Section 2 and then the appropriate product type must be added from Section 3 for the complete certification requirement.