Safety Equipment Institute

SEI Certification Program Manual

Section 22: Fall Protection Program

22.0 Fall Protection Program Standards

- **CAN/CSA Z259.2.2-17 (R2022) Self-Retracting Devices**
- **CAN/CSA Z259.2.5-17 (R2021) Fall Arresters and Vertical Lifelines**
- **CAN/CSA Z259.10-18 (R2023) Full Body Harnesses**
- **CAN/CSA Z259.11-17 (R2021) Energy Absorbers & Lanyards**
- **CAN/CSA Z259.12-16 (R2021) Connecting Components for Personal Fall Arrest Systems**
- **ASTM F887-18 Arc Resistant Full Body Harnesses & Energy Absorbing Lanyards**
- **NFPA 2500-2022 (1983) Life Safety Rope & Equipment for Emergency Services**

22.1 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 22B: General Components & Materials Description Checklist*) and a User Guide and Label Checklist form for NFPA standards (*see Section 22C: User Guide and Label 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.

<u>SEI Certification Submittal Form</u>

Each submittal form must be identified 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 & Materials Description List

The product description information may be (a) listed on the Component and 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 22B:* General Components and Materials Description Checklist form is recommended. The following information is to be included on each Components & Materials List. Brief examples are provided for guidance.

A. Description of Major Components
   All major 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 and 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.

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).

22.2 Fall 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.

eg: BBH ABC 03
eg: 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
FCR	Standard on Self-Retracting Devices	Self-Retracting Devices for Personal Fall Arrest Systems	CAN/CSA Z259.2.2
FCV	Standard on Fall Arresters, Vertical Lifelines, and Rails	Fall Arresters, Vertical Lifelines and Rails	CAN/CSA Z259.2.5
FCH	Standard on Full Body Harnesses	Full Body Harnesses	CAN/CSA Z259.10
FCL	Standard on Energy Absorbers and Lanyards	Energy Absorbers & Lanyards	CAN/CSA Z259.11
QCB, QCR, QCH, QCW	Standard on Connecting Components for Personal Fall Arrest System	Connecting Components for Personal Fall Arrest Systems	CAN/CSA Z259.12
FPE	Standard Specifications for Personal Climbing Equipment	Arc Resistant Full Body Harnesses & Energy Absorbing Lanyards	ASTM F887

RHH	Standard on Life Safety Rope and Equipment for Emergency Services	Life Safety Rope & Equipment for Emergency Services	NFPA 2500 (1983)

22.3 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 characteristic 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.

22.4 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 Fall Protection program(s):

Program Code	Model Type	Annual Model Certification Fees
FCR, FCH, FPE, FCP, RHH	Base Model	$618
	Variant Model	$206
	Accessory Model	$139
QCB, QCR, QCH, QCW	Base Model	$309
	Variant Model	$206
	Accessory Model	$139
FCL, FCV	Base Model	$1,030
	Variant Model	$206
	Accessory Model	$139

22.5 CAN/CSA Z259.2.2, CAN/CSA Z35.2.5, CAN/CSA Z259.10, CAN/CSA Z259.11, CAN/CSA Z259.12

A. Definition of Model

Qualified Elements including rings, D-rings, circular rings, oval rings, carabineers, snaphooks, buckles, adjusters, webbing, rope (including fiber rope and wire rope):
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. Changes in basic design
2. Changes in material type
3. Changes in dimensions
4. Changes in finish

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. Changes in webbing color
2. Same qualified element (component) from different source of supply
   Note: The word "same" is interpreted to mean that webbing and hardware are manufactured to identical engineering specifications that include identical material, dimensions, finish and other requirements.

Examples of Major components:

1. Material type
2. Construction method
3. Surface finish
4. Size and shape
5. Strength

Full Body Harnesses

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. Changes in basic design/configuration
2. Changes in hardware (material, dimensions, design)
3. Changes in webbing material, composition and thickness
4. Type of harness hardware and placement
5. Changes in stitch patterns
6. Changes in thread

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. Changes in color
2. Changes in non-fall protection accessories such as comfort padding and positioning rings
3. Same webbing or hardware from different source of supply
   Note: The word "same" is interpreted to mean that leather, webbing or hardware is manufactured to identical engineering specifications that include identical material,, dimensions, finish and other requirements

Examples of Major components:

Not applicable for this product

Energy Absorbing Lanyards

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. Changes in basic design/configuration/energy dissipation technology
2. Changes in hardware (material, dimensions, design)
3. Changes in webbing material, composition and thickness

4. Changes in stitch patterns
5. Changes in thread

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. Changes in color
2. Same webbing or hardware from different source of supply
   Note: The word "same" is interpreted to mean that leather, webbing or hardware is manufactured to identical engineering specifications that include identical material, dimensions, finish and other requirements

Examples of Major components:

Not applicable for this product

Self-Retracting Lanyards

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. Changes in basic design/configuration
2. Changes in hardware (material, dimensions, design)
3. Changes in pay-out line material, composition and/or 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. Changes in color
2. Same hardware from different source of supply
   Note: The word "same" is interpreted to mean that leather, webbing or hardware is manufactured to identical engineering specifications that include identical material,, dimensions, finish and other requirements

Examples of Major components:

Not applicable for this product

Fall Arresters

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. Changes in basic design/configuration
2. Changes in hardware (material, dimensions, design)
3. Changes in vertical lifeline material, composition and/or 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. Changes in color
2. Same hardware from different source of supply
   Note: The word "same" is interpreted to mean that leather, webbing or hardware is manufactured to identical engineering specifications that include identical material,, dimensions, finish and other requirements

Examples of Major components:

Not applicable for this product

B. Laboratory Testing Fees/ Attributes & 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.

22.7 ASTM F887 Arc Resistant Full Body Harnesses and Energy Absorbing Lanyards

A. Definition of Model

Full Body Harnesses

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. Changes in basic design/configuration
2. Changes in hardware (material, dimensions, design)
3. Changes in webbing material, composition and thickness
4. Type of harness hardware and placement
5. Changes in stitch patterns
6. Changes in thread

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. Changes in color

2. Same webbing or hardware from different source of supply
   Note: The word “same” is interpreted to mean that leather, webbing or hardware is manufactured to identical engineering specifications that include identical material,, dimensions, finish and other requirements

Examples of Major components:

Not applicable for this product

Energy Absorbing Lanyards

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. Changes in basic design/configuration/energy dissipation technology
2. Changes in hardware (material, dimensions, design)
3. Changes in webbing material, composition and thickness
4. Changes in stitch patterns
5. Changes in thread

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. Changes in color
2. Same webbing or hardware from different source of supply
   Note: The word “same” is interpreted to mean that leather, webbing or hardware is manufactured to identical engineering specifications that include identical material,, dimensions, finish and other requirements

Examples of Major components:

Not applicable for this product

B. Laboratory Testing Fees/ Attributes & 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.

22.8 NFPA 2500 (1983) Life Safety Rope & Equipment

A. Definition of Model

Harnesses & Belts

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. Changes in basic design/configuration
2. Changes in hardware (material, dimensions, design)
3. Changes in webbing material, composition and thickness
4. Type of harness hardware and placement
5. Changes in stitch patterns
6. Changes in thread

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. Changes in color
2. Same webbing or hardware from different source of supply
   Note: The word "same" is interpreted to mean that leather, webbing or hardware is manufactured to identical engineering specifications that include identical material,, dimensions, finish and other requirements

Examples of Major components:

Not applicable for this product

Rope & Throwlines

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. Changes in rope/throwline fiber material, composition, thickness
2. Changes in type of rope/throwline weave

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. Changes in color

Examples of Major components:

Not applicable for this product

Manufactured Systems, Straps, Auxiliary Equipment, Victim Extrication Devices, Litters, Escape Webbing, Fire Escape Webbing, Escape Systems, Manufacturer-Supplied Eye Terminations, Belay Devices, Escape Anchor Devices:

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. Changes in basic design
2. Changes in material type
3. Changes in dimensions
4. Changes in finish

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. Changes in webbing color
2. Same qualified element (component) from different source of supply
   Note: The word "same" is interpreted to mean that webbing and hardware are manufactured to identical engineering specifications that include identical material, dimensions, finish and other requirements.

Examples of Major components:

1. Material type
2. Construction method
3. Surface finish
4. Size and shape
5. Strength

B. Laboratory Testing Fees/ Attributes & 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.