Safety Equipment Institute

SEI Certification Program Manual

Section 25: NFPA Protective Clothing and Equipment Program

25.0 NFPA Protective Clothing and Equipment Program Standards

- **NFPA 1970-25 Protective Ensembles for Structural and Proximity Firefighting, Work Apparel, Open-Circuit Self-Containted Breathing Apparatus (SCBA) for Emergency Services, and Personal Alert Safety Systems (PASS) (Includes NFPA 1971, 1975, 1981, 1982)**
- **NFPA 1950-25 Personal Protective Equipment for Technical Rescue Incidents, Emergency Medical Operations, and Wildland and Urban Interface Firefighting (Includes NFPA 1951, 1977, and 1999)**
- **NFPA 1955-25 Personal Protective Equipment (PPE) for Surface Water Operations and Contaminated Water Operations (Includes NFPA 1952, and 1953)**

25.1 Certification Submittal Package

A Certification Submittal Package shall include an SEI Certification Submittal form *(see Form 8.0: SEI Certification Submittal Form*), a Components & Materials Description Checklist form (*see Section 25B: General, Clothing, Gloves Components & Materials Description Checklist*) and a User Guide and Label Checklist form (*see Section 25C: 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 or products to be selected for annual certification.
2. The information provided by the manufacturer in the submittal package confirms to SEI the product design and components.
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*).

SEI Certification Submittal Form

Each submittal 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 & 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 25B: General, Clothing, Gloves Components and Materials Description Checklist* form is recommended. The following information is to be included on each Components & Materials Description Checklist. 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 Submittal 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.
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).

User Guide and Label Checklist

A User Guide and Label are required for protective ensemble and ensemble elements. The standards specify the minimum information that must be presented, and each manufacturer may provide as much information about the products as they deem necessary to use the products safely. However, the standard does not specify or require a set format for presenting this information. As a result, there are many ways a User Guide or Label can be arranged and presented, which is up to the discretion of each manufacturer. Use of *Section 25C: User Guide and Label Checklist* form is recommended to be completed so an accurate review and evaluation can be conducted.

25.2 NFPA Protective Clothing and Equipment Program Codes

SEI Reference Program Code	Standard Description	Product Type	Standard
FF	Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting	Structural Fire Fighting Helmets	NFPA 1970 (1971)
FFG	Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting	Structural Fire Fighting Gloves	NFPA 1970 (1971)
SFB	Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting	Structural Fire Fighting Boots	NFPA 1970 (1971)
SFG	Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting	Protective Ensemble for Structural Fire Fighting	NFPA 1970 (1971)
SFH	Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting	Structural Fire Fighting Hoods	NFPA 1970 (1971)
SWU	Standard on Emergency Services Work Apparel	Station/Work Uniforms for Fire Fighters	NFPA 1970 (1975)
WFC	Standard on Protective Clothing and Equipment for Wildland and Urban Interface Fire Fighting	Protective Clothing & Equipment for Wildland Fire Fighting	NFPA 1950 (1977)

SEI Reference Program Code	Standard Description	Product Type	Standard
WFF	Standard on Protective Clothing and Equipment for Wildland and Urban Interface Fire Fighting	Wildland Fire Fighting Boots	NFPA 1950 (1977)
WFG	Standard on Protective Clothing and Equipment for Wildland and Urban Interface Fire Fighting	Wildland Fire Fighting Gloves	NFPA 1950 (1977)
WFH	Standard on Protective Clothing and Equipment for Wildland and Urban Interface Fire Fighting	Wildland Fire Fighting Helmets	NFPA 1950 (1977)
WFP	Standard on Protective Clothing and Equipment for Wildland and Urban Interface Fire Fighting	Wildland Fire Fighting Chainsaw Protectors	NFPA 1950 (1977)
WFD	Standard on Protective Clothing and Equipment for Wildland and Urban Interface Fire Fighting	Wildland Fire Fighting Load Carrying Devices	NFPA 1950 (1977)
WPF	Standard on Protective Clothing and Equipment for Wildland and Urban Interface Fire Fighting	Wildland Fire Fighting Protective Face Covering	NFPA 1950 (1977)
ESG	Standard on Protective Clothing for Emergency Medical Operations	Emergency Medical Operations Single Use Garment	NFPA 1950 (1999)
EMG	Standard on Protective Clothing for Emergency Medical Operations	Emergency Medical Operations Multiple Use Garment	NFPA 1950 (1999)
ESE	Standard on Protective Clothing for Emergency Medical Operations	Emergency Medical Operations Single Use Ensemble	NFPA 1950 (1999)
EME	Standard on Protective Clothing for Emergency Medical Operations	Emergency Medical Operations Multiple Use Ensemble	NFPA 1950 (1999)
EMS	Standard on Protective Clothing for Emergency Medical Operations	Emergency Medical Operations Single Use Exam Glove	NFPA 1950 (1999)
EMU	Standard on Protective Clothing for Emergency Medical Operations	Emergency Medical Operations Multiple Use Work Glove	NFPA 1950 (1999)
EMB	Standard on Protective Clothing for Emergency Medical Operations	Emergency Medical Operations Footwear	NFPA 1950 (1999)

SEI Reference Program Code	Standard Description	Product Type	Standard
EMH	Standard on Protective Clothing for Emergency Medical Operations	Emergency Medical Operations Hood	NFPA 1950 (1999)
UPF	Standard on Protective Ensembles for Technical Rescue Incidents	Technical Rescue Footwear	NFPA 1950 (1951)
UPG	Standard on Protective Ensembles for Technical Rescue Incidents	Technical Rescue and Recovery	NFPA 1950 (1951)
UPH	Standard on Protective Ensembles for Technical Rescue Incidents	Technical Rescue Helmets	NFPA 1950 (1951)
USG	Standard on Protective Ensembles for Technical Rescue Incidents	Technical Rescue Gloves	NFPA 1950 (1951)
MFE	Standard on Protective Ensembles for Technical Rescue Incidents, Emergency Medical Operations, and Wildland and Urban Interface Firefighting	Multifunctional Ensemble Garments	NFPA 1950 (1951, 1977, 1999)
MFF	Standard on Protective Ensembles for Technical Rescue Incidents, Emergency Medical Operations, and Wildland and Urban Interface Firefighting	Multifunctional Footwear	NFPA 1950 (1951, 1977, 1999)
MFH	Standard on Protective Ensembles for Technical Rescue Incidents, Emergency Medical Operations, and Wildland and Urban Interface Firefighting	Multifunctional Helmet	NFPA 1950 (1951, 1977, 1999)
SWO	Standard on Surface Water operations Protective Clothing and Equipment	Surface Water Operations	NFPA 1955 (1952)
CWD	Standard on Protective Ensembles for Contaminated Water Diving	Contaminated Water Diving	NFPA 1955 (1953)

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)

25.3 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.

25.4 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 NFPA Protective Clothing and Equipment Program:

Program Code	Model Type	Annual Model Certification Fees
FFG, PFF, SFB, SPB, WFD	Base Model	$1,236
	Variant Model	$515
	Accessory Model	$139
WFG, USG, MFE	Base Model	$1,030
	Variant Model	$515
	Accessory Model	$139
WFF, UPF, MFF, WPF	Base Model	$773
	Variant Model	$309
	Accessory Model	$139
WFC, WFP, UPG, SWU, SFH, EMH	Base Model	$1,236
	Variant Model	$309
	Accessory Model	$139
FF	Base Model	$1,339
	Variant Model	$309
	Accessory Model	$139
WFH, UPH, MFH	Base Model	$1,030
	Variant Model	$309
	Accessory Model	$139
SFG, EME, EMG, ESG, ESE, SWO, CWD	Base Model	$2,060
	Variant Model	$515
	Accessory Model	$139

EMS, EMB, EMU	Base Model	$721
	Variant Model	$515
	Accessory Model	$139
NFPA 1971 Component	Base Model	$309
	Variant Model	N/A
	Accessory Model	N/A
NFPA 1999 Component	Base Model	$412
	Variant Model	N/A
	Accessory Model	N/A

25.5 NFPA 1970 (1971) Protective Ensemble for Structural Fire Fighting

A. Definition of Model

Helmets:

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard:

1. Basic raw material of:
    a. Shell
    b. Energy absorbing system
    c. Retention system
    d. Ear and neck protectors, if applicable
    e. Faceshield
2. Mechanism for attaching accessories to the shell
3. Manufacturing change for any critical component, e.g., basic mold change, injection molding, sheet stock, fabrication
4. Basic design
5. Paint
6. Size

Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard:

1. Same generic material from different source of supply

Footwear:

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard:

1. Upper material, composition, thickness or design
2. Sole material, composition, thickness or design
3. Footwear configuration
4. Thread type

Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard:

1. Color
2. Accessory options (e.g., straps)

Gloves:

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard:

1. Glove outer material composition, thickness or design
2. Glove liner material composition, thickness or design
3. Glove moisture barrier composition, thickness or design
4. Glove wristlet composition, thickness or design
5. Glove seam construction technique or design

Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard:

1. Basic design alternations not affecting glove circumference and length
2. Color changes that do not result in an effect on substrate performance
3. Additional sizes beyond what is required by NFPA

Clothing:

Characteristics that should affect the model's ability to meet the performance requirements of the certification standard:

1. Outer shell material, composition, thickness or design
2. Collar liner material, composition, thickness or design
3. Thermal liner material, composition, thickness or design
4. Winter liner material, composition, thickness or design
5. Moisture barrier material, composition, thickness or design
6. Hood material, composition, thickness or design
7. Wristlet material, composition, thickness or design
8. Seam construction, techniques and design
9. Garment configuration
10. Thread material and composition

Characteristics that should not affect the model's ability to meet the performance requirements of the certification standard:

1. Color
2. Trim color
3. Clothing design options (e.g., pockets)
4. Size

B. Examples of Major Components

Not applicable for this product

C. 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.

25.6 NFPA 1970 (1975) Emergency Services Work Apparel

A. Definition of Model

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. Textile fabric material composition, thickness or design
2. Interlining material composition, thickness or design
3. Thread composition, thickness or design
4. Other component composition, thickness or design used in the construction of the uniform that must be tested to meet requirement 3-1.2 of the standard.
5. Textile fabric finishes

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. Seam construction techniques and design
2. Basic design
3. Color (unless pigmenting affects material composition)
4. Size

B. Examples of Major Components

Not applicable for this product

C. 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.

25.7 NFPA 1950 (1977) Protective Clothing & Equipment for Wildland Fire Fighting

A. Definition of Model

Clothing

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. Material, composition, thickness or design
2. Seam construction, techniques and design
3. Garment configuration
4. Thread material and composition

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: Color

1. Trim
2. Clothing design options (e.g., pockets, if made from same base material)
3. Size

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. Basic raw material
2. Suspensions (materials or type)
3. Mechanisms for attaching accessories
4. Retention system
5. Basic design

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. Color
2. Size
3. Same generic raw materials from different sources of supply
4. Suspension orientation
5. Retroreflective material color

Gloves

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. Material, composition, thickness or design
2. Seam construction, techniques and design
3. Glove configuration (e.g., wristlets versus gauntlets)

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. Color
2. Size (except as required in 6-1.2)

Footwear

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. Upper material, composition, thickness or design
2. Sole/heel material composition, thickness or design
3. Stud hook and eyelet composition and installation method
4. Footwear construction methods and 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. Color
2. Height
3. Footwear design options (e.g., traps, if made from same base material)
4. Size

B. Examples of Major Components

Not applicable for this product

C. 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.

25.8 NFPA 1950 (1999) Protective clothing for Emergency Medical Operations

A. Definition of Model

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. Garment, glove or facewear material composition, thickness or design including accessory material or components required to meet the requirements of the standard
2. Seam construction techniques and design
3. Suit closure type, design and orientation
4. Addition of external components which affect the liquid-tight integrity of the protective item
5. Basic design

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. Color (unless pigmenting affects material composition)
2. Size (except gloves)
3. Internal components which do not affect the liquid-tight integrity of the protective item

B. Examples of Major Components

Not applicable for this product

C. 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.

25.9 NFPA 1950 (1951) Technical Rescue & Recovery

A. Definition of Model

Clothing

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. Material, composition, thickness or design
2. Seam construction, techniques and design
3. Garment configuration
4. Thread material and composition

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: Color

1. Trim
2. Clothing design options (e.g., pockets, if made from same base material)
3. Size

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. Basic raw material
2. Suspensions (materials or type)
3. Mechanisms for attaching accessories
4. Retention system
5. Basic design

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. Color
2. Size
3. Same generic raw materials from different sources of supply
4. Suspension orientation
5. Retroreflective material color

Gloves

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. Material, composition, thickness or design
2. Seam construction, techniques and design
3. Glove configuration (e.g., wristlets versus gauntlets)

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. Color
2. Size (except as required in 6-1.2)

Footwear

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. Upper material, composition, thickness or design
2. Sole/heel material composition, thickness or design
3. Stud hook and eyelet composition and installation method
4. Footwear construction methods and 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. Color
2. Height
3. Footwear design options (e.g., traps, if made from same base material)
4. Size

B. Examples of Major Components

Not applicable for this product

C. 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.

25.10 NFPA 1955 (1952) Swift Water Operations and NFPA 1955 (1953) Contaminated Water Diving

A. Definition of Model

Clothing

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. Material, composition, thickness or design
2. Seam construction, techniques and design
3. Garment configuration
4. Thread material and composition

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. Trim
2. Color
3. Clothing design options (e.g., pockets, if made from same base material)
4. Size

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. Color
2. Height
3. Footwear design options (e.g., traps, if made from same base material)
4. Size

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. Basic raw material
2. Suspensions (materials or type)
3. Mechanisms for attaching accessories
4. Retention system
5. Basic design

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. Color
2. Size
3. Same generic raw materials from different sources of supply
4. Suspension orientation
5. Retroreflective material color

Gloves

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. Material, composition, thickness or design
2. Seam construction, techniques and design
3. Glove configuration (e.g., wristlets versus gauntlets)

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. Color
2. Size (except as required in 6-1.2)

Footwear

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. Upper material, composition, thickness or design
2. Sole/heel material composition, thickness or design
3. Stud hook and eyelet composition and installation method
4. Footwear construction methods and 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. Color
2. Height
3. Footwear design options (e.g., traps, if made from same base material)
4. Size

Floatation Device

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. Material, composition, thickness or design
2. Seam construction, techniques and design
3. Device configuration
4. Thread material and composition

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. color
2. size
3. Examples of Major Components
   Not applicable for this product

B. Examples of Major Components
   Not applicable for this product

C. 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.