Structural Jacket and Trouser Wear Test Evaluation

Participant Data for Evaluation

REFERENCE DOCUMENT
NFPA 1851
Chapter 5 Selection; Annex A.5.1

Prior to starting the selection process of structural firefighting ensembles and ensemble elements, a risk assessment should be performed. A risk assessment should consider and include, but not be limited to, the following components:

1. Types of duties performed
2. Frequency of use of ensemble elements
3. Organization's experience
4. Incident operations
5. Geographic location and climate
6. Specific physical area of operation
7. Likelihood of or response to CBRN terrorism incident
8. Hazard/Risk identification
9. Hazard/Risk evaluation
10. Establishment of priorities of department

Based on this risk assessment, the organization should compile and evaluate information on the comparative strengths and weaknesses of the elements under consideration and that they interface properly with other personal protective items being used. When a field evaluation is being conducted, the organization should establish criteria to ensure a systematic method of comparing products in a manner related to their intended use. Assess their performance relative to the organization's expectations.

The PPE committee should consist of the department Safety Officer and interested individuals representing a cross section from both labor and management who have several years of experience in firefighting activities.

The purpose of the evaluation is to improve the organization's criteria over existing specifications. To accomplish this, five areas are identified as quantifiable parameters. These are: Technical Performance, Preparation, Fit and Function, Performance, and In Service.

Please include as many comments as possible referencing a statement from above or any other observations of your crew.

WEAR TEST EVALUATION DOCUMENTATION
JACKET AND TROUSER

Department Name:			
Evaluator:			
Form Completed By:			
Evaluation Start Date:		Evaluation Completion Date:	
Application: ☐ **STRUCTURAL** ☐ **PROXIMITY**			
Manufacturer:			
Manufacturer Model:			
Manufacturer Identification Number:			
Manufacture Date:			
Issue Date:			

SAFETY INSPECTION

RATING	PASS	FAIL
Proper Fit		
Jacket/Trouser Overlap		

WEAR TEST EVALUATION DOCUMENTATION
JACKET AND TROUSER BASIC FUNCTIONALITY

RATING	Best	Good	Acceptable	Poor	Unacceptable
SCORE	Ø	1	2	3	4
	✓	✓	✓	✓	✓
JACKET					
Rate interface with hood/shroud.					
Rate interface with gloves.					
Rate interface with SCBA.					
Rate interface trouser.					
Rate ease of donning.					
Rate ease of doffing.					
Rate comfort and function of jacket collar.					
Rate deployment of jacket DRD.					
Rate operation of wristlets.					
Rate operation of pockets.					
Rate operation of accessories *(identify).*					

WEAR TEST EVALUATION DOCUMENTATION
JACKET AND TROUSER BASIC FUNCTIONALITY

RATING	Best	Good	Acceptable	Poor	Unacceptable
SCORE	Ø	1	2	3	4
	✓	✓	✓	✓	✓
JACKET AND TROUSER					
Rate comfort and function of jacket body, jacket collar, and jacket sleeves by crossing chest with both arms, right over left, then left over right.					
Rate comfort and function of jacket body, jacket collar, and jacket sleeves by simulating the operation of using a pike pole by reaching overhead with the arms. Repeat 5 times.					
Rate comfort and function of jacket body, jacket collar, and jacket sleeves by placing arms at side and then extend forward, to simulate reaching for an object, one arm at a time.					
Rate comfort and function of jacket body, jacket collar, and jacket sleeves by placing arms at side and then extend forward, to simulate reaching for an object, with both arms at the same time.					
Rate comfort and function of jacket body and trouser body by walking for a distance of 10 feet.					
Rate comfort and function of jacket body, trouser body, and trouser knees by duck walking for a distance of 6 feet.					
Rate comfort and function of jacket body, trouser body, and trouser knees by crawling on all four extremities for a distance of 10 feet.					
Rate comfort and function of jacket body, trouser body, and trouser knees by crawling flat as possible for a distance of 10 feet.					
Rate comfort and function of jacket body, trouser body, and trouser knees by squatting.					

WEAR TEST EVALUATION DOCUMENTATION
JACKET AND TROUSER BASIC FUNCTIONALITY

RATING	Best	Good	Acceptable	Poor	Unacceptable
SCORE	**Ø**	**1**	**2**	**3**	**4**
	✓	✓	✓	✓	✓
Rate comfort and function of jacket body, trouser body, and trouser knees by simulating the operation of climbing a ladder by performing high knee bends, alternating left and right. Repeat 8 times.					
Rate the ability of the jacket body to remain in position while the arms are in motion. Does arm movement result in the raising, lowering, or other movement of the jacket body.					
For the jacket body, rate the jacket's range of motion with regard to head movement. Check for restrictions that impede range of motion of the head and neck forward, aft, and side to side. Check for pressure points on back of neck.					
Rate the comfort of the jacket as to how the jacket weight is distributed on the body.					

JACKET IN SERVICE FUNCTIONALITY

RATING	Best	Good	Acceptable	Poor	Unacceptable
SCORE	**Ø**	**1**	**2**	**3**	**4**
	✓	✓	✓	✓	✓
VENTILATION AND OVERHAUL DRILL					
Rate jacket's ability to maintain proper interface with the trouser throughout the drill when working, with axe and pike pole.					

WEAR TEST EVALUATION DOCUMENTATION
TROUSER WITH INTEGRATED HARNESS
IN SERVICE FUNCTIONALITY

RATING	Best	Good	Acceptable	Poor	Unacceptable
SCORE	**Ø**	**1**	**2**	**3**	**4**
	✓	✓	✓	✓	✓
BAIL OUT DRILL					
For the knee, rate the trouser's range of motion with regard to the knee movement. Check for binding, pulling, tightness, and other restrictions that impede motion throughout the drill. Can knee movement be accomplished without having to make adjustments to the harness.					
Rate the ability of the trouser body to remain in position during motion. Does movement result in the raising, lowering, or other movement of the trouser body that creates separation between the jacket/trouser and trouser/footwear.					
Rate the comfort of the trouser throughout the drill.					
Rate the comfort of the trouser as to how the trouser's weight is distributed throughout the drill. Does the harness feel secure about the hips and legs.					
Rate the ease with which the harness can be loosened after the drill.					

ADDITIONAL COMMENTS *(if unacceptable grade was assessed, please specify reasons)*