



PROCEDURES MANUAL

SUBJECT: Personal Protective Equipment

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402.00 Regulation Personal Protective Equipment (PPE) – Fire Clothing

A. Regulation Fire Clothing shall consist of the following:

1. Chief Fire Officers – **White** Fire helmet, hood, bunker coat and pants, protective boots, flashlight, portable radio, gloves, ballistic body armor, safety vest, and HEPA mask.



2. Fire Officers (Captains and Lieutenants) – **Red** Fire helmet, hood, bunker coat and pants, protective boots, flashlight, portable radio, gloves, ballistic body armor, safety vest, and HEPA mask.



3. Fire Apparatus Operators (FAOs) – **Black** Fire helmet, hood, bunker coat and pants, protective boots, flashlight, portable radio, gloves, ballistic body armor, safety vest, and HEPA mask.



4. Fire Specialists - **Black** Fire helmet, hood, bunker coat and pants, protective boots, flashlight, portable radio, gloves, ballistic body armor, safety vest, and HEPA mask.

5. Fire Fighters (I, II, III, IV) – **Black** Fire helmet, hood, bunker coat and pants, protective boots, flashlight, portable radio, gloves, ballistic body armor, safety vest, and HEPA mask.
6. Fire Fighters Probationary (FF-PR) - **Yellow** Fire helmet, hood, bunker coat and pants, protective boots, flashlight, portable radio, gloves, ballistic body armor, safety vest, and HEPA mask.



7. Each member shall be responsible for the use, care, maintenance, and serviceability of issued items. Proper care will provide the member with many years of safe personal protection.
8. Each fire fighter will be issued (2) sets of PPE (coat and pants). The newest set will always be the front line set to be used whenever possible if it is clean, dry and serviceable.
9. **DO NOT MIX** PPE COMPONENTS. Mixing incompatible components of PPE from different manufacturers or types may result in potential injury or death.

402.01 The proper CARE, USE, and IDENTIFICATION of issued items are as follows:

A. FIRE PROTECTIVE COAT AND PANTS

1. Each fire fighter will have a primary set (newest) and a back-up set (older).
2. Shall be clean and dry at start of each duty tour.
3. Keep clean. Life expectancy and flame resistance increase if abrasive materials, flammable dirt and contaminants are removed. Hand wash in lukewarm water using a mild soap solution. Hang up and let the gear drip dry. DO NOT machine launder, dry clean, or use chlorine bleaches or harsh detergents as they may affect performance.
4. Flushing with water from a fire hose prior to leaving the emergency scene or at the station upon return to quarters will remove a large majority of the contaminants collected at a fire scene.

5. Do not store in sunlight or direct fluorescent lighting as exposure may cause color change and degradation of the protective qualities of the PPE.
6. Do not expose to strong caustics or clean with chlorine bleach.
7. The fire protective coat/pants ensemble shall be worn on all responses and may only be removed at the emergency scene with permission of the Officer-in-Charge. Wearing PPE on an EMS response is at the discretion of the Officer in-charge.
8. The lining shall NOT be removed from the bunker coat and pants.
9. Identification: Badge number in indelible black marker on inner flap of protective coat. Badge number in indelible black marker on the inner fly flap of bunker pants.

B. HELMET

1. Shall be clean and dry at start of each duty tour.
2. Ear flaps shall remain in helmet.
3. Face shield and chin strap in place.
4. The face shield shall be down to protect the eyes and face:
 - a. When exposed to severe heat at fire.
 - b. When overhauling, pulling ceilings, etc., and no SCBA Facepiece is worn.
 - c. Anytime there is danger of debris hitting member in face or eyes.
5. The helmet shall be worn on all responses except EMS and may be only removed at the emergency scene with permission of the Officer-in-Charge.
6. Identification: Name and badge number in permanent marker on the underside of helmet.
7. Correct Company Helmet ID shall be affixed to the front of the helmet.



8. Velcro shall be placed on the front and rear for Company Identification Markers and on the underside of the helmet for spare accountability tags.

C. HOODS

1. Each fire fighter will be issued (2) protective hoods.
2. Shall be clean and dry at start of each duty tour.
3. Shall be worn on all responses, except EMS, and may be only removed at the emergency scene with the permission of the Officer-In-Charge.
4. Shall be worn under the helmet and over the SCBA facepiece straps, and shall not interfere with the facepiece seal on the SCBA mask.
5. Identification: Badge number with indelible marker on the lower rear bib portion of the outer shell of the protective hood.

D. GLOVES

1. Each fire fighter will be issued (2) pairs of gloves.
2. Only issued gloves shall be worn.
3. Shall be clean and dry at start of each duty tour.
4. Shall be worn on all emergency responses, except EMS.
5. May be temporarily removed, in a safe atmosphere, to perform required operations such as mask donning.
6. Identification: Badge number in indelible ink on rear of each glove.

E. HEPA MASK

1. Each fire fighter is issued one HEPA mask that will be carried as part of their required PPE with one set of clean filters.
2. Used on EMS runs to block airborne pathogens.
3. May be used in a safe atmosphere during overhaul operations.

F. HOSESTRAP

1. Shall be clean and dry at start of each duty tour.

2. Hose strap shall be carried in fire coat pocket.
3. Identification: Company number (These are no longer part of the personal issue inventory and are assigned to each company)

G. HEARING PROTECTORS

1. On board hearing protection shall be worn by all members in all fire apparatus and EMS vehicles while responding to emergencies.
2. Suitable hearing protection, such as ear muffs or ear plugs, shall be worn when performing work using machinery capable of emitting constant loud noises at high decibels.

H. FLASHLIGHT

1. Shall be fully charged and placed on the protective coat at the start of each tour.
2. Each Fire Company shall have 8 flashlights assigned; allowing rotation of flashlights to ensure adequate charging.

I. RADIO

1. Shall be fully charged and placed on the protective coat at the start of each tour.
2. Fire officers shall be assigned their own radio and shall be responsible for it at all times.
3. Radios shall be tested daily for clarity and functionality.
4. Radio batteries will be charged and maintained according to manufacturer recommendations.

J. BALLISTIC BODY ARMOR

1. Each member shall be issued ballistic body armor that will be carried as part of their PPE.
2. Members shall be accountable and maintain custody of the body armor at all times. In all cases where the issued body armor is found to be missing, a F-47 will be submitted immediately and the District Chief notified.
3. Shall be clean and dry at start of each duty tour.

4. The body armor shall be worn at all times as outlined in the Operations Manual 203.14 F or when directed by the Officer-in-Charge. Body armor may only be removed with permission of the Officer-in-Charge.
5. Identification: Badge number on “Name” line in indelible black marker on both front and rear inside labels of the vest and on front and rear labels affixed to ballistic panels inside of the vest. **ALL FOUR PARTS OF THE ARMOR ARE ISSUED AS A SET. EACH SET IS ASSIGNED TO INDIVIDUAL MEMBERS AND UNDER NO CIRCUMSTANCE SHOULD THE PARTS BE EXCHANGED OR INTERMINGLED WITH OTHER SETS OF ARMOR.**
6. Storage:
 - a. Improper storage of body armor may contribute to premature wear as well as reduce the protective capabilities of the ballistic system.
 - b. Shall be stored in normal environmental conditions preferably flat either on a shelf or other flat surface. When a flat surface is not practical, hanging the body armor on a clothes hanger is the next best practice. NEVER FOLD, COMPRESS OR STORE ON EDGE.
 - c. **DO NOT** store in the trunk of vehicle or in location of extremely high heat.
 - d. **DO NOT** store with or expose armor to any petroleum, chemical or chlorine product.
 - e. **DO NOT** store armor in areas that may become wet or exposed to moisture.
7. Care and Maintenance:
 - a. **NEVER COMPLETELY SUBMERGE BALLISTIC PANELS.** If the body armor is completely submerged to the point of saturation of the ballistic panels remove the body armor from service.
 - b. Remove ballistic panels from front and rear outer carrier.
 - c. Close or remove Velcro straps and close zippers.
 - d. Hand wash the carrier with warm water and mild detergent.

- e. If machine washing use “durable press” cycle only at medium water temperature (120 degreeF). With low-sud detergent.
- f. Gently wipe down ballistic panels with a damp sponge or cloth using mild detergent. Remove any excess detergent with a damp sponge or cloth using clean water.
- g. Allow ballistic panels to completely air dry before reinserting into the vest,
- h. Air dry or machine dry the vest with a low temperature setting.
- i. **DO NOT** USE BLEACH
- j. **DO NOT** DRY BALLISTIC PANELS IN THE SUN.

K. MISCELLANEOUS EQUIPMENT

- 1. Fire fighters shall also carry the following equipment:
 - a. 20’ of 1” nylon tubular webbing tied with a water knot
 - b. Door Chocks
- 2. Optional Equipment (Not supplied by the Fire Department):
 - a. Wire Cutters
 - b. Screwdrivers
 - c. Crescent Wrench

402.02 Scheduled Inspection, Care and Maintenance of Fire Protective Clothing (PPE)

- A. Each set of fire protective clothing shall be cleaned and inspected at least twice in a twelve month period. The procedure for accomplishing the inspection and cleaning of PPE shall be as follows:
 - 1. Storekeeper shall notify by electronic mail (E-Mail) each company officer, each company member, and the District Chiefs of the date of cleaning and inspection for each specific company. This notification will take place 8 to 10 days prior to pick-up date.
 - 2. Upon being relieved of duty at 0700, all members shall place one set of their fire protective coat and pants (with suspenders removed), gloves, and hood, in a plastic bag. All items shall be marked with the members

badge number as outlined previously in this chapter. All personal tools, etc shall be removed from the pockets.

3. It is the Company Officer's responsibility to ensure that all members under his command have properly assembled their clothes for cleaning and inspection. If a member is off duty on extended leave, the Company Officer shall assemble the off duty member's protective clothing for inspection and cleaning.
4. The Central Stores Truck Driver will pick up members clothing on the specified date and return it upon completion of cleaning and inspection.
5. The Company Officer on duty shall complete a "PPE Cleaning and Inspection Form" (Downloaded from the "S" Drive) for the company and place it with the bags for the Central Stores Truck Driver.
6. In the event the PPE from a member assigned to your company is unavailable for the regular scheduled cleaning and maintenance, the Company Officer must arrange for cleaning and inspection as soon as possible. A Form 47 shall be submitted, explaining the circumstances surrounding the "unavailable" cleaning.
7. The following items of your ensemble shall be submitted for inspection and cleaning:
 - a. Coat (1) with rescue harness and personal items removed
 - b. Pants (1) without suspenders
 - c. Hoods (1)
 - d. Gloves (1 Pair)

402.03 Care and Handling of Contaminated Clothing

- A. Clothing, including protective boots and hoods that have become contaminated with chemical or biological hazardous materials shall be gross decontaminated as soon as possible while on the emergency scene using water.
- B. Minor exposure to routine chemicals or body fluid can be cleaned in the bio-hazard sink located in the fire station using a brush and mild detergent with

warm water (Do not use Chlorine Bleach). Member should wear protective gloves and face masks during cleaning.

- C. More severe highly exposed gear must receive a gross decontamination at the scene following accepted existing hazard materials standards.
- D. Clothing that is still considered contaminated after the initial wash down at a hazardous materials incident scene should be bagged and left at the scene for disposal along with other scene clean-up items.

Note: The scene supervisor may request that the clothing be preserved. Securing the contaminated clothing shall be the responsibility of the HazMat personnel on scene.

- E. Uniform clothing that is considered contaminated with body fluids or other biological contaminants shall receive a gross decontamination at the emergency scene. The clothing shall then be taken to the firehouse and washed in the city provided washing machine, or the clothing shall be placed in a red bio-hazard bag and discarded in the red bio-hazard waste collection container at the firehouse.

Note: A Form 47 must be submitted by the Company Officer explaining why the clothing was degraded in lieu of washing.

402.04 Inspection of Personal Protective Equipment (PPE)

- A. The Company's Officer shall inspect all members' personal protective equipment at line-up or immediately following line-up. Each member shall have, in service and, ready for use, required personal protective equipment: helmet, hood, bunker fire coat and pants, protective boots, Body Armor, flashlight, gloves, hood, radio, Safety Vest, and HEPA mask. Accountability tags shall be affixed to the member's helmet. Correct Company Helmet ID should be on the helmet.
- B. Members shall not be permitted to start the duty tour without the proper safety equipment in service and ready for use. If a member reports for line-up without proper equipment, the Company Officer shall determine reason for not having equipment. Take necessary action to have member properly equipped and discipline the member if appropriate.
- C. In extremely cold weather the member should have the proper safety equipment sufficient clothing to protect members from the weather. This should include but not limited to extra socks, gloves, winter hat, and sweatshirt.

D. What to look for during a PPE Inspection:

1. Coat and Pants: – Routine Inspection Items:

- a. Evaluation of fit and coat/trouser overlap (at least 2")
Soiling
- b. Contamination from hazardous materials or biological agents
- c. Rips, tears and cuts
- d. Damaged or missing hardware
- e. Thermal damage such as charring, burn holes, or melting in any layer
- f. Damaged or missing reflective trim
- g. Rescue harness intact and properly installed
- h. Suspenders attached and intact

2. Footwear – Routine Inspection Items:

- a. Evaluation of fit
- b. Soiling
- c. Contamination from hazardous materials or biological agents
- d. Rips, tears, cuts or thermal damage
- e. Loss of water resistance
- f. Damage or deformed steel toe, mid-sole and shank
- g. Nails or other objects embedded in the sole or heel

3. Gloves – Routine Inspection Items:

- a. Evaluation of fit
- b. Soiling
- c. Contamination from hazardous materials or biological agents
- d. Rips, tears, cuts or thermal damage
- e. Inverted liner
- f. Shrinkage
- g. Loss of elasticity and flexibility

4. Helmet – Routine Inspection Items:

- a. Evaluation for fit
- b. Soiling
- c. Damage to shell: cracks, dents and abrasions.
- d. Damage to liner: rips, tears or thermal
- e. Damage to Suspension system
- f. Damage or missing components to face-shield
- g. Damage or missing reflective trim
- h. Missed accountability tags
- i. While on duty - the correct Helmet (Company) ID affixed to the front of the helmet

5. Hood Routine Inspection Items:

- a. Evaluation of fit
- b. Soiling
- c. Contamination from hazardous materials or biological agents
- d. Rips, tears, cuts or thermal damage
- e. Loss of face opening adjustment/Shrinkage

6. Ballistic Body Armor – Routine Inspection Items:

- a. Member has assigned Vest
- b. Evaluation for fit
- c. Clean/ Dry
- d. Excessive Wear or Damage
- e. Less than 5 years in age.

- E. If any of the defects listed above make the PPE unserviceable the member should report to Central Stores for repair or replacement of your PPE at the first available opportunity.

402.05 Securing Personal Protective Equipment (PPE) During Tour of Duty

All required personal protective equipment is to be on apparatus at all times while on duty, secured safely to prevent accidental loss. Any loss of PPE rests wholly with the member.

402.06 Primary and Back-Up Personal Protective Equipment (PPE)

- A. Each fire fighter will be issued (2) sets of PPE (coat and pants). The newest set of Personal Protective Equipment (Coats and Pants) will, whenever possible, be used as the front line set when it is clean, dry and serviceable.
- B. Members can wear either set of PPE boots with their front line PPE.
- C. **DO NOT** MIX PPE COMPONENTS. Mixing components of PPE from different manufacturers or types may result in injury or death to the fire fighter wearing the PPE.
- D. Members shall have their back-up PPE on duty with them each day to change into if their primary set becomes wet, soiled, or damaged during their tour of duty.

402.07 High Visibility Rain Coats and Reflective Vests

- A. Each member shall have their high visibility rain coat on duty with them during each tour of duty.
- B. Members shall wear their high visibility rain coat or reflective vest when operating on highways or at accident scenes to provide visibility of members to passing motorists.
- C. Members involved in vehicle fire fighting or accidents with entrapment shall wear full protective clothing (PPE). High Visibility Rain Coats / Vests cannot be used as PPE at these incidents.
- D. The High Visibility Rain Coat is intended to be worn during periods of extended wet weather to provide personal protection and maintain fire protective clothing in a clean and dry for fire fighting activities
- E. The High Visibility Rain Coat / Vest should be worn anytime it is deemed advantageous for improving fire fighter safety (highway response, roadway response, over top of bullet proof vests, etc)