Falmouth Fire-EMS Operating Guideline

Gear Inspection, Testing & Washing

Objective: To provide guidance on the routine inspection and annual testing of fire gear.

General Information: Annually all gear issued and worn by members of the Falmouth Fire-EMS Department shall be tested in accordance with NFPA 1851. This SOG explains the method that those tests will be conducted. All gear in storage will also be tested annually. Any gear failing any portion of the testing will be repaired, removed from service as interior firefighting gear, or discarded at the discretion of the Fire Chief.

Guideline:

Turnout Coat/Pants
There are 3 components of the inspection and test; visual, light and wet

Visual

1. Conduct a visual inspection looking for any damage, rips, tears, or unstitched material on the garment
2. All snaps, buckles, and zippers need to function the way they were intended
3. Reflective material not faded or ripped
4. The Drag Rescue Device (DRD) in working order
5. The garment is not dirty or soiled
6. Manufacture date (report if more than 10 years old)

If the garment passes the visual inspection the light test will be conducted to inspect the vapor barrier.

Light

1. Separate the liner from the outer shell
2. Using the led light provided position the light on the outside of the barrier so the light shines through the moisture barrier first then through the thermal barrier
3. Look for even distribution of the insulation
4. The insulation should not be shifting or migrating resulting in thin or bare spots
5. Focus on high abrasion areas like shoulders, underarms, waist, knees, crotch, and seat
If the vapor barrier passes the light test move on to the wet test (if gear is less than 3 years old test is complete).

**Wet**

Two (2) wet tests need to be done at a seam or stitched area in the vapor barrier. The wet tests should be at abrasion points. The moisture should not leak through the barrier.

*Place the vapor barrier of the garment over a bucket. Push down making a pocket and pour approximately 1 cup of water into the pocket. Let the water stand for 3 minutes and check to see if any moisture wicked through to the other side of the vapor barrier. To pass no moisture can wick through. Repeat test with the other half of the coat/pant ensemble.*

**Helmets**

1. Inspect outer shell/reflective stickers
2. Inspect eye protection
3. Inspect inner liner/shell/ear flaps
4. Clean
5. Manufacture date (report if more than 10 years old)

**Hoods**

1. No rips or tears
2. Clean
3. No smoke stains or burn marks

**Gloves**

1. No rips or tears
2. Clean

**Harnesses**

1. No rips or tears in harness
2. All hardware functional
3. NFPA compliant
4. Manufacture date (report if more than 10 years old)

**Boots**

1. No rips or tears
2. Good tread left
3. Manufacture date (report if more than 10 years old)

Complete department gear inspection report for each firefighter and return to Assistant Chief.
**Gear Washing**

During the annual gear inspection make sure that the protective clothing (PPE) is clean (including gloves and hoods). The gear has to be kept clean at all times. Additionally, PPE is required to be cleaned after any exposure to materials like smoke, petroleum products, antifreeze, corrosives etc. This means gear also has to be cleaned after exposure to any fire incident big or small.

Even if gear has not been exposed to any of the above listed contaminants it still needs to be washed at least once a year and records provided to document meeting this requirement. Reminder that this also pertains to all backup gear that is in storage. Each quarter a company will be instructed to drop off their gear at Central Station to be washed by the on duty crew.

To wash gear, place a minimum of three (3) sets of gear in the gear washer/extractor. All gear Velcro must be secured and pockets emptied of everything. The gear is washed according to the chart on the machine.

Once the gear is washed it is placed on the gear dryer.

Record the washed gear on the form in the decon room.

These guidelines may be changed or altered by the Fire-EMS Chief at any time.