

City of Portage Fire Department



Physical Agility Test

INTRODUCTION

This test is designed to assess an individual's ability to perform a number of important physical job requirements of the entry-level firefighter position. They DO NOT require previous firefighter training. This physical performance test consists of seven events that simulate actual fire fighting tasks: equipment carry, hose drag/couple, ladder operation, simulated rescue, hose pull, joist walk and forcible entry simulation.

You should read the description of these tests carefully and completely. The more you know about what will be expected of you on the test date, the better you will perform.

Each exercise will be performed while wearing fire protective clothing, coat, helmet and gloves. In warm weather, jeans or similar pants and tee-shirt or other loose shirt work well. It is preferable that most body surface be covered to minimize abrasions and sticking to the turnout gear, which can become damp with repeated use on a hot or rainy day; i.e., no shorts, tank tops or halters. In cold or rainy weather, candidates should bring warm or waterproof clothing, which will be removed to put on the gear provided but will be needed while you are standing around between events. Athletic shoes are the only footwear allowed. Avoid having jewelry, loose hair styles, purses or other objects to carry around or keep track of.

While there is a time limit for each event, speed is not a factor in scoring test performance. You will either **pass** the event or **fail** the event. You will not receive additional "points" for speed. While you will have to hustle, running is forbidden. **You can be disqualified for running through an exercise.**

You will be given two trials, if necessary, on each event. If you fail to complete the event or fail to complete it in the required time, on the first trial, you will be given a second trial after at least a five minute rest. If you cannot complete the event in the

second trial, you will be withdrawn from the physical agility test and will not be considered further during this selection process.

For the Chin Lift: If you can presently lift 95 lbs., your likelihood for reaching the 105 lb. minimum standard is excellent. If you can presently lift less than 80 lbs., your likelihood for reaching the minimum is poor.

For Curls: If you can presently lift 80 lbs. or more, your potential for reaching the 100 lb. minimum is very good. If you can lift less than 65 lbs., your likelihood for reaching the minimum is very poor.

EVENT 1 – EQUIPMENT CARRY

SIMULATES

Advancing equipment into a building at a fire scene. Tests balance, awareness of body position and movements; lifting strength and stamina.

PROCEDURE

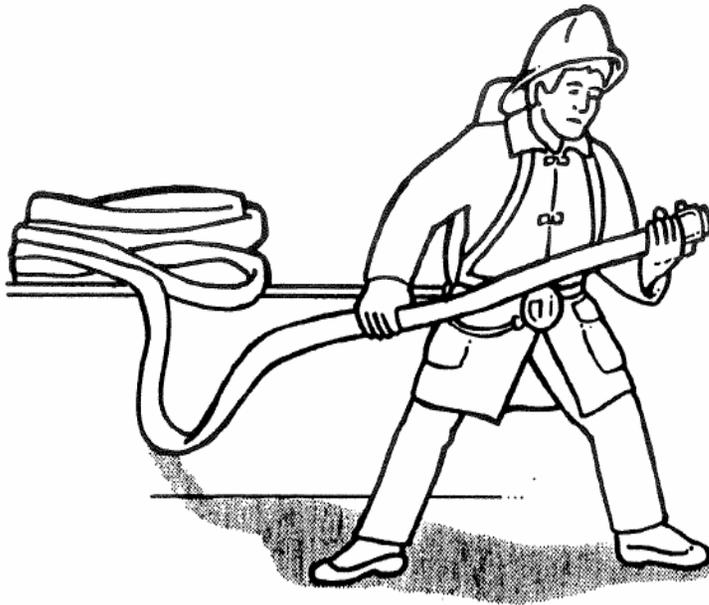
Carry three separate items up flights of stairs (approximately 30 steps) and then down again. Total weight of the three separate items is approximately 145 pounds.



EVENT 2 – HOSE DRAG/COUPLE

SIMULATES Actual moving and coupling of hoses at a fire scene. Tests eye-hand coordination; manual dexterity.

PROCEDURE Pull sections of hose which weigh approximately 50 pounds each a distance of 100 feet and couple them with a fixed connection (male/female connection).



which is not composed of fat is highly related to how much muscle mass you possess.

- D. Initial strength level vs. Potential for strength improvements: Generalization – the stronger you are now, the greater your likelihood for being able to reach the strength goals listed in the table.
1. Qualification to generalization: Relatively large people can afford to be somewhat weaker at the beginning of a strength training program because the potential for strength improvement is strongly influenced by size. In order to have a reasonable chance to become strong enough to measure up to the strength standards listed in the table, it is recommended that you have a least 120 lbs. of lean body weight.

This translates to total body weight as follows:

- A. If you are quite lean, your total body weight should be at least 140 lbs.
- B. If you are average, with respect to body fat, you would need to weigh about 160 lbs. in order to have 120 lbs. of fat-free body weight.
- C. If you are overweight, you would need to weigh 170 lbs. or more in order to have 120 lbs. of fat-free body weight.

The bottom line is that successful female contenders for the firefighter position are usually substantially larger than the average female. At 16-20 weeks, most people in strength progression training start to plateau significantly in strength improvement. In other words, you can count on your best rate of strength improvement during the first 16-20 weeks. The above information can be used in the following way to advise you of your potential for reaching the minimum strength standards listed in the table.

For Military Press: If you can presently lift 85 lbs., your likelihood for reaching the 95 lb. minimum standard is excellent. If you can presently lift less than 70 lbs., your likelihood of reaching the 95 lb. minimum is poor.

If you are unable to military press 95 lbs., chin lift 105 lbs., curl 100 lbs. and squat 180 lbs., it is extremely unlikely that you would pass the physical performance test or be able to successfully perform the firefighter position. Recruits who barely meet the minimum standards will still have substantial difficulty “measuring up” in firefighter training and on the job.

The strength level listed under the goal column represents the level that one should make every effort to achieve (do not be satisfied with minimum).

The strength level shown under the desirable column is that which essentially provides freedom from a strength-related handicap as a firefighter. When these standards were developed, it was predicted that the average successful applicant would be about as strong as is shown under the desirable column. This was subsequently checked and it was found that the average successful applicant was actually a little stronger than predicted. The range of strength among applicants indicated that the weakest (successful) applicants did not fall below the minimum strength standards (except in one case, however, the individual exceeded the minimum by a large margin in the other lifts).

OTHER STRENGTH STANDARDS

Other strength standards an applicant should strive to achieve are as follows:

- A. Be capable of at least four chin-ups. An average firefighter who weighs 187 lbs. could perform four or more chin-ups. In fact, for a 140 lb. person to be that strong in an absolute sense, about 15 chin-ups would have to be performed.
- B. Endurance requirements of fire fighting: The endurance requirements of fire fighting have been standardized in terms of the time which is required to run 1.5 miles (on level terrain) in 11:45 or less.
- C. Relationship of body size to strength and recommendations based on this relationship: Strength and the potential of developing strength are obviously related to the amount of muscle which a person possesses. That portion of your body weight

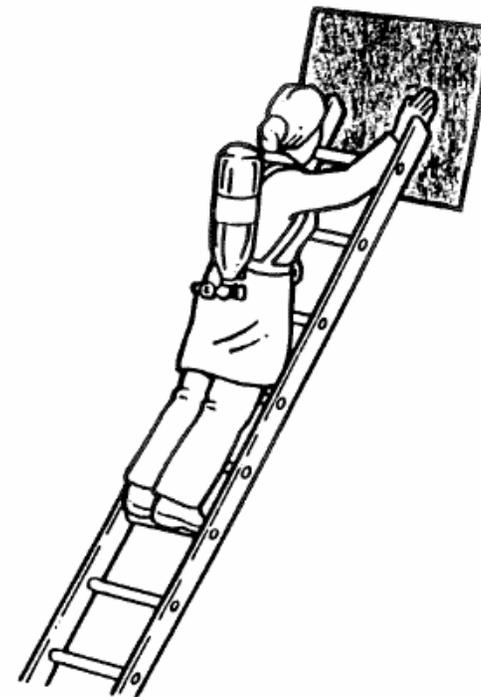
EVENT 3 – LADDER OPERATION

SIMULATES

Positioning and climbing the one person ladder at a fire scene. Tests eye-hand coordination; awareness of body position and movement.

PROCEDURE

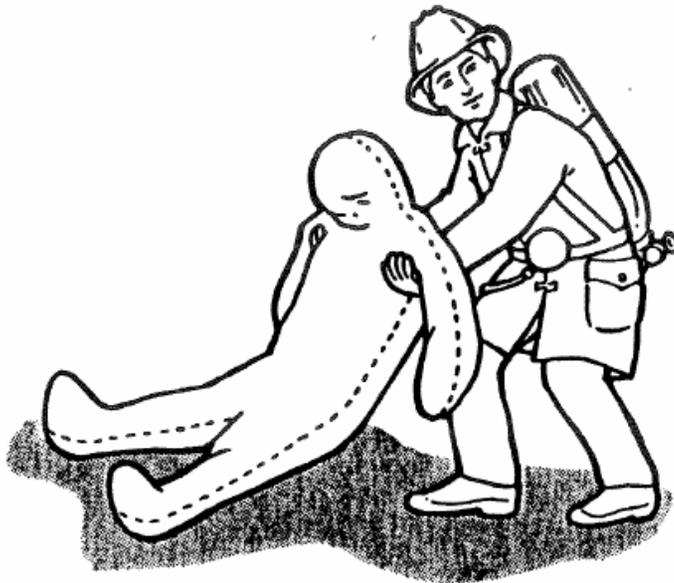
Remove a 14 foot ladder from its mounting, position it against a wall, climb the ladder, return to the ground and remount the ladder at the starting point.



EVENT 4 – SIMULATED RESCUE

SIMULATES Rescue of an injured person at an emergency scene. Tests lifting strength; stamina in maintaining muscular exertion; balance.

PROCEDURE Carry or drag a dummy weighing approximately 120 pounds up and down one split flight of stairs from a starting and ending point 20 feet from the stairs.



D. The firefighter entrance examination process is designed to ensure that those who are selected for entrance into the Fire Department possess enough physical strength, stamina and learning ability to successfully complete the fire fighting training and then function as a successful firefighter on the job.

2. Preparation for the physical performance portion of the entrance examination and for the physical demands inherent to the Fire Department.

A. The strength requirements of fire fighting have been standardized in terms of several common weight lifting exercises. These strength requirements are based on extensive research by a respected exercise physiologist. Experience with major city's fire department female pre-recruit program indicates that the strength requirements are valid (job related).

The following table lists the strength requirements. An explanation of the table appears below.

Exercise	Minimum	Goal	Desirable
Military Press	95 lbs.	110 lbs.	120 lbs.
Chin Lift	105 lbs.	115 lbs.	125 lbs.
Biceps Curl	100 lbs.	110 lbs.	120 lbs.
Squat	180 lbs.	190 lbs.	200 lbs.
Grip	115 lbs.	120 lbs.	125 lbs.

EXPLANATION OF TABLE

The strength level listed under the minimum column gives the lowest strength recommended for an applicant in order to successfully perform as a firefighter.

HOW TO IMPROVE YOUR LIKELIHOOD FOR BECOMING A CAREER OR ON-CALL FIREFIGHTER FOR THE PORTAGE FIRE DEPARTMENT

1. The nature of fire fighting and how the examination process and training process relate to the nature of firefighting:
 - A. Fire fighting can be extremely arduous work.
 1. The implements of the trade are heavy and the firefighter must be capable of repeatedly handling those implements over prolonged periods of time.
 2. Fires spread rapidly, so firefighters must work quickly. This urgency places a considerable burden on a firefighter's endurance.
 3. Fire fighting is always conducted while wearing heavy protective clothing and a self-contained breathing apparatus (total weight is about 55 pounds).
 4. Protective clothing greatly retards the body's ability to cool itself. Physical fitness (principally cardio respiratory fitness in this case) greatly influences how well and how safely a firefighter can cope with the potentially dangerous heat stress.
 - B. The weight of the protective gear in itself increases the difficulty of "routine" tasks by about 33%, which again underscores the importance of strength and stamina.
 - C. Fire fighting is periodically conducted in an extremely hot and toxic environment. This greatly increases physical and mental stress associated with performing otherwise routine fire fighting tasks.

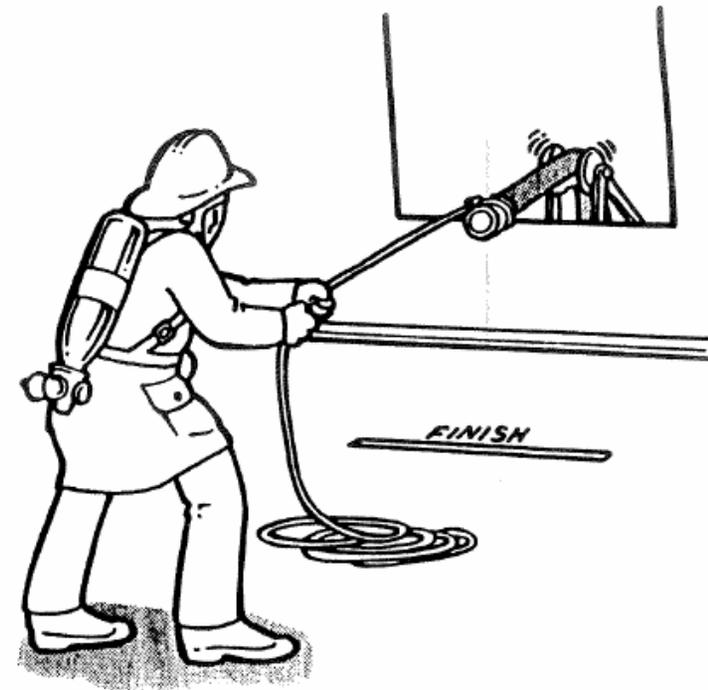
EVENT 5 – HOSE PULL

SIMLUATES

Pulling hose lengths or equipment to upper floors at a fire scene. Tests eye-hand coordination, control of repetitive muscle use, lifting strength and any claustrophobic reaction.

PROCEDURE

Standing in a third story window, pull 50 feet of utility line (rope), then 50 feet of hose, which is tied to the line, over a pulley assembly until the hose nozzle reaches an indicated location.



EVENT 6 – JOIST WALK

SIMLUATES

Walking on attic or unfinished joist construction at a fire scene, while carrying equipment. Tests balance, lifting strength, awareness of body position and movement.

PROCEDURE

Carrying a 50 pound coil of hose, walk the length twice of a 28 foot ladder laid on the ground, stepping only on the side rails and without stepping off the ladder.



EVENT 7 – FORCIBLE ENTRY

SIMULATES

Use of an axe to break into buildings or to create ventilation openings in floors, roofs, etc., at a fire scene. Tests eye-hand coordination, upper body mobility and control and repetitive maximum exertion.

PROCEDURE

Swing a fire axe 15 times at a ground level target, using a full overhead 2 arm swing.

