Colchester Physical Agility Test

In order to be considered for selection, firefighter applicants must pass the physical agility test (PAT) conducted at the City's Fire Training Center. This test consists of a series of physical tasks, such as running or raising ladders, which closely approximates physical tasks routinely performed by firefighters on the job. Most tasks are timed.

Applicants are advised to prepare for the agility test for purposes of safety as well as to enhance their chance for a higher score. With adequate preparation, the average healthy, fit individual should be able to complete the test safely and satisfactorily. During testing, all procedures will be explained in detail and demonstrated if necessary.

Physical screening procedures meet the following criteria:

1. They are job related
2. They are not discriminatory on the basis of sex, race, age, etc.
3. They represent what experts feel are the most crucial phases of firefighting and emergency medical activities and are indicative of a variety of firefighting and emergency tasks; and
4. They are quantifiable.

EVENT 1

Requirement: Complete 1.5 mile run

Grading: Time in seconds

Time Limit: 16 minutes

Job Relatedness:
This test gives an indirect assessment of aerobic power which has been shown to be one of the highest physical factors necessary for firefighters.
Applicants pace themselves throughout the run, and attempt to complete the 1½ miles by starting from the starting point, and running to complete the course. **Not following the designated course will result in disqualification from the employment process.**

**EVENT 2**

This is a pass/fail test

14’ Ladder Raise & Climb

**Equipment**

This event uses one 14-foot fire department roof ladder.

**Purpose of Evaluation**

This event is designed to simulate the critical tasks of placing a ground ladder at a fire structure and climbing it. This event challenges your aerobic capacity, upper body muscular strength, lower body muscular strength, balance, grip strength, and anaerobic endurance. This event affects your aerobic and anaerobic energy systems as well as the following muscle groups: biceps, deltoids, upper back, trapezius, muscles of the forearm and hand (grip), glutes, quadriceps, and hamstrings.

**Event**

For this event, you must remove a 14-foot fiberglass ladder from the rig. Walk it to the Bravo side of the building, lift the tip end from the ground, and walk it up until it is stationary against the wall. This must be done in a hand over hand fashion, using each rung until the ladder is stationary against the wall. You must not use the ladder rails to raise the ladder. Then pull the base of the ladder away from the building and position it for the proper climbing angle. Then you must climb up 8 rungs. And then climb down 8 rungs. Lower the ladder in a hand over hand fashion and place it back on the rig.

**Failures**

If you miss any rung during the raise, one warning is given. If you allow the ladder to fall to the ground the test time is concluded and you fail the test. The second infraction constitutes a failure, the test time is concluded and you fail the test.
EVENT 3

- Rescue

Equipment
This event uses a weighted mannequin equipped with a harness with shoulder handles.

Purpose of Evaluation
This event is designed to simulate the critical task of removing a victim or injured partner from a fire scene. This event challenges your aerobic capacity, upper and lower body muscular strength and endurance, grip strength and endurance, and anaerobic endurance. This event affects your aerobic and anaerobic energy systems as well as the following muscle groups: quadriceps, hamstrings, glutes, abdominals, torso rotators, lower back stabilizers, trapezius, deltoids, latissimus dorsi, biceps, and muscles of the forearm and hand (grip).

Event
For this event, you must grasp a minimum 135-pound mannequin** by the handle(s) on the shoulder(s) of the harness (either one or both handles are permitted), drag it 35 feet (10.67 m) to a pre-positioned drum, make a 180° turn around the drum, and continue an additional 35 feet (10.67 m) to the finish line. You are not permitted to grasp or rest on the drum. It is permissible for the mannequin to touch the drum. You are permitted to drop and release the mannequin and adjust your grip. The entire mannequin must be dragged until it crosses the marked finish line. This concludes the event.

Failures
If you grasp or rest on the drum at any time, one warning is given. The second infraction constitutes a failure, the test time is concluded and you fail the test.

**ADDITIONAL WEIGHT MAY BE ADDED
EVENT 4

24 ‘Ladder Raise and Extension

Equipment
This event uses one 24-foot fire department ladder. For your safety, a retractable lanyard is attached to the ladder that you raise.

Purpose of Evaluation
This event is designed to simulate the critical tasks of placing a ground ladder at a fire structure and extending the ladder to the roof or window. This event challenges your aerobic capacity, upper body muscular strength, lower body muscular strength, balance, grip strength, and anaerobic endurance. This event affects your aerobic and anaerobic energy systems as well as the following muscle groups: biceps, deltoids, upper back, trapezius, muscles of the forearm and hand (grip), glutes, quadriceps, and hamstrings.

Event
Immediately proceed to the pre-positioned and secured 24-foot (7.32-m) aluminum extension ladder, and extend the fly section hand over hand until it hits the stop. Then, lower the fly section hand over hand in a controlled fashion to the starting position.

Failures
If you do not maintain control of the ladder in a hand over hand manner, or let the rope halyard slip in an uncontrolled manner, your test time is concluded and you fail the test.
EVENT 5

Hose Drag

Equipment
This event uses a charged fire hose with a hose line nozzle.

Purpose of Evaluation
This event is designed to simulate the critical tasks of dragging a charged hose line from the fire apparatus to the fire occupancy. This event challenges your aerobic capacity, lower body muscular strength and endurance, upper back muscular strength and endurance, grip strength and endurance, and anaerobic endurance. This event affects your aerobic and anaerobic energy systems as well as the following muscle groups: quadriceps, hamstrings, glutes, calves, lower back stabilizers, biceps, deltoids, upper back, and muscles of the forearm and hand (grip).

Event
For this event, you must grasp a hose line nozzle attached to 150 feet of 1 3/4-inch hose. Place the hose line over your shoulder or across your chest. You are permitted to run during the hose drag. You must pull the nozzle past the finish line.

Failures
During the hose drag, if you fail to pull the nozzle past the finish line, the test time is concluded and you fail the test.
Event 6

Forcible Entry

Equipment
This event uses a target located 29 inches off the ground and an 8-pound sledgehammer.

Purpose of Evaluation
This event is designed to simulate the critical tasks of using force to open a locked door or to breach a wall. This event challenges your aerobic capacity, upper body muscular strength and endurance, lower body muscular strength and endurance, balance, grip strength and endurance, and anaerobic endurance. This event affects your aerobic and anaerobic energy systems as well as the following muscle groups: quadriceps, glutes, triceps, upper back, trapezius, and muscles of the forearm and hand (grip).

Event
For this event, you must use an 8-pound sledgehammer to strike the target area. During this event, you must keep your feet outside the toe-box at all times. After the target is moved past the line, place the sledgehammer on the ground. This concludes the event.

Failures
If you do not maintain control of the sledgehammer and release it from both hands while winging, it constitutes a failure, the test time is concluded and you fail the test. If you step inside the toe-box, one warning is given. The second infraction constitutes a failure, the test time is concluded and you fail the test.