Firefighter Physical Ability Test

Tri-State Fire Recruitment Alliance

Candidate Orientation Guide
Physical Ability Test Candidate Orientation Guide

This manual has been developed to introduce you to the Tri-State Fire Recruitment Alliance Physical Ability Test (PAT). The test consists of a series of tasks designed to assess important physical abilities necessary for effective job performance as a firefighter. These tasks were developed to mirror real situations that firefighters encounter on the job. These tasks represent basic skills that do not require training or previous experience as a firefighter to successfully complete.

The selection process for firefighters is very competitive. Although you are not required to read or use this Orientation and Preparation Guide, we encourage you to do so. The more prepared you are, the more likely you are to pass the test.

There are eight job-related physical ability test components that are timed in a continuous series. Following is an overview of the components/stations of the PAT:

- Charged hoseline drag simulation
- Charged hoseline reel simulation
- Ladder heel (raise)
- Forcible entry simulation
- Equipment carry simulation
- Stair climb with equipment
- Dummy drag
- Ceiling breach and pull (overhaul) simulation

The following points should help to familiarize you with what will take place on the day of the test.

- Applicants must wear a self-contained breathing apparatus (SCBA), excluding the face piece and low-pressure hose, for all components of the PAT. The SCBA bottle will be empty. The SCBA weighs approximately 29 pounds.

- Applicants are strongly encouraged to wear athletic shoes (sneakers) and appropriate clothing. You will be performing physical acts that demonstrate strength, agility, and endurance, and it is important to be outfitted in attire that does not hinder your performance.

- Protective gloves and a safety helmet will be provided at the test site for your use. You may bring your own gloves, kneepads, etc. to use; however, the testing authority reserves the right to inspect all equipment, and to disallow equipment, to ensure that its use does not affect the fair and impartial administration of the PAT.

- All eight components of the PAT will be timed in a series. The test has a cut-off score and failure to complete the course in the allowed time will result in disqualification.

- You must not run during the test. Running is not permitted on a working fireground, and it will not be allowed during this test. Failure to heed a first warning not to run will result in disqualification. Running is defined as any time both feet are off the ground at the same time while
you are advancing on the course. You may move as fast as you like, while remaining safe, on the
hose drag and stair climb stations as it is not technically possible to run during these components.

- Test monitors will be assigned to time you while on the course. It is acceptable to ask the test
monitor questions concerning course rules and layout prior to beginning the course and while on
the course.

- You will be allowed as much time as needed to complete each individual component of the PAT
within the maximum allotted time. Should you perform one of the components incorrectly, the
test monitor will guide you as to how to correct your actions or to perform the component again.
Pay careful attention to the instruction of the test monitor and ask for clarification when needed.

- A candidate who does not pass the physical test on their first attempt because of a prop failure or
testing mishap may request a second attempt. Second attempts will take place on the same day.

It is the expectation of the Tri-State Fire Recruitment Alliance that this orientation guide will provide
you with sufficient information to prepare for and succeed in the PAT. The eight events that
compose the Physical Ability Test are outlined for you on the following pages, along with suggestions
for preparing for each event.

Please note that suggestions regarding preparation activities are simply suggestions intended to offer the
candidate a means of practicing for the PAT. These are only suggestions. The Tri-State Fire Recruitment
Alliance and the PAT developer cannot be held responsible for injuries or expenses incurred during preparation
for the PAT.
The Tri-State Fire Recruitment Alliance and all agencies participating in this consortium do not recommend or endorse any private schools or services offering preparation for this physical ability test and are not responsible for their advertising claims.

**Hose Drag**

Station Description:
You will drag a simulated charged hoseline for a distance of 90 feet. The simulator will consist of ten (10) feet of uncharged hoseline linked to a weighted sled box. The box will contain approximately 95 pounds of weight to simulate the weight of three (3) sections of charged 1 ¾-inch hoseline and the associated force/weight of friction on an asphalt surface (a total pull force of 65 pounds). You will drag the simulator for 90 feet until both feet cross over the target line.

Preparation:
This station assesses your leg strength and overall cardiovascular endurance. You can prepare for this event by dragging a weighted object across the ground using a rope for a distance of 90 feet. You may want to begin with lesser weights and build up to a total weight similar to that used in the hose drag station.
Hose Reel

Station Description:
After completing the first station, you will be led by the proctor to a square marked on the floor. The proctor will place the end of a 50-foot section of uncharged hoseline just inside the marked square. You will take hold of the hoseline and begin to reel in the same simulator that you dragged in the previous station. You must remain inside the marked square measuring five feet by five feet at all times. The exercise will end once you have reeled in all 50 feet of hoseline and the leading edge of the sled box crosses over the front edge of the marked box.

You may reel in the hoseline in whatever fashion you choose as long as you remain inside the marked square and do not become entangled in the hoseline.

Preparation:
This station assesses your upper body strength, grip strength and muscular endurance. You can prepare for this station by reeling in rope connected to a heavy object that slides across the ground.
Ladder Heel

Station Description: You will raise a 24-foot extension ladder by ‘walking it up’ using a hand-over-hand technique. The ladder will be lowered in the reverse manner. The ladder is secured to the ground using a pivot system that will keep the base of the ladder in place. The upper portion of the ladder will be secured using a belay system that will control the ladder from falling should you lose control.

You must ‘walk’ the ladder all the way to a vertical position and all the way back down to the ground using the rungs of the ladder. You must not drop the ladder or grasp the rails of the ladder at any time.

Preparation:
This station assesses basic coordination and upper body strength. You may prepare for this exercise by ‘heeling’ a ladder up against the side of a fixed structure.
Forcible Entry

Station Description:
You will use a ten-pound sledge hammer to strike a ‘sled target’ located three feet off the ground. This activity simulates forcible entry scenarios on the fireground such as penetrating a locked door. You will strike the target the number of times necessary to move the sled a distance of 12 inches. You must remain on the designated platform at all times while completing this station.

Preparation:
This station assesses upper body strength and coordination. You may prepare for this event by striking a solid object with a 10 pound sledge hammer a number of times. Practice hitting a target approximately six inches square.
**Equipment Carry**

Station Description:
You will dismount a simulated gas-powered positive pressure ventilation (PPV) fan from a mounting platform, carry the simulator for 50 feet, around a cone, 50 feet back to the mounting platform and then remount the fan onto the platform. The PPV fan prop weights approximately 45 pounds. The fan must be carried at all times while you are advancing it forward. You may set the fan down at any time to rest. The fan must be remounted completely within the compartment to complete this station.

Preparation:
This station assesses core body strength, grip strength and overall cardiovascular endurance. You may prepare for this event by carrying a 45 pound object for a distance of 100 feet.
**Stair Climb**

Station Description:
You will climb stairs equivalent to up to and back down from a conventional third floor (two flights of stairs). You will carry a ‘high-rise pack’ containing two sections of bundled 1 ¾-inch hoseline weighing approximately 42 pounds.

The stair prop that you will use contains four stairs going up and four coming back down. It has railings on both sides that you can use. You must hit every stair going up and down. Should you skip a stair, the proctor will require that you go back and hit that stair. You will be required to complete seven (7) up and back down repetitions in order to complete this station. A single repetition involves climbing up the four stairs and then climbing down the other side of the simulator.

You may carry the hosepack in any manner that is comfortable. You must carry the hosepack at all times. You must not drag the hosepack at any time.

Preparation:
This station assesses muscular and cardiovascular endurance. You may practice for this station by ascending and descending two flights of stairs while carrying approximately 70 pounds of weight (SCBA plus hose pack).
Dummy Drag

Station Description: You will drag a human form dummy weighing 165 pounds (weight of dummy and clothing) for 25 feet, around a weighted barrel, and then back 25 feet across the starting point for a total distance of 50 feet. You will drag the dummy using the pull harness attached to the dummy ONLY. It will be unacceptable to drag the dummy by any limb, to lift under the dummy’s arms, to drag by holding onto clothing, or to carry the dummy. In order to complete this station, both the candidate and the dummy must completely cross the finish line.

Preparation:
This station assesses lower body strength and endurance. You may prepare for this event by dragging a weighted object using a rope in much the same way as was suggested for station one.
Ceiling Breach and Pull

Station Description:
You will demonstrate the physical abilities needed to breach and pull ceiling with a pike pole during overhaul procedures by performing breach and pull motions using a ceiling simulator. You will position a pike pole in the target diamond on the breach portion of the simulator and perform 3 breach repetitions. You will then hook the pike pole onto the pull portion of the simulator and perform 5 pull repetitions. This sequence will be repeated for 4 total cycles.

This station involves a highly specific simulator. It is recommended that you pay careful attention to how this simulator works prior to beginning the test.

The breach side of the simulator requires you to push up a hatch door offering 60 pounds of resistance. The pull side of the simulator requires that you hook onto a metal ring a pull down with a force of 80 pounds.

You will be required to push the breach-side hatch door completely up and than bring it back down completely to complete a repetition. You will be required to fully pull down and return the pull side of the simulator to complete a repetition.

The proctor will count out your repetitions and provide instruction to ensure that you perform acceptably during this component.

Preparation:
This station assesses upper body strength and grip strength. The easiest way to prepare for this exercise will be to use a universal weight machine. The military press exercise that is typically performed using a universal weight machine will allow you to practice pressing weight upward above your head using your arms. Do keep in mind that during this component you may be able to use your legs and lower body to assist in pushing up on the breach side of the simulator. The ‘lat’ pull down exercise typically incorporated into a universal weight machine will closely simulate the pull side of the simulator if you use a close, vertical grip.
Scoring

The PAT is a timed test. Any candidate that completes the course in **5 minute and 29 seconds** (5:29) or less will pass this stage of the selection process. There is no advantage in seeking to complete the test in a time significantly lower than the allotted time.
- Equipment Carry: 25 feet
- Hose Pack: 7 feet
- Stair Climb: 25 feet
- Ceiling Breach/Pull: 25 feet
- Hose Reel: 90 feet
- Hose Drag: 90 feet
- Stair Climb: 60 feet
- Forcible Entry: 60 feet
- Equipment Carry: 50 feet
- Ladder Heel: 12 inches