

## CANDIDATE PHYSICAL ABILITY TEST

The CPAT test is a nationally used test, created by the International Association of Firefighters and the International Association of Fire Chiefs, in which each of the test taker's scores is compared to the scores of the other individuals in a reference group rather than competing to some pre-established cut-off score. Norm-referenced testing is sometimes referred to as health-based testing. The rationale underlying health-based testing is that all job incumbents should be sufficiently physically fit to enable them to perform the job satisfactorily with minimum risk of injury. "Physically fit" refers to being able to perform a standard battery of physical tasks at a level comparable with others at the same age and sex.

The CPAT is a pass/fail timed test (10 minutes 20 seconds) which consists of eight separate events (stair climb, hose drag, equipment carry, ladder raise and extension, forcible entry, search, rescue, and ceiling breach and pull). The test is a sequence of events that requires the candidate to progress along a predetermined path from event to event in a continuous manner. In these events the candidate wears a 50 pound vest to simulate the weight of self-contained breathing apparatus (SCBA), and the firefighter protective clothing. An additional 25 pounds, using two 12.5 pound weights that simulate a high-rise pack (hose bundle), is added for the stair climb event. The events are placed in a sequence that best simulates their use in a fire scene while allowing an 85 foot walk between events. To ensure the highest level of safety and to prevent candidate exhaustion, no running is allowed between events. This walk allows the candidate approximately 20 seconds to recover and regroup before each event.

### DESCRIPTION OF ACTIVITIES

#### STAIR CLIMB



**Purpose:** The event is designed to simulate the critical tasks of climbing stairs in full protective clothing while carrying a high-rise pack (hose bundle) and climbing stairs in full protective clothing carrying firefighter equipment.

**Procedure:** The candidate is required to wear two 12.5 pound weights on the shoulders to simulate the weight of a high-rise pack (hose bundle). Prior to the initiation of the timed CPAT, the candidate has a 20-second warm-up on the Step Mill at a set stepping rate of 50 steps per minute. If the candidate falls or steps off the Step Mill during the 20-second warm-up period, the candidate is required to remount the Step Mill and restart the entire 20-second warm-up period. There is no break in time between the warm-up period and the actual timing of the test. Timing of the test begins at the end of this warm-up period when the proctor calls out "START". For the test, the candidate is required to walk on the Step Mill at a set stepping rate of 60 steps per minute for 3 minutes.

## HOSE DRAG



**Purpose:** This event is designed to simulate the critical tasks of dragging an uncharged hose line from the fire apparatus to the fire occupancy and pulling an uncharged hose line around obstacles while remaining stationary.

**Procedure:** The candidate grasps an automatic nozzle attached to 200 feet of 1¾ inch hose. The candidate places the hose line over the shoulder or across the chest, not exceeding the 8-foot mark. The candidate is permitted to run during the hose drag.



The candidate drags the hose 75 feet to a pre-positioned drum, makes a 90 degree turn around the drum and continues an additional 25 feet. The candidate then stops within the marked 5 foot x 7 foot box, drops to at least one knee and pulls the hose line until the hose line's 50 foot mark is across the finish line. During the hose pull, the candidate must keep at least one knee in contact with the ground and knee(s) must remain within the marked boundary lines.

## EQUIPMENT CARRY



**Purpose:** This event is designed to simulate the critical tasks of removing power tools from a fire apparatus, carrying them to the emergency scene and returning the equipment to the fire apparatus.

**Procedure:** During this event, the candidate removes two saws from the tool cabinet, one at a time, and places them on the ground. The candidate then picks up both saws, one in each hand, and carries them while walking 75 feet around the drum, then back to the starting point. The candidate is permitted to place the saw(s) on the ground and adjust the grip. Upon return to the tool cabinet, the candidate places the saws on the ground, then picks up each saw one at a time, and replaces the saw in the designated space in the cabinet.

## LADDER RAISE AND EXTENSION



**Purpose:** 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.

**Procedure:** During this event, the candidate walks to the top rung of the 24-foot aluminum extension ladder, lifts the unhinged end from the ground, and walks 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. The candidate immediately proceeds to the pre-positioned and secured 24-foot aluminum extension ladder, stands with both feet within the marked box of 36 inches X 36 inches and extends the fly section hand over hand until it hits the stop. The candidate then lowers the fly section hand over hand in a controlled fashion to the starting position.

## FORCIBLE ENTRY



**Purpose:** This event is designed to simulate the critical tasks of using force to open a locked door or to breach a wall.

**Procedure:** During this event, the candidate uses a 10-pound sledgehammer and strikes the measuring device in the target area until the buzzer signal is activated. The candidate's feet must remain outside the toe-box. After the buzzer is activated, the candidate places the sledgehammer on the ground.

## SEARCH EVENT



**Purpose:** This event is designed to simulate the critical task of searching for a fire victim with limited visibility in an unpredictable area.

**Procedure:** During this event, the candidate crawls on hands and knees through a tunnel maze that is approximately 3 feet high, 4 feet wide and 64 feet in length with two 90 degree turns. At a number of locations in the tunnel, the candidate navigates around, over and under obstacles. In addition, at two locations, the candidate crawls through a narrowed space where the dimensions of the tunnel are reduced. The candidate's movement is monitored through the maze.

## RESCUE EVENT



**Purpose:** This event is designed to simulate the critical task of removing a victim or injured partner from a fire scene.

**Procedure:** During this event, the candidate grasps a 165 pound mannequin by the handle(s) on the shoulder(s) of the harness (either one or both handles are permitted), drags it 35 feet to a pre-positioned drum, makes a 180 degree turn around the drum, and continues an additional 35 feet to the finish line.

## CEILING BREACH AND PULL



**Purpose:** This event is designed to simulate the critical task of breaching and pulling down a ceiling to check for fire extension.

**Procedure:** During this event, the candidate removes the pike pole from the bracket, stands within the boundary established by the equipment frame, and places the tip of the pole on the painted area of the hinged door in the ceiling. The candidate fully pushes up the hinged door in the ceiling with the pike pole three times. The candidate then hooks the pike pole to the ceiling device and pulls the pole down five times. Each set consists of three pushes and five pulls. The candidate repeats the set four times.

**AERIAL LADDER CLIMB:** Also required but not part of the timed exercise. Climb the 75 foot ladder on the aerial ladder truck. Once reaching the top, touch the top rung and upon being signaled, return to the ground.

## **OTHER INSTRUCTIONS**

- All candidates are required to complete and sign the Candidate Physical Ability Test Waiver of Claim for Injury, relieving the City of Bowling Green of any liability for any injury received during the physical fitness test/practical exercises.
- It is recommended that candidates wear loose fitting clothing and appropriate running shoes. Applicants may wish to bring a towel.

**LONG PANTS ARE REQUIRED TO COMPLETE THE PHYSICAL AGILITY TESTING.**