MEDICAL AND PHYSICAL STANDARDS

The Fire Service (Appointment and Promotion) Regulations 1978 (as amended), specify that any person wishing to join the Fire Service must undergo a series of tests to determine:

1. **Isometric Muscle Strength**
2. **Aerobic Capacity (VO\(^2\) Max)**
3. **Full Medical Fitness.**

1. **ISOMETRIC MUSCLE STRENGTH**

   The isometric muscle strength of the candidate's hand grip and the combined lifting strength of his/her back and legs will be tested, with a pass level of not less than:

   i. Dominant Hand 35 kg
   ii. Subordinate Hand 33 kg
   iii. Combined Leg & Back 117 kg.

   These tests will be supervised by a Brigade Physical Training Instructor.

2. **AEROBIC CAPACITY (VO\(^2\) MAX)**

   The candidate should have an aerobic capacity (VO\(^2\) max) of 3.2 litres/min or 45ml/kg of body weight/min or greater.

   The candidate's aerobic capacity is tested via the Chester Step Test. This is a submaximal test that requires the individual to step on and off a bench (12 inches in height) at a rate set by a metronome tape, sufficient to elicit a heart rate of 75-80% of maximum and a moderately vigorous level of physical exertion. During the test, heart rates are taken and plotted on a graph. An aerobic capacity and fitness rating are then determined from this graph.

   This test will be supervised by the Brigade Physical Training Instructor.
3. Upon completion of all the tests, successful candidates will be invited to attend for a full medical examination by the Brigade Medical Officer. The medical will consist of the following:

- Measurement of Height and Weight
- Measurement of Blood Pressure
- Urinalysis
- Spirometry
- Audiometric Testing
- Full physical examination, including eye examination.

Candidates with pre-existing medical conditions must declare them at the time of application.

PLEASE NOTE: There is a standard of vision, without correction, laid down within these regulations.

TRAINING

There are several stages involved in a Firefighter attaining "fully qualified" status, these consist of:

Recruits Course: 11 week residential course, based at the Brigade Training School. The course covers all the basic skill requirements a Firefighter needs to have in order to work safely and effectively at emergency incidents. This means that recruit Firefighters attending the course will be required to experience realistic simulations from day one, including working from heights, in confined spaces, and hot and humid atmospheres. In order to cater for the physical demands of the job, the course also includes a substantial physical training programme.

Probationary Period: On passing the initial training programme, Firefighters undergo a two year probationary period, during which time they receive additional training in the workplace and are assessed at regular intervals on their performance. They are also required to achieve an Emergency Fire Services Operations Level 2 NVQ award. Subject to satisfactory reports appointment will be confirmed.

Qualified Status: Between 2 and 4 years service Firefighters remain within the training programme (four year module), continuation training is carried out within the workplace, supported by regular assessment of performance.
During the 3rd and 4th years they are expected to achieve the full Operations Level 3 NVQ award, after which full qualified status is confirmed.

Continuation Training: Due to the risks Firefighters are expected to deal with on a daily basis, continuation training is maintained as a key component of station routine. Firefighters undergo training each day, both technical and practical sessions are delivered in the workplace.

COMMITMENT

On completion of 11 weeks initial training, recruits will be posted to one of the Brigades 12 Wholetime Stations.

Initial postings are subject to vacancies and are not necessarily the nearest station to the recruit’s home address. Individuals are responsible for transport costs to and from the posting allocated.

The duty system to which you will work is as follows:

a. 2 day shifts 0900 hours to 1800 hours.

b. 2 night shifts 1800 hours to 0900 hours.

c. 4 days rota leave.

Humberside Fire Brigade have a policy of testing all members of the Brigade with regards fitness levels on a 6 monthly basis.
HUMBERSIDE FIRE BRIGADE

RECRUIT ASSESSMENT PROCEDURES

The following information is a guide to the type of tests used to select recruit Firefighters.

PHYSICAL FITNESS

The work of a Firefighter is very demanding and at times arduous, therefore a Firefighter has to possess both physical and mental strength.

The training which has to be undertaken to become a Firefighter is equally demanding.

Recruits will attend a 11 week residential course. To be successful on this course a high level of all round fitness is required, which must be maintained not only at the Training Centre but through their career, which could be for 30 years or more.

The following tests have been devised to satisfy the Brigade that you are fit enough to undertake 11 weeks of intense training and are able to maintain such fitness throughout your career.

PHYSICAL FITNESS TESTING

The physical fitness tests associated with the selection process have been broken down into two stages.

STAGE 1: GENERAL PHYSICAL FITNESS

Multistage Fitness Test

This is designed to measure your aerobic fitness.

You will be required to run back and forth between two lines 20 metres apart, maintaining a pace set by an audio cassette.

The pace increases at one minute intervals throughout the test.

The test is completed once you have reached the predetermined target which is level 9, shuttle 6, or when you can no longer sustain the required pace.
Note: This test is included as a safety factor to ensure that candidates possess a suitable level of fitness, to complete the physical tests involved safely. It also equates to the level of fitness required to pass the "Chester Step Test" later in the selection process.

Strength Test

This is in two parts:

1. Handgrip Test
2. Leg/Back Pull Test

You will be required to use equipment designed to measure your strength of handgrip and the combined lift strength of your back and legs.

For the handgrip test you will be asked to undertake the test for each hand separately.

This stage of the selection process is designed to measure a person’s general physical suitability to become a Firefighter. Consequently to progress to the next stage you have to pass this basic first stage.

STAGE 2: WORK RELATED PHYSICAL FITNESS TEST

Learning to use ladders and practising drills with hose and other equipment needs a high level of strength and endurance which is why the candidate requires a high level of physical fitness, hence the need to pass Stage 1.

Stage 2 tests however, are very job specific. They have been designed to serve two purposes.

Purpose 1: To indicate to the Brigade a measure of potential, you have to be able to perform certain physical tasks which relate to a Firefighter’s role.

Purpose 2: For you to gain personal experience of the nature and demands of a Firefighter’s role. This will hopefully help you decide if it is a career you wish to follow.

To ensure that the tests are as realistic as possible you will perform the tests in full firegear which will include wearing a fire tunic, boots and helmet.
TASK - DEAD LIFT SIMULATOR

What you will be required to do:

Wearing full Firefighting gear you will under supervision lift a weight of 50kg from a crouching to fully upright position and maintain this lift for 5 seconds.

Why you are asked to do this:

The simulator tests the lifting of a heavy item such as a Fire Brigade portable pump.

TASK - 30 kg HAUL

What you will be required to do:

Wearing firegear you will haul a weight of 30 kg to a height of 8.2 metres using equipment specifically designed for this activity. You are only required to do this once.

Why you are asked to do this:

This action mirrors the strength you will need to extend a 13.5 metre ladder.

Note: This task is designed to measure your strength and reach in relation to a specific task. Failure to complete this test will prevent progress to the next stage.

TASK - HOSE RUNNING

What you will be required to do:

Wearing firegear you will run out and coil up lengths of hose, during a timed assessment.

Why you are asked to do this:

Hydrants can be spaced at a maximum of 240 metres apart and at an operational incident a Firefighter could be expected to run hose from a hydrant to the pump. This would be a total of 9.6 lengths and 80 seconds per length is not an unrealistic time for each length. Rolling up each length represents the time and work of returning to the pump to collect additional lengths of hose.
Full instruction and a practise period is given to candidates before undertaking this task.

**TASK - LADDER CLimb**

What you will be required to do:

Wearing Firefighting gear and a fall arrester you will:

- Mount a ladder from ground floor level
- Climb up the ladder
- Take a leg lock
- Identify symbols at ground level from the leg lock position
- Climb down the ladder
- Dismount.

Why you are asked to do this:

Ladder climbing and working at heights are an integral part of a Firefighter's role. This assessment tests the candidate's attitude to heights and co-ordination when climbing a ladder.

Full instruction is given before this assessment.

**TASK - CRAWLING IN SMALL AND AWKWARD SPACES**

What you will be required to do:

Wearing full firefighting gear with a breathing apparatus set on your back (weight = approximately 19.2 kg) you will:

- Enter a confined crawlway incorporating a variety of obstacles and negotiate a pre-set route. The test will be carried out in fresh air but vision will be obscured.

Why you are asked to do this:

The ability to manoeuvre the body and other objects in tight and awkward situations is an aspect of Firefighting. This tests the individual's agility and how they would cope with this situation.

Full instruction will be given by a Brigade Breathing Apparatus Instructor prior to this assessment.