

JOB DESCRIPTIONS / ANALYSIS

Firefighter Physical Ability Job Function Overview

Static Strength

Carry and raise ladders
equipment Drag 3-1/2" hose uphill
Wear complete turnout gear and carry a ladder & hose
Carry injured people up stairs
Lift heavy objects off trapped people
Push a disabled auto out of traffic
Lift hose and pump can
Carry 5-gallon water bags, shovels, and backpack

Dynamic Strength

Pull hoses
Pull self and equipment over fences
Carry equipment in and out of buildings
Climb hillsides in "bunker clothes" in grass fires
Dive to rescue a drowning victim
Climb ladders with equipment, hoses and personal protective clothing and equipment

Stamina

Pull ceiling
Repeat fires, successive fires in 24-hour shifts
Salvage and cleanup, taking down walls
Climb stairs with equipment
Shift hose lines
Shovel in a grass fire
Pull a drowning victim to shore
Hold and operate the "rescue equipment e.g. jaws of life," especially in awkward positions

Extent Flexibility

Fire cleanup operations
Carry out an injured person
Lay hose lines
Cleanup
Crawl through attics
Extricate victim from a car or overturned tractor
Roof work
flood) Remove victims from cars
Carry victims down winding stairs
Chop a hole in the roof
Climb hillside covered with brush

surface Gross Body Coordination

Climb a ladder through opening in a roof
Stand on pitched roof using a chain saw
Get out of a burning structure
Operate a charged hose line- Roof work
Get through building's small places

Explosive Strength

Run up stairs with
Jump to avoid falling object
Kick door in
Run and carry ladders over objects
Remove person from burning building
Cut a hole in the roof
Advance charged hose line
Breach a wall

Trunk Strength

Lift hose
Perform cardiopulmonary resuscitation
Lift people on an EMS run
Pick up bodies
Overhaul and cleanup

Effort

Repeat fires over 24-hour work shift
Multiple tasks at a fire
Remove a person trapped in a vehicle
Make a rescue

Dynamic Flexibility

Pull ceiling
Chop through a wall
Extend ladders
Saw, kick down door
Cardiopulmonary-resuscitation
Shoveling in a brush fire
Sandbagging (in
Cutting up trees

Gross Body Equilibrium

Balance on pitched roof
Balance with backpack on an inclined
Make rescue from bridge or superstructure
Walk on a concrete beam
Balance on a ladder on roof
Carry a body down the ladder

Mobility

Move within a dark building
Climb stairs, ground ladders, aerial ladders
Climb over piles of fire debris
Flee falling objects
Walk fast for alarm
Forging streams or rivers
Crawl and search through smoke
Remove boxes and other debris
Moving among animals leaving fire

Arm-Hand Steadiness

Apply traction
Hold hose lines
Hold the hose line
Steady Ladder movements
Apply first aid methods e.g. administer IV, splinting

Manual Dexterity

Disassemble machinery
Repair chain saw
Operate hand tools
Assemble and connect equipment
Aerial extension
Aid car work
Tie knots on hose
Use a spanner wrench

Near Vision

Read instructions
Read chemical labels on containers
Read prescription bottles

Color Vision

Use color-coded safety equipment
Identify objects in a fire
Conduct search and rescue in dark building

Smell

Detect leaking chemicals
Smell material burning

Hearing Conversation-Noisy Environment

Localize sound in rescues
Avoid unseen hazards
Instructions (verbal)
Radio instructions
Under adverse conditions -high ambient noise levels

Hearing Direction

Localize cries for help - Localize warning cries

Speed of Limbs

Drive an emergency vehicle
Brake continuously during response
Pull rope to rescue person in the water
Block a punch
Swing an ax
Chopping and clearing brush

Finger Dexterity

Typing
Mechanical repairs
Find a pulse
Operate a throttle on a pump
Couple and uncouple hose

Depth Perception

Climb while balancing on a roof
Go up and down ladders, jumping onto roofs
Dive into a lake – victim rescue
Estimate hose distances
Estimate driving hazards

Far Vision

See end of the aerial ladder
Avoid electrical wires
See hazards in smoky buildings through mask

Night Vision

Drive at night, travel across irregular surfaces
Read addresses at night

Hear Conversation - Quiet Environment

General needs

Sound Discrimination

Instructions in a noisy environment
Radio instructions in a noisy environment
Instructions above the noise of the pump