Manasquan Fire Department
Manasquan Fire District #1
Standard Operating Guideline

210.10

Title: Ground Ladder Operations

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Purpose: To establish the procedures for the safe operation, maintenance, testing and storage of all ground ladders used by the department.

Scope: This procedure is designed to provide a guideline for all personnel to utilize while operating department ground ladders. Procedures for storage maintenance and testing of ground ladders will be outlined. All personnel should become familiar with this procedure as the general practices of other departments may differ. It is the intention of this procedure to provide a greater margin of safety whenever possible.

General:

The Manasquan Fire Department has adopted the procedures described in the "Essentials of Firefighting - Fourth Edition" Chapter 9 entitled "Ladders" as produced by the International Fire Service Training Association (IFSTA). All personnel should become familiar with the procedures outlined in this manual.

210.10.01. Standard Equipment:

The standard ground ladder shall be constructed of an aluminum-alloy or fiberglass composite and shall meet the specifications found in NFPA 1931.

All apparatus shall be equipped with the minimum amount and type of ground ladders as required by NFPA.

210.10.02. Testing:

It shall be the responsibility of the Fire Department/Fire District to provide testing of all ground ladders as specified in NFPA 1932. Testing and documentation shall be coordinated with the Chief, Assistant Chief, Captain, and Foreman. Documentation will be forwarded to the Fire District.

210.10.03. Maintenance:

It shall be the responsibility of any member to report any problems related to the ground ladders to their Company Officer. Ladders with questionable problems should be placed out-of-service and replaced with reserve ladders if available.

210.10.04. Operations / Special Considerations

Ladder Positioning - Ground ladders that are being utilized for gaining access to or rescuing victims from elevated windows should be placed UNDER THE WINDOWSILL. Only if the window opening is large enough to access from the side should the ladder be placed anywhere other than under the sill. Ladders being used for access points for hose streams may be placed above (over) window openings.

Ladders being used for ventilation should be placed in a position upwind from the opening and above any windows that may need to be broken. Personnel should take care to notify those working below of the potential any falling objects, etc.

Ladders placed to a roof should extend a minimum of five (5) rungs above the roofline. This will allow for easy access and egress of personnel and help to pinpoint the location of the ladder should smoke conditions obscure vision.

Ladders should never be placed from the ground in front of an exit.

Extension ladders shall be positioned with the FLY SECTION OUT – AWAY FROM THE BUILDING before CLIMBING.

Safety - All personnel should practice a high degree of safety anytime ground ladders are used. Several inherent hazards are related to the use of ladders.

210.10.05. Protective Clothing:

A minimum of helmet, boot with pants and gloves must be worn anytime personnel are operating with ground ladders. Shoes do not provide sufficient support on ladder rungs to allow their use. In fire situations FULL PROTECTIVE CLOTHING is required for all ladder work. Persons assuming the heel position must wear their helmet with face shield in the DOWN POSITION.

210.10.06. Electrical Hazards:

A major concern when raising ladders is contact with live electrical wires or equipment. Personnel should take special care to ensure that the ladder will be raised and placed away from all possible electrical hazards. A CLEAR OVERHEAD command should be given before any ladder is raised from the ground.

210.10.07. Proper Climbing Angle:

It is important to establish the proper climbing angle for the ladder. Common accepted practice is to place the base of the ladder one-fourth (1/4) the distance away from the building as the height it is being raised. An improperly positioned ladder is not only dangerous, but also difficult to climb.

210.10.08. Securing in Position:

All ladders should be kept from slipping whenever firefighters are climbing, epically if the ladder is at a lower-than-desired angle. The halyard should be secured to prevent slippage and reduce the potential for tripping.

In addition, the ladder should be tied off at the tip and the base whenever possible to increase stability.

Heeling the ladder may be accomplished using any approved method.

210.10.09. Working on a Ladder:

When it is necessary for firefighters to work while standing on a ground ladder and have both hands free the use of an approved ladder belt or a leg lock can be used.

SPECIAL NOTE: A LEG LOCK CANNOT BE USED ON AN AERIAL LADDER! LIFE BELTS OR A GEMTOR HARNESS SHOULD BE USED WHILE WORKING OFF OF THE AERIAL LADDER OR PLATFORM.

One firefighter may be placed on the ladder for every ten feet of working space. Overloading of any ladder may result in failure of the ladder.

Carrying of tools and other items up ground ladders should be performed using an approved method. Care should be taken to ensure the safety of all firefighters working in the area.

It is recommended that larger tools be hoisted by rope.

210.10.10. Climbing Methods:

Ladder climbing should be done smoothly to avoid bounce and sway.

This is best accomplished if the climber bends their knees and eases their weight onto each rung. Attempts should be made to keep the body perpendicular to the ground utilizing their leg muscles not their arms. Hands may be placed either on the rungs or beams depending on individual preference. Arms and hands should not reach upward during the climb. Arms should also remain in front of the climber to help maintain a proper angle and resist the temptation to pull upward. Obviously, when carrying tools up a ladder the tool should be slid up the beam while the hands maintain contact with the ladder. Power saws will be slung over the shoulder using the saws sling. Power saws will be off when being carried up or down a ladder.

Heat Sensor Label - ladders equipped with a heat sensor label shall be examined during weekly apparatus checks and after any known exposure of the ladder to heat. This would include all live-fire training exercises. Those ladders which have been exposed to high heat (indicator turns BLACK) should be removed from service and tested before further use.

210.10.11. Summary:

It is obvious that this SOG does not begin to cover all aspects of ladder work in the fire service. The intention of this procedure is to highlight those areas of greatest concern to firefighters. Safety is obviously our biggest concern. All employees are reminded that ladder work is dangerous. Company officers are urged to drill on ladder operations on a regular basis. Continued training in these areas is the only way to become familiar with each operation.