

Manitou Springs Volunteer Fire Department Fire and Rescue



Engine 1 is the primary response pumper on all structure fire calls, except those in areas of limited access. Engine 1 will respond to the scene and do an initial size-up. Engine 2 will stage at the most appropriate hydrant, and prepare to supply water to Engine 1, if deemed necessary. In areas of limited access, the roles of Engines 1 and 2 are reversed.

On all structure fire responses, life safety is the first priority, for both the building occupants and the responding firefighters. A thorough search of all fire structures must be done to locate and remove any occupants who are incapable of exiting on their own. Search and rescue operations are conducted by one or more teams of two or more firefighters each. Teams will wear full personal protective equipment (PPE), including self contained breathing apparatus (SCBA), and have radio communication capability. For each team entering the structure, a back-up team remains outside, prepared to enter and assist that team.

After the search and rescue operation is initiated, ventilation and fire control issues are addressed. Ventilation and fire control operations must be closely coordinated for maximum efficiency and safety. Ventilation is the systematic removal of smoke, toxic gasses and heated air from a structure, and its replacement with cooler air. Depending upon the situation, vertical ventilation utilizing roof openings, or horizontal ventilation utilizing window and door openings may be used. Ventilation may utilize natural air flow, or may be forced, using electric or gasoline powered fans. Proper ventilation facilitates fire control operations by increasing visibility, reducing excessive heat and limiting fire spread.

In most cases, fire control operations will utilize a direct interior attack, directing a straight hose stream at the base of the fire to extinguish it. Teams advancing hose lines consist of two or more firefighters wearing full PPE including SCBA and with radio communication capability. As with search and rescue operations, each interior attack team will have a back-up team outside, prepared to enter and assist that team. Ventilation teams deployed on the roof of a structure are equipped and backed-up in this manner also. When intense fire conditions prevent a direct attack at the base of the fire, an indirect fire attack is utilized. An indirect fire attack is made from outside the fire area through a doorway or window opening. The hose stream is directed into the superheated gasses at the ceiling where it is converted into large quantities of steam, which expand and extinguish the fire.

The final steps in structure fire suppression are the salvage and overhaul operations. Salvage operations can often be started at the same time as the fire attack. Salvage operations are procedures that aid in reducing primary and secondary damage during firefighting operations. Primary damage is caused by the fire, and is minimized by prompt ventilation and fire attack operations. Secondary damage is caused by suppression activities, most often, water damage. Room furnishings are gathered into a close pile in the center of the room and covered with a waterproof salvage cover to minimize water damage. Accumulated water may be removed from a structure by locating and clearing clogged floor drains, removing toilets, creating scuppers, or forming chutes made of salvage covers to route water from the structure. Salvage operations conclude with protecting the structure from the weather by sealing ventilation openings, forced entry locations, etc.

Overhaul operations consist of searching for and extinguishing hidden fire and hot spots, protecting the scene and preserving evidence of the fire's origin and cause. Firefighters wear full PPE during overhaul, including SCBA, until the atmosphere has been proven safe. If ceilings or walls must be opened during overhaul, salvage covers are used to collect and remove debris from the structure.

Following structure fires, all firefighters return to the station and assist in getting all equipment and vehicles back into service.