

Operating Guideline # 816

Safe Roof Operations

December 9, 2019



PURPOSE:

The purpose of this Operating Guideline (OG) is to establish guidelines to provide for individual safety while conducting roof operations.

GUIDELINE:

1. Roof operations are inherently dangerous and the Incident Commander (IC) must thoroughly assess the risk to firefighters before assigning firefighters to work on roofs. When such risks are warranted, the IC should establish a roof sector/group under the supervision of an officer or senior firefighter equipped with a portable radio. Roof operations where light-weight construction has been utilised should not be considered when any part of the structure itself has been subject to direct fire exposure.
2. When laddering the building for operations on the roof, ladders should be raised away from or opposite to the location of a fire. This allows personnel to start and return to the strongest portion of the building and their means of egress. There should be always two means of emergency escape and these should be known to/communicated to anyone assigned to roof operations. Always know how to safely exit a roof. Generally, exit a roof from the same area used to walk onto it. Always be aware of access routes and never allow yourself to be cut off from your means of egress.
3. Ladders should be raised to the strongest areas of the roof, which are generally found at the corners. Avoid placing ladders over any openings (windows or doors). Other strong areas are hips, valleys and ridges.
4. Ladders should be raised so the ladder tip is easily visible from anywhere on the roof. A general rule is three to four feet or three to four rungs above the edge of the roof. This will allow firefighters working on the roof to be able to quickly identify their primary escape route off the roof. Be cautious of roof top utilities (hydro lines, satellite dishes, radio transmission antenna's etc.) and their hazards.
5. Crews working on roofs shall be properly equipped, including full protective clothing, SCBA and a portable radio. A charged hose line is warranted in most circumstances (see sentence 8). Tools that cannot be safely carried to the roof should be raised by rope.
6. Before venturing onto the roof, crews must check the roof for stability. Are there any sags, blistering, smoke coming from shingles or through vent openings? Always operate as if roofs are constructed of lightweight trusses unless otherwise confirmed. Sound the roof with an axe, pike pole or other tool to help verify the roof's safety.
7. When ventilating a roof, cuts should be designed to start at the weakest point of the roof and finish towards the strongest point. (ladder location) When possible, keep the wind at your back to help with visibility and keep heat and flames away from you. Make vent cuts only as deep as necessary to avoid compromising structural members.

Operating Guideline # 816

Safe Roof Operations

December 9, 2019



8. A protective hose line should be stretched to the roof for the protection of personnel. This hose line should only be used to stop fire spread on the roof surface. Hose lines should not be operated into the vent opening in an offensive mode, except as part of a co-ordinated roof attack. This requires the approval of the IC in close co-ordination with all other sectors.

9. For roof operations where the slope presents a safety concern, roof ladders shall be used. Roof ladders should also be used where there is a possibility of weakness in the roof covering.

RESPONSIBILITY:

It is the responsibility of all members to comply with the provisions of this OG and particularly that Company Officers (supervisors) and firefighters (workers) ensure that they adhere to their duties in accordance with the provisions of this document and the Occupational Health and Safety Act.

REFERENCES:

- Occupational Health and Safety Act (RSO 1990, c. 0.1)
- S.21 GN 6-14 – Safe Roof Operations