VERTICAL VENTILATION FROM AN AERIAL APPARATUS

Reference: NFPA 1001, 5.3.9 2008 Edition
JPR Identification:

Purpose: The purpose of this scenario is to vertically ventilate a pitched roof off of an aerial apparatus. This is an alternative to gaining access to the roof if it has been deemed unsafe or impractical to do so. This method enables you to vertically ventilate roofs of various pitches and contours, as well as arched roofs.

Performance Outcome: Individual will be able to effectively perform vertical ventilation while remaining on the aerial ladder. These evolutions shall be completed while wearing full PPE including breathing air. Note: this evolution may be adjusted by the company officer to fit the need of his/her specific crew members.

Materials Required:
1. K-12 or chainsaw. K-12 is preferred
2. Pike pole or similar hook
3. Webbing or Rope
4. Full PPE and SCBA
5. Aerial apparatus

Critical Teaching Points:

1. Vertical ventilation can be performed while remaining on the aerial apparatus.
2. Roof stability should always be assessed prior to stepping on it.
3. When roof is determined unstable, alternate ways of ventilation should be considered.
4. Ventilating from an aerial can be accomplished as quickly as the traditional vertical ventilation techniques.
5. Safety while operating off of an aerial should be emphasized.
1. Set up aerial, position so tip of ladder is accessible to the roof pitch being cut
2. Ensure K-12 or chainsaw is operable prior to climbing onto aerial
3. Position yourself on the tip of the aerial. Lay down or kneel.
   
   Note: If kneeling, FF should tether to the ladder. Backup FF should be in communication with aerial operator. Aerial operator must be positioned so as to remove the ladder from above opening in the event of fire breakthrough.
4. Sound roof to locate wood joists.
5. Begin cutting using joist as the top of the cut.
6. Utilize the triangle or the pentagon cut.
7. Normal ventilation practices apply – the bigger the hole the better. 4’ X 4’ minimum.
8. Remove cut decking. Note: Be aware that hot gases and smoke will be exiting the hole as you are cutting. It may be necessary to back down the ladder and utilize a pike pole to remove decking.
9. Punch through ceiling below to complete vent hole.
10. Remove yourself from the hazardous area.
11. Evolution should be completed w/in a 5 minute time frame.