

SAN FRANCISCO FIRE DEPARTMENT  
DIVISION OF TRAINING

TRAINING BULLETIN #90-7

December 26, 1990

TOPIC: ROOF VENTILATION UTILIZING THE XL-90 MULTIPURPOSE SAW

The following procedure is recommended when the XL-98 saw is to be used for ventilating a tar and gravel roof.

1. The multipurpose saw is brought to the roof of the fire building and started immediately. The Officer indicates location where ventilation is to be performed.
2. Prior to starting the cut, clear loose gravel away on heavily graveled roofs exposing the top layer of tar. This will prevent unnecessary damage to the saw blade and minimize the slinging of gravel by the rotating blade. Wearing eye protection is mandatory for this operation.
3. Make a 4' X 4' square cut in the tar roofing material by pulling the multipurpose saw towards the operator while he/she moves back-wards.  
(Pulling the saw backwards helps to prevent the saw blade from digging into the tar and binding) The objective is to score the tar roofing material so that it can be pulled back exposing the wooden sheathing. Depending upon the thickness of the tar this may take several cuts.
4. Do not attempt the cut through the 1" X 6" wood sheathing while the tar roofing material is being removed as this will allow smoke and gases to escape making the ventilation process more difficult. The heat from the fire may cause the tar to melt prior to removal which may cause the blade to bind making the saw less effective.
5. If the saw blade starts to bind, immediately remove it from the cut, bring saw to full RPMs and resume operations making a shallower cut.
6. Upon exposing the roof sheathing, use the Multipurpose saw to cut through the wood on the inside of the two farthest rafters.  
(Inside the nail lines)
7. Remove roof sheathing, using axes or ceiling hooks, one member at each joist.
8. Punch through the ceiling with the ceiling hook to complete the ventilation process.
9. It is important to always use the XL-98 Multipurpose saw at full RPMs when effecting ventilation cuts in any roofing materials.