

	<b>Cincinnati Fire Department Fire Training Supplement DRILL BOOK</b>	<b>SECTION #3 Engine Co. Operations</b>
<b>Date:</b> May 2018 <b>Section #:</b> 3	<b>TOPIC TITLE:</b> Special Nozzles and Water Distribution Tools	<b>Total Pages:</b> 1 <b>Topic #:</b> 14

## TOPIC 14: SPECIAL NOZZLES

### PIERCING APPLICATORS:

The piercing applicators in the CFD come in two sizes. There is a six foot size. The tip can be pushed or driven into most types of walls, ceilings, floors or roofs in order to get to hidden spaces where the fire has reached. This tool should not be driven into poured reinforced concrete, heavy gauge metal, or directly into brick. (Before driving the applicator into a mortar joint, attempt to remove a brick or a concrete block with a pry bar or a pick or chisel axe.)

The applicator is equipped with a 1-1/2" female end, with NS threading, for connection with a 1-3/4" hose line. The use of a 1-3/4" shut-off is recommended, so that water flow can be controlled at the point of service. The piercing applicator applies a spray pattern approximately 20 feet in diameter and 2 feet to the front of the discharge and 2 feet to the rear of the discharge for an overall reach of approximately 4 feet. When using the applicator, the engineer will maintain an engine pressure of 150#. The nozzle will discharge approximately 100 GPM.

### GRETHER NON-CONTROL CELLAR NOZZLE:

This nozzle is used for fires that are difficult to reach with hand lines. The reach of this nozzle is approximately 40 feet in diameter. It delivers approximately 400 GPM at reasonable pressures. This nozzle is equipped with 2 1/2" female CST for use with 2 1/2" hose. When making hydraulic calculations with this nozzle, the 1-3/8" tip factor will be used. This nozzle is carried by Ladder companies and by some Engine companies.



To place this nozzle in service, you must first realize that this nozzle does not have a shut-off. In order to control the water flow, a wye should be placed in service at a point in the line where the water can be controlled safely. After placing the water control mechanism in service, cut a hole that will allow you to insert the nozzle so that it can reach the seat of the fire. Place the nozzle on the end of the hose line and start the water. Wait at the hole or point of service for all the air to be expelled before placing the appliance in service. As the water nears the nozzle, insert the nozzle into the hole and begin to work the nozzle up and down within the entire space. ***USE CAUTION ANYTIME YOU ARE OPERATING IN THE SPACE ABOVE THE FIRE.***