DATA SHEET

ENGINEERED NOZZLES FOR HFC-227EA

360° Nozzle

180° Nozzle

DESCRIPTION

The function of the Fike discharge nozzle is to control the agent flow and distribute the agent throughout the protected enclosure in a uniform, predetermined pattern and concentration. Nozzles are made of aluminum and is anodized with a dull gray finish to prevent corrosion.

The discharge nozzle size refers to the size of schedule 40 or 80 pipe that it can be connected to.

The discharge nozzle is mounted to allow the agent to be discharge on a horizontal axis. The nozzle orifice area is determined by performing a hydraulic calculation using the Fike Engineered Flow Calculation program.

Nozzle should not be ordered until the clean agent system pipe network is installed and an “As Built” hydraulic calculation is performed.

Nozzle orifice drilling must be done at Fike factory, or at a UL listed nozzle drill station.

ORDERING INFORMATION

Nozzle Size IN (mm)	360° Engineered Nozzles (12 orifices)			180° Engineered Nozzles (11 orifices)			Nozzle Length (approx) in (mm)
	Part Number	Drill Diameter (IN)		Part Number	Drill Diameter (IN)		
		Minimum	Maximum		Minimum	Maximum	
3/8 (10)	80-052-XXXX	0.0670	0.1250	80-060-XXXX	0.0670	0.1285	1.56 (40)
1/2 (15)	80-053-XXXX	0.0810	0.1590	80-061-XXXX	0.0860	0.1660	1.88 (48)
3/4 (20)	80-054-XXXX	0.1065	0.2090	80-062-XXXX	0.1130	0.2210	2.19 (56)
1 (25)	80.055-XXXX	0.1360	0.2660	80-063-XXXX	0.1440	0.2812	2.50 (64)
1 1/4 (32)	80-056-XXXX	0.1820	0.3480	80-064-XXXX	0.1875	0.3680	3.13 (79)
1 1/2 (40)	80-057-XXXX	0.2090	0.4130	80-065-XXXX	0.2188	0.4219	3.38 (86)
2 (50)	80-058-XXXX	0.2720	0.5312	80-066-XXXX	0.2812	0.5469	3.75 (95)

APPROVALS:

- UL Listed
- ULC Listed
- FM Approved

Form No. IV.1.03.01-2

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Phone: 816•229•3405 • www.fike.com

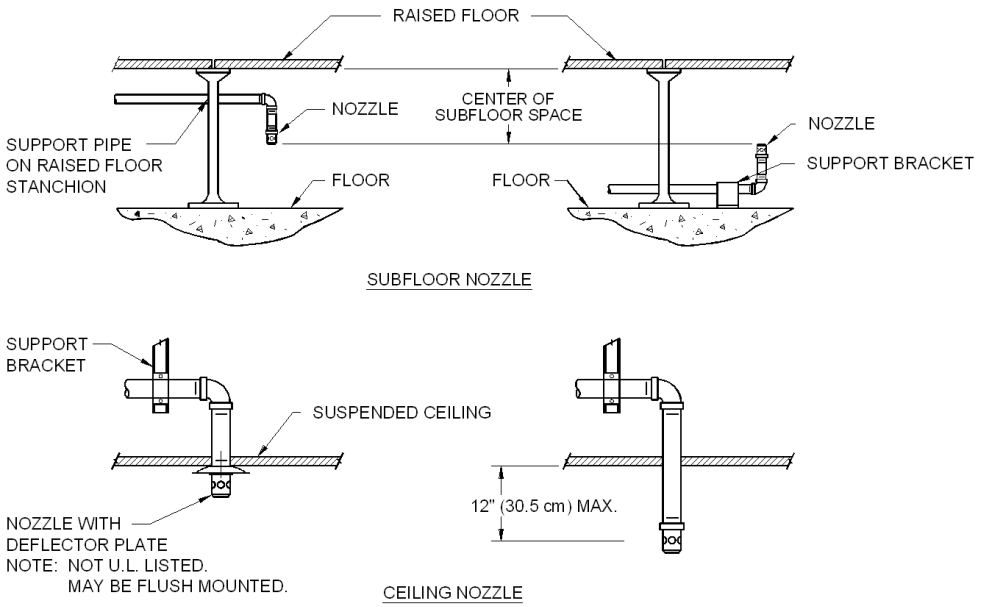
INSTALLATION

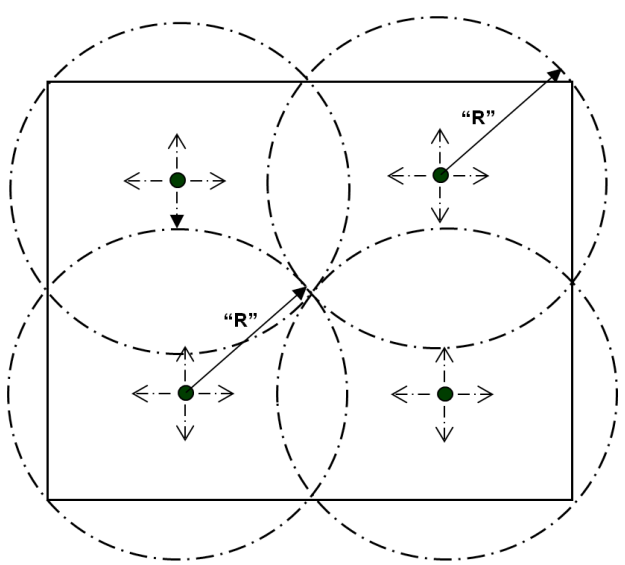
Always verify the nozzle identification number (stamped on the closed end of the nozzle) matches the nozzle part number listed on the system installation plans. All nozzle locations should be within 1’- 0” (0.3m) of their intended locations on the system plans. Discharge Nozzles must be mounted in the vertical position and can face either up or down.

Caution: The piping should be blown clear to remove chips, mill scale, or metal shavings before the nozzles are installed.

360° NOZZLES

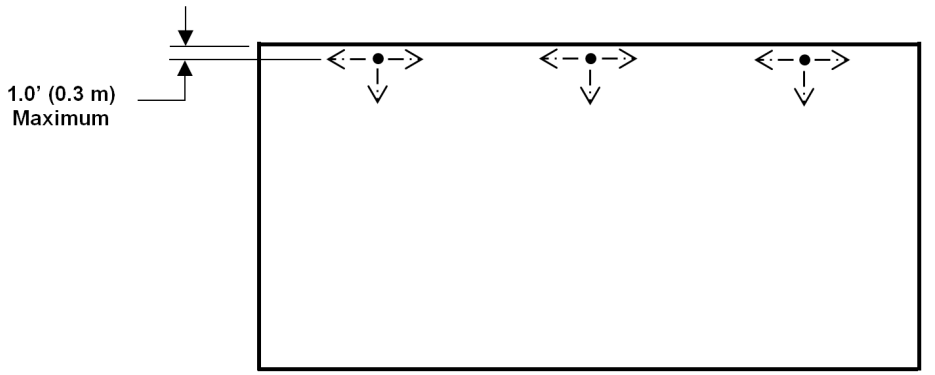
360° Nozzles should be located in a symmetrical, or near symmetrical, pattern within the protected area. Nozzle patterns need to overlap, to adequately cover the area without any “blind spots” due to nozzle locations. Apply to all Nozzle types.





180° NOZZLES

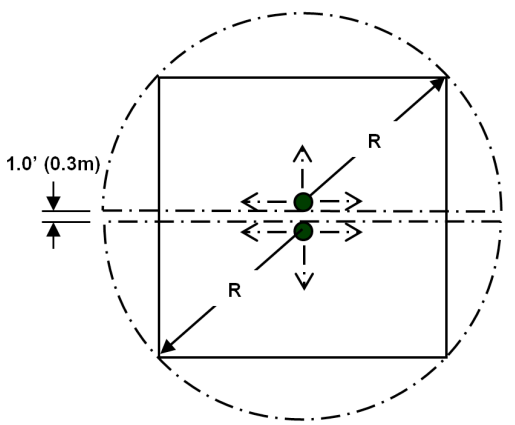
180° Nozzles should be located in a symmetrical, or near symmetrical, pattern within the protected area. 180° Nozzles should be located along the perimeter of the area – discharging along the perimeter and toward the opposite side. These nozzles can be located a maximum of 1’-0” (0.3 m) out from the wall.



180° NOZZLES – BACK TO BACK APPLICATION

180° Nozzles can be installed in a back to back arrangement within the following limitations:

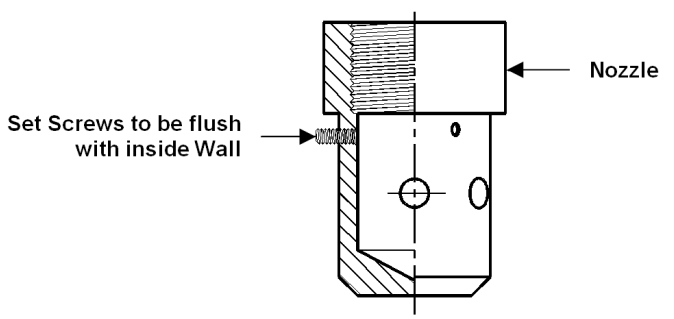
- Maximum distance between nozzles = 1.0’ (0.3 m)
- Agent supplied and flow rate from both nozzles are the same.
- Pipe size from tee to both nozzles is the same.
- Pipe lengths from tee to each nozzle are within 10% of each other.



NOZZLE SET SCREW

Verify the Set Screws found on the side of the nozzle are in place after system installation.

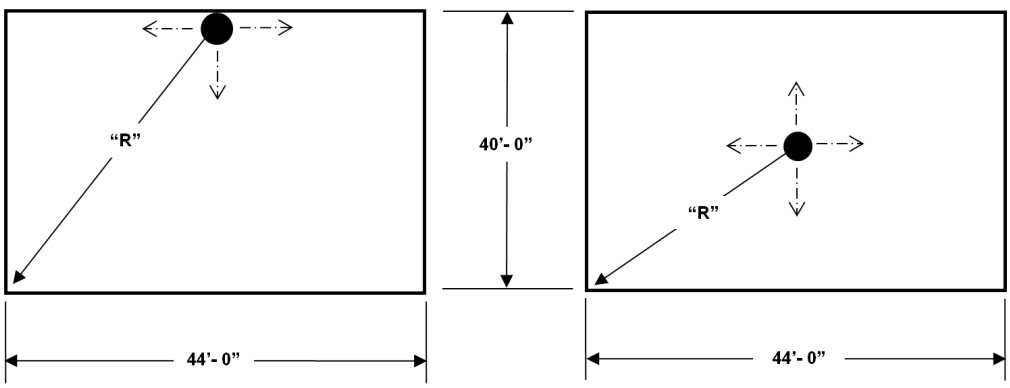
Warning: Failure to have the set screws in place will affect agent distribution and possibly the system’s ability to suppress the fire.



NOZZLE AREA COVERAGE

Nozzle Size - 3/8” - 2” (10 - 50 mm)		
Nozzle Type	**Radius “R” Dimensions ft. (m)**	**Ceiling Height Range ft. (m)**
180°	45.67 (14)	1.0 to 16.0 (0.3 to 4.9)
360°	29.67 (9)	1.0 to 16.0 (0.3 to 4.9)

Maximum Distance	180° Nozzle	360° Nozzle
Below Ceiling	1.0 (0.3 m)	1.0 (0.3 m)
Away from Sidewall	1.0 (0.3 m)	-



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