



EZ PERMIT STANDARD
SPRINKLER HEAD RELOCATION (RESIDENTIAL)

For the Relocation of Residential Sprinkler Heads

Revised 7/26 (NFPA 13-2019 / NFPA 13R-2019)

EZ Permit Standard: Residential Sprinkler Head Relocation

EZ Permit Standard **shall not** relieve FSS Contractor from complying with **all** applicable provisions of 2019 NFPA, Std. 13R.

Obtain permits for the relocation of residential sprinkler heads in accordance with the provisions of 2019 NFPA, Standard 13R without submitting plans by meeting the Conditions and Design Limitations below. Any deviations from this permit standard will result in permit revocation.

Conditions

- Permit is limited to structures **less than four (4) stories in height**.
- Heads may be relocated for accommodation of new partition layouts and reconfirmation of rooms for smooth, flat ceiling surfaces (**not applicable** to sloped surfaces).
- Work shall be done by licensed fire suppression contractor.
- Installation of new feed main, new cross mains, new sprinkler heads is **not applicable** to the EZ permit process.
- EZ permit process **shall not** permit the conversion of existing light hazard systems to quick response or residential sprinklers unless already in place.

Construction & Relocation Requirements

- Minimum spacing between sprinklers: 8-ft O.C.
- Sprinklers permitted to be installed in accordance with manufacturer's listing.
- Relocation of sprinkler heads in suspended acoustic ceiling shall meet ASTM C635, ASTM C636/C636M Standards
- Positioning of pendent spray and upright sprinklers to avoid obstructions to discharge **shall not** exceed limits of [2019 NFPA 13R, Table 6.4.6.3.6.2]
- Positioning of sidewall sprinklers to avoid obstructions **shall not** exceed limits of [2019 NFPA 13R, Table 6.4.6.3.7.2(a)], or to avoid obstructions along wall **shall not** exceed limits of [2019 NFPA 13R, Table 6.4.6.3.7.2(b)]

Pendent/Upright Deflectors

- Permitted offset from ceiling between 1-in to 4-in.
- To be located 3-ft minimum from ceiling obstructions, i.e. ceiling fans, light fixtures, etc.

Sidewall Sprinkler Deflectors

- Permitted offset from ceiling between 4-in to 6-in.
- To be located 5-ft minimum from ceiling obstructions, i.e. ceiling fans, light fixtures, etc.

Piping Support Hangers [Hangers to be installed as per 2019 NFPA 13 standards]

- Sprinkler piping to be supported independently of ceiling sheathing
- Flexible sprinkler drops shall be properly braced in the ceiling system in accordance with the manufacturer's instructions. Additional hangers may be required to ensure that the maximum unsupported length does not exceed 6 feet.
- Attachment of branch line hangers to metal deck limited to support of max. pipe diameter of 1 in.
- Clearance distance between a hanger and the centerline of an upright sprinkler shall be no less than 3 in.
- Min. Number of hangers: One (1) per section of pipe
- Hanger maximum spacing: 12 ft. for sprinkler spacing < 6 ft. [Not to exceed limits of [2019 NFPA 13, Table 17.4.2.1(a)]]
- Non-metallic pipe to comply with individual product listing for hanger distances, including, but not limited to CPVC.
- Sprigs 4 ft or longer shall be restrained against lateral movement.

Unsupported Lengths to be as limited in 2019 NFPA 13 Standards (From End-Sprinkler To Last Hanger On Line)

- 1-in diameter steel pipe: 36" [18" for copper tube]
- 1.25-in diameter steel pipe: 48" [24" for copper tube]
- 1.5-in diameter steel pipe or greater: 60" [30" for copper tube]
- For maximum pressures exceeding 100 psi: 12" for steel pipe, 6" for copper pipe
- Exceeded limits of unsupported lengths shall have pipe ends extended and supported with additional hangers.

Unsupported Armover Lengths to be as limited in 2019 NFPA 13 Standards (Max. Cumulative Horizontal Length to Sprinkler)

- 24" for steel pipe, 12" for copper tube
- For maximum pressures exceeding 100 psi: 12" for steel pipe, 6" for copper tube



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Table 6.4.6.3.6.2 Positioning of Sprinklers to Avoid Obstructions to Discharge (Residential Upright and Pendent Spray Sprinklers)

Distance from Sprinkler to Side of Obstruction (A)		Maximum Allowable Distance of Deflector Above Bottom of Obstruction (B)	
ft	mm	in.	mm
Less than 1 ft	300	0	0
1 ft to less than 1 ft 6 in.	300 to less than 450	0	0
1 ft 6 in. to less than 2 ft	450 to less than 600	1	25
2 ft to less than 2 ft 6 in.	600 to less than 750	1	25
2 ft 6 in. to less than 3 ft	750 to less than 900	1	25
3 ft to less than 3 ft 6 in.	900 to less than 1050	3	75
3 ft 6 in. to less than 4 ft	1050 to less than 1200	3	75
4 ft to less than 4 ft 6 in.	1200 to less than 1350	5	125
4 ft 6 in. to less than 5 ft	1350 to less than 1500	7	175
5 ft to less than 5 ft 6 in.	1500 to less than 1650	7	175
5 ft 6 in. to less than 6 ft	1650 to less than 1800	7	175
6 ft to less than 6 ft 6 in.	1800 to less than 1950	9	225
6 ft 6 in. to less than 7 ft	1950 to less than 2100	11	275
7 ft and greater	2100 and greater	14	350

For SI units, 1 in. = 25 mm; 1 ft = 0.30 m.

Note: For A and B, refer to Figure 6.4.6.3.6.2.

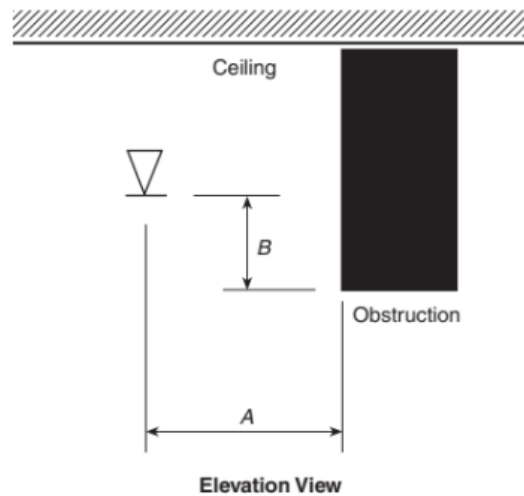


FIGURE 6.4.6.3.6.2 Positioning of Sprinkler to Avoid Obstruction to Discharge (Residential Upright and Pendent Spray Sprinklers).

Table 6.4.6.3.7.2(a) Positioning of Sprinklers to Avoid Obstructions (Residential Sidewall Sprinklers)

Distance from Sidewall Sprinkler to Side of Obstruction (A)		Maximum Allowable Distance of Deflector Above Bottom of Obstruction (B)	
ft	m	ft	mm
Less than 8	2.4	Not allowed	Not allowed
8 to less than 10	2.4 to less than 3	1	25
10 to less than 11	3 to less than 3.4	2	50
11 to less than 12	3.4 to less than 3.7	3	75
12 to less than 13	3.7 to less than 4.0	4	100
13 to less than 14	4.0 to less than 4.3	6	150
14 to less than 15	4.3 to less than 4.6	7	175
15 to less than 16	4.6 to less than 4.9	9	225
16 to less than 17	4.9 to less than 5.2	11	275
17 or greater	5.4 or greater	14	350

For SI units, 1 in. = 25 mm; 1 ft = 0.30 m.

Note: For A and B, refer to Figure 6.4.6.3.7.2(a).

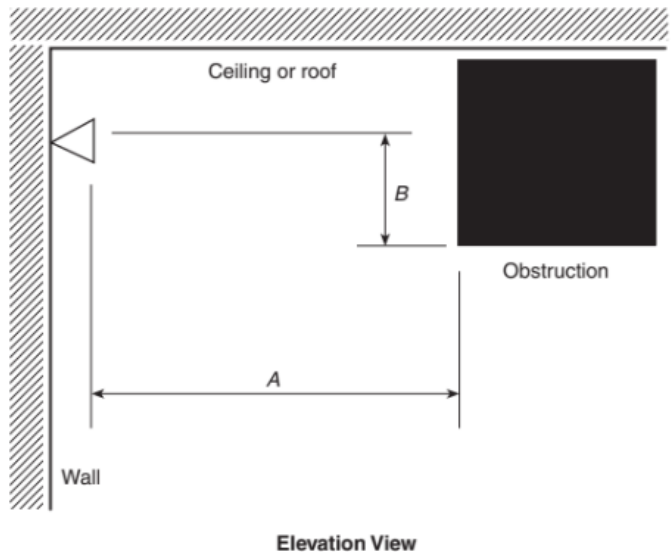


FIGURE 6.4.6.3.7.2(a) Positioning of Sprinkler to Avoid Obstruction (Residential Sidewall Sprinklers).

Table 17.4.2.1(a) Maximum Distance Between Hangers (ft-in.)

	Nominal Pipe Size (in.)											
	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8
Steel pipe except threaded lightwall	NA	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
Threaded lightwall steel pipe	NA	12-0	12-0	12-0	12-0	12-0	12-0	12-0	12-0	12-0	12-0	12-0
Copper tube	8-0	8-0	10-0	10-0	12-0	12-0	12-0	15-0	15-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	NA	NA	NA	NA	NA
Ductile-iron pipe	NA	NA	NA	NA	NA	NA	15-0	NA	15-0	NA	15-0	15-0

NA: Not applicable.

AP# _____

Applicant's Signature: _____