

10.2 Standard Pendent and Upright Spray Sprinklers.

10.2.7.1.2\*

Sprinklers shall be arranged to comply with one of the following arrangements:  
 (1) Subsection 9.5.5.2, Table 10.2.7.1.2, and Figure 10.2.7.1.2(a) shall be followed.  
 (2) Sprinklers shall be permitted to be spaced on opposite sides of obstructions not exceeding 4 ft (1.2 m) in width, provided the distance from the centerline of the obstruction to the sprinklers does not exceed one-half the allowable distance permitted between sprinklers.  
 (3) Obstructions located against the wall and that are not over 30 in. (750 mm) in width shall be permitted to be protected in accordance with Figure 10.2.7.1.2(b).  
 (4) Obstructions located against the wall and that are not over 24 in. (600 mm) in width shall be permitted to be protected in accordance with Figure 10.2.7.1.2(c). The maximum distance between the sprinkler and the wall shall be measured from the sprinkler to the wall behind the obstruction and not to the face of the obstruction.

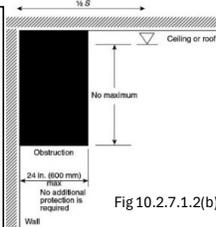


Fig 10.2.7.1.2(b)

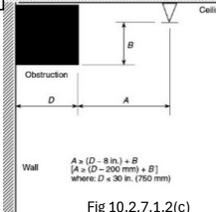


Fig 10.2.7.1.2(c)

Distance from Sprinkler (A)	Max Distance (B) (in.(mm))
Less than 1 ft (300 mm)	0 (0)
1 ft (300 mm) to less than 1 ft 6 in. (450 mm)	2 1/2 (65)
1 ft 6 in. (450 mm) to less than 2 ft (600 mm)	3 1/2 (90)
2 ft (600 mm) to less than 2 ft 6 in. (750 mm)	5 1/2 (140)
2 ft 6 in. (750 mm) to less than 3 ft (900 mm)	7 1/2 (190)
3 ft (900 mm) to less than 3 ft 6 in. (1.1 m)	9 1/2 (240)
3 ft 6 in. (1.1 m) to less than 4 ft (1.2 m)	12 (300)
4 ft (1.2 m) to less than 4 ft 6 in. (1.4 m)	14 (350)
4 ft 6 in. (1.4 m) to less than 5 ft (1.5 m)	16 1/2 (415)
5 ft (1.5 m) to less than 5 ft 6 in. (1.7 m)	18 (450)
5 ft 6 in. (1.7 m) to less than 6 ft (1.8 m)	20 (500)
6 ft (1.8 m) to less than 6 ft 6 in. (2.0 m)	24 (600)
6 ft 6 in. (2.0 m) to less than 7 ft (2.1 m)	30 (750)
7 ft (2.1 m) to less than 7 ft 6 in. (2.3 m)	35 (875)

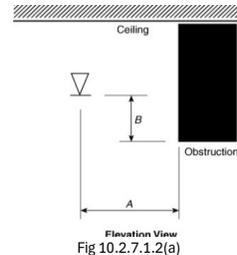
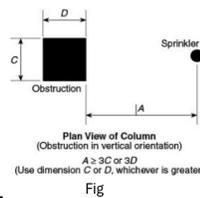


Fig 10.2.7.1.2(a)

10.2.7.2.1.3\* Minimum Distance from Obstructions.

Unless the requirements of 10.2.7.2.1.4 through 10.2.7.2.1.9 are met, sprinklers shall be positioned away from obstructions a minimum distance of three times the maximum dimension of the obstruction (e.g., structural members, pipe, columns, and fixtures) in accordance with Figure 10.2.7.2.1.3(a) and Figure 10.2.7.2.1.3(b).  
 (A) The maximum clear distance required shall be 24 in. (600 mm).  
 (B) The maximum clear distance shall not be applied to obstructions in the vertical orientation (e.g., columns).



Fig

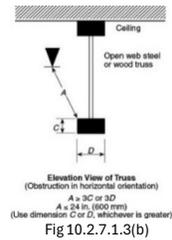


Fig 10.2.7.1.3(b)

Horizontal Distance (A)	Minimum (B) (in.(mm))
6 in. (150 mm) or less	3 (75)
More than 6 in. (150 mm) to 9 in. (225 mm)	4 (100)
More than 9 in. (225 mm) to 12 in. (300 mm)	6 (150)
More than 12 in. (300 mm) to 15 in. (375 mm)	8 (200)
More than 15 in. (375 mm) to 18 in. (450 mm)	9 1/2 (240)
More than 18 in. (450 mm) to 24 in. (600 mm)	12 1/2 (315)
More than 24 in. (600 mm) to 30 in. (750 mm)	15 1/2 (390)
More than 30 in. (750 mm)	18 (450)

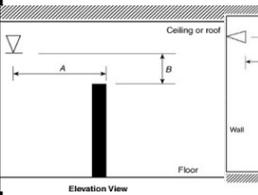


Fig 10.2.7.2.2

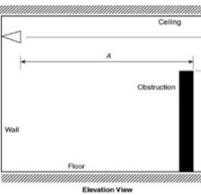


Fig 10.3.6.2.2

10.3 Sidewall Standard Spray Sprinklers.

Distance from Sidewall Sprinkler(A)	Max Distance (B) (in.(mm))
4 ft (1.2 m) to less than 5 ft (1.5 m)	1 (25)
5 ft (1.5 m) to less than 5 ft 6 in. (1.7 m)	2 (50)
5 ft 6 in. (1.7 m) to less than 6 ft (1.8 m)	3 (75)
6 ft (1.8 m) to less than 6 ft 6 in. (2.0 m)	4 (100)
6 ft 6 in. (2.0 m) to less than 7 ft (2.1 m)	6 (150)
7 ft (2.1 m) to less than 7 ft 6 in. (2.3 m)	7 (175)
7 ft 6 in. (2.3 m) to less than 8 ft (2.4 m)	9 (225)
8 ft (2.4 m) to less than 8 ft 6 in. (2.6 m)	11 (275)
8 ft 6 in. (2.6 m) or greater	14 (350)

10.3.6.2.1.3\*

Unless the requirements of 10.3.6.2.1.4 or 10.3.6.2.1.5 are met, sprinklers shall be positioned away from obstructions a minimum distance of three times the maximum dimension of the obstruction (e.g., truss webs and chords, pipe, columns, and fixtures) in accordance with Figure 10.3.6.2.1.3(a) and Figure 10.3.6.2.1.3(b).  
 (A) The maximum clear distance required to obstructions in the horizontal orientation (e.g., light fixtures and truss chords) shall be 24 in. (600 mm).  
 (B) The maximum clear distance shall not be applied to obstructions in the vertical orientation (e.g., columns).

Distance from Sidewall Obstruction (A)	Maximum (B) (in.(mm))
4 in. (100 mm) to less than 6 in. (150 mm)	1 (25)
6 in. (150 mm) to less than 1 ft (300 mm)	2 (50)
1 ft (300 mm) to less than 1 ft 6 in. (450 mm)	3 (75)
1 ft 6 in. (450 mm) to less than 2 ft (600 mm)	4 1/2 (115)
2 ft (600 mm) to less than 2 ft 6 in. (750 mm)	5 3/4 (145)
2 ft 6 in. (750 mm) to less than 3 ft (900 mm)	7 (175)
3 ft (900 mm) to less than 3 ft 6 in. (1.1 m)	8 (200)
3 ft 6 in. (1.1 m) to less than 4 ft (1.2 m)	9 1/4 (230)
4 ft (1.2 m) to less than 4 ft 6 in. (1.4 m)	10 (250)
4 ft 6 in. (1.4 m) to less than 5 ft (1.5 m)	11 1/2 (290)
5 ft (1.5 m) to less than 5 ft 6 in. (1.7 m)	12 3/4 (320)
5 ft 6 in. (1.7 m) to less than 6 ft (1.8 m)	14 (350)
6 ft (1.8 m) to less than 6 ft 6 in. (2.0 m)	15 (375)
6 ft 6 in. (2.0 m) to less than 7 ft (2.2 m)	16 1/4 (410)
7 ft (2.2 m) to less than 7 ft 6 in. (2.3 m)	17 1/2 (440)

10.3.4.1.6

Sidewall spray sprinklers shall be permitted to be installed on opposing or adjacent walls, provided no sprinkler is located within the maximum protection area of another sprinkler. (Max listed not design)

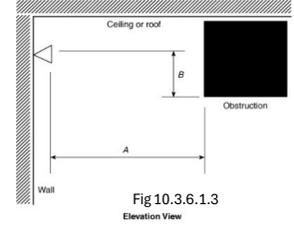


Fig 10.3.6.1.3

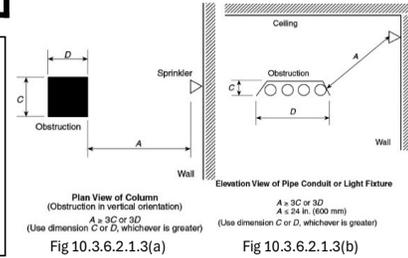


Fig 10.3.6.2.1.3(a)

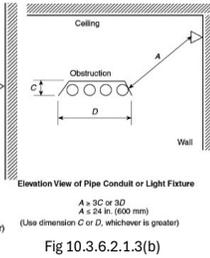


Fig 10.3.6.2.1.3(b)

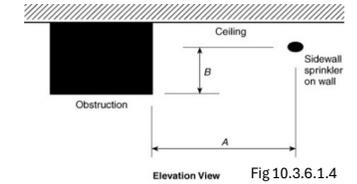


Fig 10.3.6.1.4

This does not cover all obstruction rules, for complete rules for obstruction please refer to the appropriate chapter referenced above