

OBSTRUCTIONS AGAINST WALLS

A USER'S GUIDE

#1 US SI

OBSTRUCTIONS AGAINST WALLS

#2

CONFIGURATION

Type of Sprinkler Standard Spray Upright or Pendent

NFPA 13 Edition 2025

#4

#3

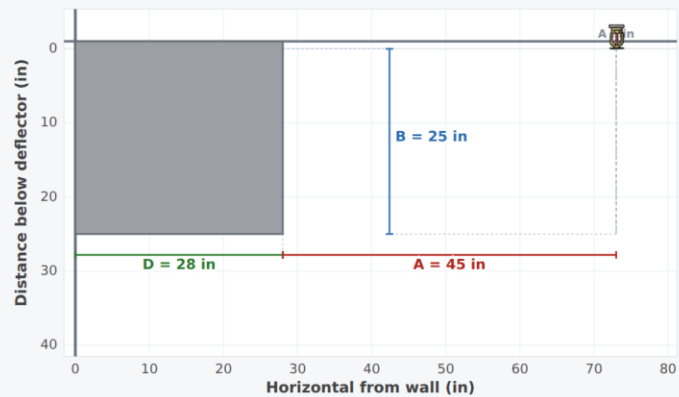
OBSTRUCTION GEOMETRY

B Vertical Distance to Obstruction 25 in
Deflector to bottom of obstruction

D Width of Obstruction 28 in
Horizontal projection from wall

A Horizontal Distance to Obstruction 45 in
Set exactly · [use minimum](#)

OBSTRUCTION AGAINST WALL SECTION



#5

Min. Req'd Horizontal Distance
(A_{min})

45 in (3'-9")

NFPA 13 (2025) Fig. 10.2.8.2(b)

Narrow Obstruction?

No

≤ 24 in wide → no additional protection

#6

SPRINKLER REQUIRED BELOW THE OBSTRUCTION?

No

Horizontal distance A = 45 in meets the minimum (45 in). No sprinkler is required below the obstruction.

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PNG

PDF

Reset

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DESCRIPTION

PURPOSE: The Obstructions Against Walls tool checks a sprinkler positioned near a wall-mounted obstruction — a soffit, ledge, or similar projection — against the NFPA 13 obstruction-against-wall rule. It (1) applies the correct figure for the selected sprinkler type and code edition, (2) calculates the minimum horizontal distance the sprinkler must be set from the obstruction, and (3) compares the sprinkler's actual location to that minimum to determine whether a sprinkler is required below the obstruction. The tool supports US/SI units, PNG and PDF export, and a printable one-page report.

#1 UNIT TOGGLE: Switch between US Imperial units (in) and metric SI (mm). Every input, result, and the section drawing updates automatically.

#2 CONFIGURATION: Choose the Type of Sprinkler and the NFPA 13 Edition. Together, these set which obstruction figure and rule apply, and select the sprinkler symbol shown in the section (upright/pendent or sidewall).

#3 OBSTRUCTION GEOMETRY: Enter the three dimensions of the condition — B, the vertical distance from the deflector down to the bottom of the obstruction; D, the width the obstruction projects from the wall; and A, the horizontal distance from the obstruction to the sprinkler. A defaults to the minimum — type a value to set the sprinkler's actual location, or click "use minimum" to relink it.

#4 OBSTRUCTION AGAINST WALL SECTION: A to-scale section of the condition — wall, obstruction, and the sprinkler at its deflector — with B, D, and A dimensioned and the vertical axis reading distance below the deflector. If a sprinkler is required below the obstruction, a second symbol appears centered beneath it.

#5 RESULT CARDS: The left card gives the Minimum Required Horizontal Distance (A_{min}) the sprinkler must be set from the obstruction, along with the governing NFPA 13 figure. The right card flags a Narrow Obstruction — one ≤ 24 in (600 mm) wide — which requires no additional protection.

#6 SPRINKLER REQUIRED BELOW: The headline result. It compares the actual horizontal distance A with A_{min} : if A meets the minimum, no sprinkler is required below; if A falls short — or the obstruction is wider than the figures cover — a sprinkler is required below the obstruction.

#7 EXPORT & PRINT: Export the section as a transparent image (PNG) or PDF, or Print a clean one-page report. These buttons appear below the tool.