

R SERIES / MODEL MBEC-14

Extended Coverage / Extra Hazard (NFPA13)
Standard Response Sprinkler
Horizontal Sidewall



Horizontal

PRODUCT DESCRIPTION

The horizontal sidewall sprinkler model MBEC-14 is a special application sprinkler for the protection of metal buildings with purlin roof support. The sprinkler has a very extra large orifice, Nominal K=14 (200). When the system is designed to NFPA 13 requirements, MBEC-14 sprinklers provide protection in Ordinary Hazard (Groups 1 and 2) and Extra Hazard (Groups 1 and 2) Occupancies to 175 ft² (16.3 m²) per sprinkler. These sprinklers must be installed according to this data sheet. FM does not permit the use of these sprinklers in areas with flammable liquids or shielded discharge.

TECHNICAL DATA

Nominal "K" Factor	14 (200 metric)
Thread Size	3/4" NPT (R3/4)
Nominal Orifice	0,70" (18 mm)
Temperatures	165°F (74°C) 212 °F (100°C)
Minimum Sprinkler Spacing	7 ft (2,1 m) for NFPA and 8 ft (2,4 m) for FM
Maximum Sprinkler Spacing	14 ft (4,3 m)
Maximum water discharge length from pipe	12,5 ft (3,8 m)
Maximum coverage area	175 ft ² (16 m ²)
Minimum density	0,21 gpm/ft ² (8,56 lpm/m ²)
Maximum building height peak	32 ft (9,8 m)
Maximum protected bay width	25 ft (7,6 m)
Minimum distance from Deflector to commodity clearance	10 ft (3,1 m)
Deflector distance below roof/ceiling	From 12" (305 mm) to 16" (406 mm)
In sloping ceilings	Not exceeding 2" (50,8 mm) of rise in 12" (305 mm)
Maximum / Minimum Operating Pressure	175 psi (12 bar) / 7 psi (0,5 bar)
Reference	R6932
Finishes ⁽¹⁾	Bronze Chrome

(1). Other colors and finishes are available under request.

OPERATION

The sprinkler model MBEC-14 from AG Fire Sprinkler uses a central link with compression weld. The fusible is captured in the capsule cylinder through a stainless steel ball. When the fusible melts, the ball displaces through the cylinder, allowing the cylinder to separate from the central link. When it occurs, the lever is liberated and it removes from the sprinkler, this way all the operating items unblock the water way and allow the deflector to distribute the water discharge.

INSTALLATION

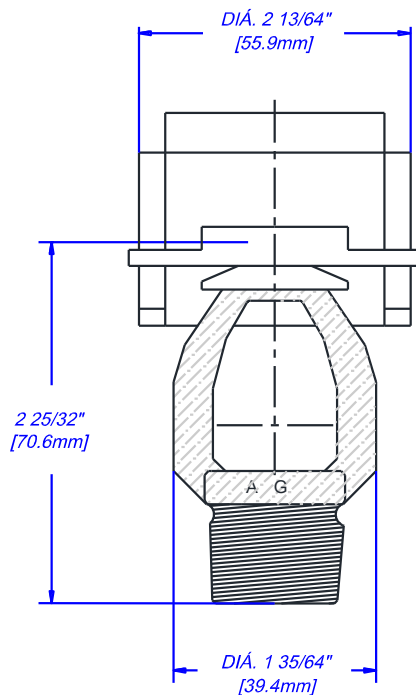
Model MBEC-14 sprinklers are designed for installation as specified in NFPA 13. They must also be installed with the Model **AG3** Sprinkler Wrench specifically designed by AG Fire Sprinkler for use with these sprinklers.

The sprinkler joint can be obtained with a torque of 14-20 ft-lbs (19-27,1 N-m). Do not tighten sprinklers over maximum recommended torque. It may cause leakage or impairment of these sprinklers.

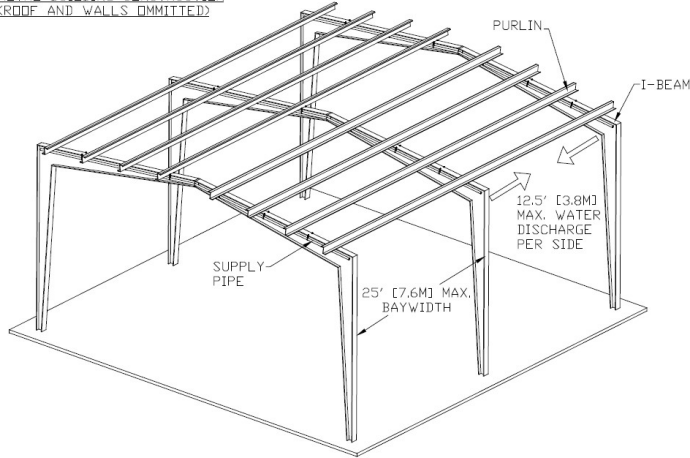
TEMPERATURE RATING

Classification	Nominal Sprinkler Temperature		Maximum Ceiling Temperature	
	°F	°C	°F	°C
Ordinary	165	74	100	38
Intermediate	212	100	150	66

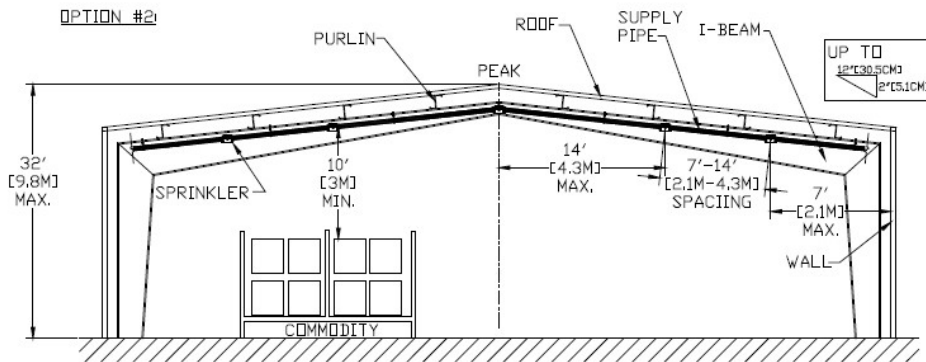
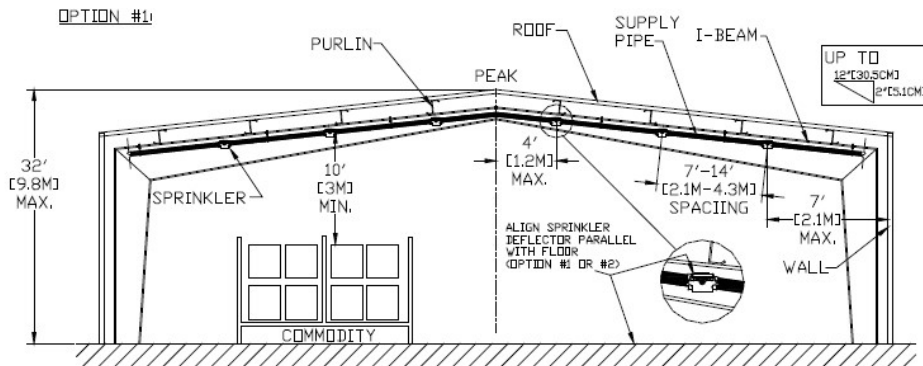
DIMENSIONS

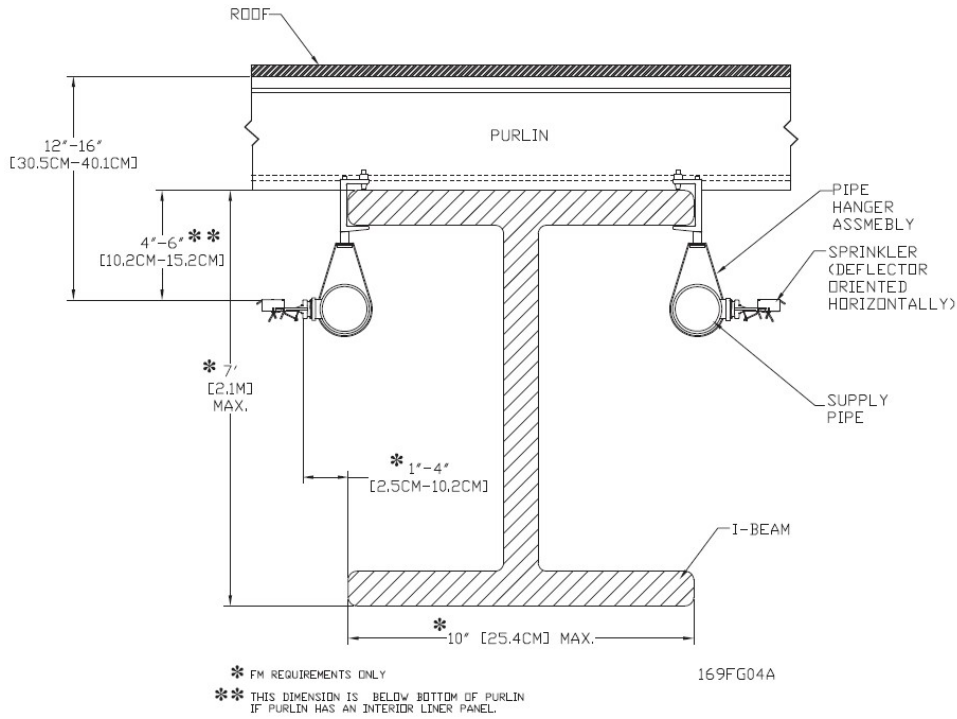


METAL BUILDING CONSTRUCTION
(ROOF AND WALLS OMITTED)



FACTORY MUTUAL SPACING REQUIREMENTS





ORDERING INFORMATION

Specify:

Quantity	
Model Number	
Type	
Orifice	
Thread Size	
Temperature	
Finishes	
Quantity - Wrenches	

The equipment presented in this bulletin is to be installed in accordance with the latest published Standard of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable. This documentation is not contractual. AG Fire Sprinkler reserves the right to any kind of change without notice.
