Table 9.7: Automatic Sprinkler System Requirements

ITEMS	REQUIREMENTS
30. HANGERS AND BRACES	i. Hangers shall be designed to support five times the weight of the water-filled pipe plus 250 lb (115 kg) at each point of piping support. ii. The minimum distance between hangar supports, size of hangar rods, fasteners, bolts, clamps etc. shall be designed & selected and installed to withstand the load 5 times the weight of water filled pipe, plus 115 kg load. iii. These points of support shall be adequate to support the system. iv. Hanger components shall be ferrous, listed and approved by Civil Defence as per **Section 6.** v. All the supports provided for the sprinkler system piping shall allow the free movement for expansion or contraction of pipe work and shall be located by ensuring that the branch lines or fittings are not affected by the supports during expansion or contraction of the pipe installation. vi. Sprinkler system main risers shall be supported by riser clamps or by hangers located on the horizontal connections within 600 mm of the center line of the riser. Riser clamps supporting risers by means of set screws and riser clamps anchored to walls using hanger rods in the horizontal position shall not be permitted to vertically support risers. vii. Vertical risers supported at the bottom of the riser at the lowest level, at each level, above & below the offsets and top of the risers. The maximum distance between each riser support shall not exceed 3 m. viii. An anchor support shall be provided at the base (bottom) of each vertical riser pipes to withstand the total weight of the pipe with water and to prevent the movement by an upward thrust in the sprinkler system. ix. The sizes of hanger rods, U-hooks and eye rods shall not be less than that of **Table 9.7.E.** x. However, the hangars spacing and hangar rod size supporting the horizontal pipes shall be not less than the distance specified in **Table 9.7.E.**

Table 9.5.E: Hanger Rods, U-Hooks, Eye Rod Sizes

PIPE SIZES	HANGER ROD SIZES	U-HOOK SIZES	EYE ROD SIZES	BOLT OR ROD SIZES	HANGER SPACING
Up to 50 mm		8 mm			2 meters
65 mm to 100 mm					2.5 meters
65 mm to 150 mm		10 mm			
Up to 100 mm	10 mm		10 mm	10 mm	
125 mm	12 mm		12 mm	12 mm	
150 mm	12 mm		12 mm	12 mm	3 meters
200 mm	12 mm	12 mm	12 mm	12 mm	3 meters
250 mm	16 mm			16 mm	3 meters
300 mm	16 mm			20 mm	3 meters