

Table 9.7: Automatic Sprinkler System Requirements

ITEMS	REQUIREMENTS
26. PROTECTION AREA AND SPACING	<ul style="list-style-type: none"> i. The protection areas and the maximum spacing of various sprinkler heads, with a lenient consideration, shall comply with Table 9.7.F. unless the hazard demands a reduction in these figures. ii. The distance from sprinklers to walls shall not exceed one-half of the allowable distance between sprinklers. iii. Under curved surfaces, the horizontal distance shall be measured at the floor level from the wall, or at the intersection of the curved surface and the floor to the nearest sprinkler shall not be greater than one-half the allowable distance between sprinklers. iv. The distance between sprinklers shall not be less than 1.8 m on center.
27. STANDARD PENDENT AND UPRIGHT SPRINKLERS	<ul style="list-style-type: none"> i. The upright sprinkler heads shall be installed in such a way that their deflector is facing an upright position only with the frame arms parallel to the branch line to minimize the obstruction of its discharge pattern. ii. Upright sprinklers shall be installed where there is no false ceiling, such as car park, stores, plant rooms and concealed spaces above false ceiling areas etc. iii. Pendent Sprinklers shall be installed as Recessed or concealed sprinklers where there is a false ceiling. iv. Pendent sprinklers installed as recessed or concealed sprinklers shall be permitted to be used with, Civil Defence approved and listed flexible pipes. v. The distance between the sprinkler deflector to the ceiling shall be not less than 25mm and shall be not more than 300 mm. vi. Where the situation does not permits to locate the sprinkler head within 300mm from the ceiling and exceeds 300mm, it shall be fitted with a deflector plate made of stainless steel having a diameter not less than 200 mm and shall be attached to the deflector. vii. Sprinkler protective caps and straps shall be removed immediately after the commissioning of the sprinkler system. viii. Sprinklers shall be fitted with a protective guard where there is possibilities for accidental damage of sprinkler bulbs. ix. The minimum distance between the sprinkler to the adjacent sprinkler shall be not less than 1.8 meters. x. The maximum distance between the standard sprinkler and the adjacent standard sprinkler shall be not more than 4.5 meters. Where the extended coverage upright sprinklers are used, the maximum distance between sprinkler and sprinkler shall be not more than their approval listing as per the original equipment manufacturers technical data sheet. xi. The minimum distance between a sprinkler and a wall shall be not less than 100 mm. xii. The maximum distance between a standard sprinkler and a wall shall be not more than 2.25 meters or ½ of the spacing between the sprinkler. xiii. There should not be any continuous or non-continuous obstructions such as columns, beams, truss webs and chords, pipes, ducts, and other fixtures that could prevent a discharge pattern below the sprinkler head for less than or equal to 500 mm. xiv. Sprinklers shall be installed under fixed obstructions over 800 mm wide such as ducts, cable trays, decks, open grate floorings etc.