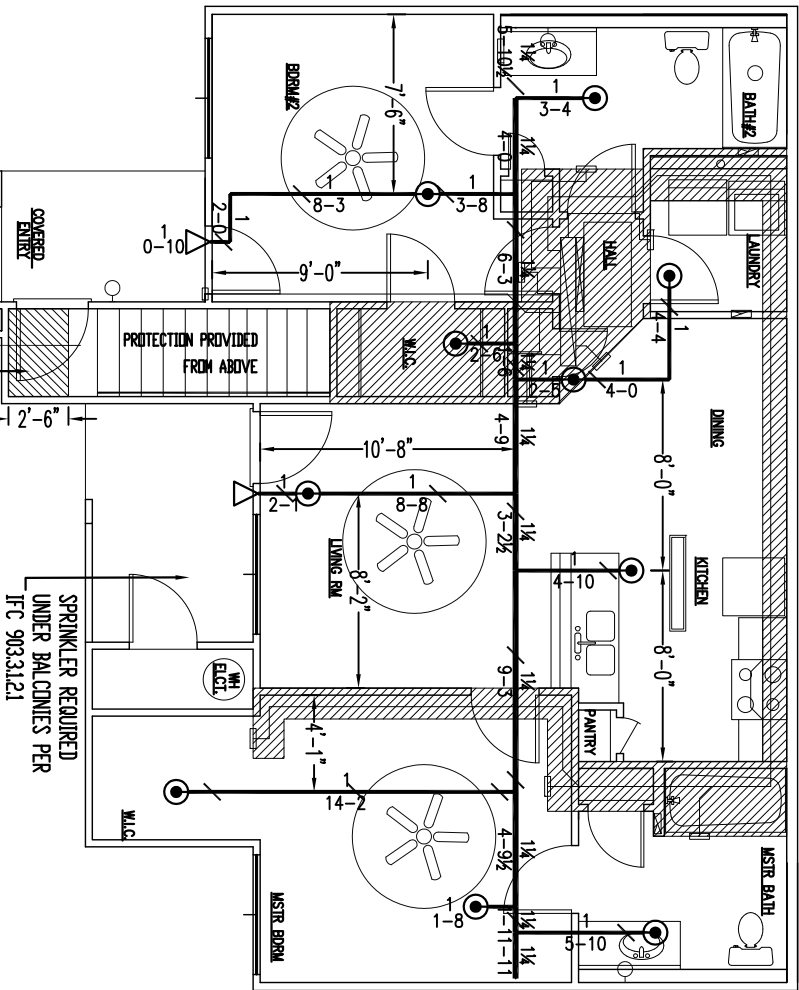
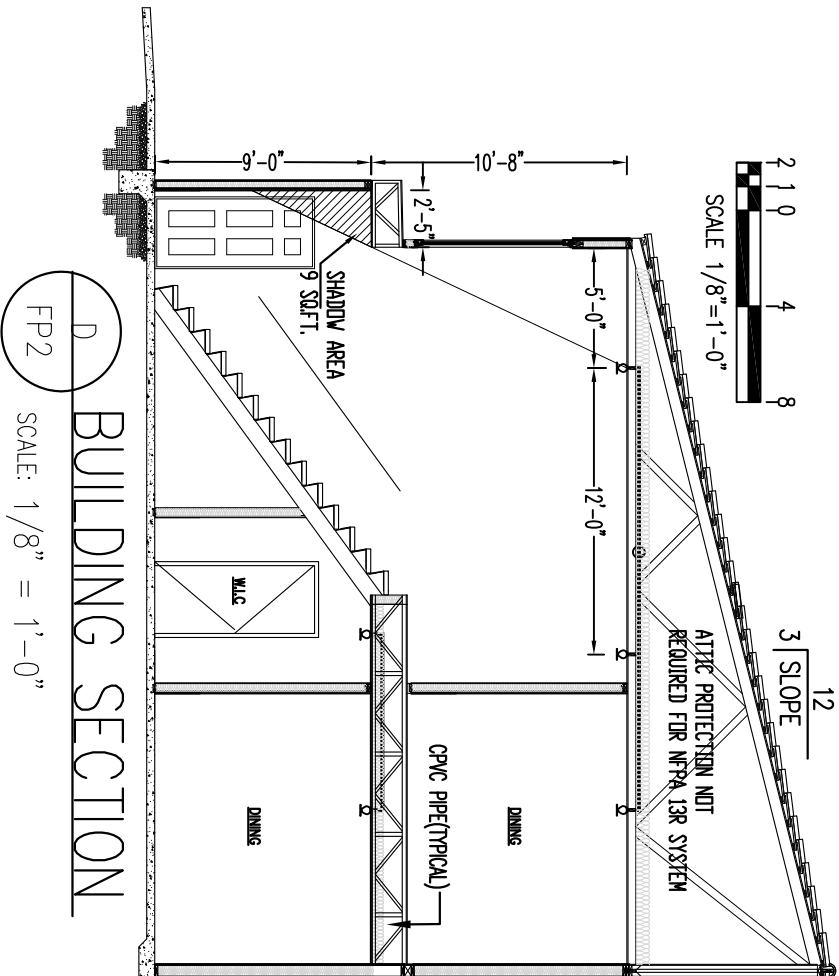


B
2ND FLOOR SPRINKLER PLAN
FP2 SCALE: 1/8" = 1'-0" SMALL 2 BEDROOM UNIT



A
1ST FLOOR SPRINKLER PLAN
FP2 SCALE: 1/8" = 1'-0" SMALL 2 BEDROOM UNIT

NFPA 13R, 2013 EDITION

3.3.10* Shadow Area. The dry floor area within the protection area of a sprinkler created by the portion of sprinkler discharge that is blocked by a wall or partition.

6.4.6.3.3.1* Shadow Areas. Shadow areas shall be permitted in the protection area of a sprinkler as long as the cumulative dry areas do not exceed 15 ft² (1.4 m²) per sprinkler.

A.3.3.10 Shadow Area. Water is not required to fall on every square inch of floor space of the occupancy. This definition establishes a term that will be used to address the rules for acceptable dry spaces that occur when walls interfere with the sprinkler's spray pattern. Angled walls, wing walls, and slightly intended walls can disrupt water discharging from a sprinkler, which does not travel only in an absolute straight line, as if it were beams of light. Where small (typically triangular) shadowed areas are formed on the floor adjacent to the wall, these shadowed areas are purely on paper and do not take into account the dynamic variables of sprinkler discharge. In order to be acceptable, the shadow area needs to be within the coverage area of a sprinkler, meaning that water would discharge to the space directly if the structural or architectural feature was not there. The purpose of the shadow area is not to replace any existing obstruction requirements. Instead, the shadow area concept has been added to the standard to provide clarity to specific situations in which walls form non-rectangularshaped rooms, as shown in Figure A.3.3.10.