903.2.1 Group A. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section. For Group A-1, A-2, A-3, and A-4 occupancies, the automatic sprinkler system shall be provided throughout the floor area where the Group A-1, A-2, A-3 or A-4 occupancy is located, and in all floors between the Group A occupancy and the level of exit discharge. For group A-5 occupancies, the automatic sprinkler system shall be provided in the spaces indicated in Section 903.2.1.5.

Q1: Do the automatic sprinkler requirements in Section 903.2.1, based on the fire area of an occupancy, apply to buildings without surrounding exterior walls?

A1: Yes. The entire area of a single floor of a building or structure must be considered when determining the automatic sprinkler requirements based on fire area. The entire area of a single floor of a building or structure may be considered a single fire area, or a portion of the floor area within a single story of a building or structure may be considered a fire area when separated in accordance with Section 706 of the International Building Code.

Where no surrounding exterior walls are provided along the perimeter of a building, the building area is used to identify and determine applicable fire areas. Section 502.1 of the International Building Code defines BUILDING AREA as: “The area included within surrounding exterior walls (or exterior walls and fire walls) exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above”.

Q2: Do the automatic sprinkler requirements in Section 903.2.1, based on the fire area of an occupancy, apply to buildings without surrounding exterior walls if the building perimeter is enclosed with a barrier such as fencing, rails, or other obstruction that restricts exiting from any location along the perimeter of the building?

A2: Yes. Means of egress is not a determining factor in identifying a fire area.