

**CHAPTER 9
FIRE PROTECTION SYSTEMS**

**SECTION [F] 903.3.1.2
IFC Interpretation No. 43-03
2003 Edition
Issued: 02-28-05
BU_03_58_03**

[F] 903.3.1.2 NFPA 13R sprinkler systems. Where allowed in buildings of Group R, up to and including four stories in height, automatic sprinkler systems shall be installed throughout in accordance with NFPA 13R.



Q: Is an NFPA 13R sprinkler system permitted in a Group R occupancy where four stories of the building are located above grade plane and one story is located below grade plane?

A: Yes. The definition of Building Height ' the vertical distance from grade plane to the average height of the highest roof surface ' establishes the grade plane as the reference point for determining building height and number of stories. *Section 503* and *Table 503* establish the maximum building height and number of stories permitted for all occupancies above the grade plan. The maximum number of stories and building height in *Table 503* can be modified as permitted by *Section 504.2, Automatic sprinkler increases*, when a sprinkler system is installed throughout in accordance with NFPA 13R. With the modification in *Section 504.2* the building above the grade plane can be four stories provided the overall building height does not exceed 60 feet, measured to the average height of the highest roof surface. The type of occupancy permitted in the basement, including residential, is not controlled by the Code provided the basement is separated from the residential portions of the building in accordance with the mixed-use provisions of the Code. S-2 occupancies can also be installed in the lower level of an R occupancy if they comply with the requirements of *Section 508*. The lower level, or basement, of the building must comply with the Code definition for basement.
