

WATER SUPPLY REQUIREMENTS FOR SPRINKLER AND WET RISER SYSTEMS IN HIGH-RISE BUILDINGS

1. The Fire Safety and Shelter Department (FSSD) had recently undertaken a study to review the water supply requirements for fire-fighting systems in high-rise buildings. The main purpose of this review is to facilitate the installation of combined storage and pumping facilities for fire-fighting systems in high-rise buildings which would result in less space requirements, smaller loads imposed on the building structure and less cost in maintaining the system. The outcome of the study reveals that the wet riser storage tank is able to cater to the effective operation of both sprinkler and wet riser systems, taking into consideration the response time of SCDF's fire fighting crew to fire incidents and standard operations procedures at fire site.
2. Engineers in designing combined sprinkler and wet riser systems shall conform to the provisions stipulated in SS CP 52 and SS 575, except that there is no need to cater for water storage for the sprinkler system's demand. Pump sets shall be designed for the simultaneous operation of both the sprinkler and wet riser systems. The combined system's sprinkler risers and wet riser stacks shall not be interconnected by sprinkler system piping or a single riser serve both systems.
3. The contents of this circular serve as an alternative design approach for the installation of sprinkler and wet riser systems in the new or existing buildings having ordinary hazard category classification. The guidelines shall take immediate effect.

