

WATER SUPPLY REQUIREMENTS FOR WET RISER SYSTEM

The Fire Safety and Shelter Department (FSSD) had recently undertaken a study the water supply requirements for wet riser systems. The main purpose of this review is to determine the practicable water flow rate and the maximum water storage capacity required for wet riser systems comprising multiple stacks of rising mains. The study revealed that the current pumping and storage capacities as stipulated in SS 575 can be reduced, basing on the fact that buildings having wet risers are likely to be sprinkler protected and the number of fire hose jets likely to be deployed at the fire site. The reduction in water supply requirement would result in less space less space requirements and thus impose smaller loads on the building structure.

2 Henceforth, Engineers may adopt the following water supply requirement for the design of the wet riser system :

No: of stacks	Water flowrate for Non-residential buildings	Water flowrate for Residential buildings
1	38 l/s	27 l/s
2	57 l/s	40.5 l/s
3	76 l/s	54 l/s
4 and above	95 l/s	67.5 l/s

The minimum water storage capacity shall be capable of supplying water at the above said flow rate for the periods as specified in SS 575.

3 The contents of this circular serve as an alternative design approach for the installation of wet riser systems in the new or existing buildings. The guidelines shall take immediate effect.

