

DRY RISER DETAILS

BS 9990:2015 - Code of practice for non-automatic fire-fighting systems in buildings

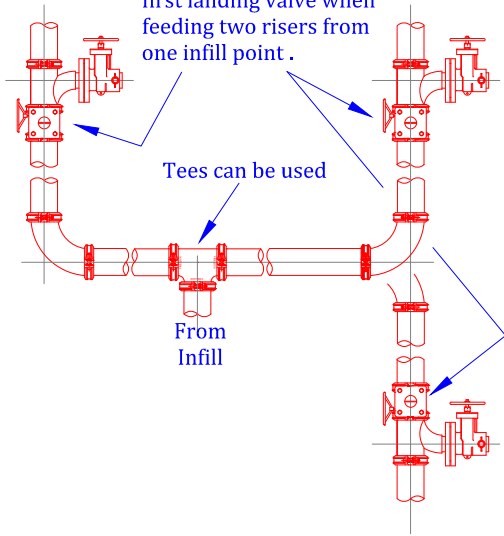
A typical dry hydrant riser is illustrated below. It consists of a normally empty pipe rising the full height of the building. Provision is made to enable the fire brigade to pump water into the riser at ground level and draw off water through hydrant valves located at strategic points throughout the building to fight the fire.

Guidance and recommendations only. These are not rules.

4.1.1.1 - Isolating valves to be located under the first landing valve when feeding two risers from one infill point.

Tees can be used

From Infill



4.1.3.4 - Air release valve at top of riser.

4.1.5 - A landing valve should be provided at roof level for test purposes if practicable.

4.1.2 - Valves should be flanged not screwed

4.1.1 - A fire strategy report may deviate from information shown here.

Consultants specifications may require a difference in what is required.

4.1.5 - Landing valves should be installed in a box.

Cabinet

4.3 - Fire main to be electrically earthed.

Flow to be provided is 750dm³/min from two remote valves with a running pressure of 8 bar, when valve is fully opened.

Landing Valve

4.1.1 - Isolating valves secured open and monitored.

4.1.5 - Landing valves to be positioned within a ventilated lobby or a stairway lobby or in any position agreed with by the AHJ

4.1.2 - Fire mains should H.Q.Galv. Steel

4.1.1 - Fire mains should be 100 dia.

4.1.1 - Must withstand 1.5 x predicted max. operating pressure

8.2.2 - Fire mains should be installed during building construction.

4.1.5 - 750 above floor

4.2.2 - If riser is not near inlet then the horizontal connecting pipe is to be a maximum of 18m in length.

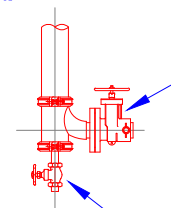
4.1.3.1 - Operating pressure of 12 bar.

4.2.2 - Where riser is not located near an external wall more than one inlet valve may be required.

4.1.2 - No elbows to be used. Only bends. See Sheet No. 00009 for details.

4.2.2 - Valves should be flanged not screwed

Hydrant valves are also used in basements. If excessive depths are expected then pressure relief type landing valves (PRV) may need to be used.



4.1.3.3 - 25 drain valve

4.2.1 - No floor higher than max Z=50m above fire service level

4.1.1 - Isolating valves at max 10m intervals.

4.2.2 - Inlet connection should be installed in an external wall as close to the riser as possible

4.1.3.2 - Two-way inlet breeching.

Fire Brigade Inlet Connection

4.1.3.3 - 25 drain valve

4.1.3.2 - 400-600 above ground

Fire service level

Pitcher Tee
Coupling