## FIRE AND LIFE SAFETY DURING CONSTRUCTION AND MAINTENANCE

## Table 12.8.: Fire Access, Means of Egress, Fire Alarm and Fire Protection Requirements

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|----------------------------|---|
| ITEMS                      | REQUIREMENTS  |
| 3. FIRE                    | 1. YARD HYDRANT SYSTEM  |
| 3. FIRE PROTECTION SYSTEMS | <ul> <li>i. Where the building under construction requires Yard Fire Hydrants as per Civil Defence approved consultant's drawings, the Hydrants either temporary or part of the permanent hydrant network shall be installed based on the hazard evaluation of the construction site, in compliance with Chapter 9, Section 3.11.</li> <li>ii. Fire Pump and water tanks are permitted to be non listed when they are temporarily installed to safeguard construction activity.</li> <li>iii. Temporary Fire pump capacity shall be permitted to be 500 gpm.</li> <li>iv. Permanent fire pump capacity shall be as per Civil Defence approved consultant drawings.</li> <li>v. Temporary fire water tank shall be permitted to be of 60 minutes duration.</li> <li>vi. Permanent fire water tank shall be as per Civil Defence approved consultant drawings.</li> <li>vii. Free access from the street to fire hydrants and to outside connections for standpipes, sprinklers, or other fire extinguishing equipment, whether permanent or temporary, shall be provided and maintained at all times.</li> <li>viii. Protective pedestrian walkways shall be constructed such that they do not impede access to hydrants.</li> </ul> |
|                            | <ul> <li>ix. No stored material, debris or construction activity shall interfere with access to hydrants, Siamese connections, or fire extinguishing equipment.</li> <li>2. WET/DRY RISER SYSTEM</li> </ul>   |
|                            | <ol> <li>Where the consultant design NOC requires dry risers with hose reel system for<br/>the completed building, the building under construction shall be provided with<br/>temporary dry risers with hose reel system as per Chapter 9, Section 3.3., with<br/>50 gpm non listed pump and 60 minutes duration fire water tank.</li> </ol>  |
|                            | <ul> <li>ii. Where the consultant design NOC requires wet risers for the completed building, the temporary Wet riser shall be installed when the progress of construction is not more than 10.7 m in height above the lowest level of Civil Defence access.</li> <li>iii. Fire Pump and water tanks are permitted to be non listed when they are tempo-</li> </ul>  |
|                            | rarily installed to safeguard construction activity, when building height is less than 23 m from fire access level.  iv. Temporary Fire pump capacity for wet risers shall be permitted to be 500 gpm,  |
|                            | with single wet riser serving two hose outlets located near the exit stair.  v. Temporary fire water tank shall be permitted to be of 60 minutes duration.  vi. When the under construction building height crosses 23 m, permanent wet riser   |
|                            | system, as per consultant's approved drawing, shall be in place and in working condition.  vii. Permanent fire pump capacity and number of wet risers shall be as per Civil De-   |
|                            | fence approved consultant drawings. viii. Permanent fire water tank shall be as per Civil Defence approved consultant drawings.   |
|                            | ix. Standpipes shall be provided with breeching inlets, Civil Defence hose connections and outlets at accessible locations adjacent to usable stairs.   |
|                            | <ul> <li>x. The standpipe system shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.</li> <li>xi. Each floor shall be provided with 2 ½ in. (64mm) valve outlet for Civil Defence</li> </ul>  |
|                            | use. xii. In all new buildings in which standpipes are required or where standpipes exist in buildings being altered or demolished, such standpipes shall be maintained in conformity with the progress of building construction in such a manner that they are always ready for use.   |
|                            | xiii. All the hose outlets shall be in hose cabinet as per Chapter 9, Section 3.3 and 3.4.  |

