



Building Bulletin

519-741-2312

building@kitchener.ca

www.kitchener.ca/building

Backup Fire Pump Requirements

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The City of Kitchener Building Division and Fire Department have been asked questions regarding the pumping capabilities of the fire department apparatus, as it relates to sprinkler and standpipe design and requirements for backup fire pumps.

The Ontario Building Code requires that fire pumps be installed in accordance with the requirements of NFPA 20 "Installation of Stationary Pumps for Fire Protection".

Excerpt from NFPA 20 - 2016 Edition:

5.6.2 Fire Pump Backup.

Fire pumps serving zones that are partially or wholly beyond the pumping capability of the fire department apparatus shall be provided with one of the following:

- (1) A fully independent and automatic backup fire pump unit(s) arranged so that all zones can be maintained in full service with any one pump out of service.
- (2) An auxiliary means that is capable of providing the full fire protection demand and that is acceptable to the authority having jurisdiction.

This bulletin is to serve as communication that the pumping capabilities of the City of Kitchener fire department apparatus is **1,400 kPa (203 psi) @ 30 L/s (475 gpm)** at the fire department connection inlet. All calculations and determination of when a backup fire pump is required shall be based on this pumping capacity.

Note that the City of Kitchener Building Division currently allows deferred submissions of sprinkler and standpipe shop drawings to after permit issuance and before installation to expedite the approval process. As a result, consultant coordination is paramount at the building design stages to determine if a backup pump is required. It is critical to ensure adequate space for the backup pump has been accounted for at the early stages and before permit issuance.

As always thank you for your cooperation, and if you have any questions, please contact us.

Matt Ruetz, C.E.T. CBCO
MBO - Technical Specialist
519-741-2200 x7570
Matt.Ruetz@Kitchener.ca

Dave Heuchert, C.E.T. CBCO
Chief Fire Prevention Officer
519-741-2200 x5529
Dave.Heuchert@Kitchener.ca