

Storm Sump Pump

The purpose of this building information brochure is to assist owners and builders about the requirements for installing pumped storm systems.

"This information is provided for convenience only and is not in substitution of applicable City Bylaws or Provincial or Federal Codes or laws. You must satisfy yourself that any existing or proposed construction or other works complies with such Bylaws, Codes or other laws."

Some buildings have storm and subsurface drainage systems installed at an elevation where pumping becomes necessary. Under these circumstances, the design and installation of the sump pits and pumps must meet special standards in order to provide citizens with some degree of protection against the inevitable flooded basement that may occur due to inadequately designed or improperly installed sump pumps.

Permit Requirements

When applying for a permit for a pumped storm sump, the following requirements must be met:

- All roof water and driveway surface drainage piping must be connected through a separate gravity sump.
- Each application must be accompanied by a letter, under the seal of a professional engineer. The engineer must design and inspect upon completion, the required sump pump and pit.
- The engineer must notify this Department if services need to be terminated prior to completion of construction.

Criteria

The professional engineer should consider the following factors:

- the varying flow rates toward all perimeter drains (depending on the drainage area), the ground water levels, the type of backfill in trenches, and the depth of the surrounding impervious stratum in relation to the drain pipes.

- the installation of pumps equipped with a self-resetting thermal overload protection switch. The pumps should be rated to operate for a sufficient amount of continuous running time to pump all water from the sump pit. This is a safeguard against the installation of low-quality pumps, which may burn out if operated continuously.
- the requirements of Part 7 of the B.C. Building Code, including:
 - an approved pressure-rated pipe for any discharge lines that are subject to pressure. An Approved drainage pipe may still be used from the point where gravity flow begins.
 - an approved union, check valve and shut-off on any discharge piping.
- the requirements of the B.C. Electrical Code, including the connection of the sump pump to an electrical circuit which supplies no other outlet or equipment. The pump must be hard-wired directly to the panel, unless provided with a factory assembled cord and plug.

Further Information

For further information on the above, please contact the Plumbing Section of the Burnaby Building Department at 604-294-7130.

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