



BUILDER TIPS

EXCAVATIONS

The Town of Amherstburg Building Department will be providing Builder Tips on a regular basis as part of our customer service. They are designed to provide information to home builders as a way to improve the understanding of the building code. Please contact our office if you require additional information at 519-736-5408.

9.12.1.1. Removal of Topsoil and Organic Matter

- (1) The topsoil and vegetable matter in all unexcavated areas under a building shall be removed.
- (2) In localities where termite infestation is known to be a problem, all stumps, roots and other wood debris shall be removed from the soil to a depth of not less than 300 mm (11 ¾ in) in unexcavated areas under a building.
- (3) The bottom of every excavation shall be free of all organic material.

9.12.1.2. Standing Water

- (1) Excavations shall be kept free of standing water.

9.12.1.3. Protection from Freezing

- (2) The bottom of excavations shall be kept free from freezing through the entire construction period.

9.12.2.1. Excavation to Undisturbed Soil

- (1) Excavations for foundation shall extend to undisturbed soil.

9.12.4.1. Support of Footings

- (1) The soil in trenches beneath footings for sewers and watermain shall be compacted by tamping up to the level of the footing base or shall be filled with concrete having a strength no less than 10 MPa (1500 psi) to support the footing.

High Water Table

In a high-water table condition, the minimum footing width for walls shall be not less than twice the width required by the Ontario Building Code. Additionally, the footing area for columns must also be no less than twice the area required by the code.

OBJECTIVE

Soil condition may vary from site to site or within the building area. When poor soil conditions such as sensitive clay, frost susceptible soils, high ground water etc. are encountered during the excavation, the general contractor must adopt at least one of the following precautions:

- Extend the excavation to good stable soil.
- Have a soil test performed to determine the foundation design requirements.
- Investigate the feasibility of installing a completed granular layer to obtain the required bearing capacity. In wet and cold conditions, the following must also be observed.
- Standing water in the excavated area shall be pumped out and the soil examined for adequate bearing capacity.
- Protect the bottom of the excavation from freezing throughout the construction period to avoid settling, frost heave and possible damage to the structure after the soil thaws. A good practice is to provide frost blankets or a layer of straw.