

BLDREG-003 - RESIDENTIAL AUGER-INSTALLED STEEL PILES

- Authority: Building By-law No. 7258
- Covers: All persons required to obtain a Building Permit in accordance with the Building By-law for the construction, design and installation of Auger-Installed Steel Piles that support residential buildings or structures.
- Effective: January 1, 2020
- Purpose: To establish provisions with respect to the construction, design and installation of steel piles for which a Building Permit is required.
- Author: Murray Fischer, Manager of Building Safety and designated Authority Having Jurisdiction with respect to the Building By-law

1. Definitions

- (a) Unless otherwise expressly provided or unless the context otherwise requires, words and expressions in this Regulation have the same meaning as the same words and expressions in the Building By-law.
- (b) In this Regulation:
- (1) “PROFESSIONAL ENGINEER” means an engineer or firm licensed by Engineers Geoscientists Manitoba to practice in the province of Manitoba and skilled in the appropriate section of work concerned.

2. Permit Requirements

- (a) The foundation/support of any residential building or structure that is supported by, or on auger-installed steel piles requires a building permit.

3. Construction and Design

- (a) All steel piles shall be designed and constructed as herein provided and in accordance with Part 4 of the Code, and be performed by a *professional engineer*.
- (b) In all cases, a *professional engineer* shall determine the number and spacing of the auger-installed steel piles required to carry all the loads.
- (c) A signed and sealed certificate attesting to the conformity of the installation and the allowable loads for the piles shall be provided by the *professional engineer*.
- (d) Every installer of the proposed auger-installed steel pile shall be certified by the manufacturer using approved equipment. The installer must follow the manufacturer's installation instructions and the uses and limitations specified in the CCMC Report.

- (e) Each installer is required to carry a certification card bearing their signature and photograph, and produce the certification when requested by the authority having jurisdiction.
- (f) The structural base steel shall meet the requirements of CSA G40.20/G40.21 or ASTM A 500. All welds shall conform to CSA W59-13 and be produced by certified welders in accordance with the Canadian Welding Bureau.
- (g) All steel piles shall have sufficient strength and stiffness to resist effectively all loads and effects of loads as well as such influences as may reasonably be expected during the service life and designed in accordance with CAN/CSA-S16.1.
- (h) Unless it has been proven that the site is free of corrosive conditions, all steel piles, including all accessories, are required to be hot-dipped galvanized, meeting the requirements of CAN/CSA-G164 or ASTM A123/A123M with a minimum thickness of 610 g/m².
- (i) The determination of the presence of corrosive conditions and the specification of the corrosion protection shall be carried out by a *professional engineer*.
- (j) Each auger-installed steel pile shall be identified with a label that contains the manufacturer's information, reference to the material standards specified above and the CCMC registry number.

4. Enforcement

In accordance with the authorities established by the Building By-law, any person who contravenes, or does not comply, or improperly complies, or only partly complies, with any provision of this Regulation commits an offence and is subject to penalty.

Related Information:

Building By-law No. 7258
CCMC Technical Bulletin on Auger-Installed Steel Pile Foundations
The Building and Mobile Homes Act, C.C.S.M. 1987, c.B93
The Manitoba Building Code
Compliance By-law No. 7198

Conflict: Where there is a conflict or inconsistency between this Regulation and provisions contained within a statute or regulation of the Government of Canada or the Province of Manitoba, the Federal or Provincial statute or regulation shall supercede those impacted provisions of this Regulation.