

Building Services – Policy	
Subject: Steel Grain Bins	Policy No. BS19-001
Effective Date: October 10, 2019	Replaces: None
Approved by: Jacob Forget	Type of Policy: Internal & External

# <u>Scope</u>

This document outlines the criteria when applying for a Building Permit, as well as the associated review, inspection and approval protocols for all **new** and **used** corrugated steel grain bins constructed within the Township of North Dundas.

# Design Criteria

• Bins and their supporting foundation shall be designed in accordance with Part 2, Section 2.2 and 2.3 of the 1995 National Farm Building Code of Canada and according to good engineering practice.

# Footings and Foundations

- All footings and foundations shall require professional design. Plans and specifications will require design and approval by a person licensed to practice professional engineering in the Province of Ontario.
- Design of the foundation shall be consistent with the soil bearing capacity of the site. Soil analysis may be required to confirm soil bearing capacity.
- Grain bins with an eave height over diameter ratio in excess of 1.75 or exceeding 14.63 metres (48 feet) in diameter or 13.72 metres (45 feet) eave height shall require
  - a) Soil analysis to confirm bearing capacity.
  - b) General Review and approval by a person licensed to practice professional engineering in the Province of Ontario shall be required on all footings, foundations and soil bearing capacity for grain bins with an eave height over diameter ratio in excess of 1.75 or exceeding 14.63 metres (48 feet) in diameter or 13.72 metres (45 feet) eave height

# Bin Superstructure

 All new bins, regardless of size, require professional design by a person licensed to practice professional engineering in the Province of Ontario. Plans and specifications contained in the manufacturer's manual shall bear the seal of the licensed professional engineer.

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- General review and approval by a person licensed to practice professional engineering in the Province of Ontario shall be required on all bin structures with an eave height over diameter ratio in excess of 1.75, exceeding 14.63 metres (48 feet) in diameter or 13.72 metres (45 feet) eave height.
- General review and approval is not required for bins with less than an eave height over diameter ratio lower than 1.75 or 14.63 metres (48 feet) in diameter or 13.72 metres (45 feet) eave height where the contractor/builder is certified to erect by the manufacturer.

# <u>Other</u>

- All electrical connections shall be inspected by the Electrical Safety Authority (ESA).
- A warning sign clearly indicating the hazards of entrapment shall be installed according to Part 3, Section 3.2.1.6 (1) of the National Farm Building Code of Canada, 1995, at every designated person access.
- Ladders and safety cages shall meet the requirements of Part 3, Section 3.2.2 of the National Farm Building Code of Canada, 1995.
- Building Inspections are required at various stages of construction. Call the Building Division to arrange for inspections.
- Elevators, silos or similar farming equipment will also be required to adhere to this policy and in the same sense as steel grain bins