

Information Bulletin

Limit States Design

Effective October 1, 2012, the City of Winnipeg, in consultation with the Association of Professional Engineers and Geoscientists of Manitoba (APEGM), requires that all foundation design be done in accordance with Limit States Design (LSD) as prescribed in the Manitoba Building Code (MBC) 2024ⁱ Edition. All accompanying documentation, references, and standards must follow LSD guidelines. A soils report is necessary and must meet LSD guidelines.

Background

Limit States Design (LSD) was introduced into the National Building Code of Canada (NBCC) in 1975 for the design of steel and concrete structures. Since that time the LSD method has been adopted for wood, cold formed steel, masonry, aluminum and finally in 1995 for foundations. Working Stress Design has been gradually phased out over the years with the last reference, for foundation design, being removed from the MBC 2006 Edition.

Foundations for Single Family dwellings, duplexes (or row housing) and residential garages will be exempt, only if the design conforms with the prescriptive requirements of Part 9 of the MBC 2024 Edition.

ⁱ Manitoba Building Code 2024 consists of the 2020 National Building Code of Canada with Manitoba Amendments