BUILDING SERVICES DEPARTMENT GUIDELINES Updated: 25/10/2024

BUILDING SERVICES

Grade & Localized Depression

Guideline

Guideline ESP - 32

Purpose

This guideline has been developed to help improve education and enforcement when determining grade and building height for residential buildings within the scope of Part 9 of the Building Code.



Code Reference

Current National Building Code – Alberta Edition Division B Part 9 Illustrated User's Guide – NBC 2015: Part 9 of Division B, Housing and Small Buildings Users Guide – NBC 1995 Fire Protection, Occupant Safety and Accessibility Part 3

Summary

This Guideline provides clarity and direction regarding the determination of grade when reviewing a residential dwelling unit for building height/number of storeys, which determines if a building falls under the scope of Part 9 or Part 3 when reviewing for code compliance.

Interpretation

This Guideline provides clarity and direction from Rocky View County on their interpretation of calculating grade for residential dwelling units. And then using this information to determine the building height, being the number of storeys, which determines if a building falls under the scope of Part 9 (up to 3 storeys) or Part 3 (4 storeys or more) of the Building Code. Based on the information provided within this Guideline, grade and building height should be reviewed in the following method(s).

1) **Definitions**

- a) *Grade* means the lowest of the average levels of finished ground adjoining each exterior wall of a *building*, except that localized depressions need not be considered in the determination of average levels of finished ground.
- b) *First storey* means the uppermost *storey* having its floor level not more than 2m above *grade*.
- c) Localized depressions that need not be considered in the determination of the elevation of grade include such features as vehicle and pedestrian entrances and other minor depressions that do not affect accessibility for firefighting or evacuation.





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- 2) <u>Localized Depressions</u> Some localized depressions may not be considered when determining the elevation of grade.
- 3) <u>What is a Localized Depression?</u> Examples of a localized depression may include features such as a vehicle or pedestrian entrance, window wells or other minor depressions that do not affect accessibility for firefighting or evacuation.





a) Vehicle and Pedestrian Entrances – Where a vehicle or pedestrian entrance is created below the surrounding grade the following size restrictions must be adhered to if intending to meet the definition as a localized depression.

i) The lowered area shall not extend to more than 0.6 m (2'-0") to the side of any building opening(s)

- b) Private Outdoor Amenity Spaces Private outdoor amenity spaces, such as forced walk-out patios, would not be considered as a localized depression. When determining grade, where these spaces exceed 50% of the building face, the walkout elevation will be calculated as the average grade for that face.
- c) Window Wells Large window wells which extend down to grade, and which provide access from the house into the well area such as a doorway, will be considered as walk-out patios. These areas will be required to meet the design parameters as a private outdoor amenity space and will be required to provide egress from this space to the surrounding exterior grade.
- 4) <u>Determining Grade -</u> Grade is determined by calculating the average ground elevation adjacent to each side of a building. Grade is then defined as the lowest of these average levels.





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5) **Determining First Storey -** The first storey is then defined as the uppermost storey having its floor level not more than 2.0 m (6'-7") above grade.



Reference

Approval Date

Last Review Date

- October 2024
- October 2024