

Purpose

This guideline has been developed to provide guidance and direction on the information required to be provided for a building permit, when applying for a building which includes a forced walkout basement with an exterior patio area/slab which is below the surrounding grade.



Code Reference

Current National Building Code – Alberta Edition – Section 9.14 and 9.16
National Plumbing Code of Canada 2020



Summary

Rocky View County – Building Services has provided direction regarding permitting requirements when developing a forced walkout patio area which is below the surrounding grade. For these areas, drainage of rain and snow must be considered and addressed.

Additional clarification is also provided in this Guideline to define what is interpreted as a “covered” and an “uncovered” patio, and to identify the permit requirements for each scenario.



Interpretation

This Guideline provides clarity and direction from Rocky View County on forced walkout patios and the information required to address the means of drainage for these areas. Based on the information provided within this Guideline, the following information and/or engineered designs will be required.

- 1) Definitions:
 - a) Canadian Oxford Dictionary; Second Edition
 - i) **Covered** means enclosed; provided with a roof, top, or cover.
 - ii) **Uncovered** means not covered with a roof.

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2) Covered Walkout Patio

Rocky View County has reviewed the definitions provided and made the following interpretations regarding what would be considered as meeting the intent as “covered”, and the information required for the building permit with this scenario.

- a) What is Covered? – Walkout patios covered by a roof, or upper deck which has been constructed to collect or shed water in its entirety, from above the patio area would meet the intent as being covered. Examples of this would be, but are not limited to, a typical shingled roof, or a deck with vinyl surfacing.
- b) Permit Requirements – Building permits with a covered forced walkout patio must include the following information identifying how drainage for the area will be provided.
 - Minimum 2 – 4” floor area drains that drain:
 - i) by gravity to daylight or
 - ii) by minimum 4” solid pipe to separate storm water sump pit, not to the basement drain tile sump pit.

3) Uncovered Walkout Patio

Rocky View County has reviewed the definitions provided and made the following interpretations regarding what would be considered as meeting the intent as “uncovered”, and the information required for the building permit with this scenario.

- a) What is Uncovered? – Walkout patios which are not covered by a roof or upper deck which is covered, but instead remain either open above, or are covered by a deck which does not shed water would be interpreted as being uncovered. Examples of this would be, but are not limited to, a deck utilizing a decking material which allows rain or snow to pass e.g., decking material which provides/allows gaps between boards etc.
- b) Permit Requirements – Building permits with an uncovered forced walkout patio must include the following information identifying how drainage for the area will be provided.
 - A storm water drainage system designed by an engineer which includes the following:
 - i) minimum 2 floor area drains
 - ii) anticipated water volume calculations
 - iii) size and type of storm water drainage pipe
 - iv) size and capacity of storm drainage sump pit
 - v) size and location of discharge pipe and outlet location
 - vi) emergency power system for storm water sump pump
- c) Small Uncovered Basement Stair Landing – Where a design includes a small, uncovered basement stair landing, this floor/slab must be provided with drainage for the space. Drainage can be provided by a floor drain which is tied into the building weeping tile system.

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4) Storm Water Dry Well

An option for above items (2) or (3), could be that drainage is directed to an engineered drywell. When proposing this scenario, the following information must be provided by the Professional Engineer.

- i) calculations for design storm water volume
- ii) verification that fluctuation of water table will not affect capacity of dry well
- iii) dry well water volume capacity and design safety factor



Reference

Approval Date

- October 2024

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