

On July 25, 2011, Delta Council adopted bylaw amendments that:

- exempted the floor area of in-ground basements from floor space ratio calculations;
- revised maximum building height regulations to 9.5 m (31.2 ft); and
- established conditions that would allow sanitary and stormwater pumped systems in cases where underground services cannot rely on gravity.

This information brochure has been prepared to provide homeowners and builders with an overview of Delta's requirements for in-ground basements. This brochure is for general guidance only, and does not replace bylaws and legal documents such as Delta's Zoning Bylaw or the BC Building Code.

AREAS WHICH PERMIT IN-GROUND BASEMENTS

Which zones would exempt an in-ground basement floor area?

All residential zones in Delta which permit single family and duplex uses are allowed to have an in-ground basement.

In what circumstance would an in-ground basement not be permitted in a single family or duplex building?

- a) Certain areas in Delta will not be able to accommodate in-ground basements due to the minimum building elevation for flood protection. This would include all low-lying areas in Tsawwassen and Ladner. The flood protection elevations in these areas are generally too high relative to the natural ground to allow for an in-ground basement.
- b) If an existing house has two full storeys and living space in the attic area, the dwelling would be considered 2 ½ storeys. As an in-ground basement is considered to be a ½ storey in Delta's Zoning Bylaw, an in-ground basement would not be possible in this scenario.
- c) If a restrictive covenant is registered on title that does not permit basements then the covenant would need to be discharged from the title of the property and this can only be done by an affirmative vote of Delta Municipal Council.

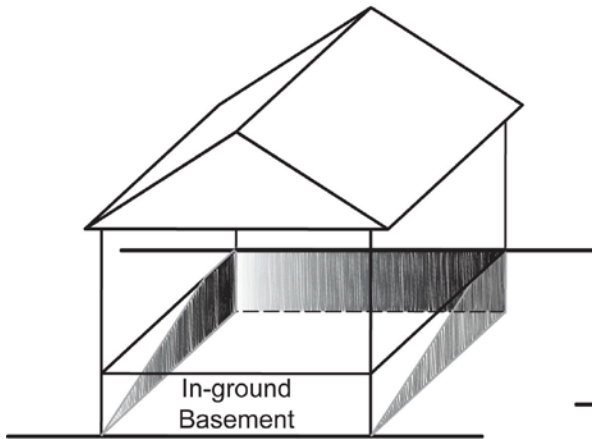
DETERMINING AN IN-GROUND BASEMENT

How is an in-ground basement defined?

To have the floor area of an in-ground basement exempted from floor space ratio calculations, you must have more than 50% of the total perimeter wall area below the lower of the finished or natural grade. A walk-out in-ground basement may be permitted if the lot has favourable sloping conditions and where setback and height regulations can be met.

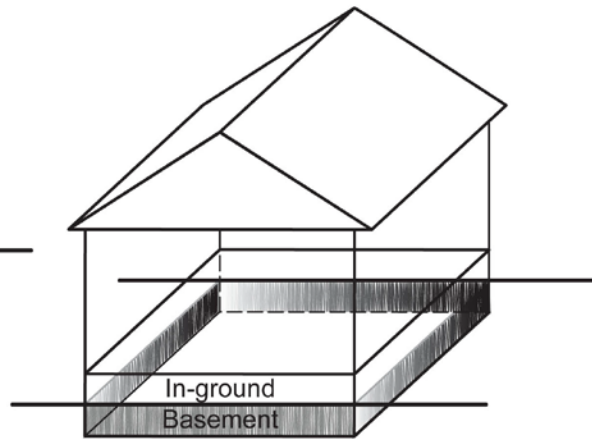


Sloped Lot



50% of in-ground exterior wall area below the lower of natural or finished grade

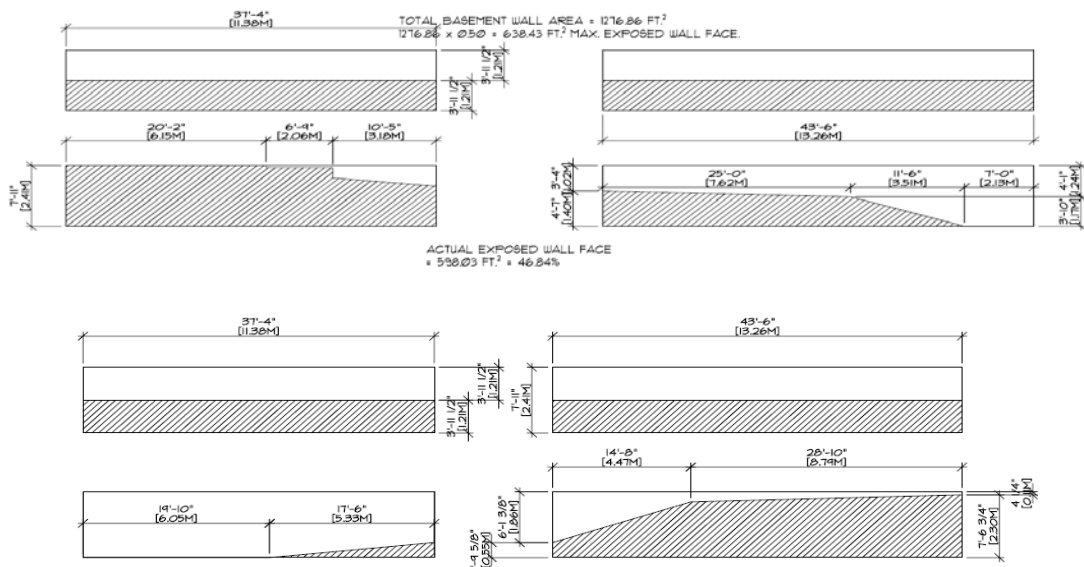
Flat Lot



50% of in-ground exterior wall area below the lower of natural or finished grade on a flat lot

How is the perimeter wall area measured?

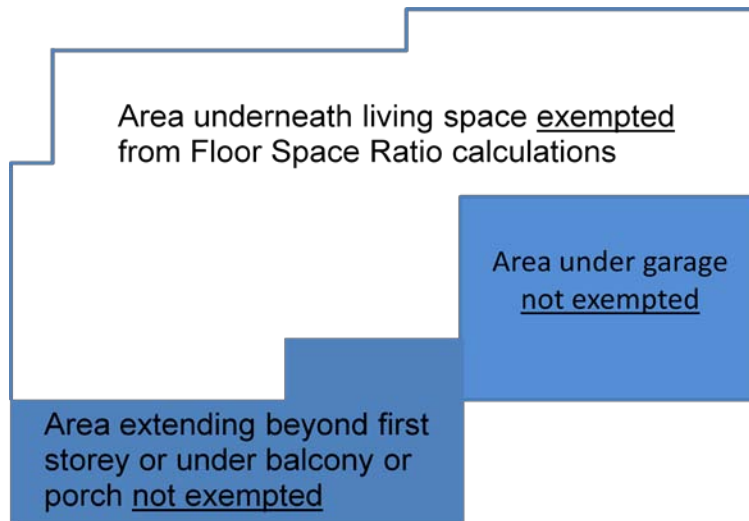
The perimeter wall area is the total area of each wall of the in-ground basement measured from the finished floor to the top of the floor system directly above it. As illustrated in the example below, the area of the total perimeter wall of the basement must be calculated. In order to have the floor area exempted, the calculations must indicate that more than 50% of the total perimeter wall area is below the lower of the finished or natural grade.



How much of the floor area of an in-ground basement can be exempted from floor space ratio calculations?

The maximum floor area that can be exempted from floor space ratio calculations would be the area directly below the interior living space of the first storey. Any floor area directly beneath the garage footprint or any floor area that extends beyond the walls of the first storey would not be exempted from floor space ratio calculations. Furthermore, any floor area directly beneath a balcony, deck or porch would not be exempted.

Basement Footprint – Exempted Floor Area



REVISED HEIGHT REGULATIONS

What is the height calculation of an in-ground basement?

An in-ground basement would count as a ½ storey towards the maximum house height.

Which zones had the maximum roof ridge height reduced to 9.5 m (31.2 ft)?

All residential zones in Delta have had the maximum roof ridge height reduced to 9.5 m (31.2 ft) except for the RS9 Single Family (330 m²) Infill Residential, Strata House, Townhouse and Apartment zones. The maximum mid-roof height elevation and number of storeys will remain the same.

CRAWL SPACES AND CELLARS

Can I have a crawl space rather than an in-ground basement?

Yes. If the height of the floor is not more than 1.2 m (4 ft) measured from the floor to the underside of the floor system directly above it and is located below the first storey, the floor would be considered a crawl space. The floor area of a crawl space would be exempt from the overall floor space ratio calculations, and the floor would not be considered a storey under the permitted height provisions.

I would like to have a cellar below the first storey with a height greater than 1.2 m (4ft) but less than 1.95 m (6.4 ft). How would this be calculated in Delta's Zoning Bylaw?

A cellar less than 1.95 m (6.4 ft) would be considered a ½ storey for height calculations. With respect to floor area exemptions, a cellar with a ceiling height greater than 1.2 m (4ft) would be considered an in-ground basement. The floor area would only be exempted from floor space calculations if the total exterior wall area, measured from the finished floor to the top of the floor system directly above it, is more than 50% below the lower of the natural or finished grade.

OTHER REGULATIONS

Would sunken patios, stair wells, window wells, be included in the building site coverage regulations?

No, provided that no part of the well has a structure more than 0.6 m (2 ft) above the ground surface. Please keep in mind that a sunken patio, stair well or window well would be discounted against your required permeable area.

Would I be permitted to have a secondary suite in an in-ground basement?

Yes as long as there is no more than 1 suite per single family dwelling, the floor area of the suite is not greater than 90 m² (968 ft²) and the suite meets all other regulations in Delta's Zoning Bylaw and the BC Building Code. Please check with our secondary suite hotline at (604) 952-3159 or email suites@corp.delta.bc.ca for further information.

STORMWATER AND SANITARY SEWER SERVICING

I'm not sure if my stormwater and/or sanitary sewer services are deep enough underground to be fed by gravity. What should I do?

Prior to submitting your building permit application, you will need to retain the services of a surveyor or engineer to determine the depth of the existing storm and sanitary services for your property. You may need to expose the services in order to confirm the depth. Your surveyor or engineer will then be able to determine whether your proposed basement will be able to drain by gravity, based on the requirements of the BC Building Code.

Should you wish to request new service connections, your drawing submission must clearly show the size and location of the requested services, as well as a profile drawing showing all other utilities that could pose a conflict. The minimum grade for a municipal service connection is 2% and the service connection is taken from the springline of the municipal main. As-built drawings of storm and sanitary sewer mains are available at the Engineering counter.

Would I be permitted to have a pump system for stormwater and/or sanitary sewer if gravity can't be relied upon?

Yes. In many cases, existing stormwater or sanitary sewer pipes may not be deep enough underground to service basements by gravity. The Corporation of Delta would allow a stormwater and/or a sanitary sewer pumping system provided the applicant can provide and satisfy all of the following criteria:

- a sealed design of the proposed pump system and a letter of assurance from a Professional Engineer. The pump design must include:
 - a dual or duplex pumps;
 - an appropriate backflow prevention device;
 - temporary power back-up; and
 - an alarm audible within the premises.

In addition, a covenant will be registered on title serving as notice to future owners and to indemnify The Corporation of Delta (the cost to have a covenant prepared would be \$500.00 – this would cover legal costs to prepare the covenant and all registration fees at the Land Titles Office).

APPLYING FOR A BUILDING PERMIT

What do I need to consider when applying for a building permit for an in-ground basement?

Your new building permit application would have to ensure that the maximum roof ridge height is 9.5 m (31.2 ft) or lower. Furthermore, you would need to determine if your stormwater and sanitary servicing can be provided via gravity. The only way this can be done is by hiring a professional surveyor or engineer to determine the elevations of your service connections at the property line.

I have an existing house and I wish to renovate to include an in-ground basement. What is required?

You would need to apply for a building permit. As part of your building permit application, you would need to have a modified lot grading plan indicating natural and finished grade elevation points at each corner of the house and at the mid-point along each wall. This would assist in determining if the in-ground basement meets the criteria in Delta's Zoning Bylaw to be exempted from the floor space ratio calculations.

I wish to do some renovations to an existing house that has a basement. I am not sure if the basement would be included in the floor space ratio calculations. What do I do?

In this situation, you would be required to have a modified lot grading plan indicating natural and finished grade elevation points at each corner of the house and at the mid-point along each wall. This would assist in determining if the in-ground basement meets the criteria in Delta's Zoning Bylaw to be exempted from the floor space ratio calculations.

NORTH DELTA DEVELOPMENT PERMITS

I have a North Delta Development Permit that was issued recently and I would like to revise the Development Permit to include an in-ground basement. What do I do in this situation?

If you wish to include an in-ground basement in your house plans you should discuss your revised plans with the Planner who processed your Development Permit application to determine if you require an amendment to your Development Permit.