Variance SPV-001
October 1, 2017 (Revision 5 – March 5, 2026)

Subject: Zero Lot Line

Background:

A variance is written permission to build, install, process or otherwise act in a manner not consistent with the provisions of an applicable code but which provides, in the opinion of the Authority Having Jurisdiction (AHJ) or Safety Codes Officer, an equivalent or greater level of safety to persons or property. This is accomplished by meeting or exceeding the objective and functional statements related to the specific code article being varied for single family dwelling units and single-family dwelling units containing secondary suites.

Note: *Standing Posted Variances (SPV) cannot be altered or deviated from. Any modification to the scope or application will require the prescriptive requirements of Division B to be followed or a site-specific variance to be applied for.*

Applicable regulatory requirements:

National Building Code – Alberta Edition
Division B, Article 9.10.15.5. Construction of Exposing Building Face of Houses

8) Except as provided in Sentence (10), where the exposing building face has a limiting distance of not more than 0.45 m, projecting roof soffits shall not be constructed above the exposing building face.

9) Except as provided in Sentence (10), where the exposing building face has a limiting distance of more than 0.45 m, the face of roof soffits shall not project to less than 0.45 m from the property line.

Reason for the Variance:

In the City of Calgary, home builders are constructing single-family homes up to three storeys tall, positioned close together with only 1.5 meters between the exposed sides of adjacent houses.

In this configuration:

- One side of each house is set back 1.5 meters from the property line. This is referred to as the **"easement side."**

- The other side of each house may be constructed at the property line (0.0 meters); however, in all cases, the roof soffit on that side is located within 0.45 meters of, or may cross, the property line. This is known as the "**zero side**."

All homes on the block follow the same layout, 1.5 meters on one side and zero on the other—ensuring consistent spacing in accordance with the requirements of **SPV-001**.

The house constructed on the zero side includes a roof soffit that projects beyond the property line or less than 0.45m limiting distance. Contrary to the applicable regulatory requirement: National Building Code Alberta Edition Division B, 9.10.15.5. (8) & (9). that requires a roof soffit project to not less than 0.45 m from the property line.

A review of the building code requirements in Article 9.10.15.5., Sentences (8) and (9), establishes limiting distances that typically result in a minimum combined separation of 0.90 m between the roof soffits of two adjacent houses. This variance (SPV-001) achieves the same minimum separation through an alternative solution. Instead of measuring from the property line, the total distance between both adjacent houses is treated as part of a combined design approach to this Alternative Solution.

The Maintenance Access Right of Way (MARW) agreement formalizes the permitted distance between buildings including soffits and exposing building faces in accordance with the variance conditions. It also addresses the separate matter of building on or near an adjacent property, ensuring continued access for maintenance and ongoing compliance with the variance.

Accepted method of Variance:

The following construction methods are to apply to the exposing building faces on both side walls of both houses adjacent to each other, this may be achieved by:

a) The outermost face of all storeys (1 – 3) of the exterior wall finish of the wall at zero limiting distance shall be in line with the property line or within the property of the building to which the finish is attached. All other configurations will require a separate variance request.

b) All front or rear facing balconies on or adjacent to the exposing building face at zero limiting distance shall have:

   i. No glazed openings or unprotected mechanical openings.
   ii. A minimum 15.9mm (5/8”) Type X gypsum sheathing or the equivalent on the entire ceiling or soffit of the open balcony, c/w non vented metal soffit material.
   iii. A fire resistance rating of not less than 45 minutes on all exposed beams and support columns. The fire resistance rating may be achieved by utilizing mass timber material as per Article 9.10.6.2. and Table 3.1.4.7. Or an approved noncombustible cladding.

c) Exterior Cladding shall be:

   i. Non-combustible fiber cement board, installed over an accepted oriented strand board (OSB) or a minimum 15.9mm (5/8”) Type X gypsum sheathing. The area above the soffit to the underside of the roof sheathing is to be protected by a minimum 15.9 mm (5/8”) Type X gypsum sheathing or equivalent with all edges to be fully supported. OR
   ii. Cementitious stucco conforming to Subsection 9.28 of Division B of the National Building Code – Alberta Edition, over an accepted oriented strand board (OSB). The area above the soffit to the underside of the roof sheathing is to be protected by a minimum 15.9 mm (5/8”) Type X gypsum sheathing or equivalent with all edges to be fully supported. OR
   iii. Vinyl siding conforming to CAN/CGSB-41.24, shall be installed on over a minimum 15.9 mm (5/8”) Type X gypsum sheathing on both side walls of both houses. Sheathing panels are to extend to the underside of the roof sheathing with all joints to be on the studs, top and bottom plates or otherwise fully supported. Joints are not required to be taped.

d) Interior gypsum board is to be a minimum 12.7 mm (1/2") Type X gypsum board on both side walls of both houses with all joints fully supported taped and finished.

e) Gypsum board on the ceiling of the uppermost floor of both houses shall be a minimum 12.7 mm (1/2") Type X.

f) **Three Storey House** - No glazed or unprotected mechanical openings are permitted on the exposing building face on either side wall of the 3rd storey and no glazed openings or unprotected mechanical openings are permitted on the exposing building face face on the 'zero' side less than 1.2m limiting distance Unprotected mechanical openings and glazed openings on the first and second floor are permitted on the 'zero' side where the limiting distance is 1.2m or greater. Glazed openings are to be calculated prescriptively as per 9.10.15 and table 9.10.15.4. At 1.5m limiting distance on the 'easement' side, a maximum glazed opening area of 7% of the exposing building face measured from grade to the underside of 2nd floor ceiling is permitted. Where the limiting distance on the 'easement' side exceeds 1.5m, glazed openings are allowed to be calculated prescriptively using 9.10.15 and table 9.10.15.4. No individual opening is to exceed 3.5% of the exposing building face, measured from grade to the underside of 2nd floor ceiling only. The wall area of the 3rd storey is not to be included in the calculation.

g) **One - Two Storey House** - No glazed openings or unprotected mechanical openings are permitted on the exposing building face on the 'zero' side less than 1.2m limiting distance. Unprotected mechanical openings and glazed openings on the first and second floor are permitted on the 'zero' side where the limiting distance is 1.2m or greater. Glazed openings are to be calculated prescriptively as per 9.10.15 and table 9.10.15.4. At 1.5m limiting distance on the 'easement' side, a maximum glazed opening area of 7% of the exposing building face measured from grade to the underside of the uppermost ceiling is permitted. Where the limiting distance on the 'easement' side exceeds 1.5m, glazed openings are allowed to be calculated prescriptively using 9.10.15 and table 9.10.15.4 No individual opening is to exceed 3.5% of the exposing building face.

h) Protection of electrical penetrations within the exterior wall at zero limiting distance. Outlet boxes are to be tested and listed for such installation or are to be protected with a listed fire stop system. Electrical penetrations for outlet boxes in the wall at 1.5m limiting distance are not required to be protected.

i) No combustible services are allowed within the wall at zero limiting distance unless they are fire stopped at all penetrations through top or bottom plates and wherever they penetrate the interior gypsum membrane.

j) **Zero Side** - Decorative combustible architectural returns, on the zero side must comply with the following conditions:

   i. Where the limiting distance is between 0.0 m and less than 2.4 m from the property line decorative combustible architectural returns:
      - Must not cover more than 2% of the total exposing building face, or
      - Must not extend more than 0.6 meters along the side walls from the corner,
   ii. For the 1st and 2nd story if the limiting distance is 2.4 meters or more from the property line, combustible cladding is permitted.
   iii. In all cases: Combustible cladding must be installed over a minimum 15.9 mm (5/8") Type X gypsum sheathing. Combustible architectural returns must be treated with a fire-retardant coating approved by the Authority Having Jurisdiction (AHJ).

k) **Easement Side** - Decorative combustible architectural returns on the easement side must meet the following conditions:

i. Where the limiting distance is **from the 1.5 m easement line to less than 0.9 m** beyond that line. Decorative combustible architectural returns:
    - Must not cover more than 2% of the total exposing building face, or
    - Must not extend more than 0.6 meters along the side walls from the corner,
ii. For the 1st and 2nd story if the limiting distance is 0.9 meters or more from the 1.5m easement line, combustible cladding is permitted.
iii. In all cases: Combustible cladding must be installed over a minimum 15.9 mm (5/8") Type X gypsum sheathing and fixed to wood studs. All combustible architectural returns must be treated with a fire-retardant coating approved by the AHJ.

l) **Maintenance Access Right-of-Way (MARW)** - to be registered on title with the following provisions:

i. Each lot must provide a 1.5 m Maintenance Easement Agreement, except for lots terminating at a street or lane, where the easement may not be applicable or required on the street-facing side. However, if the adjacent lot is on the zero-lot line side, the 1.5 m easement is still required.
ii. Maximum allowable soffit projection into the easement: 0.3 m.
iii. Maximum allowable footing projection into the easement: 0.3 m.
iv. The Maintenance Access Right of Way (MARW) easement on a Zero Lot Line build shall remain clear of all obstructions which could impede firefighting efforts.
v. Side entrance steps and landings which are 0.6m or less above or below grade without guard rails, are not considered to be obstructions.

m) **Edge support** - to be as per National Building Code - Alberta Edition, Division B, D-2.3.8. Edge Support for Wallboard - Gypsum board installed over framing or furring in a wall assembly shall be installed so that all edges are supported, except that 15.9 mm Type X gypsum board may be installed horizontally with the horizontal joints unsupported when framing members are at 400 mm on centre maximum.

Attributing Objective and Functional Statements:

OP3 - Protection of Adjacent Buildings or Facilities from Fire

An objective of this code is to limit the probability that as a result of the design or construction of the building or facility, adjacent buildings or facilities will be exposed to an unacceptable risk of damage due to fire. The risks of damage to adjacent buildings or facilities due to fire addressed in this code are those caused by:

- OP3.1 – fire or explosion impacting areas beyond the building of origin.

Functional Statements

The objectives of this Code are achieved by measures, such as those described in the acceptable solutions in Division B, that are intended to allow the building or its elements to perform the following functions.

- F03 – to retard the effects of fire on areas beyond its point of origin.

This Variance is based on:

- Reference to this variance in the documents submitted by the applicant for the building permit.
- Reference to this variance within the permit conditions of the building permit.
- Full-Scale Study of Spatial Separation; NRC Research Report: IRC-RR-195; May 19, 2005.
- NIST Fact Sheet – NIST Lab Experiments Simulate House-to-House Fire Spread.
- Document entitled - 0 Lot Line Concept Variances, Under the Alberta Building Code 2006 in The City of Calgary - March 2012.

Address:

Where referenced as (SPV-001) within the building permit conditions, this variance shall be applicable to the address of the building permit.

Authority and conditions:

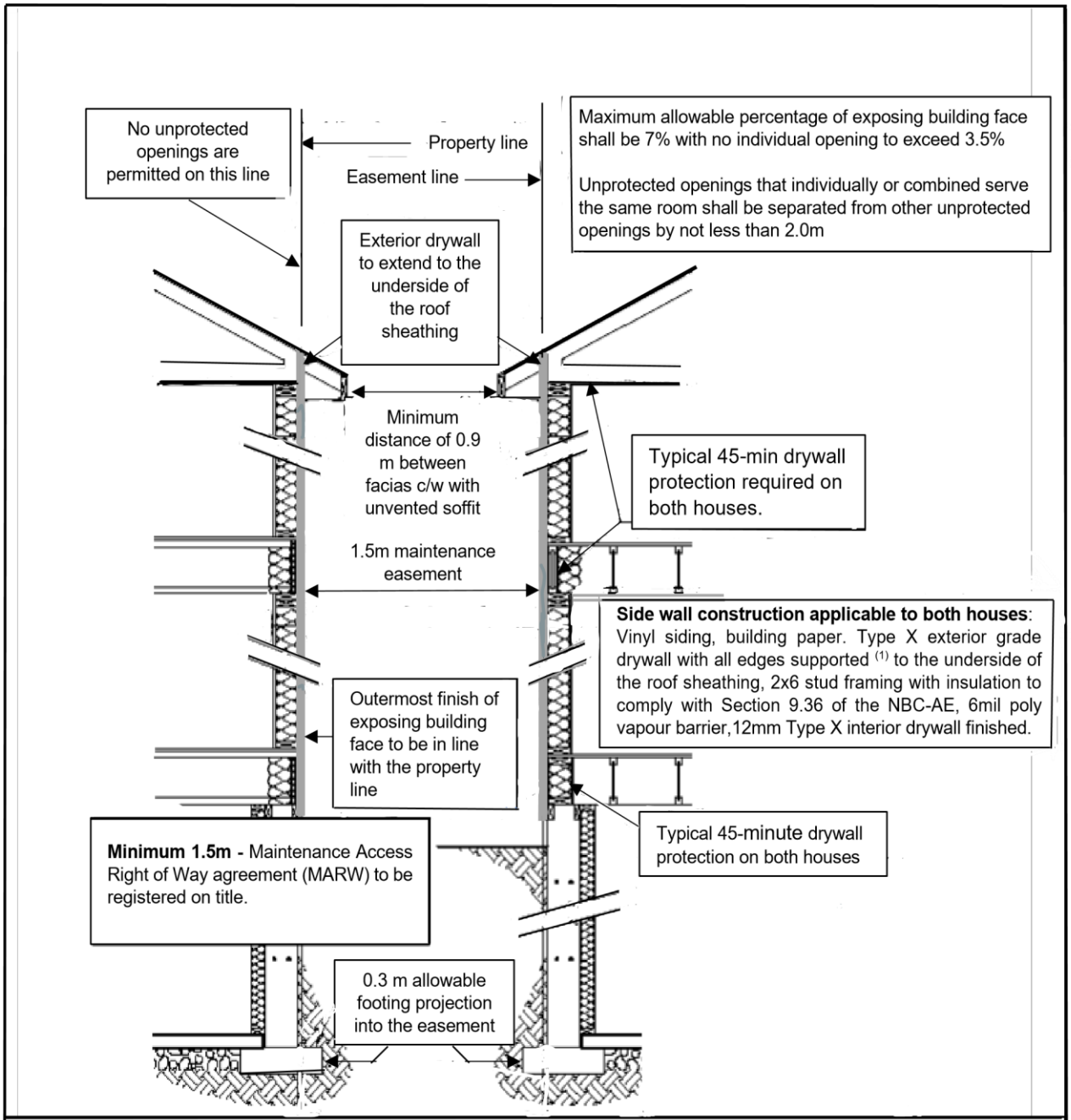
Under the authority of Section 38 of the Safety Codes Act, Chapter S-1 of the Statues of Alberta 2000, this Variance is granted based on:

- The owner/contractor acknowledging the authority under which the variance is issued by virtue of referencing this Variance number (SPV-001) in the Building Permit documentation.
- The owner, and contractor ensuring that the project is carried out as outlined in this Variance.
- A Maintenance Access Right of Way (MARW) agreement in a form satisfactory to the Authority Having Jurisdiction (City of Calgary) must be registered on the title of th parcel and the adjacent parcel over a 1.5m width parallel to the property line. The agreement can allow for 0.3 m eave projection and a 0.6m footing projection across the property line. At no time may any portion of the buildings including the eaves on either parcel be closer together than 0.9 m.

If this variance is relied upon to obtain a permit, non-compliance with the requirements of this variance are an offence under the Safety Codes Act.

This Standing Posted Variance (SPV) was accepted by the Codes and Standards Technical Interpretation Committee (CSTIC) meeting on March 5, 2026.

Chief Building Official
The City of Calgary



Sample Cross Section Detail of Adjacent Zero Lot Line Houses

Sample Detail; The applicant is to provide a detail of both adjacent Zero Lot Line houses, as above, as well as a title block which shall include the company letterhead.