



Memorandum

To: Vail Town Council

From: Town of Vail Community Development Department
Building and Fire Board of Appeals
Christopher "CJ" Jarecki, Chief Building Official

Date: March 6, 2018

Subject: Ordinance No. 7, Series of 2018 – Amendment to the International Residential Code as Adopted in Ordinance No. 14, Series of 2015

Summary:

The purpose of this memorandum is to provide information to the Vail Town Council regarding adoption of an Ordinance that will amend the previously adopted International Residential Code as recommended by the Building and Fire Board of Appeals. The members of the Building and Fire Board of Appeals making this recommendation are:

- Mark J. Mueller, PE Structural Engineer
- Steve Loftus Mechanical Engineer
- Rollie Kjesbo General Contractor
- Kathy Langenwalter, RA Architect
- Kyle Webb, RA Architect
- Mark Hollenbeck General Contractor
- Mark Donaldson, RA Architect

In order to ensure compliance with the provisions of the International Residential Code (IRC), it has become apparent that, due to the characteristics of the majority of two-family residential units within the Town of Vail, an exception to a code section is necessary.

Background:

In general, a typical "duplex" is regulated as a two-family dwelling unit in accordance with the IRC, with no assumed property line. As such, a permitted two-family dwelling under the IRC needs no additional protection for proposed openings (e.g.: windows and doors) and projections (e.g.: roof eaves). However, when performing design, code review, construction and subsequent inspections on these duplexes, it becomes

impossible to meet the prescriptive requirements set forth within the IRC when property/lot lines dividing the dwelling units are known to exist.

The root of the situation stems from adding property lines along the shared wall of the two-family dwelling for financial gains. The practice of this type of subdivision has been in place for many years and continues to occur on a regular basis. When subdivision happens to existing buildings, the Building Department has no say in the matter and quite honestly, the addition of this “imaginary line” has not made the building any less safe. But, if the line is indicated on a new drawing when presented to the Building Department for review, it cannot be ignored and a majority of new designs cannot meet code requirements.

The specific code section in question is R302, Fire-Resistant Construction (see Exhibit A). The section details the requirements for all fire-resistant rated construction when designing and building a residential structure. Within the section, Tables R302.1(1) and R302.1(2) deal specifically with exterior walls, projections, openings and penetrations and what is required of these construction elements in their relation to lot lines (i.e: separation distances).

While examining the tables, it is easy to determine that when property/lot lines are indicated, any projections or openings that encroach upon those lines are not permitted – specifically when dealing with more modern, offset style duplexes which are commonplace here in Vail (see Exhibit B). This has backed the Building Department and the design community into a corner when trying to ensure code compliance.

Opinions relating to this matter have been requested and received from numerous experts in the building code industry, including other Building Officials and the International Code Council. These opinions have varied slightly, but most came to the same conclusion: with automatic sprinkler systems and the use of section R104.11 of the IRC (Alternate Materials, Designs and Methods), each jurisdiction has the ability to ensure that the life safety intent of the code is achieved without meeting the specific, prescriptive methods. To quote the response received from the International Code Council – “...In my opinion, it is up to local jurisdictions to establish how they are going to address these issues...”

The Building and Fire Board of Appeals feels that adopting the Ordinance will clarify how the Town of Vail is addressing the issue of walls, projections, openings or penetrations that occur along the lot line that divides the duplex and the platted property.

Action Requested:

Town Council shall approve, approve with modifications, or deny Ordinance No.7, Series of 2018 based on recommendation from the Building and Fire Board of Appeals.

Recommendation:

Staff and the Building and Fire Code Board of Appeals recommends approval and adoption of Ordinance 7, Series of 2018.

Thank you for your consideration in this matter.