MEMORANDUM

To: Development Services staff
From: Matthew Seubert for Tina Axelrad, Zoning Administrator
Date: January 10, 2018
Re: Code Clarification – Rule of Measurement for DZC Building Coverage vs. FC59 Unobstructed Open Space

Background and Summary
There has been some confusion among staff about the distinction in the rules of measurement regarding maximum building coverage standards in the Denver Zoning Code (DZC) compared to unobstructed open space requirements under Former Chapter 59 (FC59). This memo provides clarification and examples of these rules of measurement.

In contrast to the DZC standard of building coverage, the FC59 standard refers to unobstructed open space. The two standards are almost the direct inverse of each other. For example, the DZC standard for a Duplex in a U-TU district allowing maximum building coverage of 37.5% is similar to the FC59 standard for a multiple unit dwelling in an R-2 district requiring unobstructed space of at least 62.5%.

Denver Zoning Code – Requirements for Maximum Building/Structure Coverage
For example, using the Urban House form, the maximum building coverage allowed on a 6250 (50’ x 125’) square foot zone lot in a U-SU or U-TU zone district is 37.5%.

The DZC defines Building Coverage in Article 13.1.5.9:
A. Intent: To provide openness on a lot by limiting the amount of area buildings can cover.

B. Rule of Measurement: Building coverage shall be measured as the “gross area of a footprint” on the zone lot according to C below, divided by the total gross square foot area of the Zone Lot and multiplied times 100, expressed as a percentage.

C. Gross Area of Footprint:
1. The gross area of the actual footprint measured to the exterior faces of the structure and any enclosed projections beyond the footprint of all Primary and/or Accessory:
   a. Structure, Completely Enclosed;
   b. Structure, Partially Enclosed;
      Defined in the DZC as a structure that is: (1) Enclosed by a roof; or (2) Enclosed on three or more sides with fences or walls that are (a) greater than six feet in height and (b) less than 50% open.
   c. Deck, Raised
      Defined in the DZC as “a platform more than 2.5 feet above original grade, and supported on the ground.”
d. Balcony, Exterior

Defined in the DZC as “A projecting cantilevered platform on a building that is not supported on the ground by posts, columns, or similar supporting structural members. Generally, an exterior balcony is intended to be used for outdoor living, gardening, or other actively used outdoor space. An exterior balcony shall not include a landing abutting an entry to habitable space, provided such landing does not exceed the minimum required dimensions for a landing as defined in the Building Code.”

According to this Rule of Measurement, building coverage does not include an Open Structure unless it is a “raised deck” or “exterior balcony” per Sec. 13.1.5.9.

An Open Structure is defined as being:
1. At least 50% open to the sky, and
2. If it has fences or walls, there are no more than two sides with fences or walls that are greater than 6’ in height and less than 50% open.

The Rule of Measurement for building coverage would generally include the following:
- All areas enclosed by a roof, such as covered porches or patios, unless specifically excepted in Design Standard Exceptions
- Covered or uncovered decks, patios, porches or stairs/landings raised more than 2.5’ above grade, but not including the area of a pool or spa inset in a deck (unless the floor of the pool or spa is more than 2.5’ above grade)
- Bay windows, second floor projections (projections beyond the footprint)
- Projecting cantilevered platforms (balcony, exterior)
- Detached accessory structures (completely enclosed or partially enclosed)

In general, the following would not be included as part of the DZC building coverage calculation:
- Fenced or walled trash facilities, pits for household garbage cans, fire pits (“open structures”)
- Area beneath eaves (not part of a structure’s footprint) Note: an eave is defined as the underpart of a sloping roof overhanging a wall.
- Area beneath trellis or arbor (assuming they meet definition of “open structures”)
- Decks or patios raised 2.5’ or less above grade and uncovered (“open structures”)
- In-ground pools or ponds, spas in decks 2.5’ or less above grade (“open structures”)
- Planters, raised flower/garden beds (assuming these are “open structures”)
- Ground-mounted AC units (“utility and equipment” detached accessory structures excluded from other types of structures – see Section 4.3.4.2.B.4 and similar provisions in DZC, Articles 3-9)

Above examples may not always apply.
Check the DZC Rules of Measurement definition if in doubt.
FC 59 – Requirement for Minimum Amount of Unobstructed Open Space

In FC59, Section 59-2(305), “Unobstructed Open Space” is defined as: “Land with no buildings thereon, except clubhouses and other similar recreational facilities, fenced or walled trash facilities and pits for household garbage cans.” For example, in the R-0, R-1, R-2 zones, standards applicable to a 6250 sq. ft. zone lot require a minimum of 62.5% unobstructed open space (with 60% of the “rear portion of the zone lot” required to be open space).

In addition to the definition above, the following provisions relate to what “counts” as unobstructed open space apply in specified zone districts:

- In the R-0, R-1, R-2 and R-2-B zone districts, unobstructed open space includes any areas open to the sky, including driveways; driving aisles, unenclosed parking spaces (except in the R-2 PBGs); porches, terraces, patios or decks the surface of which is 2.5’ or less above grade; and unenclosed areas covered by a trellis or arbor.
  - **Note:** These are generally the same types of areas and “open structures” NOT included in the calculation of “Building Coverage” in the DZC.

- In the R-0, R-1 and R-2 zone districts, the following areas are NOT included as unobstructed open space: (1) Any area bordered by walls on more than three sides; (2) any porch, terrace, patio or deck enclosed by any railing, wall, or similar structure more than 3’ in height; and (3) any area beneath a projecting architectural or structural element such as balconies, bay windows, or second floor projections, excepting eaves.
  - **Note:** These are generally the same types of areas and “partially enclosed structures” INCLUDED in the calculation of “Building Coverage” in the DZC.

- Standards for unobstructed open space in the R-0, R-1 and R-2 zone districts are more stringent than in the R-2-B or other zone districts.

- The CCN zone uses a different rule of measurement for open space.

**Comparison of DZC and FC59 Rules of Measurement and Examples**

In contrast to the DZC standard of building coverage, the FC59 standard refers to unobstructed open space. The two standards are almost the direct inverse of each other. However, there are some important differences between the rules of measurement in the two codes. For instance:

- **FC59** allows clubhouses to be counted as unobstructed open space, in contrast to the DZC, where a clubhouse (completely enclosed structure) would be included in the building coverage calculation.

- The DZC standard for building coverage includes “partially enclosed structures” enclosed on 3 or more sides with fences or walls that are greater than 6’ high, and less than 50% open. In contrast, FC59 excludes structures such as a porch, terrace, patio or deck enclosed by a railing, wall, or similar structure over 3’ high in R-0, R-1, and R-2 districts from the open space calculation.

If you have further questions, please contact your supervisor or Zoning Administration.