Rules of Measurement

Division 13.1

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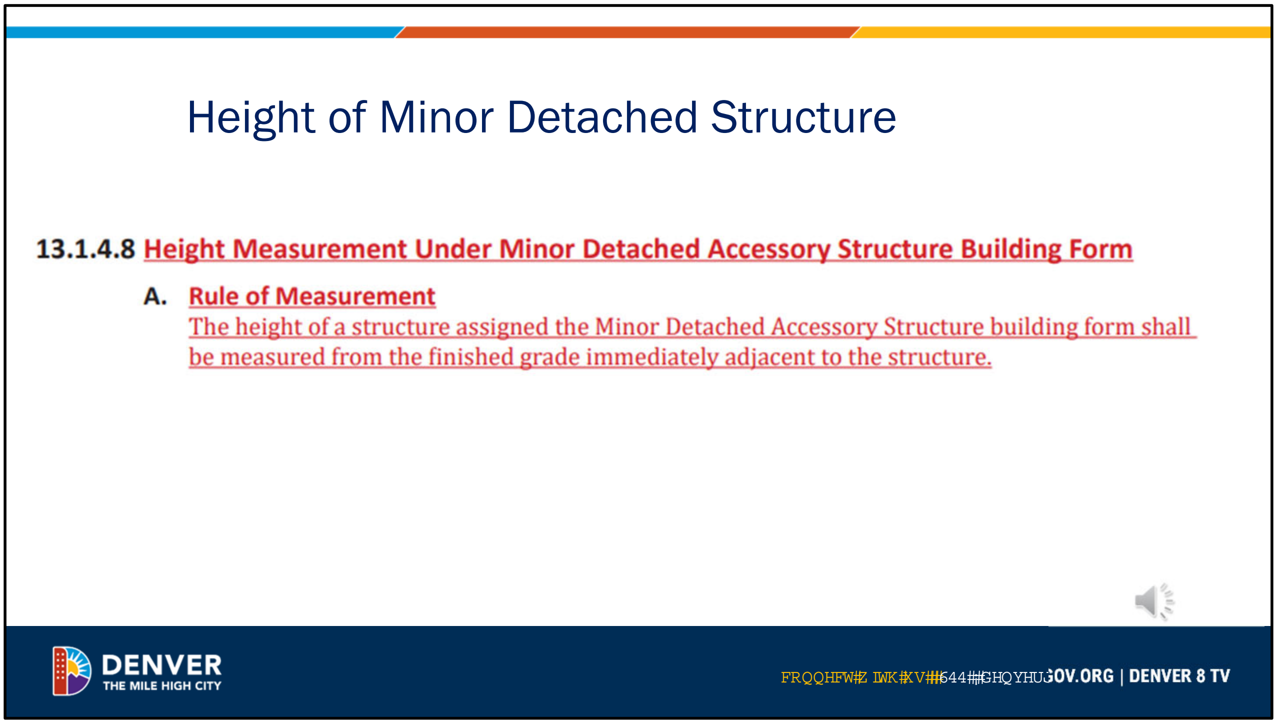
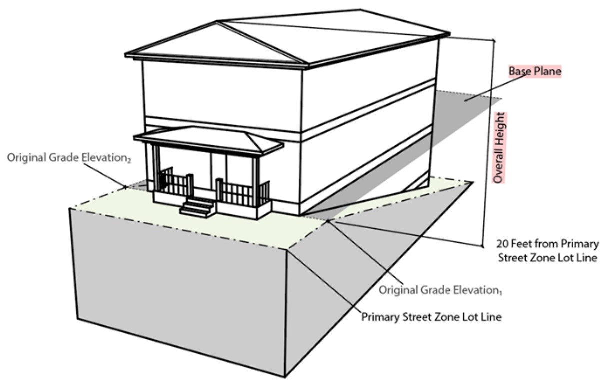


For minor detached structures, the height will be measured from the finished grade immediately adjacent to the structure. Remember, these are the most minor of accessory structures, like sheds and planters. When it comes time to verify the height of a shed or other small structure, it is simpler to take the height from the immediately adjacent grade, rather than try to use a base plane or other point on the property.

Measuring Height



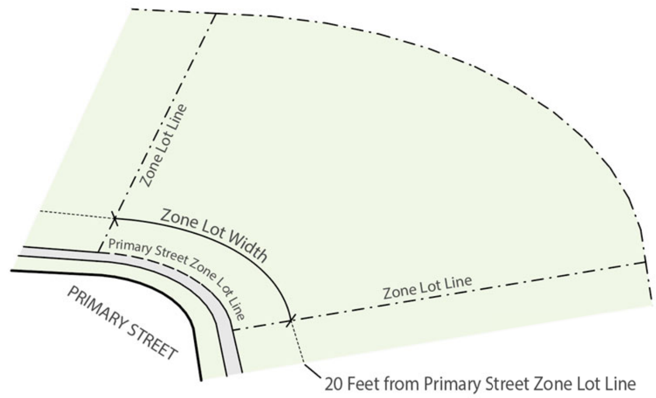
- Section 13.1.2 – Height for All SU, TU, TH, RH, E-MU-2.5, MU-3 and RO-3 Zone Districts
- Now: average elevation of original grade at the side interior zone lot lines (to establish the front base plane) will be measured 20 feet from the primary street zone lot line along the side interior zone lot lines instead of at the primary street setback.

Why? Simplifies planning for applicants and reviewers. You know where the base plane should be measured without any analysis of neighboring properties. The 20 feet is based on the typical ;

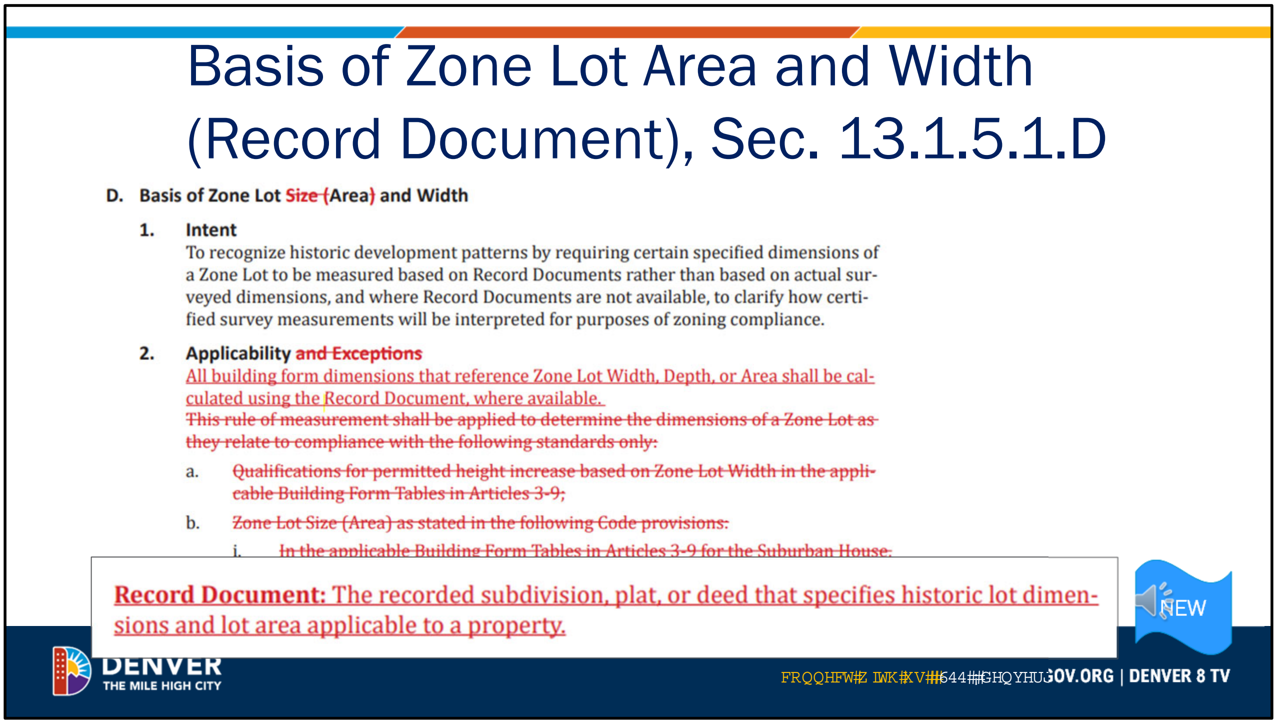
Measuring Zone Lot Width

13.1.5.1 Zone Lot Area and Width

Use 20 feet from Primary Street Zone Lot Line



Why change this? Simplifies planning for applicants and reviews. You know where zone lot width should be measured without any analysis of neighboring properties! No risk that a neighbor’s house could change and change your zone lot width by triggering a greater or smaller PSS applied after home has been constructed.



Simplify the required use of a record document to determine zone lot area and zone lot width by stating that all building form dimensions that reference zone lot width, depth, and area, shall be calculated using the record document. We define record document in this rule of measurement and have added it as a new defined term. That is, a recorded subdivision, plat, or deed; an approved zone lot amendment or recorded dedication.

Basis of Zone Lot Area and Width (Record Document), Sec. 13.1.5.1.D

3. **Exception**
   Where a Record Document is not available, an applicant shall submit an Improvement Survey Plat (ISP) or a Land Survey Plat (LSP) prepared by a Qualified Professional to determine the dimensions or area of the Zone Lot.

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This exception states that when a record document is not available, an applicant shall submit an Improvement survey plat or land survey plat prepared by a qualified professional to determine the dimensions or area of the zone lot.

Basis of Zone Lot Area and Width (Record Document), Sec. 13.1.5.1.D

4. Rule of Measurement

a. The Zoning Administrator shall make a final determination of the dimensions or area of the Zone Lot based on the Record Document, where available.

i. For the purposes of this provision, a "Record Document" shall mean the recorded ~~Plat or S~~subdivision, plat, or deed that specifies historic ~~platted~~ lot ~~measurements~~ dimensions applicable to the subject property. An approved Zone Lot Amendment or recorded dedication shall also qualify as a "Record Document" for the Zone Lot.

ii. For purposes of this provision, the Zoning Administrator shall not rely on resurveys as the Record Document when the original historic subdivision or plat is available.

Now we get to the actual rule of measurement. Here’s that definition again, in 4.A.i. Then, in two is where we state that a resurvey is not considered a record document when the original historic subdivision plat is available.

Basis of Zone Lot Area and Width (Record Document), Sec. 13.1.5.1.D

b. ~~Where a Record Document is not available, an applicant shall submit an Improvement Survey Plat (ISP) or a Land Survey Plat (LSP) prepared by a Qualified Professional to determine the dimensions of the Zone Lot.~~ Whether using the Record Document or an ISP or LSP, ~~W~~when a Zone Lot measurement is ~~within~~between 99.5% and 100.5% of ~~one-tenth of a foot per 25 feet of~~ the applicable standard, it shall be determined to meet that standard.

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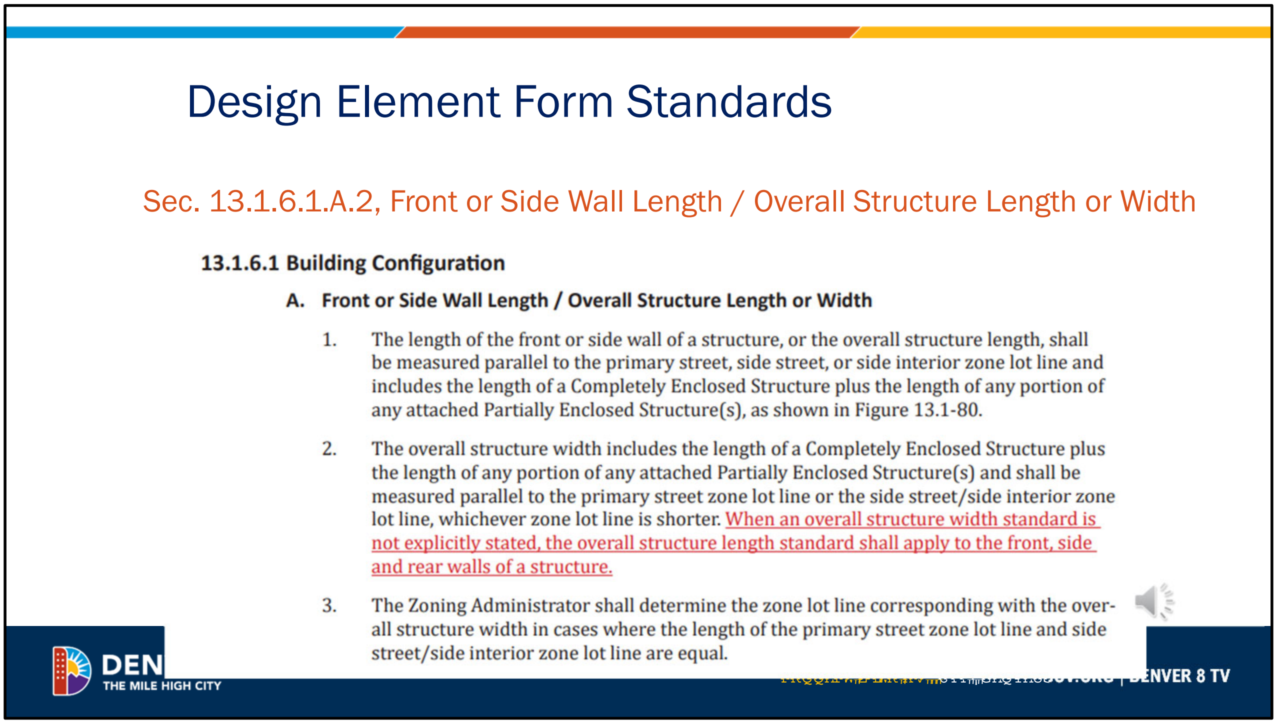
The next part of the rule of measurement revises and simplify the rule for the "margins" for determining a single measurement for the zone lot per the applicable standard. This is less complex than the rule of measurement that's been removed.



In the rule of measurement for the overall structure width and length, we’ve added a clarifying sentence that when the width is not stated, the overall structure length shall apply to the front, side, and rear walls.

13.1.6 Design Element Form Standards

Sec. 13.1.6.1.C.2.a, Mass Reduction Rule of Measurement

2. Rule of Measurement

a. The Mass Reduction is calculated as a percentage (%) using the "gross area without building coverage" at a height of 31 feet or the highest point of the second story, whichever is less, divided by the total gross square foot area of the zone lot and multiplied times 100. For purposes of Mass Reduction, "gross area without building coverage" shall be calculated as the gross area from all zone lot lines to the exterior faces of the following structures:

i. Structure, Completely Enclosed;

ii. Structure, Partially Enclosed; ~~and~~

iii. Balcony, Exterior;~~:~~ and

iv. Balcony, Interior.

See Figure 13.1-82

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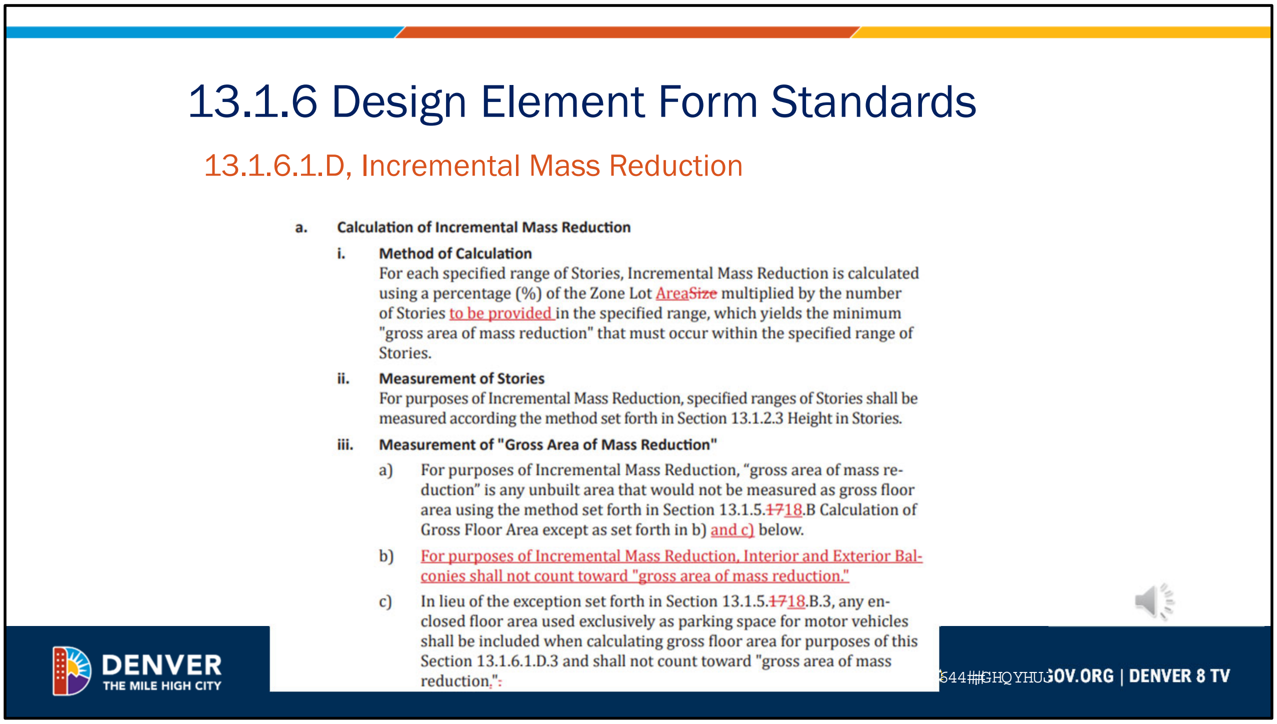
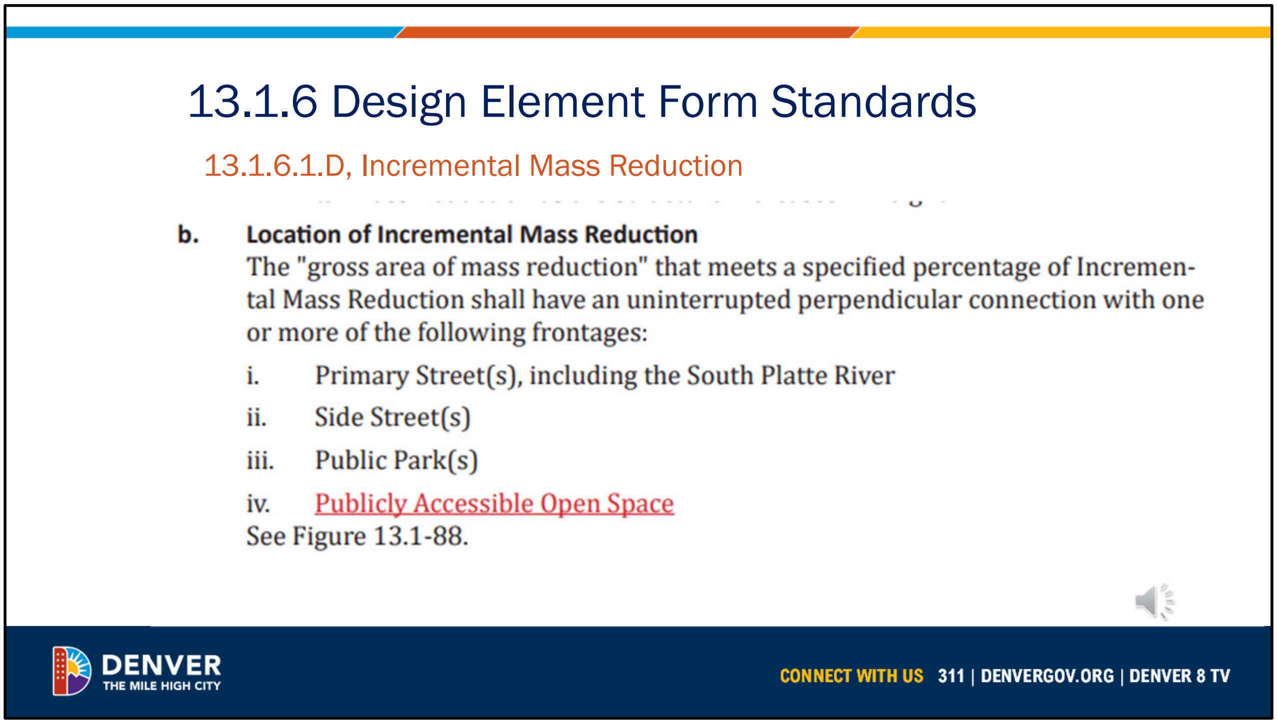
We've added Interior Balconies to the list of elements that count toward the Mass of a building for purposes of calculating Mass Reduction.



Since gross area of mass reduction is any unbuilt area, we've added an explicit exception for interior and exterior balconies – these DO NOT count toward the gross area of mass reduction.



Also under the incremental mass reduction rule of measurement, we've added publicly accessible open space to the list of frontages to which the mass reduction shall have a perpendicular connection.

Transparency Alternatives (13.1.6.3.A.5.a – c)

Removal of display cases, Automated Teller Machines, and Wall Design Elements as alternatives to transparency

- Focus alternatives to transparency on design elements that better generate pedestrian interest

Figure 13.1-108

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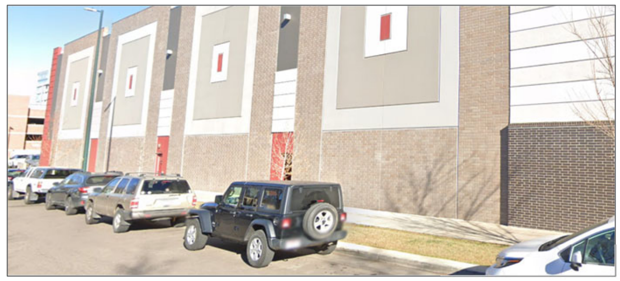
Moving on to Transparency alternatives: The transparency requirement is there to provide a streetscape that is engaging to pedestrians. Typically this is provided in the form of windows, but the code offers alternatives. Some of these alternatives have not resulted in that engaging streetscape or better design outcomes and so we proposed removing those alternatives in the Bundle. The three alternatives that were removed were ATMs, display cases, and wall design elements.

Better Design Outcomes, Less Time in Review

Transparency Alternatives

Remaining Alternatives to Transparency

- Permanent Art
- Permanent Outdoor Gathering Areas



Above: Example of "a variation in material, pattern, and/or color," that is <u>no longer</u> allowed as an alternative to transparency

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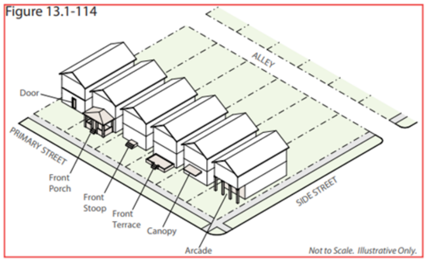
This photo shows an example of a "wall design element" being used in lieu of transparency, where the design outcome did not foster an engaging pedestrian environment at the street. There will still be alternatives to transparency –permanent art and permanent outdoor gathering areas do serve the same purpose as transparency and are appropriate alternatives – those will continue to be available as alternatives.

Design Element Form Standards

Sec. 13.1.6.3 Street Level Activation
B. Pedestrian Access

Figure 13.1-114



b. Entry Feature

i. Where required by the Primary Building Form Standards, an Entry Feature shall signal the presence of an Entrance and shall include a clear and obvious publicly accessible connection between the Street and the Primary Uses within the building (e.g., a walkway).

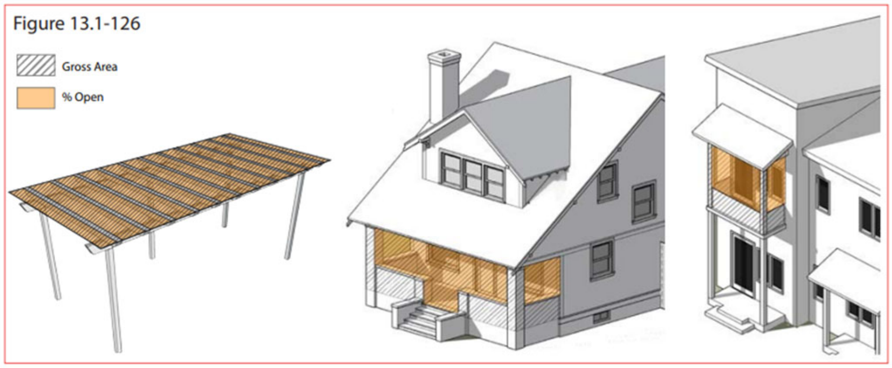
ii. An Entry Feature shall be located either on the Primary Street-facing Facade or between the Primary Street-facing Facade and the Primary Street Zone Lot Line. See Figure 13.1-114.

iii. An entry feature shall be a Door, ~~Gate,~~ Unenclosed Porch, Front Stoop, Front Terrace, Canopy, and/or Arcade. See Figure 13.1-114.

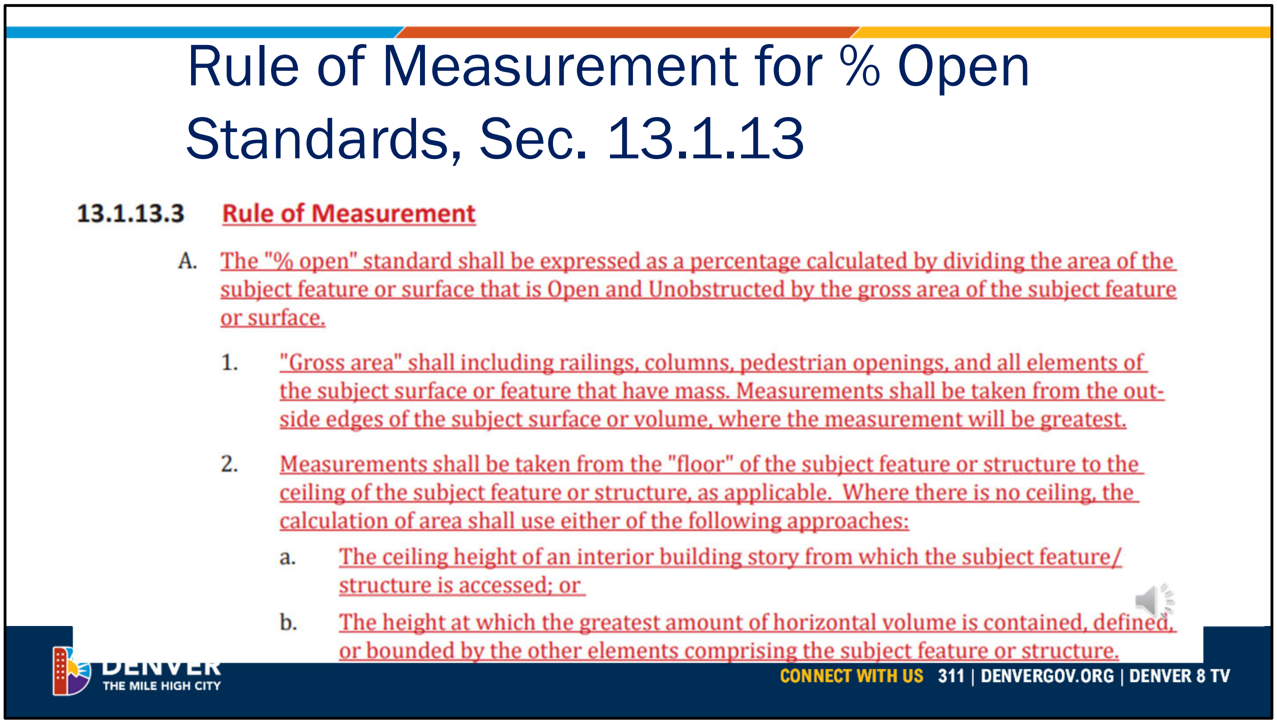
iv. A Facade is "Street-facing" when it meets the criteria in Section 13.1.6.5 Determination of "Street-Facing" Building Elements.

When the form standards require a pedestrian access entry feature, we've removed the option to use a gate as an entry feature. Previously, the graphic showed a lone gate standing in the front yard as an example and that had been used on at least one occasion, which is not the type of outcome we're looking for when pedestrian access is required.

Rule of Measurement for % Open Standards, Sec. 13.1.13



We've added a new rule of measurement for standards that require a certain percentage of a structure or feature to be a certain percentage open. Examples include coverings above outdoor gathering areas and porches.

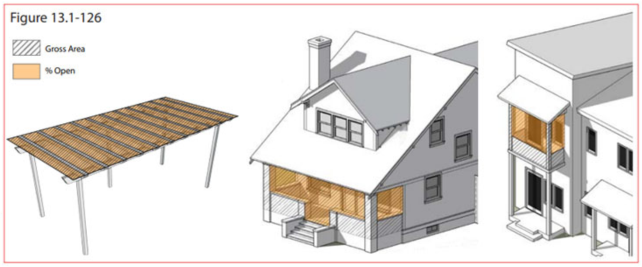


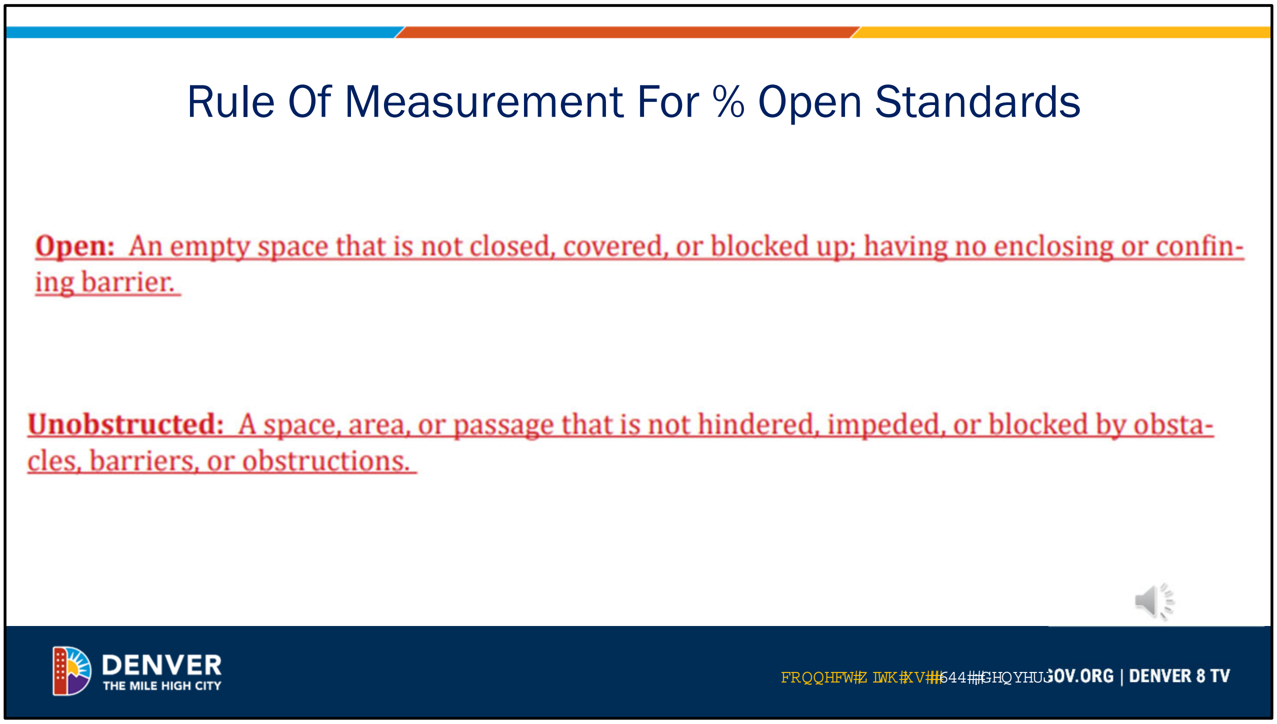
- Calculated by dividing the area of the subject feature or surface that is Open and Unobstructed by the gross area of the subject feature or surface
- "% open" is measured independently for each surface or feature to show compliance with the applicable zoning standard
- Measurements are taken from the floor of the subject feature

Rule Of Measurement For % Open Standards

B. "% open" shall be measured independently for each surface or feature to show compliance with the zoning standard at issue (e.g., % open is measured separately for each side of the 3 sides of a porch to determine whether a setback exception is allowed). A calculation of "% open" that is a cumulative total of % open for all subject surfaces or features is not allowed (e.g., % open is not the sum of the open/unobstructed surface area of all 3 sides of a porch divided by the sum of the gross area of all 3 sides of the porch).

Figure 13.1-126





New definitions have been added for the words open and unobstructed, in case there are any questions about what these words mean. Open is an empty space that is not closed, covered, or blocked up; having no enclosing or confining barrier.

Rule Of Measurement For % Open Standards

Additional Rules for Permanent Mechanized Coverings (13.1.13.4):
Measure by the most covering/least open position.

13.1.13.4 Additional Rules for Permanent Mechanized Coverings

When a "% open" standard applies to a mechanized covering over a structure or land use and the standard requires a minimum "% open to the sky," such as a movable or retractable covering over an outdoor gathering area or outdoor recreational use, the % open standard shall be measured and calculated with the mechanized covering in its most fully covering (not retracted) position and in a position where the covering is the least "Open" as that term is defined in Article 13 of this Code. See Figure 13.1-126.

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Finally, mechanized coverings have become more common in recent years in Denver. This gives clarity to how the percent open should be measured for these coverings. The percent open standards shall be measured and calculated with the covering in its most covering, least-open position. This tells us to use the least-open scenario to go by when determining if a structure is 50% open to the sky.

Rules of Measurement

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