

Standard Operating Procedure

How To Calculate Building Heights

Re: Figuring the height of a building for Zoning and Building Code purposes

The following definitions will be used in calculating the height of a building. Section 503.2.4 BASEMENTS is used for calculating stories for use in Table 500 of the Standard Building Code and not for zoning purposes.

GRADE. A reference plane representing the average of finished ground level adjoining the building at all exterior walls.

HEIGHT, BUILDING. The vertical distance from grade to the highest finished roof surface in the case of flat roofs or to a point at the average height of the highest roof having a pitch. Height of a building in stories includes basements, except as specifically provided for in 503.2.4.

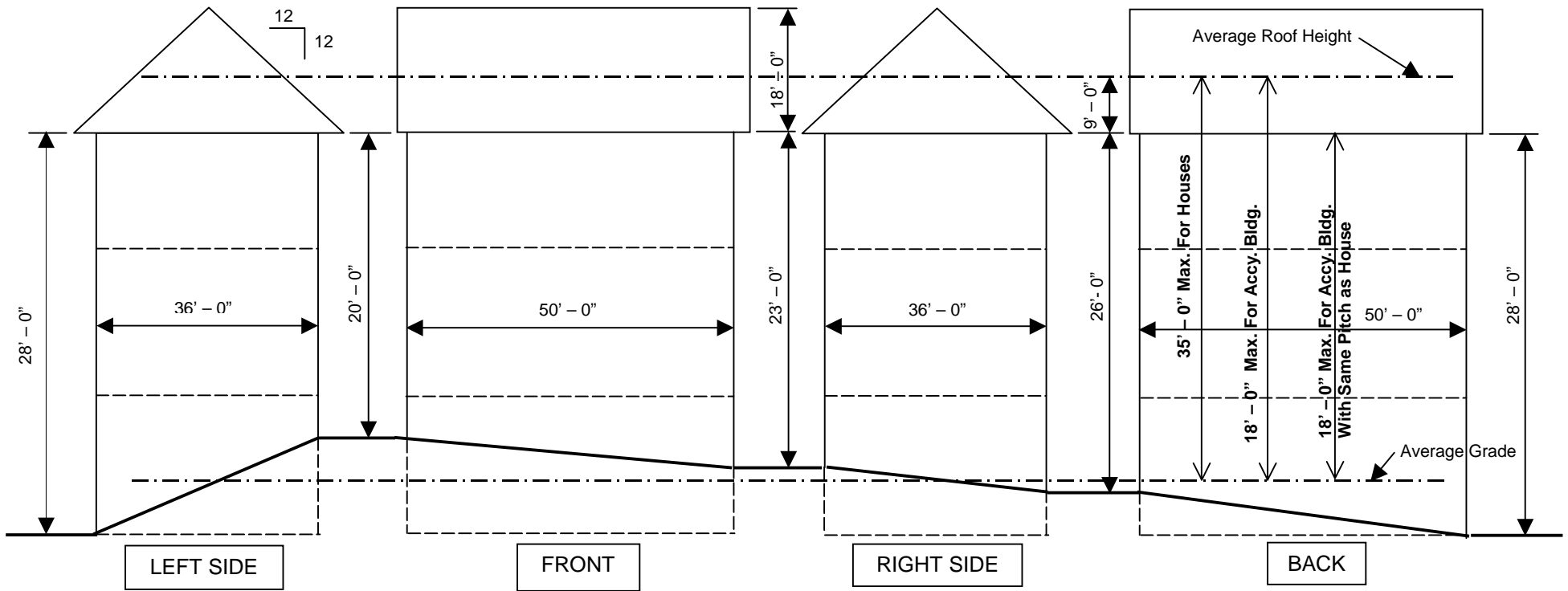
503.2.4 BASEMENTS. A basement of a building shall not count as a story, when applying Table B500 for allowable building height, if the upper surface of the first floor above such basement complies with all of the following:

1. is less than 7 ft (2134 mm) above grade,
2. is less than 7 ft (2134 mm) above finished ground level for more than 50 percent of the perimeter of a building, and
3. is less than 12 ft (3658 mm) above finished ground level around the entire building perimeter.

Note: A basement is counted as a story when applying other sections of the code.

Please go to www.knoxmpc.org to check for building height limitations for each zone.

See attached diagram for clarification.



EXAMPLE BUILDING HEIGHT CALCULATION

1. Left Side = $((28+20) / 2) * 36 = 864$
2. Front = $((20+23) / 2) * 50 = 1075$
3. Right Side = $((23+26) / 2) * 36 = 882$
4. Back = $((26+28) / 2) * 50 = 1350$
5. $(864 + 1075 + 882 + 1350) / (36 + 50 + 36 + 50) = 4171 / 172 = 24.25$
6. Average Height from Grade to Eave = 24' - 3"
7. Roof Height / 2 = 18 Ft / 2 = 9 Ft.
8. Building Height = 24' - 3" + 9' - 0" = 33' - 3"