

BASIC DESIGN INFORMATION

CODES

Jurisdictions served by Pikes Peak Regional Building Code have adopted the following codes:

- 2023 Pikes Peak Regional Building Code (PPRBC)
- 2021 International Building Code (IBC)
- 2021 International Existing Building Code (IEBC)
- 2021 International Energy Conservation Code (IECC)
- 2021 International Mechanical Code (IMC)
- 2021 International Fuel Gas Code (IFGC)
- 2021 International Swimming Pool and Spa Code (ISPSC)
- 2018 International Plumbing Code (IPC)
- 2020 National Electrical Code (NEC)
- 2017 ICC/ANSI A117.1 Accessibility Standard
- ASME A17.1, 2019 Edition, Safety Code for Elevators & Escalators
- ASME A17.3, 2005 Edition, Safety Code for Existing Elevators & Escalators
- ASMEA18.1 - 2017 Edition, Safety Standard for Vertical Platform Lifts and Stairway Chairlifts

The International Fire Code and amendments are adopted by the Fire authority. Plans are reviewed for compliance by the Zoning and Fire authorities. Contact those agencies directly for plan submittal requirements (see page 7).

The following criteria must be included on submittal documents:

SNOW LOADS

Grade Plane - Average elevation of finished ground level adjacent to the building at exterior walls.

Flat Roof Snow Load - Structure shall be designed for the specified uniform snow load, and need not act concurrently with unbalanced loading and drifting. Load may be reduced for slope per ASCE 7-16, however, **no other reductions are permitted.**

Unbalanced Roof Snow Load - Structure shall be designed for unbalanced loading per ASCE 7-16, Section 7.6, where applicable. Balanced and unbalanced loads shall be analyzed separately. **Winds from all directions shall be accounted for when establishing unbalanced loads.**

Grade plane	Below 7000'	At or above 7000'
	Ground snow load - p_G : 43 psf uniform Flat roof snow load - p_r : 30 psf uniform	Ground snow load - p_G : 57 psf uniform Flat roof snow load - p_r : 40 psf uniform

Design factors

Exposure Factor C_e : 1.0	} Minimum based on Occupancy Category per Table 1604.5
Thermal Factor C_t : 1.0	
Importance Factor I : 1.0	

WIND LOADS

Basic wind speed

Category I/II: 130 mph (V_{ult})

Category III: 135 mph (V_{ult})

Category IV: 140 mph (V_{ult})

Exposure category: Exposure C required

EARTHQUAKE LOADS - Code sets spectral response factors and cannot be numerically less than the specified values.

Short period spectral response S_s : 18.5%

1-Second spectral response S_1 : 5.9%

LIVE & DEAD LOADS - Refer to Code