BASIC DESIGN INFORMATION

CODES

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

- 2017 Pikes Peak Regional Building Code (PPRBC)
- 2015 International Building Code (IBC)
- 2015 International Existing Building Code (IEBC)
- 2015 International Mechanical Code (IMC)
- 2015 International Fuel Gas Code (IFGC)
- 2015 International Plumbing Code (IPC)
- 2017 National Electrical Code (NEC)
- 2009 ICC/ANSI A117.1 Accessibility Standard

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 contact documents:

SNOW LOADS

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

Flat Roof Snow Load — Building structure is designed for the specified uniform snow load, and cannot act concurrently with unbalance loading and drifting. Load may be reduced for slope per ASCE 7-10, no other reductions are permitted.

Unbalanced Loading & Drifting — Building structure is analyzed for drifting per ASCE 7-10. The specified ground snow load ($p_g$) is used to establish a new flat roof snow load ($p_f$) for this analysis only. The new value ($p_f$) is then used in the unbalanced loading and drifting calculations per Section 7.6, ASCE 7.

<table>
<thead>
<tr>
<th>Grade plane</th>
<th>Below 7000'</th>
<th>At or above 7000'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat roof snow load</td>
<td>$p_r$: 30 psf uniform</td>
<td>Flat roof snow load</td>
</tr>
<tr>
<td>Unbalanced load &amp; drifting</td>
<td>$p_g$: 20 psf</td>
<td>Unbalanced load &amp; drifting</td>
</tr>
</tbody>
</table>

Design factors

- Exposure Factor $C_e$: 1.0
- Thermal Factor $C_T$: 1.0
- Importance Factor $I$: 1.0

Minimum based on Occupancy Category per Table 1604.5

WIND LOADS

Basic wind speed 130 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 $S_t$: 5.9%

LIVE & DEAD LOADS — Refer to Code