CITY OF CAÑON CITY

Building Department

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CLIMATIC & GEOGRAPHIC DESIGN CRITERIA FOR CAÑON CITY, CO UNDER THE 2018 IRC AND 2018 IBC.

RESIDENTIAL DESIGN CRITERIA

GROUND SNOW LOAD[o]	WIND DESIGN				SEISMIC DESIGN CATEGORY[f]	SUBJECT TO DAMAGE FROM			ICE BARRIER UNDERLAYMENT REQUIRED[h]	FLOOD HAZARDS[g]	AIR FREEZING INDEX[i]	MEAN ANNUAL TEMP[j]
	Speed[d] (mph)	Topographic Effects[k]	Special wind Region[l]	Windborne debris zone[m]		Weathering[a]	Frost line depth[b]	Termite[c]				
30	100	Engineer of Record	Yes	No	B	Severe	27"	Slight to Moderate	Not Required	FEMA Flood Maps CCMC TITLE 21	2000	54.2° F.

MANUAL J DESIGN CRITERIA[n]						
Elevation	Altitude correction factor[e]	Coincident wet bulb	Indoor winter design relative humidity	Indoor winter design dry-bulb temperature	Outdoor winter design dry-bulb temperature	Heating temperature difference
5332	0.83	59°	30%	70°	5°	65°
Latitude	Daily range	Summer design grains	Indoor summer design relative humidity	Indoor summer design dry-bulb temperature	Outdoor summer design dry-bulb temperature	Cooling temperature difference
38	H	-33 to -48	50%	75°	94°	19°

COMMERCIAL DESIGN CRITERIA

Section 1608.2 Ground Snow Loads.

Snow loads for Cañon City are as follows: Snow Load (Ground and Roof) shall be 30 psf. Reductions in snow load below 30 psf are not permitted in ASCE 7-16 Sections 7.3, 7.4, 7.7, 7.8, or 7.13.1. The 30 psf snow load shall be increased by the importance factor of 1.10 for Risk Category III and 1.20 for Risk Category IV buildings and other structures.

Section 1609.3 Basic Design Wind Speed.

The basic design wind speed, V, in mph, for the determination of the wind loads shall be determined by Figures 1609.3(1) through (8). The basic design wind speed, V, for use in the design of Risk Category II buildings and structures shall be obtained from Figures 1609.3(1) and 1609.3(5). The basic design wind speed, V, for use in the design of Risk Category III buildings and structures shall be obtained from Figures 1609.3(2) and 1609.3(6). The basic design wind speed, V, for use in the design of Risk Category IV buildings and structures shall be obtained from Figures 1609.3(3) and 1609.3(7). The basic design wind speed, V, for use in the design of Risk Category I buildings and structures shall be obtained from Figures 1609.3(4) and 1609.3(8). The basic design wind speed, V, for the special wind regions indicated near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements. The basic design wind speeds, V, are as follows:

- Buildings and Structures of Risk Category I: VULT = 115 mph, VASD = 90 mph
- Buildings and Structures of Risk Category II: VULT = 126 mph, VASD = 100 mph
- Buildings and Structures of Risk Category III or IV: VULT = 139 mph, VASD = 110 mph

1612.3 Establishment of flood hazard areas.

To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study for Fremont County, Colorado and incorporated areas," dated July 3, 2012, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.