



Design Criteria IRC

GROUND SNOW LOAD ^o	WIND DESIGN				SEISMIC DESIGN CATEGOR Y ^f	SUBJECT TO DAMAGE FROM			ICE BARRIER UNDERLA YMENT REQUIRE D ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	Speed ^d (mph)	Topograp hic effects ^k	Special wind region ^l	Windborn e debris zone ^m		Weatheri ng ^a	Frost line depth ^b	Termite ^c				
30 psf	105 ult	NO	NO	NO	B	Severe	36"	sli to mod	NO	IBC 1612.3	1500	45°F
MANUAL J DESIGN CRITERIA ⁿ												
Elevation			Altitude correctio n factor ^e	Coincide nt wet bulb	Indoor winter design relative humidity	Indoor winter design dry-bulb temperature			Outdoor winter design dry-bulb temperature		Heating temperature difference	
5,344 ft			0.84	59° F	50%	70° F			1° F		69° F	
Latitude			Daily range	Summer design gains	Indoor summer design relative humidity	Indoor summer design dry-bulb temperature			Outdoor summer design dry-bulb temperature		Cooling temperature difference	
40° N			High(H)	—	50%	75° F			91° F		16° F	

Design Criteria IBC

For Design Geodatabase, Enter **Thornton, CO and risk category in the hazard tool at
<https://ascehazardtool.org/>

Design criteria depends on building risk category

1. Wind Speed – **See Section 1609.3 (see also tornado loads).
2. Exposure – ** see definitions section 1609.4.3
3. Ground snow load – ** See IBC 1608.2 and ASCE 7
4. Footing depth – minimum of 36 inches to bottom of footing
5. Seismic Design – ** B or provide data from design Geodatabase
6. Weathering – Severe
7. Termite – Slight to moderate
8. Winter design temperature – 1°F
9. Ice barrier requirement – not required
10. Air-Freezing index – 1500
11. Mean annual temperature – 50°F

Adopted Codes*

Building Inspection Division 9500 Civic Center Drive Thornton, CO 80229 303-538-7250



1. 2024 International Building Code
2. 2024 International Residential Code
3. 2024 International Plumbing Code
4. 2024 International Mechanical Code
5. 2024 International Fuel Gas Code
6. 2024 International Energy Conservation Code
7. 2024 International Existing Building Code
8. 2024 International Fire Code
9. 2023 National Electric Code
10. ICC A117.1-2017 Accessible and Usable Buildings and Facilities

* Current codes are effective July 1, 2025

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