

City of Casa Grande Adopted Codes

The Building Division is currently reviewing permits under the following codes as adopted and amended under [Title 15](#) of the Casa Grande Code of Ordinances. Please reference applicable codes on the cover page of each plan set submitted for review.

2019 City of Casa Grande Building and Technical
Administrative Code (CG-BTAC)
2018 International Building Code (IBC)
2018 International Residential Code (IRC)
2018 International Fire Code (IFC)
2018 International Mechanical Code (IMC)
2018 International Plumbing Code (IPC)
2018 International Fuel Gas Code (IFGC)

2009 ICC A117.1 Accessible and Usable Buildings and
Facilities (A117.1)
2018 International Energy Conservation Code (IECC)
2018 International Property Maintenance Code (IPMC)
NFPA 99 Standards for Health Care Facilities (NFPA 99)
2017 National Electrical Code (NFPA 70)
2018 International Swimming Pool and Spa Code
(ISPSC)

Residential and Commercial Buildings under the IBC

For both residential and commercial buildings constructed under the IBC, the structural design criteria shall be performed in accordance with *IBC Chapter 16, ASCE 7-16*, and the project geotechnical investigation. Please note that design criteria shall be site specific.

Single Family, Two Family, and Townhomes under the IRC

For residential buildings and structures constructed under the IRC, the climatic and geographic design criteria shall be as provided in the completed *IRC Table R301.2(1)* provided below.

IRC TABLE R301.2(1)		
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA		
Ground Snow Load		0 psf
Wind Design	Speed (mph)	$V_{ult} = 115$
	Topographic Effects	No
	Exposure Category	C
	Special Wind Region	No
Seismic Design Category		B
Subject to Damage From	Weathering	Negligible
	Frost Line Depth	0 inches
	Termite	Heavy (Certificate of soil treatment req'd)
Winter Design Temperature		34°
Ice Barrier Underlayment Required		No
Flood Hazards		See Pinal Co Flood Control Viewer
Air Freezing index		No Freezing Index Value
Mean Annual Temperature		70.1°

IRC TABLE R301.2(1)	
ACCA MANUAL J DESIGN CRITERIA	
Elevation	1415
Latitude	32°53' North
Winter Heating	32°F
Summer Cooling	107°F
Altitude Correction Factor	1.0
Indoor Design Temperature	70°F
Design Temperature Cooling	75°F
Heating Temperature Difference	38°F
Cooling Temperature Difference	32°F
Daily Range	High

Residential Energy Efficiency Design Minimums

New & Replacement HVAC (sized per ACCA Manual J & S)

- Gas Furnaces and Boilers, 80% AFUE; Air conditioners and heat pumps, 14 SEER

Duct Size and Insulation

- Per ACCA Manual D, R-8 within attics or exterior of building or R-6 within other portions of the building

Common insulation values

- Walls, R-13; Ceilings, R-38; Windows, U-0.40; Crawl/SoG, R-0; Water/Refrigerant Lines, R-3

Other Common Questions

Gas Water Heaters – High/low combustion air supply required at a rate of 1sq. in / 2000 Btu

Arc Fault and Tamper Resistant Outlets – Required at most locations per 2017 NEC

Attic/Crawl Space Venting – 1sf of vent per 150sf of space served

Re-Roofing – Maximum of two layers of roof covering; ice barrier not required

Egress Windows – Minimum 5.0sf for grade floor or below-grade openings; 5.7sf required for upper stories

Bedroom Dimensions – 7ft minimum dimension and 70sf total; additional persons require 50sf each

Attic Access – Minimum opening 22"x30"

Crawl Space Access – Minimum opening 18"x24"

Drywall/Gypsum Attachment – 12"oc on ceiling, 16"oc at walls framed 16"oc, 12"oc at walls framed 24"oc