WALL & CEILING CONFERENCE

Technical Bulletin 1.002

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California Climate Zones & Prescriptive U Factor Assemblies For Framed Construction

(2013 CA. Energy Code: Effective July 1, 2014)

COMMERCIAL (ALL NON-RESIDENTIAL CONSTRUCTION)* *Unchanged from 2008 CA Energy Code*

	Steel Frame				Wood Frame			
CA Zone	1,6,7	2,4,5,8-16	3		1,5,8	2,4,9-14&16	3,6,7	15
U Factor	.098	.062	.082		.102	.059	.110	.042
Cavity Insulation+ CI***	R19+R5	R21+R11	R19+R7	R13+0	R19+R4	R11+0	R21+R8	

HIGH RISE RESIDENTIAL AND HOTELS OVER THREE STORIES *Unchanged from 2008 CA Energy Code*

	Steel Frame*		Wood Frame	
CA Zone	ALL ZONES	1-10,12,13	11,14-16	
U Factor	.105	.059	.042	
Cavity Insulation+ CI***	R19+R3	R19+R4	R21+R8	

LOW-RISE RESIDENTIAL**: WOOD FRAME *Mandatory = January 1st 2014*

CA ZONE	ALL ZONES
U FACTOR	*.065*
Cavity Insulation + CI***	R19 + NO CI (Wood Framing must include 2"X8" Studs) or
	R15 + R4 CI (Framing is 2"X4" wood stud)

2008 California Energy Code (Under Component Package D)

CA ZONE	1, 14-16	2-10	11-13
UFACTOR***	R21	R-13	R19

Keys to using these tables

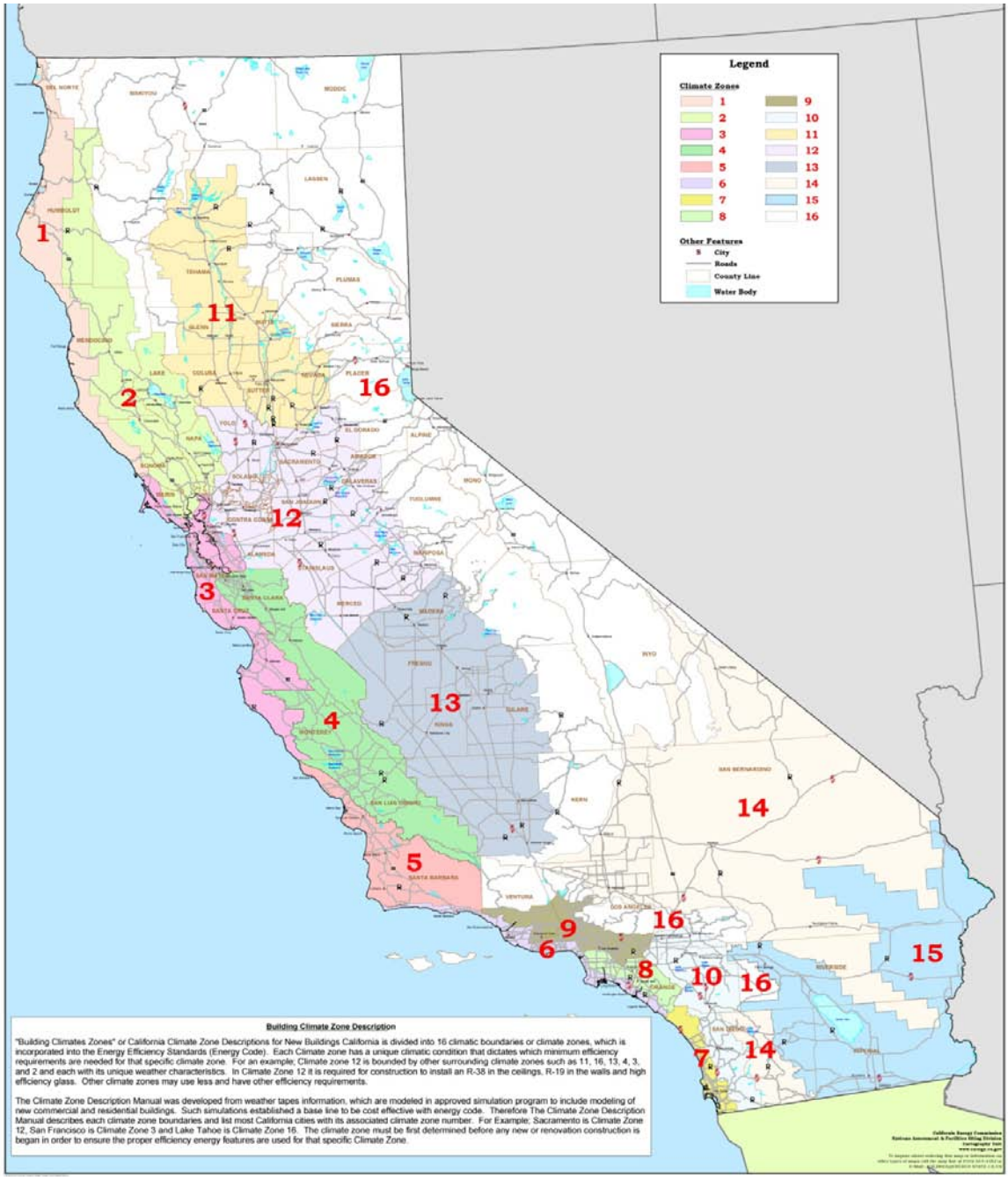
1. Determine project's climate zone (Area Climate zone can be found on page 2), Project Type & Framing Type
2. Determine Project Type: Commercial, High or Low-Rise Residential.
   CA. Energy code does not mandate Type "I" occupancies including hospitals, prisons and nursing homes.
3. Framing Type: Steel Frame or Wood Frame
4. Locate U factor for the climate zone (i.e. climate zone 1 & commercial steel frame = .098)

* Steel Frame = Nominal 18Ga. Studs 16" on Center

** Occupancy Group R, Division 1 & is Multifamily with 3 stories or less or a single family residence of occupancy Group R Division 3.

*** An Example of achieving required U Factor with Cavity Insulation and CI (i.e. R19+ R5)

Note: Air Barrier will be required in zones 10-16 for all commercial construction per 2013 CA. Energy Code.



For a list of climate zones by city:
http://www.energy.ca.gov/maps/renewable/Climate_Zones_by_City.pdf