

**TELLER COUNTY BUILDING DEPARTMENT
GENERAL FRAMING
FIREBLOCKING/DRAFTSTOPPING
January 1, 2007**

✓	Item	Code Reference
	FLOORS	
	Engineered floor joist system, or approved manufactured wood products supplier for floor system and approved Engineered structural support system, site specific is installed per approved plans.	R502.1. R502.8.2 *TCBC – Art. III – R502.2
	Concrete piers are a minimum 8" above ground unless posts are pressure treated.	R407.1
	Wood columns are a minimum 4 X 4 (steel minimum 3" diameter sch. 40)	R407.3
	Restrain lower end of posts from lateral displacement.	R407.3
	Beams, minimum bearing of 3" on concrete or masonry, metal shims.	R52.6
	Floor loads shall be transmitted to the supporting elements.	R501.2 & R301
	Joists have a minimum bearing: 1 ½" on wood or 3" on concrete.	R502.6
	Joists framed from opposite sides overlap each other by a minimum of 3".	R502.6.1
	Joists supported on ends by solid blocking of framing.	R507.1
	Joists and beams size and spanned properly.	Tables:R502.3.(1) & (2)
	Double joists under parallel bearing walls. (or engineering if loaded)	R502.4
	Joist minimum clearance above ground 18" & girders 12" unless treated.	R319.1 #1
	Double – header and trimmer when span exceeds 4 feet.	R501.10
	Header joists greater than 6 feet, tail joists greater than 12 feet. Require joist hangers or beam support, tail joist hangers or 2 X 2 ledger.	R502.10
	Maximum 1 joist depth horizontally under perpendicular bearing wall.	R502.4
	Holes and notching.	R502.8.1
	Crawlspace access minimum 18 X 24 with a permanent ladder.	R408.3
	Crawlspace areas are ventilated 1 square foot per 150 square feet of area. Example: 1,800 sq. ft. crawlspace 1,800 – 150 = 12 sq. ft. of venting or 12 X 144 sq. in. = 1,728 sq. in. 8 X 16 vent with actual opening of: 7 X 15 = 105 sq. in. 1,728 – 105 = 16.45 or 17 of these openings to vent crawlspace	R408.2
	Size and thickness of sub floor and fastening.	R503
	Anchor bolts: maximum 12" from sill end, minimum of two per sill, bolts installed per foundation plans, ½ X 7" minimum size, maximum spacing 6 feet.	R403.1.6
	Bottom of sill minimum of 6 inches to ground.	R404.1.6
	Sill materials to be treated or naturally decay-resistant.	R319.1
	Fasteners for treated wood is to be hot dipped galvanized steel, stainless steel, silicon bronze, or copper.	R319.3
	Manufactured wood products will be inspected per their specifications	*TCBC Art. II –R502.2, R802.2..1
	Sub-floor sheathing shall be fastened in accordance with the Tables.	R602.3 (1&2)
	Load bearing dimension lumber for: joists, beams and girders shall be identified by a grading mark of a lumber grading or inspection agency that has been approved by an accreditation body that complies with DOC PS20	R5021
	WALLS	
	Load bearing studs, plates and headers shall be identified by a grade mark of an approved lumber grading or inspections agency complying with DOC PS 20.	R602.1 & 602.1.1
	Approved connections between posts and beams to prevent uplift or lateral displacement.	R502.9
	Foundation plates and sills use treated wood or foundation redwood.	R319.1
	Foundation anchorage must be visible to inspection for compliance with Section R403.1.6 and or architect's/engineer's specifications.	R403.1.6
	Studs have full bearing on sill of at least 2" nominal thickness and width equal to wall studs.	R403.16
	Foundation plates and sills use treated wood or foundation redwood.	R319.1
	The construction of buildings shall be callable of transferring all loads from their point of origin through the load resisting elements to the foundation. (Squash blocking)	R301.1

Size, height, and spacing of studs.	R602.3.1
Studs with notches or cuts repaired, maximum 25% for exterior or bearing studs and 40% for non-bearing studs.	R602.6
Bored holes in studs repaired, maximum 40% for exterior or bearing and 60% for non-bearing studs.	R602.6
Cutting, drilling, or notching the top plate by more than 50% of its width shall be repaired: 0.0054 X 1 ½ metal plate shall be fastened to each side of the opening with not less than 8 – 16d's each side.	R602.6.1
Exterior corners must have a minimum of three studs.	(F) R602.3 (2)
Bearing wall intersections and corners must overlap.	R602.3.2
End joints must offset by 4 inches,{48" offset}	R602.3.2
Openings less than 4 feet in bearing walls require 2- 2 X 4 headers	R602.7
For header spans.	Tables: R502.5 (1) & (2)
Wall bracing.	R602.10
Walls exceeding 10 feet will require an architect or engineer to address	*TCBC
Exterior openings provide the proper amount of light and ventilation.	R303.1 & 303.7.1
Braced wall panel vertical joints shall occur over studs. Horizontal joints shall occur over blocking of a minimum of 1 ½ thickness.	R602.10.7
Sheathing placed on walls shall follow the fastening in Tables.	R602.3 (1&2)
FIREBLOCKING/DRAFTSTOPPING	
Fire blocking shall be provided to cut off all concealed draft openings, (both vertical and horizontal) and to form an effective fire barrier between stories. (1-6 details of areas)	R602.8 1-6
The integrity of fireblocking shall be maintained.	R602.8.1.2
Block concealed wall spaces every 10 feet horizontally & vertically.	R602.8
Block at floor and ceiling levels. (Openings, holes, etc.)	R602.8
Intersections, such as soffits, drops, and coves.	R602.8
Materials may be 1 ½ lumber, ½ drywall, or compressed glass fiber.	R602.8.1
Unfaced fiberglass minimum of 16 inches vertical when used in walls.	R602.8.1.1
Fiberglass shall be compressed and fie tightly.	R602.8.1
When there is usable space both above and below the concealed space of a floor/ceiling assembly, draft stops shall be installed so that the area of the concealed space doe not exceed 1,000 sq. ft. (32' X 32" approx.)	R502.12
½ gypsum board between garage and house, 5.8 garage ceiling and livable space above.	R309..2
No duct opening into garage.	R309.1.1
20 minute self closing door to house from garage.	R309.1
CEILING/ROOF	
Manufactured wood products / I-Joists per specifications.	R807.7.2
Rafters and joists spans per Tables	R802.4.5
Notching and boring	R802.7
Ridge board1 x full depth of cut rafter.	R802.3
Hip and Valley rafters minimum 2 X full depth of cut rafter.	R802.3
Headers and trimmers greater than 4 feet must be doubled.	R802.9
Rafters span can be measured from purlin support.	R802.5.1
Ends of rafters shall be a minimum bearing of 1 ½.	R802.
Trusses shall be engineered, site specific and all details followed.	*TCBC Art. III – R802.2.1 & R802.10.1
Trusses and rafters shall be strapped and have truss blocking.	R802.10.3, R802.8, R802.10.5
No field modifications without engineering.	R802.10.4
Roof Ventilation shall be a minimum of 1/10 for attic spaces.	R806.2
Rafter spaces where ceiling is applied directly to underside shall be ventilated at each separate space.	R806.1
Insulation shall be installed to allow for a 1 inch clearance for free airflow.	R806.3

*Teller County Building Code