

1 CITY OF SANTA FE, NEW MEXICO

2 ORDINANCE NO. 2009-31

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4
5 AN ORDINANCE

6 AMENDING CERTAIN ITEMS OF THE SANTA FE RESIDENTIAL GREEN
7 BUILDING CODE, BEING EXHIBIT A OF CHAPTER VII SFCC 1987, TO CLARIFY
8 AND CORRECT TEXT; TO PROVIDE EQUITABLE REQUIREMENTS FOR
9 DIFFERENT HEATING AND AIR CONDITIONING EQUIPMENT THAT RESULT IN
10 HIGHER GREENHOUSE GAS EMISSIONS THAN THE EQUIVALENT CODE-
11 MINIMUM EQUIPMENT; AND TO BETTER ALIGN ITEMS WITH THEIR PURPOSE
12 FOR THE SIZE OF TREES AT PLANTING AND FOR WATER EFFICIENT
13 FIXTURES.

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15 BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF SANTA FE:

16 Section 1. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe
17 Residential Green Building Code, Section 1, Item 1.3.3 is amended to read:

1.3.3	Minimize slope disturbance.		
*	A. Complete a hydrological/soil study for steep slopes and use this study to guide the design of all structures on the site. Applies to slopes between 20-30%	1	Hydrological/soil stability study results
*	B. Align road or extended driveway with natural topography to minimize its grade and reduce cut and fill.	1	Grading plan with existing and proposed contours. Note: Driveways cannot exceed 10% slope.
	C. Reduce long-term erosion effects through the design and implementation of terracing, retaining walls, landscaping, and restabilization techniques.	1	Grading and drainage plan and/or site plan
	D. 100% of disturbed area is on 0-10% slopes OR	3	Grading and

			drainage plan and/or site plan
	E. No more than 5% of disturbed area for building and driveway construction is on 0-10% slopes and all other disturbed area is on slopes of 0-10%.	1	Grading and drainage plan and/or site plan
1	Section 2. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe		
2	Residential Green Building Code, Section 1, Item 1.5.2 F is amended to read:		
	F. Specify planting of trees of 1½” caliper minimum and irrigation for 1 year, to increase site shading and moderate temperatures (see also Energy Efficiency guideline 3.3.5.1.D specifying siting of trees to reduce the energy consumption of the home). Chinese Elm, Siberian Elm, Russian Olive, Tree of Heaven, and Salt Cedar shall not be allowed.	2	
3	Section 3. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe		
4	Residential Green Building Code, Section 2, Item 2.8.1 is amended to read:		
	2.8.1 Use locally available, indigenous materials such as adobe, and rammed earth, from less than 500 miles radius of site. Twenty-seven total points available.		Builder Certified
	- use locally available, indigenous materials for 50% of the wall structure.	15	
	- use the soils from the site for adobe or compressed block without removing it.	7	
	- use one type of locally available, indigenous material for non-structural and non-decorative item	3	
	- use of additional indigenous materials – one point each	2	
5	Section 4. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe		
6	Residential Green Building Code, Section 2, Item 2.8.4 is amended to read:		
	2.8.4 Use recycled content materials for 50% of the wall assembly. (not for finger jointed studs, engineered lumber or cellulose insulation or for reclaimed lumber from a building that was deconstructed for which points were taken under items 2.3.1 or 2.3.2)	10	Specifications
7	Section 5. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe		
8	Residential Green Building Code, Section 3, Item 3.1.3 is amended to read:		
	3.1.3 Heating, ventilation, or air conditioning (HVAC) equipment that uses electricity instead of natural gas or propane such that the net greenhouse gas emissions from the system are greater than for the code-minimum equipment for the same purpose, such as ground source heat pumps or electric space heating, unless it receives	-5	Show on electrical plan

	at least 20% of its electric load from photovoltaic or other renewable electric source or enough to off-set the additional greenhouse gas emissions using local data, documenting the actual efficiency of the appliance or equipment. (For example, ground-source heat pumps with a Coefficient of Performance of 3.75 would have the same greenhouse gas emissions as a code-minimum 80% efficient natural gas furnace or boiler with a 95% efficient blower and would not receive negative points nor need to off-set with renewable energy.)		
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1 **Section 6. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe**

2 **Residential Green Building Code, Section 3, Item 3.2.1 is amended to read:**

3.2.1	Home performs at X% of energy saving as compared to the RESNET model home. (Must use ASTM test for thermal conductance for R-values, not effective R-values that are sometimes provided. For materials for which no test has yet been conducted, R-value must be calculated using the R-values of the component materials.) Silver: 30% or HERS Index of 70 Gold: 50% or HERS Index of 50 Platinum: 75% or HERS Index of 25 Emerald: 100% or HERS Index of 0	Required 30 50 75 100	REM/Rate or other RESNET approved software report: A projected HERS index shall be submitted at the time of building permit application AND a confirmed HERS index shall be submitted to obtain a Certificate of Occupancy and included in the posting required under "Posting of Green Building Facts" on page 2 of this document.
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3 **Section 7. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe**

4 **Residential Green Building Code, Section 3, Item 3.3.5.1(B) is amended to read:**

B. Use full passive solar design with all items below:	10	Builder spec sheet specifying passive solar design features
• Sun-tempered design as outlined in 3.3.5.1(A)		Documentation

above except additional glazing permitted on south wall		of design process
<ul style="list-style-type: none"> For any room with south-facing glazing > 12%, but not exceeding 20%, of finished floor area, properly sized thermal mass shall be used, which is at least 4" thick masonry material with the surface area 6 times that of south glazing and located in direct sun in winter or line of sight of other thermal mass. Where the ground floor slab is used for solar mass, it shall be insulated below. 		
<ul style="list-style-type: none"> Trombe walls, or other indirect gain systems are recommended for a portion of the south-facing glazing to avoid over-glare and nighttime heat loss. All indirect gain systems are recommended to use an overhang as described below in 3.3.5.1(D). 		
<ul style="list-style-type: none"> Glazing on west walls shall not exceed 2% of floor area or 4% on north and east walls unless use of high thermal efficient windows are used such that the net energy loss is the same as if standard double-pane windows were used based on the HERS analysis. 		
<ul style="list-style-type: none"> Provision for forced air flow to adjoining areas as needed. 		
<i>Note: All applicable items in 3.3.5.1.A except south-facing glazing must also be done in order to receive points for 3.3.5.1.B.</i>		

1 **Section 8. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe**

2 **Residential Green Building Code, Section 3, Item 3.3.6.1 is amended to read:**

3.3.6.1	Conduct onsite third party inspection to verify installation of energy related features such as:	8	Report from third party inspector (likely to be the HERS professional)
	A. Installation of insulation including no gaps, voids, or compression as per manufacturer's specifications.		
	B. Windows and doors flashed, caulked and sealed properly.		

3 **Section 9. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe**

4 **Residential Green Building Code, Section 4, Item 4.1.1 is amended to read:**

4.1.1	Retrofit toilets within the limits of the City of Santa Fe: Lots up to 6,000 s.f. shall retrofit 8 toilets, lots between 6,001 and 8,000 must retrofit 10 toilets, and lots above 8,000 must retrofit 12 toilets to receive points. These points are available to affordable homes (Santa Fe Homes unit, Housing Opportunity Program unit or a low priced dwelling unit as defined in the Santa Fe City Code 1987).	20	N/A -verified by the Water Budget Office staff
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5 **Section 10. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe**

1 **Residential Green Building Code, Section 4, Items 4.2.4 through 4.2.6 are amended to read:**

4.2.4	Water efficient showerhead using conventional aerator or venturi technology for flow rate of ≤ 2.5 gpm.:		
	- 100% of showerheads	8	
	- per-showerhead if not 100% of showerheads (2 points each/max. quantity of 3)	6	Grading and drainage plan and/or site plan
	1.6 to less than 2.0 gallons and 100% of showerheads	2 additional	Grading and drainage plan and/or site plan
	- Shower head with shut off (2 points each, max. quantity of 3)	6	Grading and drainage plan and/or site plan
4.2.5	Water-efficient single faucets/aerators ≤ 2.2 gallons/minute for kitchen and ≤ 1.5 gallons/minute for bathrooms:		
	- 100% of the faucets	10	
	- Kitchen sink faucets (2 points each/max quantity 2)	4	
	- Bathroom kitchen faucets (1 points each/max. quantity 4)	4	
4.2.6	Ultra low flow (≤ 1.3 gpm/flush) toilets installed:		
	A. Power Assist or other low flow alternatives:		
	- 100% of toilets in the house OR		
	- per toilet (4 points each/max. quantity of 2)		
	B. Dual Flush Toilets:		
	- 100% of toilets in the house OR		
	- per toilet (6 points each/max. quantity of 2)		

2 **Section 11. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe**

3 **Residential Green Building Code, Section 4, Item 4.3.1 D is amended to read:**

D. Rainwater distribution system that uses a renewable energy source or gravity (minimum capacity of 200 gallons)	4	Installer-certified
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4 **Section 12. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe**

5 **Residential Green Building Code, Section 5, Item 5.2.1 is amended to read:**

5.2.1	Pollutants generated in the building are controlled in accordance with one or more of the following:		Builder spec sheet
	(a) The minimum ventilation rate shall be 50 cfm for bathrooms and 100 cfm for kitchens exhausted to the outdoors.	Required	

	(b) Bathroom and/or laundry exhaust fan is a minimum of 50 cfm and linked to the light switch or has an automatic timer and/or humidistat.	6. for first device + 2 per additional	
	(c) Kitchen range, bathroom and laundry exhaust are verified to specification. Ventilation airflow at the point of exhaust is tested to a minimum of 100 cfm for kitchens and 50 cfm for bathrooms and laundry.	8	

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Section 13. Chapter VII, SFCC 1987, Exhibit A (being Ord. #2009-9) Santa Fe

Residential Green Building Code, Section 6, Item 6.5.2 is amended to read:

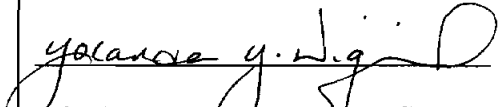
6.5.2	Builder or owner/builder that applies for the building permit uses hybrid or alternative fuel vehicle(s).	3	Copy of title or registration
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Section 9. This Ordinance shall become effective immediately upon adoption.


PASSED, APPROVED and ADOPTED this 8th day of July, 2009


 DAVID COSS, MAYOR

ATTEST:


 YOLANDA Y. VIGIL, CITY CLERK

APPROVED AS TO FORM:


 FRANK D. KATZ, CITY ATTORNEY