

# City of Sachse

## Steps We Are Taking Toward a Sustainable Community

### Green Building Program

The intent of the City of Sachse's green building program is to not only demonstrate the City's commitment to environmental, economic, and social stewardship, but to also yield cost savings to the City taxpayers through reduced operating costs, to provide healthy work environments for staff and visitors, and to contribute to the City's goals of protecting, conserving, and enhancing the region's environmental resources.

To accomplish these goals for sustainability the City has adopted the following programs:

### Sustainable Homes

The Residential Green Building Program – (adopted March 2008) – minimum standards for all new single family construction

### Energy efficiency.

1. The minimum standard for energy efficiency of single-family residential structures shall be the Environmental Protection Agency's EPA Energy Star designation as it stands or may be amended with a score of 85 or below on the Home Energy Rating Systems ("HERS") index.
2. Every home shall be tested by a Residential Energy Services Network ("RESNET") HERS inspector/rater who is accredited through a RESNET-approved HERS provider. The HERS provider must register with the City on an annual basis. No batch testing shall be allowed.
3. A return air path shall be provided for any room that can be closed off by a door (except for baths, kitchens, closets, pantries, mechanical rooms and laundry rooms). The pressure differential for said room, with doors closed and air handler operating, shall not exceed  $\pm 3$  Pascal pressure differential with respect to the main body of the home where the central air return is located.
4. All joints in the air distribution system shall be sealed with duct mastic or approved equivalent.
5. Dishwashers must be Energy Star designated and labeled.
6. A minimum of one programmable thermostat is required on every story.

### Water conservation.

1. Homebuilders shall display in all model homes information provided by the City concerning the benefits of xeriscaping and water conservation practices.
2. Irrigation systems shall include a rain and freeze sensor and shall be installed to manufacturer's specifications.
3. A portable drip irrigation bag or zoned bubbler system shall be installed for each required tree.



**Texas:** Sachse Mayor Mike Felix receives Sachse Environmental Hall of Fame Award on behalf of the City of Sachse from Deanne Crumpley (L) and Charles Crumpley (R) of WeKnow Technologies on November 1, 2010



## **Indoor air quality.**

1. The minimum standard for indoor air quality of single-family residential structures shall be the American Society of Heating, Refrigerating and Air-Conditioning Engineers (“ASHRAE”) Standard 62.2 as it stands or may be amended.
2. All mechanical room walls exposed to any living area shall be insulated to R-11.
3. All un-vented fireplaces and gas logs equipped with a fan that blows any level of combustion gases into any living space shall be prohibited.
4. Exterior ventilation system installed per ASHRAE standards must perform at:
  - Kitchen - 25 cubic feet per minute (“CFM”) (continuous) or 100 CFM (spot)
  - Bathroom - 20 CFM (continuous) or 50 CFM (spot)
  - Master Bedroom - 20 CFM
  - Other Bedrooms - 10 CFM
5. All ducts supplying outdoor air must be equipped with a filter inside the return.
6. A furnace and/or duct-mounted electronic/electrostatic air cleaner option shall be provided for homebuyers.
7. All central vacuum systems shall exhaust to the outside.
8. HVAC plenums on the supply shall be constructed of sheet metal (duct board shall be prohibited) with external insulation (minimum R-6, if located in unconditioned space).
9. Vinyl wallpaper is not allowed on the inside of exterior walls or on either side of wet walls, including but not limited to those in bathrooms, kitchen or laundry rooms.
10. A metal drip edge shall be provided at all exposed roof decking.
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12. A metal drip edge shall be provided at all exposed roof decking.

## **Sustainable Buildings**

Commercial Green Building Standards – (not yet adopted, but in process)

The goal for the commercial green building standards is to promote key sustainable practices within the community. Sachse’s proposed green building program is geared towards addressing the areas of emphasis developed by the Council. The program aims at making an impact without being financially burdensome on the development community. The areas of emphasis developed by the Council are as follows:

1. Water conservation
2. Recycling – both construction and post construction
3. Energy conservation
4. Heat island mitigation

## **Renewable Energy**

Small wind energy system ordinance – (adopted February 2010)

Set guidelines that if met allow the construction of small wind energy systems on lots within the City of Sachse by right. Also sets up a process that citizens can follow to request a special use permit for a small wind energy system if the city’s guidelines are not met. This way, property owners may easily construct the wind mills if they have the right location and those property owners who don’t meet the city’s criteria can also request approval. The hope of the program is to make owning and constructing a small wind energy system in Sachse a reality for a greater number of citizens.

## **Environmental Stewardship**

Water conservation ordinance – (adopted April 2009)

The City, as part of the North Texas Municipal Water District, has adopted the following landscape water conservation measures:

1. Time of day restrictions prohibiting lawn irrigation watering from 10 AM to 6 PM beginning April 1 and ending October 31 of each year.
2. Prohibition of watering of impervious surfaces. (Wind driven water drift will be taken into consideration.)
3. Prohibition of outdoor watering during precipitation or freeze events.
4. Lawn and landscape irrigation limited to twice per week. Handheld watering, either by hose or watering can, and the use of soaker hoses around the foundation of a structure is not limited by this ordinance. Newly planted landscaping may be watered in excess of twice per week within 30 days of installation.
5. Prohibiting the use of treated water to fill or refill residential, amenity, and any other natural or manmade ponds. A pond is considered to be a still body of water with a surface area of 500 square feet or more.
6. Rain and freeze sensors and/or ET or smart controllers required on all new irrigation systems. Rain and freeze sensors and/or ET or smart controllers must be maintained to function properly.
7. “At home” car washing can be done only when using a water hose with a shut-off nozzle.
8. Member cities and customers of NTMWD are responsible for developing regulations, ordinances, policies or procedures for enforcement of water conservation guidelines.
9. Prohibition of watering areas that have been over seeded with cool season grasses (such as rye grass or other similar grasses), except for golf courses and public athletic fields.