# **City of Cypress**

# Planning Department Green Building Ideas



## What is a "green building"?

A structure that is designed, renovated, re-used or operated in a manner that enhances resource efficiency is considered a sustainable, or "green building". These structures reduce water consumption, improve energy efficiency and lessen a building's overall environmental impact. Listed below are various ways in which homeowners and builders can improve a building in an effort to help reduce energy costs, improve energy performance, and reduce construction waste for both residential and commercial projects.



### **For Homeowners**

 Install High Performance Windows. Energy-efficient windows employ advanced technologies, such as protective coatings and improved frame assemblies, to help keep heat in during winter and out during summer.

For more information on sustainable improvements for residential homes, visit Build It Green's website: <a href="https://www.builditgreen.org">www.builditgreen.org</a>.

• **Install ENERGY STAR appliances/bulbs.** ENERGY STAR qualified products like lighting fixtures, compact fluorescent bulbs, ventilation fans, and appliances, such as refrigerators, dish washers, and washing machines work as well or better than standard appliances, but use less energy.

Energy Star Program: www.energystar.gov

- **Install Effective Insulation.** Properly installed, climate-appropriate insulation in floors, walls, and attics ensures even temperatures throughout the house, less energy consumption, and increased comfort.
- Install Effective Heating and Cooling Systems. In addition to using less energy to operate, energy-efficient heating and cooling systems can be quieter, reduce indoor humidity, and improve the comfort of the home.
- Ensure Tight Construction and Ducts. Sealing holes and cracks in the home's "envelope" and in duct systems helps reduce drafts, moisture, dust, pollen, and noise. A tightly sealed home improves comfort and indoor air quality while reducing utility bills.
- Install landscape with low-drip irrigation systems, drought tolerant and Native California Plants.
- Install A Solar Photovoltaic System. A good aim is to install a residential photovoltaic system that will, at peak production, provide one-half to three-fourths of your household's energy demand; typically between 1 and 3kW.



### For Building Professionals

- Install tankless water heating systems, low-flush toilets and flowreducing water faucets.
- Protect Native Soils and Mature Trees. Protection of existing mature landscape features helps prevent soil erosion, maintains sources of natural cooling, diverts waste from landfills, preserves nature and adds value to the community.
- Deconstruct Rather than Demolish. Deconstruction of existing buildings is a good way to salvage quality building products that have not yet reached the end of their usable life, even if the building or part of it has. Salvaged materials are often less expensive to purchase than new materials, and may be of higher quality, especially salvaged wood.
- Recycle Job Site Construction Waste. 21% of the statewide waste stream
  is construction/demolition debris, but in newer communities C&D waste sent
  to landfills can be as high as 50%. Generally, construction waste consists of
  wood, drywall, metal, concrete, dirt and cardboard, and also plant debris
  (green waste). Much of this material can be reused or recycled.

State Integrated Waste Management Green Building: <a href="https://www.ciwmb.ca.gov/GreenBuilding">www.ciwmb.ca.gov/GreenBuilding</a>

- Roofing products should be energy efficient, light colored and reflective. ENERGY STAR qualified roof products reflect more of the sun's rays, decreasing the amount of heat transferred to the building, thereby reducing air conditioning needs.
- Use Recycled Aggregate for Walkway, Driveway and Roadway Base.
   Virgin aggregate comes from sources such as riverbeds and quarries where
   mining activities may disturb the environment. Mainly concrete and asphalt
   pavement, recycled concrete material crushed to 3/4-inch meets the
   California Department of Transportation's (CalTrans) specification for Class 2
   Aggregate Base.

The City of Cypress has signed the U.S. Mayors Climate Protection Agreement, which aims to meet or beat the Kyoto Protocol targets of a 7% reduction from 1990 emissions levels by 2012, as well as support bipartisan emission reduction legislation. Additionally, Cypress is committed to providing citizens with current information about available programs that provide assistance to home and business owners interested in incorporating sustainable designs to lower energy costs and reduce environmental impact. For more information about energy efficiency and how you can include green building to your home or business, please visit Global Green USA: <a href="http://www.globalgreen.org">http://www.globalgreen.org</a> and the US Green Building Council: <a href="http://www.usgbc.org">www.usgbc.org</a>.

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