

GREEN CONSTRUCTION SUPPLEMENT

What is "Green Construction"?

Green Construction is a term that is used interchangeably with "sustainable development" and "high performance / energy efficient". It refers to development that not only meets our ever-growing demand, but also protects environmental quality by reducing air pollution, solid waste, the use of toxic substances and conserves natural resources for future life and development.

How is this applied to affordable housing and why is it important to the City of Elizabeth?

Affordable housing developed in this manner promises to maximize savings from energy and resource efficiency; improve the health, safety and comfort of its occupants, and minimize the detrimental environmental effects of its construction, maintenance, and long term occupancy. The utilization of sustainable building techniques can actually make a building more affordable for low and moderate income people by decreasing the cost of operations and maintenance. Sustainable developers can build houses that are significantly cheaper to heat and cool, that reduce the total consumption of resources, that are more durable and comfortable, and that leave the occupants healthier and more satisfied. If occupants and/or property owners can save on utilities, not only will they be better able to afford housing, but also they will have more income available to spend on their families and in their communities. All of these enhancements improve household health, energy performance and, increase the marketability of housing. In the long run, this means stronger, more stable communities and real improvements in the lives of those most in need.

What financial incentive is available from the City to build or renovate "green"?

The City of Elizabeth will provide developers and/or owners with up to \$7,500 per residential unit for utilizing Green Construction design and products. Proof must be provided of the "green" products used. The actual amount of the supplement will be determined by comparing the cost of the original component vs. the cost of the green component. The City will subsidize the difference up to a maximum of \$7,500 per residential unit. Please note that if the project is also an Energy Star project, only those items or components not subsidized through the Energy Star program will be considered.

How can a structure be made "Green"?

A great many materials and products are used to build a house, including green products and non-green products. Innovative design techniques may utilize non-green products in a manner that helps reduce the overall environmental impacts of the building. In addition, substituting green products for conventional products can also make a structure "Green". Creating a green building means matching the products and materials to the specific design and site to minimize the overall environmental impact.

Examples of "Green" design elements might include:

- Installation of recycling containers in kitchens;
- Building a pantry with shelves rather than additional cabinets;
- Installing ceiling fans to cool house instead of air conditioning;
- Reducing and re-using construction waste;
- Installing bike racks;
- Installing a composter on site;
- Utilizing rain water from roof to irrigate landscape;
- Design nature windbreaks using trees and landscaping on northern side of building;

Examples of "Green" products and components might include:

1. Products made from environmentally attractive materials:
 - Salvaged Products
 - Products with post-consumer recycled content
 - Products with post-industrial recycled content
 - Certified wood products
 - Rapidly renewable products
 - Products made from agricultural waste materials
 - Minimally processed products
2. Products that are green because of what isn't there:
 - Products that reduce material use
 - Alternatives to ozone-depleting substances
 - Alternatives to products made from PVC and polycarbonate
 - Alternatives to conventional preservative-treated wood
 - Alternatives to other components considered hazardous
3. Products that reduce environmental impacts of building operation:
 - Building components that reduce heating and cooling loads
 - Equipment that conserves energy
 - Renewable energy and fuel cell equipment
 - Fixtures and equipment that conserve water
 - Products with exceptional durability or low maintenance requirements
 - Products that prevent pollution or reduce waste
 - Products that reduce or eliminate pesticide treatments
4. Products that contribute to a safe, healthy indoor environment:
 - Products that don't release significant pollutants into the building
 - Products that block the introduction, development, or spread of indoor contaminants
 - Products that remove indoor pollutants
 - Products that warn occupants of health hazards in the building
 - Products that improve light quality

How can I obtain the Green Construction Supplement?

The Green Construction Supplement is available to owners and developers who have applied for financial assistance under one of the other EHIP programs. This supplement can not be obtained alone – it must be combined with another EHIP program. Interested applicants should complete the attached form, which requires you to list the conventional construction/rehabilitation elements and their costs. You must also list the intended Green elements and their costs. The last column allows you to calculate the cost differences. The City will review this information. Based upon this review, the City will provide supplemental funds, not to exceed \$7,500 per unit, for the incorporation of these Green components into the project.

Please be aware that the green components listed on the sample form are not all inclusive. Depending on your project you may include components that are different from these – they were provided simply as examples.

Project Address: _____

SAMPLE GREEN CONSTRUCTION UTILIZATION COSTS

#	ORIGINAL COMPONENT	BASE COST	GREEN COMPONENT	UNIT COST	PRICE DIFFERENTIAL
1	Interior Paint	per gallon	Low/No VOC Paint	per gallon	
2	Standard Adhesives & Sealants	per unit	Low VOC Adhesives & sealants	per unit	
3	Standard Stains & Varnishes	per gallon	Low VOC Stains & Varnishes	per gallon	
4	Fiberglass Insulation	linear feet	Cellulose Insulation	linear feet	
5	Vinyl Siding	square feet	Fiber Cement Siding	square feet	
6	Standard Waste Hauling	cubic yard	Construction Recycling	cubic yard	
7	Not Previously Provided		Compost Bins & Recycling Containers	per unit	
8	Fluorescent Exterior Lighting	per unit	Solar Exterior Lighting	per unit	
9	Pavers	per unit	Semi-perVIOUS paving of walkways & driveways and/or recycled content patio blocks	per unit	
10	Treated Wood Decking	linear feet	Plastic Lumber Decking	linear feet	
11	Vinyl Tile Flooring or Carpeting	square feet	Bamboo Wood Flooring	square feet	
12	Ceramic Tile Flooring	square feet	Recycled Content Ceramic Tile	square feet	
13	Portland Concrete	per yard	Concrete with 15% Fly Ash	per yard	
14	Asphalt Shingles	per square	Recycled Content Shingles	square feet	
15	Ceiling Light Fixtures	per unit	Ceiling Fans with Light Fixtures	per unit	
16	Energy Star Lights		LED light fixtures/lights	per unit	