

# Part 1: General

## 1.01

Each new or renovated project should be rigorously examined to include sustainable features using the LEED Guidelines. Not all projects will be certified, but each project should obtain enough points, that if taken through the certification process, it would earn a Silver Certification or higher.

## 1.02

The Design Team for each project should be familiar with sustainable design concepts. The Design Team will submit the LEED Checklist for a project after Programming is complete and then with the CD submittal.

## 1.03

The Contractor for each project should be familiar with sustainable design concepts. The Contractor will review the sustainable aspects of the project monthly with the owner and the Design Team during the project meetings.

# Part 2: Design Guidelines

## 2.01 Site Protection

### a. Soil Erosion and Storm water Control Plan

The contractor shall reduce pollution from construction activities by controlling soil erosion, waterway sedimentation, and airborne dust generation.

### b. Parking Count

The design team will limit the number of parking spaces to that required by local zoning ordinance and identify preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site.

### c. Parking Lot Design

Parking lots should be designed with previous asphalt that is 2 1/2" Binding Course Asphalt Paving (Type H) over 5" crushed stone.

### **d. Site Disturbance**

The contractor should limit site disturbance to 40 feet beyond the building perimeter; 10 feet beyond surface walkways, patios, surface parking and utilities less than 12 inches in diameter; 15 feet beyond primary roadway curbs and main utility branch trenches and 25 feet beyond constructed area with permeable surfaces that require additional staging areas in order to limit compaction in the constructed area.

## **2.02 Water Efficiency**

### **a. Irrigation systems**

If irrigation systems are installed, they should be controlled by the Sentinel Irrigation System.

### **b. Fixtures**

In order to reduce the amount of water consumed by building users, the following should be used

- Toilets: should have dual flush valve handles
- sinks should have low flow aerators (1.0 gpm for office and classroom buildings and 1.5 gpm for sinks in residential halls), and
- Showers should have low flow aerators (1.6 gpm)

## **2.03 Energy and Atmosphere**

### **a. Metering**

Each building should connect to the University's energy management system so that energy consumption can be metered individually by building. ( SEE ELECTRICAL TECH SECTION FOR METERING)

### **b. Appliances**

The Design Team will specify Energy Star rated appliances when available.

### **c. Energy Modeling**

Since the University is a member of Energy Star, the design team will use Energy Star tools to model the building and reduce energy consumption.

### **d. HVAC Equipment**

The design team should select chillers that do not contain CFC's or HCFC's.

## **2.01 Materials and Resources**

### **a. Construction and Demolition Waste**

The contractor will assist the University in promoting sustainable construction practices by limiting the amount of construction and demolition waste sent to the landfill. The contractor will recycle and/or salvage at least 50% of non-hazardous construction and demolition waste (by weight). The contractor shall develop and implement a construction waste plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or commingled. Extracted soil and land-clearing debris does not contribute to this requirement. Calculations can be done by weight or volume, but must be consistent throughout. The contractor will submit a waste report with each pay application. See Waste Report.

### **b. Salvage Material**

The contractor shall set up a trailer during renovation projects where materials that are not being reused in the project can be stored until after the completion of the project. At that time, local non-profit agencies can claim any materials that they can use before these materials are sent to the landfill.

### **c. Recycled content**

The design team will specify materials such that the sum of post-consumer content plus one-half of the pre-consumer content constitutes at least 10%

(based on cost) of the total value of the materials in the project. Mechanical, electrical, and plumbing components and specialty items such as elevators shall not be included.

#### **d. Local/Regional Materials**

Elon University would like to promote local economies and reduce the amount of fuel required to bring materials to construction sites. Therefore, the design team will specify that at least 10% of the total building material value (based on cost) be extracted, harvested or recovered, and manufactured within 500 miles of Elon University. so that . Mechanical, electrical, and plumbing components and specialty items such as elevators shall not be included.

#### **e. Certified Wood**

The design team will specify that at least 50% of the wood based products are certified in accordance with the Forest Stewardship Council's Principles and Criteria.

#### **f. Recycling Areas**

The design team will provide an easily accessible area that serves the entire building and is dedicated to collection and storage on non-hazardous materials for recycling, including at a minimum, paper, corrugated cardboard, glass, plastics, and metals.

## **2.02 Indoor Environmental Quality**

### **a. Smoking**

Smoking is prohibited inside buildings including during construction.

### **b. Air Contamination**

After the building is constructed, the building should be flushed out with 100% outside air or conduct baseline IAQ testing to ensure that contaminant concentrations do not meet the maximum recommendations.

### c. Low-Emitting Materials

Designers should specify low emitting materials as follows:

- All adhesives and sealants used on the interior of the building shall comply with the South Coast Air Quality Management District.
- All paints shall be low or no VOC (see Finish Design Guidelines).
- All carpets and cushions should meet Carpet and Rug Institute Green Label program.
- All composite and wood agrifiber used on the interior of the building should not include urea-formaldehyde resins.