

ACTIVITY 4: Green Building Best Practices

Activity Objective: Develop a plan for Green Building best practices for a new construction project to include: site preparation building plans, sustainable Materials, construction methods, Environmentally Sensitive Landscaping, and Waste Management

Definition: Best practices are ways to reduce operating costs and carbon emissions as well as improve energy and water performance for green buildings. A best practices is defined as a policy, systems and procedures that, at any given time, are generally regarded by peers as the practice that delivers optimal outcome, such that they are worthy of using. Green building best practices incorporates the complete building process to include site preparation, home design, sustainable materials, sound construction methods, environmentally sensitive landscaping, and waste management.

Materials: Chapter 11, paper, computer, printer, Internet Access

Procedure:

1. Work as partners or small teams
2. Complete the entries in the below table, you can use additional paper or develop the plan on your PC
3. Develop a Power point presentation showing your overall best practices plan

Site Preparation	Your GREEN BUILDING PLAN
<p>Site preparation starts with selection of plan to best fit on property and to meet zoning requirements. Drainage, building orientation, and minimum tree impact are important factors. The construction plans submitted to the city include tree-save areas, drainage patterns, erosion fencing, and recompense calculations for tree removal and replacement. Foundations should be located to ensure minimum excavation, minimum material usage, and efficient drainage away from the structure.</p> <p>Water run-off is contained on site</p>	

Building Design	Your GREEN BUILDING PLAN
<p>Overall design of building takes into consideration engineered floor joists and roof trusses in even dimensions to minimize off-cut waste. Advanced framing techniques should be used to minimize lumber scrap for all headers and ensure adequate insulation at wall corners. To minimize hot and cold water runs, plumbing fixtures should be located as centrally as possible and close to the water heater. All gas-fired water heaters should be located in a sealed enclosure with combustion air vents to the exterior.</p>	
Sustainable Materials	Your GREEN BUILDING PLAN
<p>Exterior doors should be insulated metal doors that have superior strength, longevity, and increased insulation compared to wood doors. To conserve water usage, all faucets, toilets, and laundry appliances should be low-flow fixtures. All concrete used on site should contain a minimum of 25% fly ash, which is a waste product from coal power plants and results in a better concrete product.</p>	

Sound Construction Methods	Your GREEN BUILDING PLAN
Construction should use green building best practices. Two layers of blue foam insulation on the exterior to increase the R-factor assembly and to provide an increased vapor and exterior air barrier to infiltration. The walls should be insulated with R13 insulation batts, and all penetrations are caulked with expanding foam to further reduce exterior air infiltration.	
Environmentally Sensitive Landscaping	Your GREEN BUILDING PLAN
Each building should be landscaped with plants and grasses designed to be drought tolerant. All lots are planted with additional trees	
Waste Management	Your GREEN BUILDING PLAN
Construction debris that can be ground up is utilized on site. The ground-up material is used to enrich the soil; off-cut lumber, tree branches and stumps are chipped for use as landscaping mulch, and ground-up roofing shingles are used for base under the driveways and walkways. All cardboard, metals, and drink containers are recycled.	

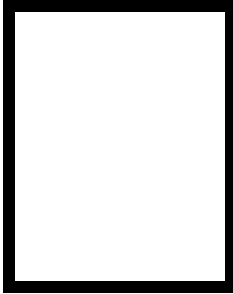


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4 World-Class Learner	3 Proficient Learner	2 Developing Learner	1 Emergent Learner
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<p>Learner at this level has gone beyond mastery of knowledge, skills, & attitudes described in project. World-class learner consistently exhibits high-quality performance.</p>	<p>Learner at this level has had opportunities to apply knowledge, skills, & attitudes of component of project. Proficient learner has mastered essential attributes, thus proving mastery.</p>	<p>Learner at this level has been exposed to & had opportunity to apply knowledge, skills, & attitudes of project. Developing learner may have only a few essential attributes to master before mastery.</p>	<p>Learner at this level may or may not have been exposed to knowledge, skills, & attitudes required by academic standards of the project.</p>
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- 1= Emergent Learner**
- 2 = Developing Learner**
- 3 = Proficient Learner**
- 4 = World-Class Learner**