

2008 Michael G. Meyers Design Competition

Community Recycling & Reuse Center

sponsored by
the American
Institute of
Architects,
Houston Chapter

Background

re-duce *transitive verb* \ri-'düs, -'dyüs\

(1): to diminish in size, amount, extent, or number > (2): to decrease the volume



re-use *transitive verb* \,(,)rē-'yüz\
>

: to use again especially in a different way or after reclaiming or reprocessing <the need to reuse scarce resources> <reuse packing material as insulation>

re-cy-cle *transitive verb* \,(,)rē-'sī-kəl\
>

1: to pass again through a series of changes or treatments: as **a:** to process (as liquid body waste, glass, or cans) in order to regain material for human use

At 1,609 pounds per person per year, the U.S. is the primary trash-producing country in the world. This means that 5% of the world's people generate 40% of the world's waste. With an ever increasing rate of consumption, until we learn to reduce, recycling and reuse must be a big part of our daily lives. Everything comes in some sort of packaging most of it not integral to the use of the product. Many of our food & household items come in some kind of container, fortunately more and more of these containers can be recycled and are made of recycled materials.

In Architecture the concepts of reduce, reuse and recycle are part of the Sustainable Design movement. In these ideas Architects focus on design solutions that minimize our impact on the environment. In this year's project you will be asked to address the issue of sustainable design relative to Site, Water, Materials, Energy and Indoor Environment.

Your challenge this year is to design more than a recycling center. The hope is that you create a place that is a destination not just a drop off. A place that helps to promote the values and continues to educate a community that recycles.

Program

Project Elements

RECYCLE ZONE

Provide the following open, covered, or enclosed storage areas for the material to be recycled

Storage/Collection zone for Glass - minimum 200 sqf

Storage/Collection zone for Metal - minimum 200 sqf

Storage/Collection zone for Paper & cardboard- minimum 400 sqf

Storage/Collection zone for Plastic - minimum 200 sqf

Office space for Recycle Center employees (2 each) @100 sqf

Storage and maintenance room for Recycle Center employees @ 200 sqf

Men's and Women's restroom with shower and changing area @ 120sqf each

Vehicular circulation for Recycle center fork lifts, loaders, trucks, trailers etc,

Vehicular and Pedestrian zone & circulation for Community Drop off

DESTINATION ZONE

Design an open, enclosed or covered space with a program defined by you the student.

Your program should make the recycling center an educational and fun place to visit.

(For example, Car wash, Resale Store.)

Provide between 800 sqf to 2,500 sqf

Provide restrooms 2ea @ 60sqf

Provide parking spaces for 12cars and accommodate bicycle parking

Project Requirements

The design for your Community Recycling & Reuse Center must

1. Develop a distinctive solution that addresses the requirements of the program
2. Address the concepts of sustainable design in your solution by incorporating ideas that deal directly with @ least two of these concepts Site, Water, Energy,. Materials, Indoor Environment, (concepts discussed below)
3. Written description (maximum one page) of the Destination Program developed and the Sustainable design concepts pursued.

Sustainable design

Site



Preserve green space or return developed land to more natural state
Be aware of drainage, minimize potential erosion
Be smart about transportation
Be aware of extent of impermeable surfaces, eg; roads and paving
Be aware of the affect of your site on adjacent properties

Water



Be smart about how much, and how you use and or reuse water.
Think about ways to conserve water.
Use native and adaptive plants, and minimize use of potable water.
Adopt water technologies that reduce amount of water used.

Energy



Be smart about how much, and what type of energy is used.
Think about ways to conserve energy.

Materials



Consider the impact of products used in the construction of the Building;
this would include materials with recycled content, salvaged, rapidly renewable
and local materials.

Indoor Environment



We spend the majority of our time indoors and we should optimize the quality of that environment.
Think about ways to bring lots of daylight into the building
Think about the types of materials you use inside the building and how they could affect the health of the occupants

Presentation Requirements

essay (should be firmly affixed to the front of one board)

Your descriptive essay should include some detail to explain your design. Please limit your essay to one 8 ½ x 11 @ 12 point Arial font.

Suggestions of what to include in your essay:

- Clarify the program of your chosen destination zone, what you do there, how does it service the community, how is it educational.
- What are the sustainable design strategies that you have chosen for your project, and how they affect your design
- What are the ideas behind your Recycle Center design solution.

drawings

The following **minimum** requirements should be mounted on two 24" x 36" or 30" x 42" foam core or similar rigid boards (*do not submit more than two boards*):

- A **site plan**, to scale, showing outdoor features and site improvements and the roof of your project (if there is a roof)
- 1/8" = 1'-0" scale **floor plan** of the building showing walls, doors, windows, countertops, plumbing fixtures, room names, and other descriptive information that defines the space.
- 1/8" = 1'-0" scale **exterior building elevations** showing roof heights, building materials, windows, and other descriptive information.
- 1/8" or 1/4" = 1'-0" **section** of the building showing where openings are located in walls and how spaces are connected or divided.
- At least one accurate **perspective** drawing at any scale of an interior or exterior view of your project.
- Three or more **hand sketches** that document your design process.

models

A 1/8" = 1'-0" **scale model** of the project (*building only, no site model*) is required for team projects.

**Models are optional for individual participants, but all are encouraged to experiment with models to help answer questions about their designs.

deadline for submissions

Entries are due by 5:00 pm on Friday, **18 April 2007** at the AIA Houston offices **315 Capitol Street, Suite 120, Houston, Texas 77002** [phone 713-520-0155].