



HOUSE TOURS BRIEF CONTEST REPORT

This report summarizes the strategy of the CU Solar Decathlon Team for addressing the Hours Tours portion of the 2005 Solar Decathlon Competition.

Brochures

The CU Team is designing one brochure for the General Public and one for the Competition Judges. Both of these 18"x 24" handouts will fold into 10 sections like a compact map. On the inside of the brochures will appear a color rendering of the North, South, East and West facades of the house, in addition to a floor plan. The brochures will also include a detailed map that will explain various aspects of the CU Solar Decathlon Home and site plan. The content of each brochure will be audience appropriate. Each of the ten sections will contain 250-500 words of text, as well as pictures, diagrams, tables, graphs, and logos supporting that section. The intent of the map approach is to combine all information on the CU design into one concise, easy-to-read, and informative document that will serve well on its own as a poster long after the 2005 competition.

The Public brochure will include the following sections: Rendering of the 2005 CU House, What is the Decathlon?, Background on CU Team members, CU Team Design Philosophy, Materials, Construction, Solar Energy, Energy Conservation, Transportation, "A New Generation of Energy" – CU Team Foreword. The Competition Judge brochure will include ten sections specifically about each of the Solar Decathlon Contests. By modifying the content between these two brochures, the CU Team hopes to engage respective audiences more closely.

Entertaining the Public

To address anticipated long lines on the National Mall, the CU Team plans to give each member of the public a brochure to read while waiting in line to visit the house. Additionally, outdoor informational signage will be placed along the walkway that will introduce key design concepts. Furthermore, the CU Biodiesel Club will accompany the CU Solar Decathlon Team to the competition and will hold public demonstrations of biodiesel processing on the CU site. These demonstrations will explain that biodiesel has played an important role in CU's "low- to no-petroleum" design pledge – the Bio-*S^hIP* house was transported to D.C. using 100% biodiesel fuel.

Signage

Outdoor Signage will be placed along the main entrance walkway in a National Park Service fashion. These signs will include Did You Know? facts about the CU Solar Decathlon Project.

Indoor Signage will provide answers to commonly asked questions and walk visitors through the design, construction, and commissioning phases of the project.

Truth Panels will be placed in the floors, ceiling and walls of the house to give visitors a true sense of the materials used in the house. These truth panels are sections where the finishes are left off so that the public can see the building block materials underneath them.

Pictures of CU students, industry professionals, K-12 students, and others engaged in CU's 2005 Solar Decathlon efforts will be hung on the walls throughout the house.

Key Messages

CU's key tour messages are outlined in detail in its Final Project Summary Report, submitted August 9th, 2005. A brief overview of those seven key design highlights is given below. The CU Team seeks to highlight these design elements and others in an attempt to distinguish its design from that of its competitors.

1. Bio-Sip Wall System

The CU team has designed, tested, and is currently patenting a low- to no-petroleum, thermally efficient, Structural Insulated Panel (SIP), called the Bio-SIP.

2. Bio-Based Materials

Since many of the materials used in the construction of this house are derived from human agricultural feedstock, this is truly a house you can "sink your teeth into."

3. B100 Biodiesel Fuel

The CU Team will be transporting their home to the National Mall on 100% biodiesel with the assistance of the CU Biodiesel Club.

4. Aesthetically Integrated Solar Panels

Attractive, architectural window shades on the south façade are composed of crystalline photovoltaic panels that power exterior DC lighting.

5. Bio-S^(h)IP Single Chassis Design

A single chassis design combined with efficient use of space means this house is designed like a ship, hence the name Bio-S^(h)IP.

6. Raise the Roof!

The CU house has a movable roof that retracts for transport and rises for livability.

7. A Zero Energy Home

The CU home will be the second Zero Energy Home in the Front Range of Colorado and the first ever in Longmont, CO. A zero energy home is a house that produces more energy than it consumes. The lucky owner of this home could get a paycheck from the local utility every month!

CU Decathlete Tour Locations and Duties

(Please see site map below, not to scale, for corresponding CU Decathlete site locations)

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|----------------------------|--------------------------------|
| 1. Site Entrance | 6. Solar Systems and Batteries |
| 2. Front Door | 7. Electric Car (2) |
| 3. Mechanical Room | 8. Strategy Team |
| 4. Great Room/Movable Roof | 9. Floater |
| 5. Materials | |

