

# ARCHITECTURAL MODEL

## OVERVIEW

Participants develop a set of architectural plans and related materials for an annual architectural design challenge, and construct an architectural model to accurately depict their design.

In 2001 and 2002, participants develop a house design to be considered for use by an affiliate of Habitat for Humanity International. The basic house design criteria used by Habitat for Humanity are provided, and participants are encouraged to contact their local, regional, or state affiliates of the organization for additional information. The challenge in 2001 is for a three-bedroom house; the challenge in 2002 is for a four-bedroom house.

## PURPOSE

Architectural Model provides an opportunity for TSA members to demonstrate an understanding of the application of architectural design, portfolio development, and modeling construction techniques

## ELIGIBILITY

Entries are limited to one (1) individual or team per chapter.

## TIME LIMITS

The entry must be started and completed during the current school year.

## PROCEDURE

1. Participants check in their entries at the time and place stated in the conference program.
2. Entries are reviewed by evaluators.
3. The ten (10) finalists are identified. A finalist list is posted.
4. The finalists, one (1) individual representing each team, report to the event area at the time stated in the conference program.
5. Finalists are interviewed individually by the team of event evaluators.
6. Participants pick up their entries from the event display area at the time specified in the conference program.

## REGULATIONS

- A. The architectural model must be placed on a site board 24" square.
- B. A portfolio (a standard 1" three-ring binder) must be submitted with the model and must include a title page, a page describing the design and the construction of the model, a blue print or copy of the original floor plan, a sectional detail drawing, a plot / site plan, and a list of materials used in construction of the model. (Only reproduction copies of original drawings or printer/plotter generated drawings are to be submitted. Maximum drawing sheet cut size B-- 11" x 17". All documentation and drawings are to be professionally arranged in the order stated above within the binder).
- C. Suggested model construction materials include the following:
  - 1. Balsa wood
  - 2. Plywood or veneer
  - 3. Hardboard
  - 4. Foam Board
  - 5. Styrofoam/urethane
  - 6. Dowels
  - 7. Illustration board

No glass or liquid may be used as part of any model.

## EVALUATION

Evaluation is based on points earned for the portfolio, the architectural model, and the finalist interview.

# Habitat for Humanity International House Design Criteria

Selecting or developing an appropriate house design is a challenging and yet rewarding process. The key to the challenge is partnership with the affiliate and homeowner. In recognizing the needs of the family, an affiliate builds a house that will not burden the homeowner for care and maintenance.

Each affiliate must have a detailed description of what is and what is not included in their basic house. Potential homeowners, new board members, architects, construction coordinators, public speakers and the press all benefit a clear understanding of what Habitat means by a "simple, decent house."

In the construction of new houses, the following Habitat House Design Criteria, approved by the Habitat for Humanity International Board of Directors, provide the guidelines for an affiliate as the elements of a basic house are considered. These criteria are established so that each house reflects the Habitat philosophy of building simple and decent houses.

1. The living space provided, not including stairwells (except to a basement), and exterior storage, should not be more than:
  - 900 square feet for a two-bedroom house
  - 1,050 square feet a three-bedroom house
  - 1,150 square feet for a four-bedroom house
2. The basic house should have only one bathroom. The bathroom may be compartmentalized for increased usefulness, or additional baths can be by the family as part of their budget.
3. Each family should have an opportunity to affect the design of the house as much as possible. A budget with a predetermined limit (e.g., \$1,000) should be established to allow the family to personalize their home with such things as picture windows, fencing, half-bath, etc.
4. Each house should have a covered, primary entrance.
5. When feasible, at least one entrance to the house should be accessible to persons who have difficulty with mobility.
6. All passage doors, including the bathroom door, should be 2' 8" minimum width, and the hall should be 3' 4" minimum width, frame to frame. These standards allow for simple access for disabled persons and elderly persons and increases the costs only slightly. Further adaptation may be needed if a family member is disabled.
7. Homes should have no garages or carports.

Note: Although rehabilitation jobs may provide circumstances, in which some guidelines cannot be met, maintain the intent and spirit of the guidelines when determining the specifics and extent of the proposed rehabilitation.

# ARCHITECTURAL MODEL EVENT COORDINATOR INSTRUCTION

## PERSONNEL

- A. Event coordinator, one (1)
- B. Event evaluators, three (3)
- C. Event project check-in personnel, two (2)

## MATERIALS

- A. Coordinator's box, containing
  - 1. Event guidelines, four (4) copies
  - 2. Official rating forms
  - 3. List of entries, with finalist report
  - 4. List of event evaluators/assistants
  - 5. Pens for event evaluators
  - 6. Notepads
  - 7. Finalist list for posting
  - 8. Results envelope
- B. Tables for entries
- C. Tables and chairs for evaluators

## PROCEDURE

1. Upon arrival at the conference, report to the CRC room and check the contents of the coordinator's box. Review the event guidelines and check to see that enough evaluators/assistants have been scheduled.
2. Inspect the area or room in which the event is being held for appropriate set- up, including room size, chairs, tables, outlets, etc. Notify the event manager of any potential problems.
3. Check in the entries at the time stated in the conference program. Reporting who is not on the entry list may check in only after notification is received from the CRC chairman. Entries turned in late are NOT considered unless the lateness has been caused by the oversight negligence of the conference coordinators. Secure the entries in the designated area.
4. One (1) hour before the event is scheduled to begin, meet with your evaluators/assistants to review time limits, procedures, regulations and all other details related to the event. If questions arise that cannot be answered, speak to the event manager before the event begins.
5. Evaluators independently review the entries.
6. For participants who violate the rules, the decision either to deduct
7. Prepare a list of the ten (10) finalists and submit it to the CRC chairman for posting.
8. Conduct finalist interviews.
9. Complete the finalist's report, including evaluators' signatures. Evaluators discuss and break any ties that affect the top three (3) placements.
10. Submit the finalists report and all related forms in the results envelope to the CRC room.
11. If necessary, manage security and the removal of materials from the area.

# ARCHITURAL MODEL

LTSA 2001 OFFICIAL RATING FORM

LEVEL I OR II

TEAM/SCHOOL #													
<b>EVALUATION CRITERIA</b>													
Portfolio development..... 15 pts. Title page (event name, conference site, date, and entry ID#) Design description Model description Floor Plan drawing Sectional detail drawing Plot/site plan drawing Materials list													
Design and planning ..... 15 pts. Traffic flow Placement of rooms Planning within each room Exterior design													
Architectural model .....20 pts. Appearance Quality of construction Enhancements													
Meets design problem criteria ..... 20 pts.													
Creativity and innovation ..... 10 pts.													
Rules violation (if any) ..... minus 20 pts.													
<b>SUBTOTAL ..... 80 pts.</b>													
Interview (finalists only) ..... 20 pts													
<b>TOTAL ..... 100 pts.</b>													
Evaluator's comment/notes													
I certify these results to be true and accurate to the best of my knowledge.													
Evaluator's signature _____													