

DESIGN PROBLEM

Design a group of 24 townhouses in the specified site. The houses can be displayed in smaller rows or clusters, but have to be subdivided in smaller groups. Each group can decide on how many houses they want for their clusters.

Although the programs for MIT and MIYAGI students are similar, units area and the sites are completely different: one is tight and the other one almost too large. The groups are expected to take advantage of the on-line consulting with their overseas partners to take decisions about cultural characteristics of the American and Japanese houses, like the number of bathrooms in each unit or where to place the laundry (even if there should be a special room for it or if it should be hidden in a closet).

To avoid imposing too many constraints, for this short exercise we are going to ignore building codes, but a general idea can be passed to your partners, to keep the projects close to reality.

We will be using shape grammars to:

1. Display the groups of houses in the site. (2D grammar)
2. Design the groups of houses (3D grammar)

PROGRAM

1. For MIT students

Design 24 townhouses for families in Sendai City, Miyagi Prefecture, Japan.

Each house should have:

- living room
- 3 or 4 bedrooms
- bathroom(s)
- kitchen
- laundry
- space for parking 1 or 2 cars outside

The area of each unit should be between 100-150 sqm.

The site plan has to be carefully thought so that the group does not look crowded.

2. for MIYAGI students

Design 24 townhouses for families in Long Island, Boston Bay, Massachusetts, USA.

Each house should have:

- living room
- 3 or 4 bedrooms
- bathroom(s)
- kitchen
- laundry
- space for parking 1 or 2 cars outside

The area of each unit should be between 180 and 220 sqm.
(1800 and 2200 sqft.)