Residence II: Acoustical House

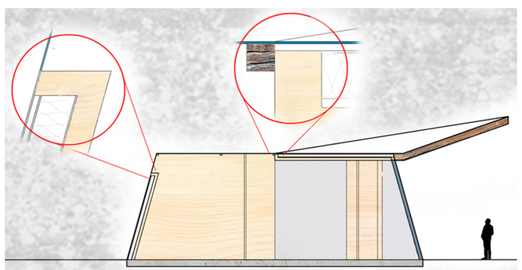
By: Karl Mauro & Nathan Oh

This three bedroom family house is an ***ensemble of two different acoustical effects separated by a transitional space.*** The house is constituted of ***three different modules*** all connected to a ***central circulation path dictating the way to move*** throughout the house. It was designed to ***become quieter as you are moving from public space to private space.*** The main concept of the house is to improve the room qualities exploring sound.

Module One: A public space, using concrete and wooden curated cubed walls. These hard surfaces make it dense and easier for sound to reflect off of. The rigid cubed blocks placed along the walls are angled to create multiple surfaces for sound to deflect and travel throughout the room effectively. To heightening the quality of sound more efficiently, the ceiling in the living room is raised to give it a religious atmosphere that would bring a certain peacefulness to the residents as they enter the house.

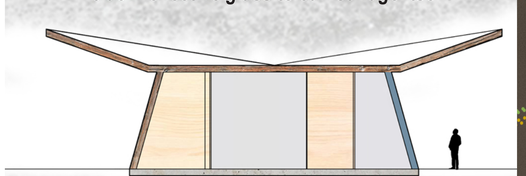
Module Two: To really explore the changes in the relationship of sound to the space, we must transition into a new state of being. In a seamless design of the ceiling changing shape and material as it fades into a new experience as you walk between module one and two.

Module Three: Transitioning beneath the ground surface where there's a natural sound barrier. To achieve the highest level of privacy, we used cubed foam panels along the ceiling and walls. The thick soft material of foam helps decrease the sound by reducing the amplitudes of sound waves. We designed the rooms to be at a lower level to be separated in creating a private atmosphere. Despite the proximity, each room would feel like it's own little world.

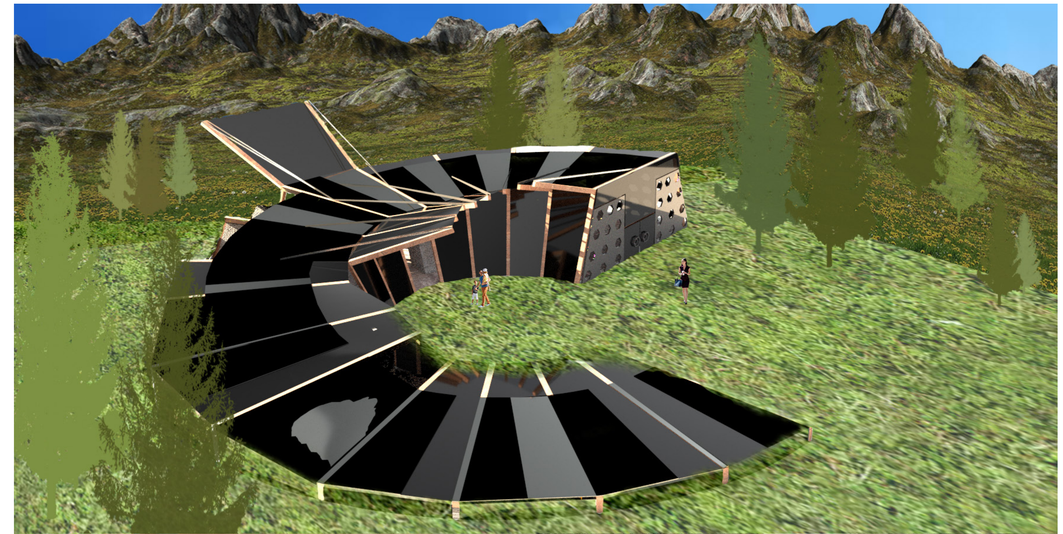


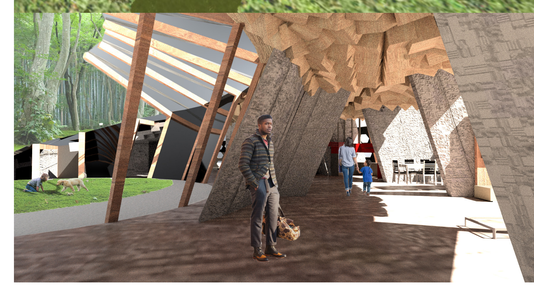
SEAMLESS DETAIL

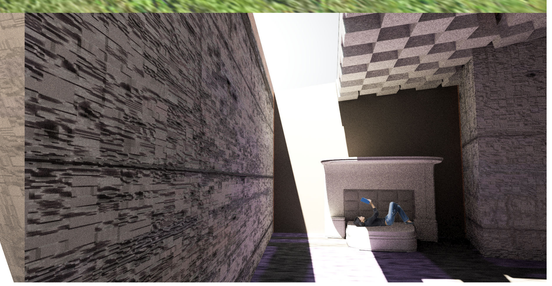
Using wooden beams, to bring ***natural elements*** into the design gives a sense of ***connection to nature***. The large overhang in the kitchen area are designed to ***bring the exterior soundscape inside***, immersing into the natural surroundings through structural elements. The skin of the building is composed of ***black reflective glass to camouflage itself***.

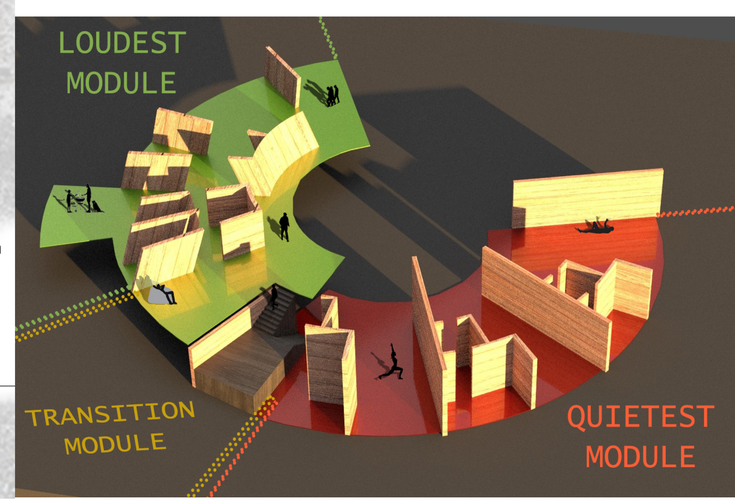


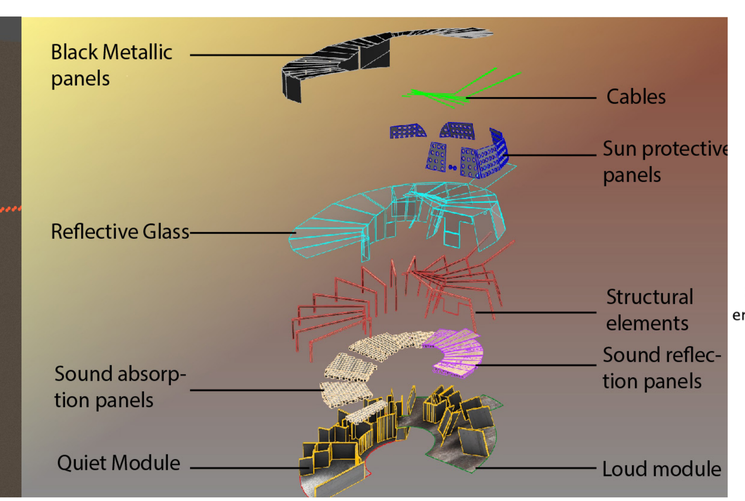
3/16" = 1'
Scale

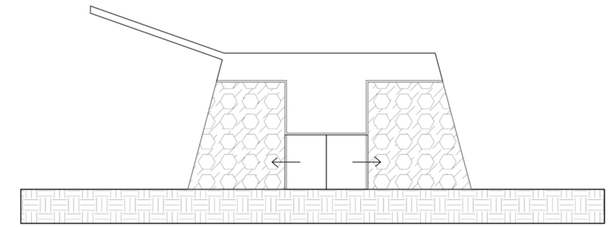
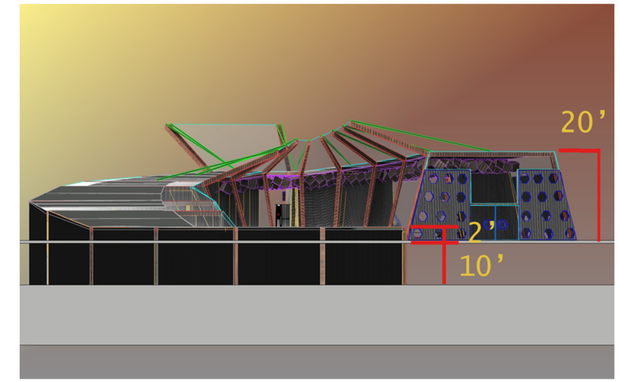
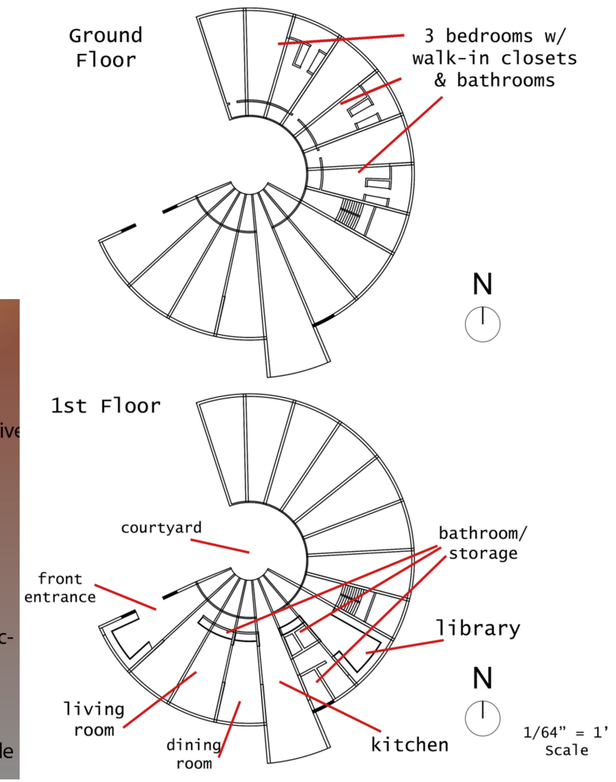












1/8" = 1'
Scale