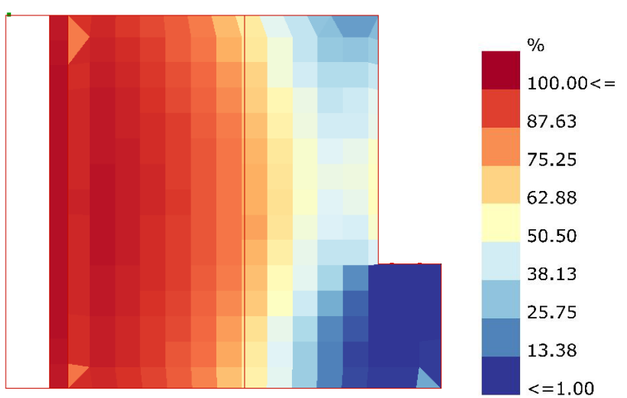
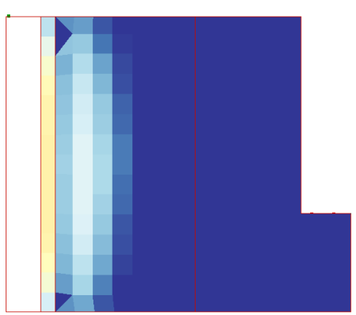
Sun Room in Seoul

by Rajika Maheshwari | Arch 753

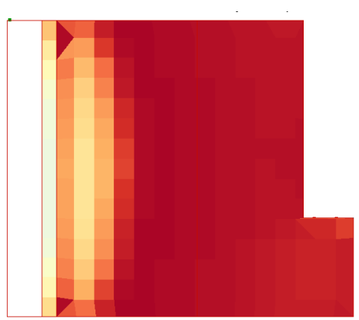
DAYLIGHT

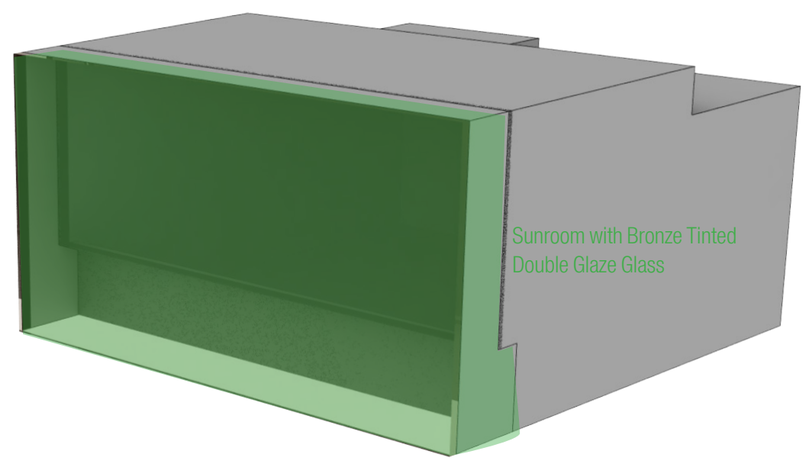


Harsh Light Gone!

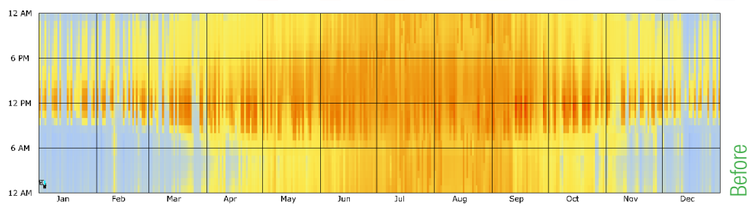


Lots of useful light!

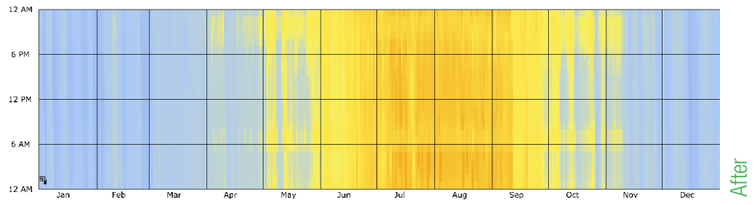




INDOOR THERMAL COMFORT

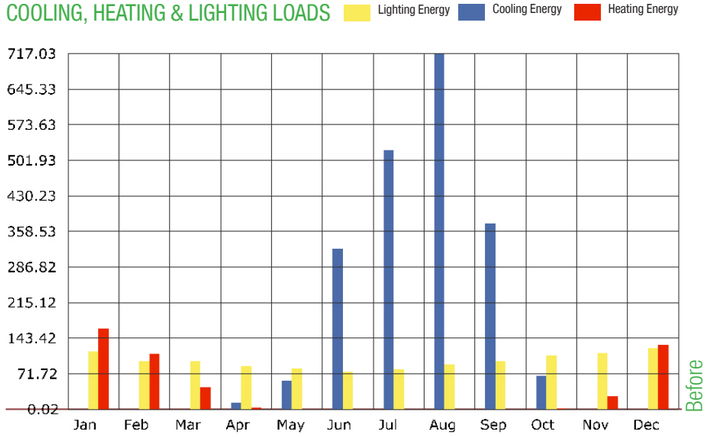


Extremes Eliminated!



Seoul, South Korea features a climate that is pleasant in the spring and fall months but extremely humid and hot in the summer and windy and chilly in the winter months. Keeping that in mind, the proposed building faces south to allow sun to penetrate the room in the winter. Creating this 1m sun room in front of the window would also create extra insulation in the winter from the harsh wind and provide an extra barrier from the sun and its glare in the summer. Because the air/wind is either really humid or really cold, natural ventilation is not an option. This design proved to be effective in reducing energy use in the hot summers, creating favorable indoor thermal comfort and daylighting conditions.

COOLING, HEATING & LIGHTING LOADS



Hello Cool Summers!