

Exercise 3 - (Guaranty) Prudential Building / Houdini 16.0.671

Average render time: 30 min/frame

Samples: 3:3

Noise Level: 0.005

Diffuse Quality: 2

Refraction Quality: 2

Resolution: 1280x720

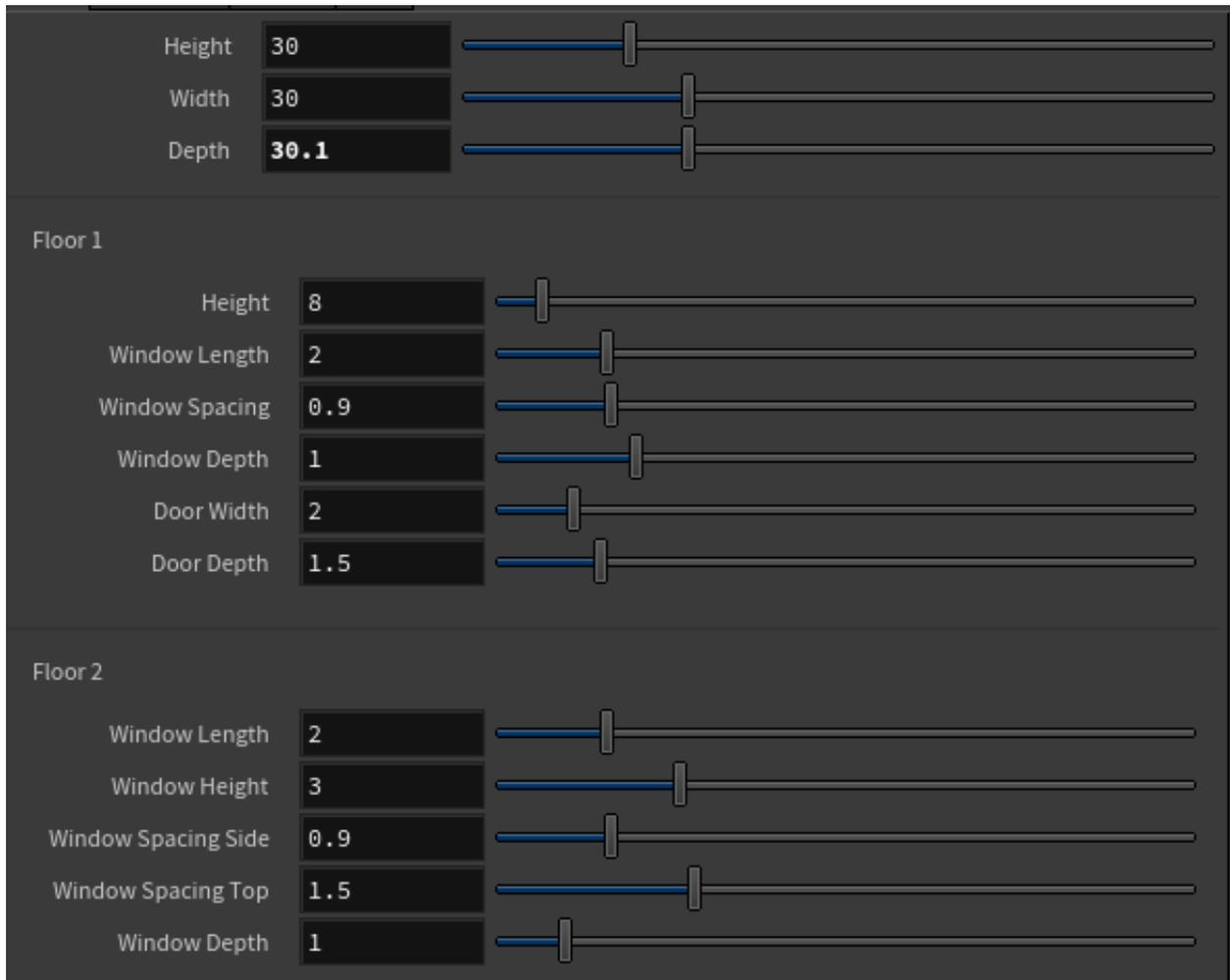
Min/Max Rays: 3/10

Lights: 1 envlight, 2 grid lights

Reflection Quality: 4

Diffuse Limit: 3

Complexity of Geometry: 11,000 points & vertices, 2,000 primitives & polygons, 20 packed geos



Top Level Parameter	Description
Height	The height [y] of the building (controls the "Floor 2" height)
Width	The width [x] of the building
Depth	The depth [z] of the building

More parameters cont.

Floor 1 Parameter	Description
Height	Height of the bottom “floor”, also affects height of the features within
Window Length	Length of the windows near the top of the bottom “floor”
Window Spacing	Spacing between the windows
Window Depth	Depth of the windows into the building, also affects the columns’ radii
Door Width	Width of the door [note: is buggy]
Door Depth	Depth of the door into the building

Floor 2 Parameter	Description
Window Length	Length of the windows on the second “floor”, also affects top round windows
Window Height	Height of the windows on the second “floor”
Window Spacing Side	Space between windows horizontally
Window Spacing Top	Space between windows vertically, also affects roof feature (“separator02”)
Window Depth	Depth of the windows into the building

Beyond the required attributes I added window controls [length, spacing, and depth on Floor 1; length, height, depth, side spacing, and top spacing on Floor 2], door controls [width and depth]. The two grid lights transform according to the size of the building. There is a texture map applied to the transparency of the lowest gallery windows.

The Method I used to construct the building was expressions based on width, length, and height values. I referenced those in a multitude of ways to copy-stamp features. I also used Booleans to carve features into the building, as in the depth of the windows and doors.

Challenges I faced in the process included dealing with Booleans; it can be a finicky operation and is prone to glitchy behavior. I also did not get a handle on uvproject well enough to apply maps to the building in the way I wanted (I was only able to apply it to the lowest gallery windows). The bulk of my time, however, went into just placing objects correctly with expressions.