

Correct size modelling

It doesn't take much, but if an object is more than 10% over its real size, the scene starts to look surreal and fake. Most things have standard sizes, doorways, halls, furniture, windows and we all subconsciously know this. Look up the real sizes and make sure that your modelling conforms to them. Some modelling packages work to their own unit of measurement so make sure yours is set up properly to use a real-world measurement.



Reasonably accurate scale



Off-scale

Model in meters

When the scale is not set properly, there will be many unexpected results so it is very important that it is correct. To be consistent, everything in Indigo is measured in meters, from focal distance and aperture, to object sizes. Here are several examples of what is affected by bad scale:

1. Sub-Surface Scattering

Sub-Surface Scattering (SSS) is a measured distance that controls how far a beam of light goes in a medium (such as glass) before it is reflected in a different direction. A wrong scale will either cause the whole surface to light up, or appear to have no SSS at all.

2. Light absorption

A material, such as a yellow glass, absorbs colors of light in a way that it appears yellow. Either no color will be absorbed with an incorrect scale therefore making it appear clear, or inversely, it will appear black, having absorbed all light.

3. Focus

The aperture is a very fine measurement, which incorrectly set will either cause the whole scene to be in sharp focus, or totally blurry.