

Model Design Checklist

We recommend reviewing the checklist below to help identify any issues with your design before attempting to 3D print. The sizes listed for the various design features are CBM recommendations for printing on plastic FDM printers, resin SLA printers and nylon SLS printers.

Alpha Carbon Backbone

All protein chains shown have a "backbone" size of 1.25

Molecular Bonds:

- Hydrogen bonds are only displayed in beta sheets, not alpha helices
- Hydrogen bonds are set "solid"
- Hydrogen bonds and disulfide bonds are set "to backbone"
- Hydrogen bonds and disulfide bonds have a size of 0.75
- Identify and remove "triangle" hydrogen bonds (see image to the right)
- All molecular bonds have a subtle color

Sidechains:

All sidechains shown have a "spacefill" size of 1.25 Sidechains do not have "bumpy backbones" (see image to the right) Only sidechains that help communicate your molecular story are shown

Support Struts:

Support struts are added to all protein chains Support struts have a size of 0.75 Individual struts are added to connect any nucleic acids or small molecules Struts do not cut into key sidechains or molecules (see image to the right) All struts have a subtle color





