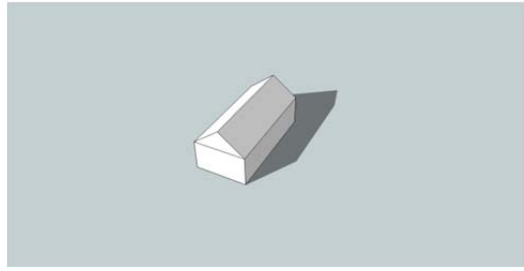
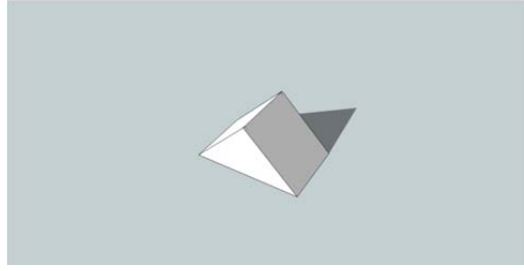
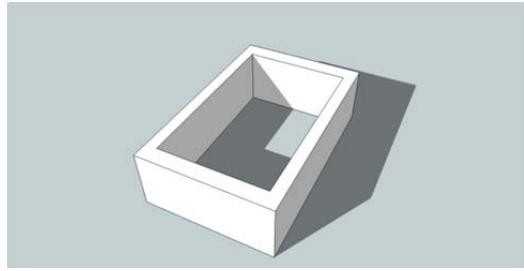
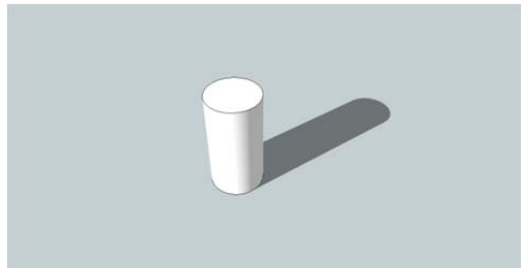
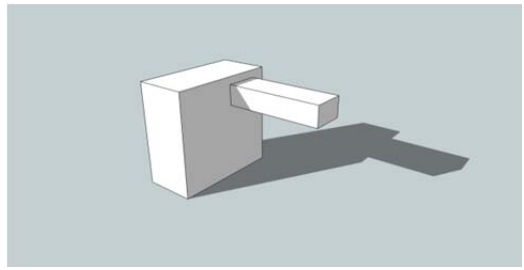
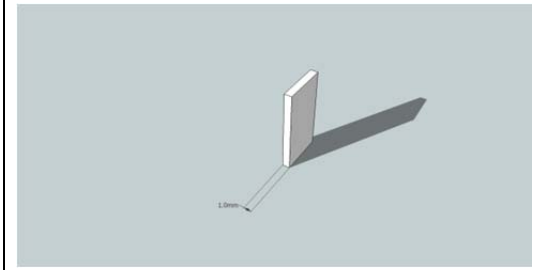
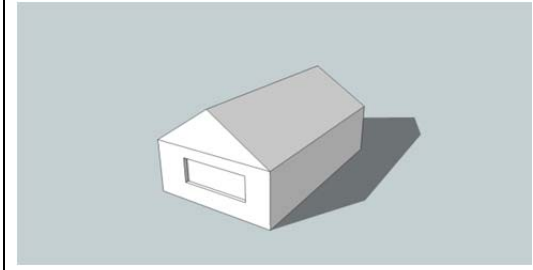
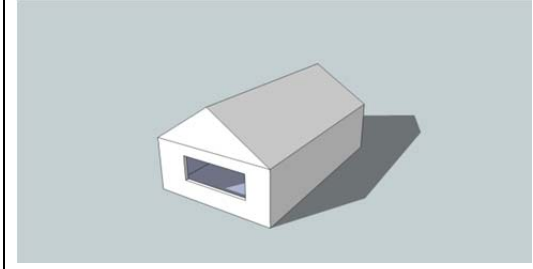
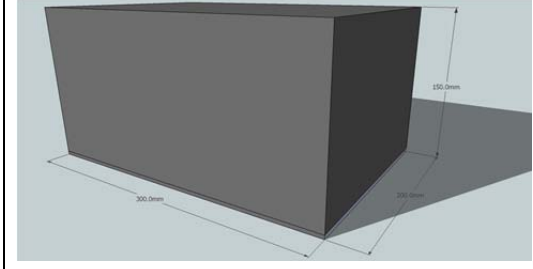
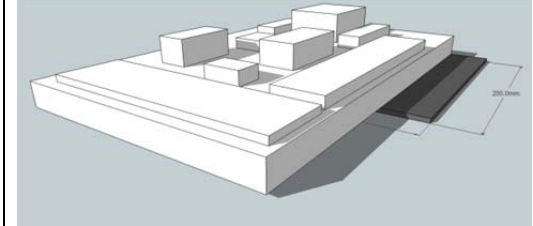


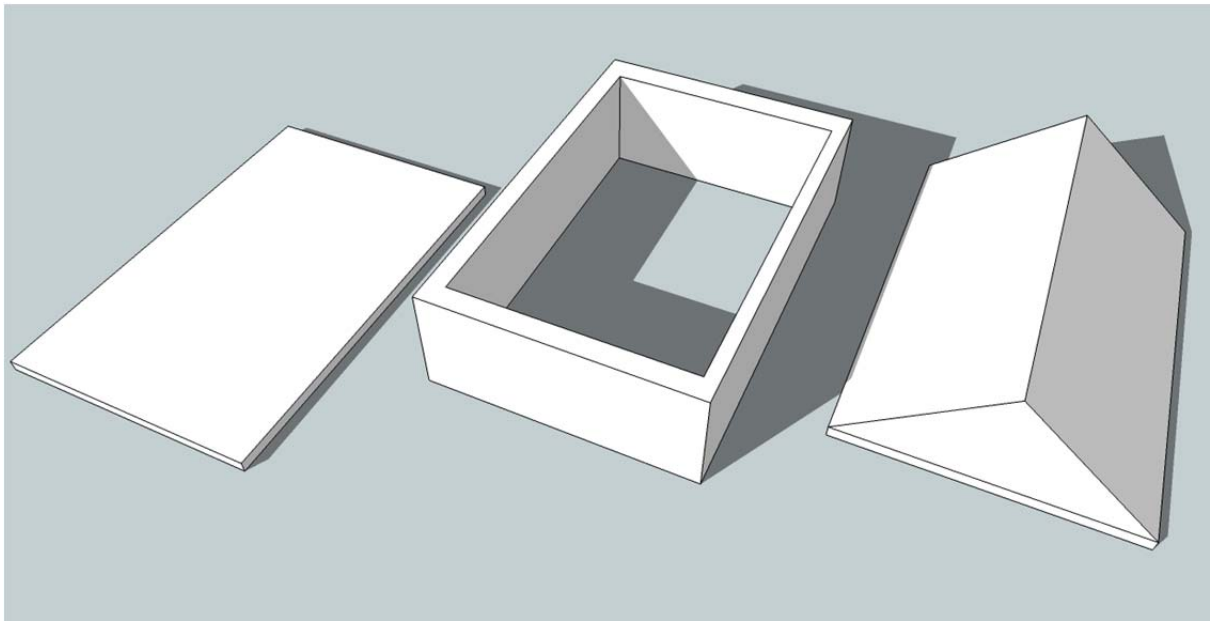
## COMMERCIAL PRINTING – Design Considerations when submitting model to Replica 3dm

|   |  |
|---|--|
|    | <p><b>WATER TIGHT</b></p> <p>All models should be water tight, edges must meet up and multiple objects shouldn't float in mid-air. Objects which aren't water tight will be ignored by the 3D printing process.</p>  |
|    | <p><b>ORIENTATION</b></p> <p>Orientation of objects affects how the support material is added; this example of orientation will print support material inside the object. Invert the object and the support material will be printed on the outside. A gloss finish can't be applied to a section of a part that has support material.</p> |
|   | <p><b>WALLS</b></p> <p>Vertical planes can be printed without support material for a gloss finish or with minimal support for a matt finish. Without a floor or roof the support material is easily removed. With a floor and roof the support material can be trapped inside the model.</p>   |
|  | <p><b>POSITIONING</b></p> <p>Objects which have tall vertical structures take longer to print than the equivalent object positioned horizontally. If possible save these objects as separate print files so they can be printed horizontally, this will improve print times.</p>   |
|  | <p><b>OVERHANGS</b></p> <p>Overhangs require support material to enable the print heads to lay down the model material at the correct vertical plane. Be aware of the added costs when adding overhangs.</p>   |



|   |  |
|---|--|
|    | <p><b>WALL THICKNESS</b></p> <p>Any wall thickness should have a minimum of 1mm. Anything less than 1mm will be very delicate and could be damaged in the support removal process. Please note that a single skin doesn't constitute a wall and will be ignored by the printer as it has no thickness.</p> |
|    | <p><b>SOLID</b></p> <p>Objects can be printed solid, in this example the support material will be trapped inside the object (unless the floor is removed).</p>   |
|   | <p><b>HOLLOW</b></p> <p>Punching out an opening in the object allows the audience to see inside the model, also support material can be removed.</p>   |
|  | <p><b>PRINT SIZE</b></p> <p>The Objet 24 allows for a print tray size of 240 x 200 x 150mm (9.45 x 7.87 x 5.9 in) and the Objet 30 Pro has a print tray size of 300 x 200 x 150mm (11.81 x 7.87 x 5.9 in). Printing anything larger than this will require you to break your model into sections.</p>      |
|  | <p><b>SCALING</b></p> <p>When we receive your object file we can scale the model to either just fit our print trays or smaller if required.</p>  |





## SUGGESTED FORMAT

For the best results and price please supply your model as separate components which:

- Are water tight.
- Are configured to reduce support material.
- Enable re-orientating for reduced print times.
- Over scaled wall thickness to retain the model structural integrity.

Reduced print times, reduced support material and separate components reduce you overall charge and improve the aesthetic look of your model.

Please call / email for any additional help you require designing your model.

