Modular Architecture

Overview:

When creating modular architecture, it's important that a set of guidelines are followed to ensure that assets are usable and consistent when implemented.

Steps & Components

1. Concept
2. Thumbnails
3. References & Orthographic
4. Modeling

Deliverable Information

Format	FBX
Submitted	Imported in UE4 Asset Database

Concept:

The artist creating the asset and designer requesting it must have a discussion laying out important features including **dimensions**, intended use, and overall look. The designer should create simple sketches and/or find reference images to help convey the design. Quick and simple sketches by both the artist and designer are key to ensure that there is a mutual understanding.

It is imperative that **dimensions** are established at this step. No orthographic drawings and especially no modeling should be started without specific dimensions.

If the asset is an exploration of an existing asset or the artist is given free reign, then proceed to the thumbnail stage.
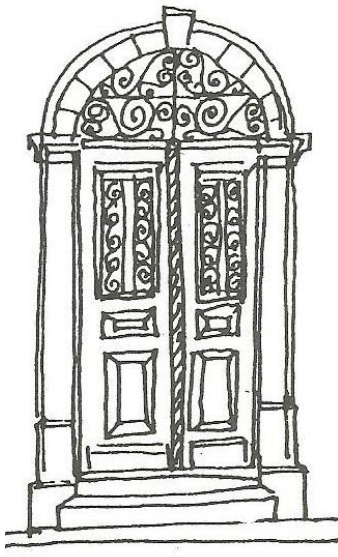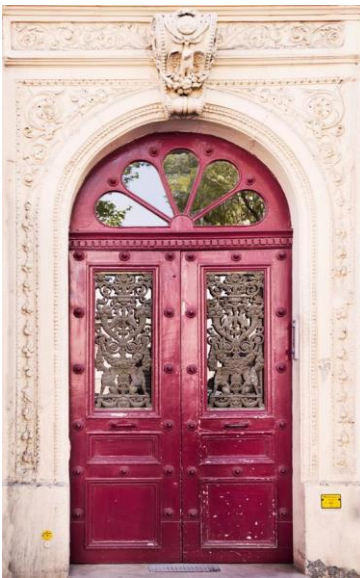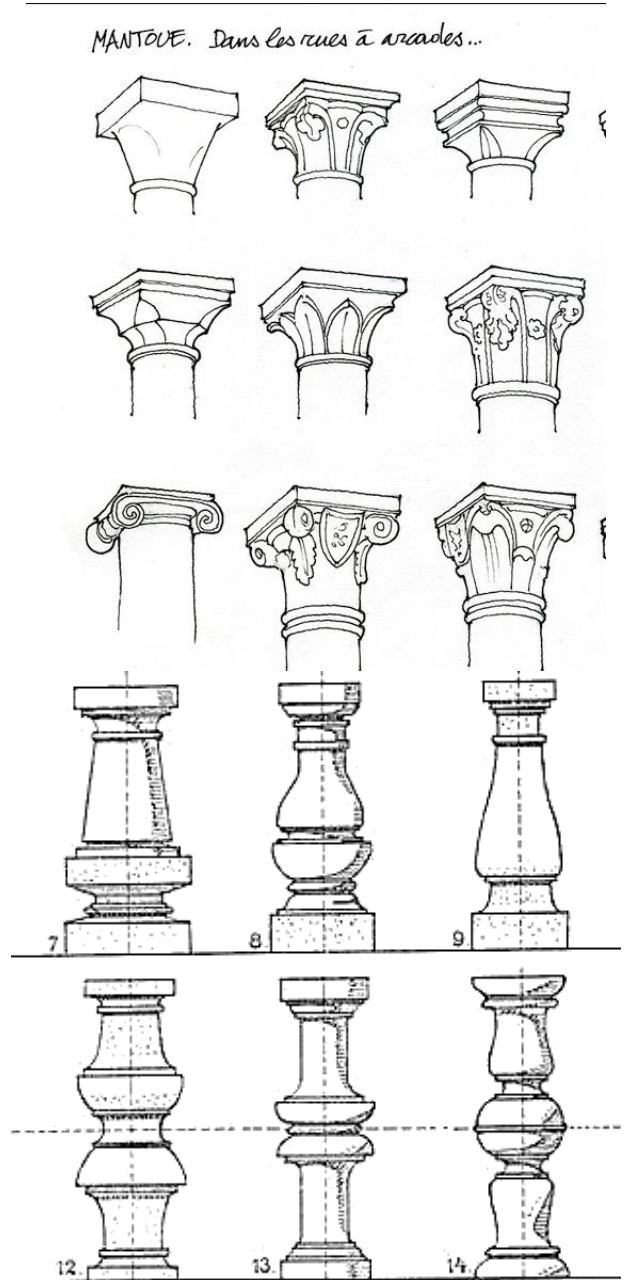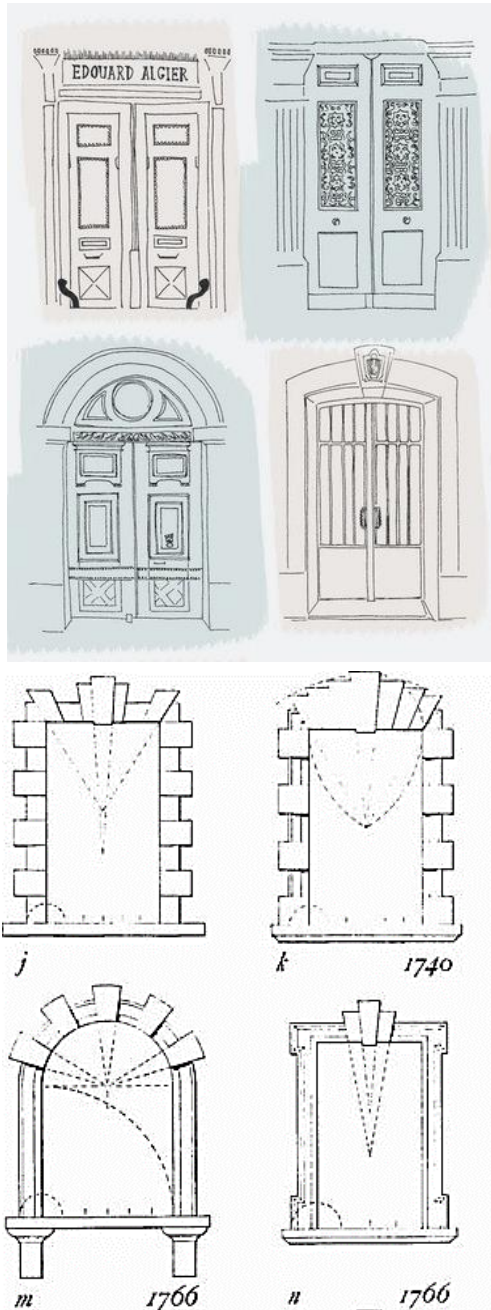
Thumbnails:

If the artist and designer come to consensus after discussing the concept, then thumbnails may not be necessary. If there is no consensus or more variations on a design need to be explored, then a set of thumbnails should be created.

Thumbnails should be simply rendered and showcase what makes each design unique from one another.

Each thumbnail must be <u>numbered</u> or <u>lettered</u>.

References & Orthographic Drawings:

Once a thumbnail has been selected and a design consensus has been reached there should already be a strong body of reference but sometimes gathering more reference imagery is necessary.

Creating orthographic drawings must be created to scale. This will increase modeling productivity and ensure that dimensions are consistent.

If orthographic reference has already been created or found, then there is no need to create it but be cautious of scale and dimension consistency when using outside orthographic reference.
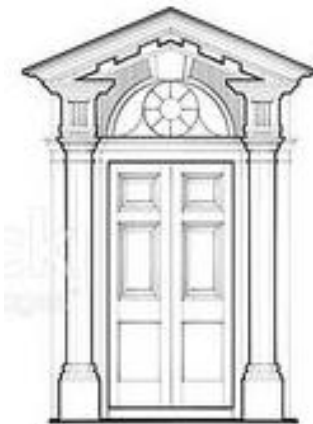

Any components of the asset that will be animated or have unique behaviors should be highlighted.

Modeling on the Grid:

It is incredibly important that <u>all edges are on the grid</u>. All sides of a modular pieces must line up with the grid. The only time an edge doesn't need to be on the grid is if no other pieces will be placed on that edge, e.g. the top of a roof piece.

Character Reference:

When creating modular assets, it's recommended to bring in the character model as a scale reference. This will help catch scale issues early and potential dimension changes.
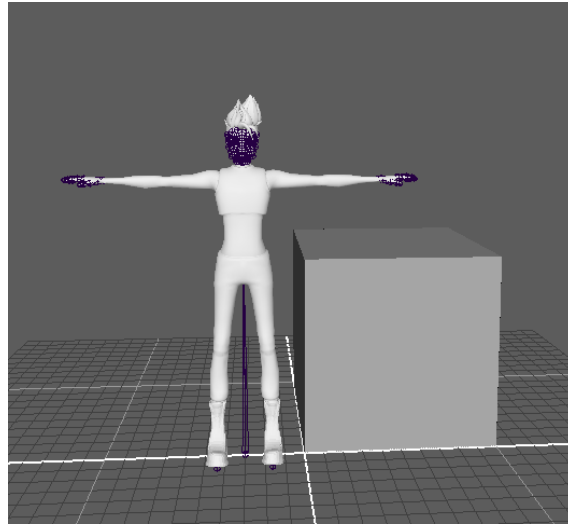
UVs:

Try to place your UVs along the edges of the UV grid. Not all UVs will line up properly this way, and it is more important to have even UVs and consistent texel density.