

Family-Object Classification of Components

1. INSTRUCTIONS:

Please classify the groups of objects being submitted utilizing this document. Refer to the [USACE Advanced Modeling Object Standard](#) (Click this link) for more information on each section below. Please note that the check boxes are activated.

2. NAMING CONVENTION:

Indicate whether or not the content being submitted complies with the naming standards defined in the USACE Advanced Modeling Object Standard.

<u>Criteria</u>	Yes	No
Object Name	☐	☐
Type Name	☐	☐
System Name	☐	☐
Attribute Name	☐	☐

3. TYPE CATALOGS:

Indicate whether or not if type catalogs are provided for objects containing six or more family types.

<u>Criteria</u>	Yes	No
Type Catalogs	☐	☐

4. OBJECT QUALITY:

Classify the group of objects being submitted in accordance with the four sections below. Please check one box from each section.

Geometry		
Selection	Quality Indicator	Quality Definition
☐	G-100	Object composed of basic shape(s) indicative of area, height, volume, orientation, and clearances. (e.g. a pump would be a cube.)
☐	G-200	Object is modeled with approximate, size, shape, orientation, and clearances.
☐	G-300	Object is modeled to specific size, shape, orientation, and clearances based on real world objects and use.

Behavior – Function		
Selection	Quality Indicator	Quality Definition
	F-100	Object contains no or limited parametric functionality or connectivity that is common to similar categories of objects.
	F-200	Object contains parametric functionality or connectivity, but not both. For example, a door with parametrically driven width and height or a plumbing fixture with connections properly configured with the correct utility system(s). Also, a light fixture with electrical connections but no light distribution data.
	F-300	Object contains both parametric functionality and connectivity. These generally should be limited in number due to the complexity of the object, the file size, and the impact on the building design with overly complex objects. Lighting objects should contain correct lighting distribution and photometric data.
Information		
Selection	Quality Indicator	Quality Definition
	•	Refer to the specific child element for appropriate Information. (Used for categories that have multiple sub-elements for which varying Information levels apply.)
	I-100	Model Elements contain basic intrinsic information indicative of area, height, volume, location, and orientation. The information may or may not be used to derive the graphics. Data is generally User created.
	I-200	Model Elements are modeled as generalized systems or assemblies with nominal or approximate quantities, size, shape, location, and orientation. Non-geometric information may also be attached to Model Elements (i.e., a pump would be a generic pump of approximate size.) Any information that needs to be scheduled for that object will be part of the object data.
	I-300	Model Elements are modeled as specific assemblies accurate in terms of quantity, size, shape, location, and orientation. Non-geometric information may also be attached to Model Elements. Accurate to the degree dimensioned or indicated on contract documents (i.e., a pump would be a generic pump of accurate size complete with connections and clearances for a complete system.)
Extensions		
Selection	Quality Indicator	Quality Definition
	•	Since there are various types of components in this category, refer to the specific Object type and software vendors recommendations for use of the extensions.
	E-100	Model Elements contains no additional content or extensions for lighting, sustainability or LEED.
	E-200	Model Elements contain or are linked to extended generic data such as a general lighting, .IES lighting information file, photometric data, images or general type catalogs, material, textures. Extension files could include data for LEED, sustainability, daylighting
	E-300	Model Elements contain or are linked to extended specific real world data from manufacturer or field tests. As an example, Steel sizes would be from the current AISC sizes with accurate data.