2.4 Verification

One of the Airport's goals for BIM is the delivery of standardized and consistent information. Without a standardized approach to authoring file names, element names, geometry and attributes, outputs from models developed for different projects will be inconsistent. Errors must be identified early to avoid unnecessary revisions.

2.4.1 Model Data Verification

The project team shall develop a model data test plan based on distinct tests for the data view definitions that are required for each milestone. The test plan shall be incorporated into the project BIMx plan. The data verification tests shall check:

- Conformance to element name definitions in the Element Attribute Dictionary
- Existence of attributes that are bound to element instances in the model
- Conformance to the attribute name definitions in attribute sets
- Conformance to acceptable attribute values for attributes that have a testable name pattern or enumerated list of values in the Element Attribute Dictionary

For example: The space numbering criteria is specified in the SFO Building Level and Space Numbering Guidelines to conform to the pattern: <BuildingNumber>.<BoardingArea>.<Level Number>.<Space Number>.

The data acceptance tests must check for conformance with the pattern for the space number as well as define a pick-list for acceptable values for individual attribute fields for Building Number, Boarding Area, Level Number and Space Number.

The tests may be implemented in a model checking software application that is approved by the Airport. Project team members that author BIM content shall run acceptance tests based on data verification rules approved by the Airport. Project teams will be responsible for running tests as frequently as necessary to achieve appropriate data conformance results at each project milestone.

The Airport recommends that the project teams run tests as a regular activity associated with the model coordination processes until all tests indicate conformance to Airport requirements for model submission. The Airport will also spot-check the models at major milestones to ensure data conformance.

The Airport will partner with the project teams to define and implement the process and expectations of model data verification through spot-checks.