

## Generic AEC/FM View Description

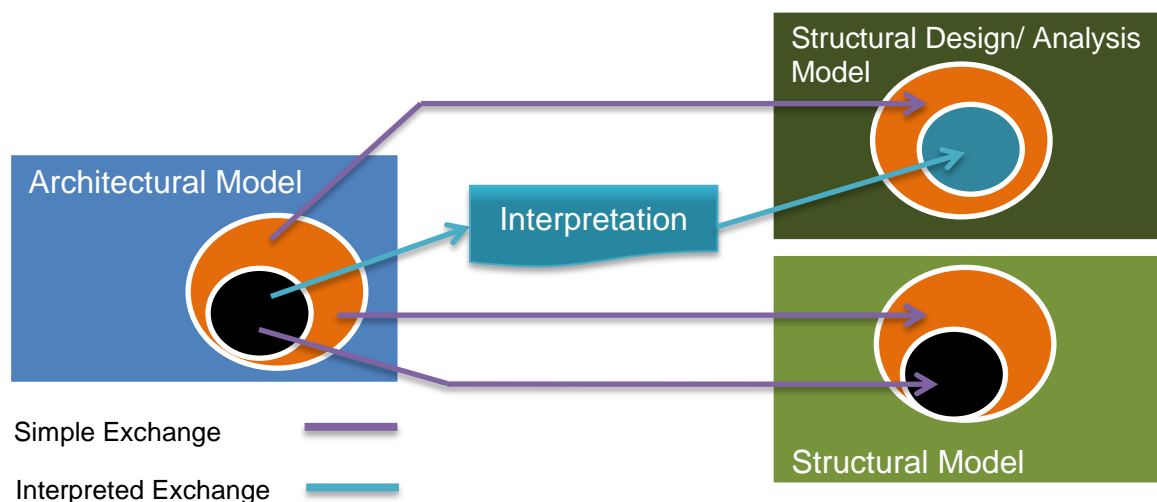
# Multi-Story Modular Buildings -- From Architectural Model to Structural Design/Analysis Model

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## Description

In addition to the project phases, the structural system of the multi-story modular buildings is different from site-built constructions, and as a result, the structural design of the building requires special attention. Each module is a complete structure by itself. The assemblies of these structures along with the secondary supporting structures make the whole building.

This model view defines the information that is required for structural design. There are two types of exchanged information, simple and interpreted exchanges. In simple exchanges, the information is exchanged directly from architectural model to the structural design/analysis model; but in interpreted exchanges the information is translated for structural design/analysis model from architectural model. For example, the exchange information for a single column from architectural model to the structural model is a simple exchange. But simplification of a SIPs wall in the architectural to a structurally equivalent simple wall in the structural design/analysis model is an interpreted exchange.



## Scope:

- This model view covers the structural elements of the modular buildings.
- This model view addresses the general thermal resistance properties of the modules.
- This view only addresses steel modular systems with possible use of OSB or gypsum sheathing and concrete floor slabs.
- This model view doesn't cover the main structural system of the site-built structures, but it addresses their connections to the modular assemblies.

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