

## 6 Oxide Architecture and Building Information Modeling (BIM)

Oxide Architecture/Oxide Structure uses BIM as a unified tool for three-dimensional computer modeling, design, construction management, and cost estimating. BIM streamlines processes that were traditionally executed through manual drawing, calculations, and estimating.

### What is Building Information Modeling (BIM)?

BIM is the process of generating and managing a smart, real-time building model to increase efficiency in the design and construction of buildings. BIM links building data found in drawings, details, cost and quantities of materials, and construction phasing.

### The Advantages of Building Integrated Modeling (BIM)

**Accuracy** – Design details are visualized in three-dimensions prior to construction to minimize subjective interpretation during construction. Materials in your home are modeled as three-dimensional objects and assigned a cost per unit, quantity, vendor, and construction phase in order to streamline the material ordering process. Cost spreadsheets are generated early in the process to help you visualize individual line items and their implications on your budget.

**Cost Savings** – Modeling the design and construction of your home reduces the number of change orders during construction by reducing ambiguity. For energy efficient homes, BIM can support energy modeling to help estimate your home's energy usage and can help streamline Energy Star and LEED certification processes.

**Ease of Construction** – For renovation projects, modeling your existing home using BIM highlights structural conflicts before construction begins and increases predictability for subcontractors during construction. Construction phasing is part of the computer modeling to help the architect, homeowner, and subcontractors more efficiently visualize the order of assembly during construction.

