

Home Building Industry Innovations

BIM and VR

What is BIM...



- **2D hand drafting.** Historically we started from a point of **documentation**. Hand drafting all buildings to convey our ideas and construction methods.
- **2D CAD drafting.** This next stage was a great leap in **optimization**. Changes were easier and files could be reproduced and shared digitally.
- **3D models.** Became an efficient way of **communication**. New ways to solve problems by creating prototypes.
- **BIM** is now about the connectivity of the process. Extend the workflows and **collaboration** with all stakeholders. Taking all of the information that we can from a model and using it however we can to automate the building industry.

What are the benefits of BIM?...

Presentation: Produce informative 3D images and VR experiences. Engage the client with stunning visuals and realistic experiences. Reduce the concept stage.

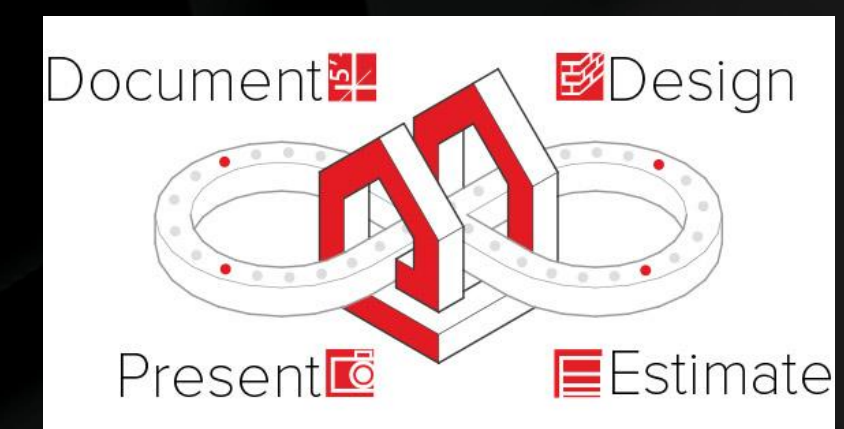
Automation: Automatically produce the elevations, sections, floor plans and details required for permit purposes and submit them digitally.

Communication: Reduce the amount of errors and "surprises" on site by sharing the 3D model with all trades. Graphical languages everyone can understand.

Integration: The data from the BIM model flows to value added engineering, cabinet design and POS packages: MiTek trusses, Weyerhaeuser joists, CSD, Simpson, 2020 Spaces, POS systems etc.

Accuracy: The model holds information related to cost, sku #s, size, phase and usage for itemized reports sent directly to accounting software.

Analysis: The intelligent model integrates with energy analysis software ResCheck for US government approved energy efficiency standards for value added services to contractors.



Why Automate?

...When everyone works together effectively from the earliest phases of design, the results in the end are pretty incredible:

Reduced overall costs and time through better communication, the **elimination of duplication of efforts**, and most importantly, **better quality custom renovations and new homes.**

Sales/Marketing

Engage customer early and often

Décor Centre

Better decisions leads to increased sales value

Quotes

Instant quotes linking to POS systems

Permit Drawings

Fast and accurate document production

Engineering

Direct data integration for better & faster analysis

Control Systems P/L

Seamless link to POS for accounting controls

Framing and Manufacturing

Accurate BOM shipped for field framing or factories

Suppliers' Catalogs

Custom catalogs with sku's linked to website and pricing

Finished Home

Easy 3D BIM for homeowner to renovate or for maintenance



The Power of VR

The home building industry needs technology to help professionals and consumers visualize concepts better while making changes on the fly and making decor selections.

We need better ways of engaging and educating the homeowner in the purchasing process early to improve opportunities to initialize a strong business relationship.

How do we deliver VR?

→ GOOGLE CARDBOARD

→ SAMSUNG GEAR VR

→ OCULUS RIFT

→ HTC VIVE

→ VRSTUDIOS



The Power of BIM & VR!

So whether you are a Homeowner, Designer, Builder, Contractor, Engineer or LBM Supplier...

Designing a new kitchen, garage, deck or new home should be a fun and engaging experience!

Everyone should easily work together and build from the same 3D BIM Model from concept to construction.

The process should be seamless and the data should be intelligent from concept to construction to future project.

Thank you!

Brought to you by Cadsoft makers of

 **envisioneer™**



Personal
Architect



ProArchitect



Building
Essentials



Construction Suite

The Envisioneer Suite of products for a unified creative workspace and design process.

 **Cadsoft®**