Simpler, Faster and more Accurate. These three principles provided the guidance for every feature and enhancment in Envisioneer version 10.

Simpler

A V10 goal was to implement tools that simplify the design process so you can spend less time on a project. We have streamlined tools ranging from floor framing capabilities to simplified creation of worksheet views.

Faster

You have limited time to spend on a project, so we have implemented tools to make designing more efficient. Decreased mouse clicks and combining tools mean increased productivity.
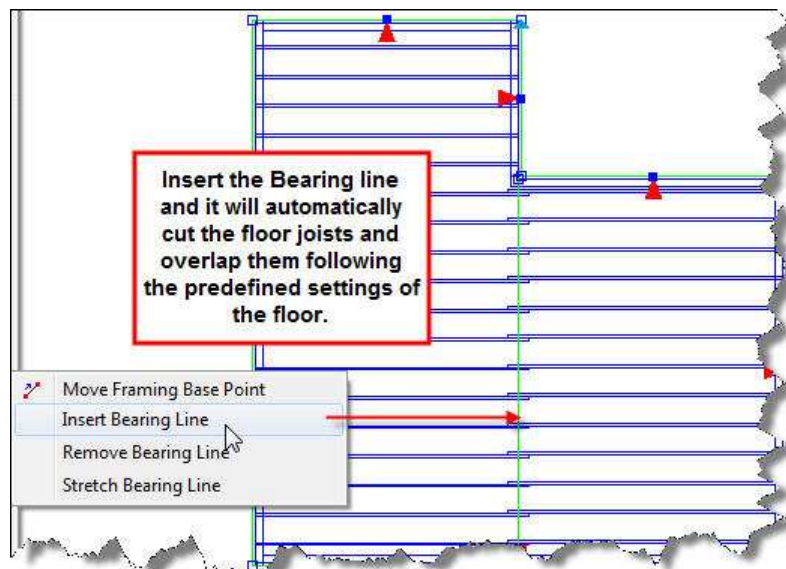
More Accurate

Accurate drawings and take offs are imperative. V10 has powerful new estimating, framing and drafting capabilities that increase the accuracy and flexibility of your work.
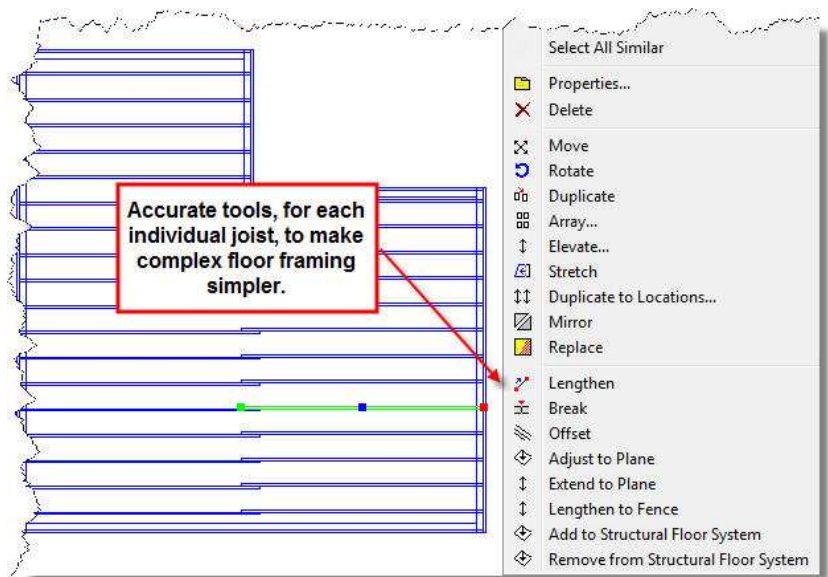
Framing

Structural Floor Tool

You asked for a faster way to insert a sill plate. You asked for a simpler way to lengthen, remove and add members to a floor for custom framing situations. You asked for a more accurate way to separate the framing from the sub floor. We give you the "Structural Floor".

Insert the Bearing line and it will automatically cut the floor joists and overlap them following the predefined settings of the floor.

Move Framing Base Point
Insert Bearing Line
Remove Bearing Line
Stretch Bearing Line

- **Bearing Line**
  - o **Faster.** Simply draw a line with the Bearing Line tool and the floor joists automatically cut and overlap at that point.

- **Member Adjustment Tools**
  - o **Simpler.** All members in the floor are individual members that can automatically be stretched and shortened separately.

- **Add Member to Structural Floor Tool**
  - o **More Accurate.** Additional members can be added to the structural floor where you needed. Insert any member, where you need it for greater accuracy in the design.

- **Floor lock/unlock mechanism for updating**
  - **Simpler.** The Floor can be locked so automatic update won't affect the framing applied.
- **Remove Member from Structural Floor Tool**
  - **Faster.** Remove individual members from the structural floor to customize the framing in a few mouse clicks.

Wall Framing System

V10 offers more options than ever for wall framing. You asked for a more accurate way for studs to be projected into a steel top and bottom channel. You asked for a simpler way to set walls to Load Bearing vs. Non Load Bearing. You asked for a faster way to build wall panels. We enhanced key areas of Envisioneer to accomplish this for you.
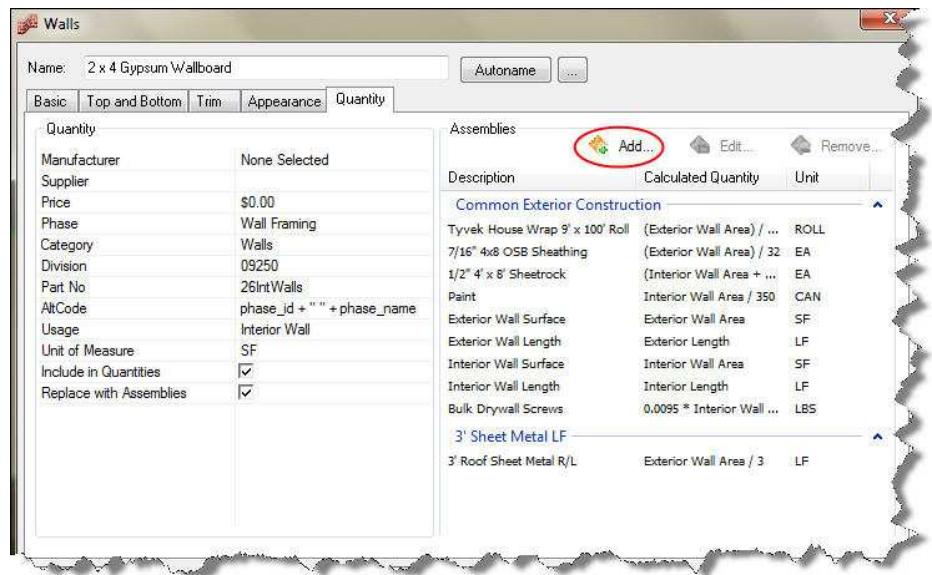
- **Export Wall Panels to BOM file**
  - **Simpler**. Export your wall panels out to a csv file to speak with a CNC.
- **Project Studs +/- into plates**
  - **More Accurate.** Studs in a wall can now project into the top and bottom plates to work with steel framing channels. This added flexibility also enables poles to extend from below grade all the way to the roof and keep the same single wall framing options.
- **Multiple Bottom Plates**
  - **More Accurate.** Designate multiple bottom plates to replicate your actual wall framing.
- **Load Bearing Vs. Non Load Bearing**
  - **Faster.** Walls can now be designated as Load Bearing or Non Load Bearing so you can designate them even before you insert them for faster Head/Sill/Jamb designations.

Quantity System

V10 will streamline your estimating, improving your takeoff speed and increasing your accuracy. You asked for a faster way to attach products to elements. You asked for a more accurate use of purchased lengths of lumber. You asked for a simpler way to have surfaces to recognize the framing elements. We took your suggestions and made the quantity reporting tools even better.

- **Attach assemblies to materials**
  - **More Accurate.** Every material can now have prices associated to them. Import a jpg or bmp to use as an exterior finish material and then use the Material Paintbrush to apply different materials and see the difference in the overall cost instantly.
- **Second chance optimizer to reduce scrap**
  - **More Accurate.** When a purchased length of lumber has a cut, the quantity optimizer will now re-evaluate the left over piece a second time to ensure the best use of lumber is being quantified accurately.

- **Multiple assemblies**
  - **Simpler.** Each element can now have multiple assemblies attached to it. Separate a group of materials and swap them out for another based on design changes.
- **Enhanced Roof Surfaces**
  - **More Accurate.** If a roof is exploded into individual surfaces, the framing on the adjoining surfaces will recognize each other and only keep one member so you don't have multiple members along the edge of an adjoining surface.

Rendering System

Updates to the Rendering system include a new automatic headlight for better lighting and a view that is automatically anti-aliased for sharper imagery.
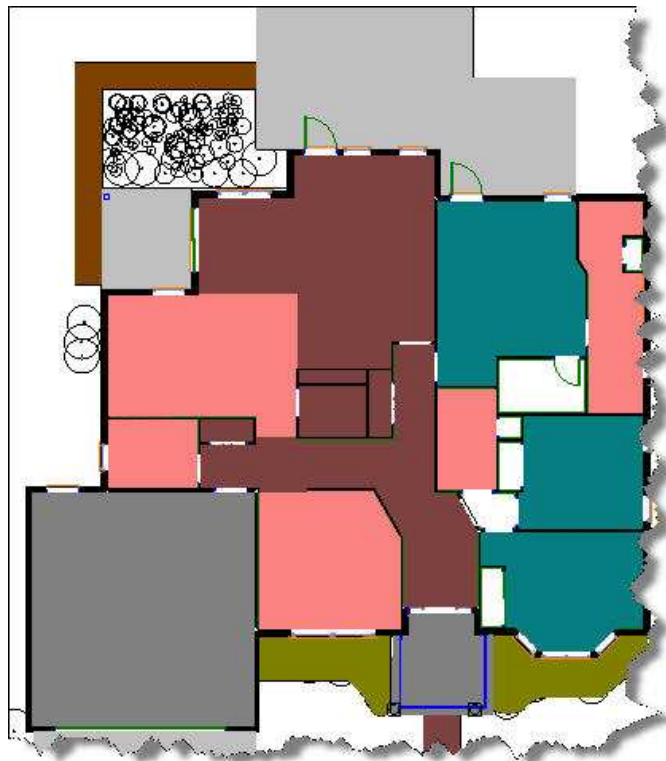
- **Automatic Headlight**
  - **Simpler.** When you enter a room in 3D a headlight is now attached to the camera to illuminate the room if lights haven't been added to the space.
- **Improved Real Time Render views**
  - **More Accurate.** The real time walk through in a model now appears crisper. The view is now automatically anti-aliased for minimal distortion and a higher resolution image.

Usability Enhancements

V10 offers enhancements that continue the history of Cadsoft creating user friendly tools. You asked for a simpler way to select elements. You asked for a faster way to license multiple copies of the software. You asked for more accurate options for footings. We enhanced many existing commands to make this happen.

- **Save Display Type between views**
  - **Simpler.** Work in 3D in a rendered outline view, move to 2D Plan view and work in a hidden line, upon return to 3D it will remember the rendered outline view mode and retain that view type.

- **Auto Save Enhanced**
  - **More Accurate.** Now when you do a manual save the AutoSave clock is reset so repeated saves will no longer interrupt your work.
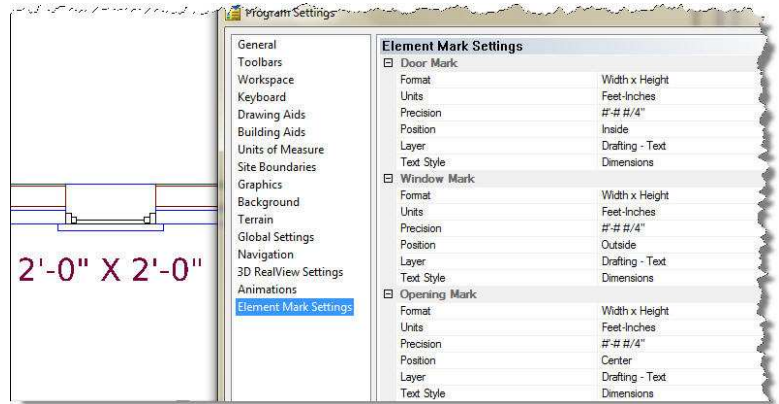
- **Solid Fill available in Floors/Cabinets/Paths/Pads/Fills**
  - o **Simpler.** A solid fill can also be automatically added to floors, cabinets, paths, pads and fills. Create attractive presentation plans easily.
- **Add 2D component to surfaces**
  - o **More Accurate.** Includes a separate 2D Footprint component for line style and hatch pattern assignments.
- **Sketchup™ export enhancement**
  - o **More Accurate.** Upon export the model has the surfaces integrated for cleaner surfaces in Sketchup™.
  - o **Simpler.** The model will retain units that Sketchup™ will recognize.
  - o **Simpler.** The model will export out to layers for easier manipulation in Sketchup™.
- **Server license**
  - o **Simpler.** Envisioneer Construction Suite V10 has server licensing. Issue a single code for all of the licenses in the office. When they are on the network, they get access to the software.
- **Cycle through Objects for selection**
  - o **Simpler.** Place your cursor over an object and by holding down the Shift key you can scroll through all of the other objects that have that same common edge. Makes it much simpler to select ceiling and floor surface edges.
- **Snap Orthogonal overrides Object Snapping**
  - o **Faster.** When tracing a PDF the Ortho snap now overrides Object snapping making it faster to select accurate points in a straight line.
- **Add Custom Profile to Footings**
  - o **More Accurate.** Apply a custom profile to a footing to exactly replicate the footing style you need for a project.
- **Add Material and Usage to the Weyerhaeuser™ Export**
  - o **More Accurate.** When exporting to Weyerhaeuser™ the usage and material is now added to the elements to be read in Weyerhaeuser™.

Openings

Enhancements to openings have been implemented to V10. You asked for a faster way to resize an opening. You asked for a simpler wall to mark openings. You asked for a more accurate way to show sills. We took your great suggestions and made them happen.
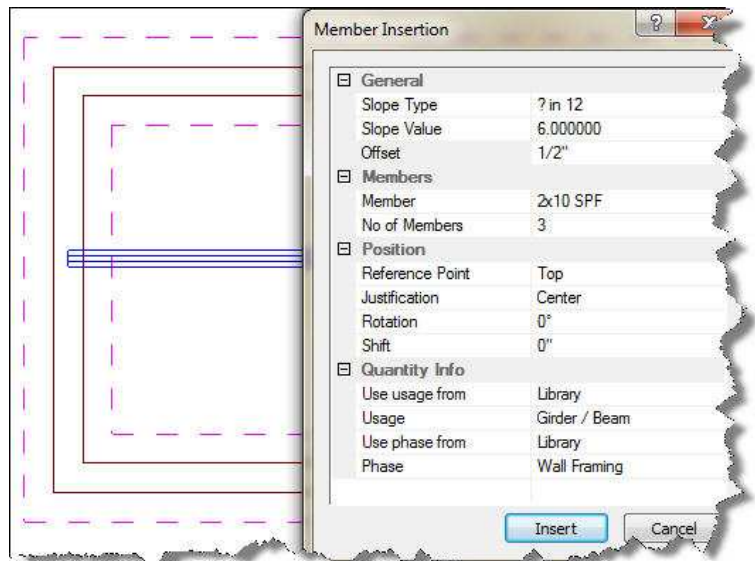
- **Dynamic grips for resizing openings**
  - **Faster.** Select a window, door or opening in a model and grips will now appear on either side to stretch the opening wider. No need to edit the opening it will automatically rename itself (if you choose) to represent the new size.
- **Move windows and doors in 3D with grips**
  - **Simpler.** You can move a window or door vertically on a wall while in 3D by simply dragging it to the new position.
- **Implement interior sills**
  - **More Accurate.** Windows now show an interior sill on the floor plan and in 3D.
- **Door and Window Marks**
  - **Simpler.** Door and window marks can be automatically inserted when a door or window is inserted. Definable settings are in the Program Settings.
- **Variable definition of LH vs RH Door**
  - **More Accurate.** Display standards are different all over the world. Use the definable setting so you choose how you define a LH vs RH door.

Members

V10 took a good tool and made it even better. The Member command is one of the most flexible tools in Envisioneer and now inserting and editing members is even better. You asked for a faster way to insert multiple members at the same time. You asked for a simpler way to show members in 2D. You asked for a more accurate way to insert members on a plane. The enhanced member tools accomplishes this and much more.

- **Solid Fill in 2D plan**
  - **Simpler.** Add solid fill colours to members on a floor plan. Create colourful floor plans and instantly visualize the various member sizes.
- **Show plan as single line**
  - **Simpler.** Collapse members to a single line element in a plan view for clean floor plan visuals.
- **Insert Multiple Members**
  - **Faster.** Insert multiple copies of a member at the same time to save you time.
- **Definable Member Insertions**
  - **More Accurate.** Define the slope and an +/- offset of a member before inserting it.
  - **Faster.** Define the phase and usage of a member on the fly.

- **Extend to plane tool**
  - **More Accurate.** Select a member and a surface and the member will automatically extend to the surface and mitre the end accordingly.
- **Adjust to Plane**
  - **Simpler.** Once a member is inserted you can modify the slope of the plane and offset from a surface.

Drafting

Making the drafting experience easier was a focus for V10. We took key requests and turned them into reality. You asked for a faster, simpler and more accurate working drawing environment. V10 makes great strides towards better working drawings.

- **Line work transition to layers**
  - **Faster.** More Drafting settings now have layer assignment capabilities.
- **Ellipse Command**
  - **Simpler.** Insert an ellipse in worksheet space with two different insertion methods for simple insertion.
- **Elliptical Arc**
  - **Simpler.** Insert an ellipse in worksheet space and remove a portion, upon insertion, to create an arc.
- **Angular dimension in model view**
  - **More Accurate.** Angled dimensions can now be inserted in model view as well as worksheet view.
- **Include CAD entities in Zoom to Fit**
  - **Simpler.** Now Zoom to Fit will recognize CAD entities and zoom to their limits.