



# ~ Polyboard V Features list ~



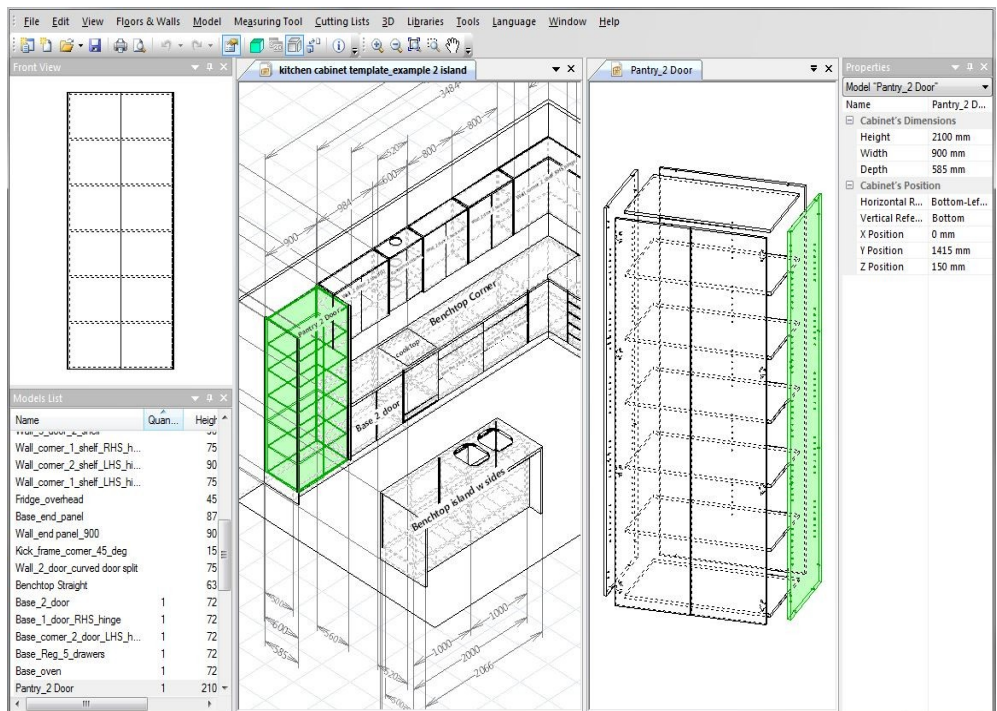
## General performance and usage features:

- Consistent, simple 3d panel design system that allows, exceptional flexibility and control over cabinetry design.
- Low computer system overheads usage. Standalone design and 3D graphics and rendering systems.
- Built in Fast 3D rendering of panels with solid colours and textures applied.
- All design operations are performed in a 3d graphical user interface with all machining operations and elements viewable on screen for easy validation.
- Polyboard operates in 3 modes:
  1. Cabinet design, unit by unit,
  2. 3d Projects: multiple cabinet units arranged in a 3d space
  3. Catalogue mode: multiple cabinet units manipulated in a spreadsheet interface.
- Ability to export 3D DXF drawing of particular cabinets or entire project with design elements separated into individual drawing layers ready for rendering by external specialist rendering software.
- Detailed Reporting: Itemised Project materials costings, Cabinets lists, Parts lists
- Automatic transfer of cut-lists to Opticut for sheet optimisation. Export of cut-lists to other external software in CSV format.
- Export of parts machining files to popular CAM systems such as: Biesseworks, Woodwop, Xilog Plus, DXF etc
- Direct seamless connection and integration with popular nesting systems such as Biesse nest, Enroute, Aspan, Masterwork, Optinest, e.t.c.

- shelves, uprights / dividing panels doors and drawers. Ability to set elements to be positioned proportionally or at specific positions.
- Parametric Design of doors and drawers. Doors can be added to any section of the cabinet and drawers are can include any or none of their internal components such as sides bottoms back and internal fronts
- Polyboard has many Specific features for increasing design efficiency and providing the utmost in flexibility such as:
  1. Internal casings: adds two perpendicular parts in one command such as a shelf and an upright which are cut by each other.
  2. "Un-boxings": Simple method for designing cabinets that need to have a void or need to fit around external elements such as building columns.
  3. Sloping sides and multiple sloped tops: Units can have external sides sloping at any reasonable angle and can have their tops consisting of multiple parts set at various angles to each other.
  4. Free divisions: ability to set internal panels at any angle inside a cabinet.
  5. Cabinet Free shape designer. Polyboard permits a cabinet to be set up with any number of external sides. The user determines cabinet behaviour by setting cabinet sides to be one of the following: side, frontage, or back.

## Cabinet Layout / 3D Space / Interior design features:

- Design of horizontal surfaces: floors, upper levels, mezzanine floors: set surfaces at any height / elevation
- Design of walls and partitions at any position in the 3 dimensional space
- Consistent shape designer system for designing walls and floors and benches tops using popular coordinate systems, Cartesian, polar e.t.c.
- Easy positioning of cabinets using snap to cabinets walls floors etc. - special cabinet move and set position commands.
- Direct control over cabinet dimensions from project layout interface designer
- Measuring tool for evaluating available space works in vertical, horizontal planes individually as well as point to point in 3 dimensions.
- Bench top designer, easy set of bench-tops to match cabinet shapes and position.
- Customised lighting solutions including spot and directional light fittings
- High resolution image placement on cabinets for displaying external appliances; ovens, fridges etc.
- Generation of dimensioned plan, elevation, and 3 dimensional views and drawings of the completed project, ability to set cut section planes to cut the project to get clear elevation drawings, & sectional views.



- Polyboard allows user control of part shapes. Individual part shapes can be modified by:
  1. Applying curves to part edges or corners.
  2. Adding internal shaped cut outs or pocket type machining operations
  3. Surface splits: parts can be divided into two or more separate parts using straight lines or curves.
  4. Thickness splits: parts can be modelled by two or more different materials laminated together.
  5. Parts can be made up from assembled components e.g. aluminium or timber framed multipart doors.
- Individual material properties including complete user control of part grain direction, part thickness, edge-banding requirements e.t.c.
- Parametric application of hardware fittings and other machining operations including drilling, routing and grooving. Positioning rules for setting number of hardware components, and offset positions. Automatic insertion and deletion of fittings upon change of cabinet dimensions.

## Cabinet / unit / part design Features:

- Automatic configuration of cabinet elements according to pre-defined manufacturing methods and rules. Simple manual override control of all individual design elements.
- Units conform to parametric design rules with control to resize unit at any stage.
- Simple design of standard cabinet internal parts such as