# 3D CAD Package Deliverables

# 3D CAD Package

The 3D CAD Package offers a significant starting point containing a model, floor plans, elevations, roof plans, dimension plans, optional ceiling plans and a plotted pdf package. The 3D CAD Package is only available in Imperial Units, available for any property under 10,000 SF (under 150 scans) and Premium Only (Contact the Support Team for larger submissions). The following items are available in the 3D CAD Package:

- **Point Cloud:** In the form of a DXF (.dxf) file, Point Cloud is available against the wall segments drawn for the iGUIDE Virtual Tour.
  - o Provided by Default.
- Floor Plans: 2D AutoCAD 2018 drawing file (.dwg).
  - o Provided by Default.
- Ceiling Plans: 2D AutoCAD 2018 drawing file (.dwg).
  - o Provided as an Optional Add-on.
- Elevation Plans: 2D AutoCAD 2018 drawing file (.dwg).
  - Provided by Default.
- Roof Plans: 2D AutoCAD 2018 drawing file (.dwg).
  - Provided by Default.
- Dimension Plans: 2D AutoCAD 2018 drawing file (.dwg).
  - Provided by Default.
- Model: 3D Revit 2020 file (.rvt).
  - Provided by Default.
- **Plotted Package:** 8.5x11 drawing package containing the floor plans, point cloud captures, dimension plans, ceiling plans, elevations, roof & legend.
  - Provided by Default.
- Delivery Time: 5-10 business days for properties under 10,000 sq ft after the iGUIDE is published. Please contact the Support Team for properties over 10,000 sq ft or over 150 scans. Delivery times will vary due to property size and complexity.
  - \*Delivery time is dependent on property size, complexity & additional add-ons which may exceed 5-10 business days. Excluding Saturdays & Sundays, holidays, and outside office hours (Mon-Fri 9 am-5 pm ET).



	Premium		
Included	✓ Point Cloud (.dxf)		
	✓ Floor Plans (.dwg)		
	✓ Dimension Plans (.dwg)		
	✓ Elevation Plans (.dwg)		
	✓ Roof Plans (.dwg)		
	✓ Model (.rvt)		
	♦ 8.5x11 Plotted Package (.pdf)		
Optional	✓ Ceiling Plans (.dwg)		
Not	➤ Mechanical/Electrical/Plumbing Plans		
Included	XLife Safety/Building Code Plans		
	X Building Sections/Wall Sections/Detail Sections		
	X Site/Grading/Landscape Plans  → Site/Grading/Landscape Plans		
	₩ Window/Door Schedules		
اا شخت			
*Deliverables a	re dependent on successfully meeting Capture Requirements.		
*3D CAD Package is Premium Only.			



### Point Cloud Deliverables

The Point Cloud is Delivered within the DXF file, "Metric DXF". The DXF does not contain annotative text or dimensions of any kind. See <u>iGUIDE DXF Information</u> via the iGUIDE Help Center. \*

\* The DXF is an automatically generated copy of the iGUIDE Virtual Tour floor plan, whereas the DWG is manually drafted, and to different specifications. The DXF and DWG will not be 1 for 1.

DXF is a Drawing eXchange Format created by Autodesk for exchanging data between various CAD packages. DXF files can be imported into most CAD software, not only Autodesk software (e.g. AutoCAD, Revit). DXF format is publicly documented, as opposed to Autodesk's proprietary DWG format.

DXF files only store numerical coordinates, but do not store measurement units for those coordinates. iGUIDE DXF files store all coordinates in **millimetres**, which is signified by the Metric DXF naming. Incidentally, if the coordinates in the iGUIDE DXF file were stored in metres, the files would still be called Metric.

Our system does not provide DXFs in imperial units, such as inches or feet. However, when importing a DXF file into CAD software, you can apply any scale factor of your choice, depending on which units you need to work with in the CAD software. For example, to work in inches, you would choose the scale of 25.4 and to work in metres the scale of 1000. This selection can usually be made in the import dialogue.



Figure #1 - Standard Residential DXF File Output





Figure # 2 - Standard Commercial DXF File Output

### Floor Plan Deliverables

File Format: 2D AutoCAD 2018 drawing file (.dwg).

**Interior Walls:** Primarily drawn to follow standard dimensional lumber sizes. The most common interior wall thickness values will be  $4\frac{1}{2}$ " (114mm) &  $6\frac{1}{2}$ " (165mm).

- Wall Thicknesses: Drawn to follow ½" (13mm) increments.
- Wall Placements: walls will be placed so room dimensions are to the nearest 1/4".
- Half-walls will be drafted as non-hatched walls to indicate non-full height walls.

**Exterior Walls:** Wall widths provided by an operator and ground level point cloud capture will be used as a starting point. The exterior wall width will be modified to adhere to standard dimensional lumber sizes, factoring in common brick or siding construction assembly thicknesses insuring reliable floor to floor alignment.

• <u>Wall Thickness:</u> Without supporting exterior data captured by an iGUIDE camera system, the exterior wall widths will be massaged to support vertically aligning floors based on interior point cloud data. Drawn to follow ½" (13mm) increments.

**Structural Elements:** Features such as fireplaces and columns each have different representations.

- <u>Columns:</u> Solid objects with standard shapes represented within the Interior of the property.
- <u>Fireplaces:</u> Single medium line types outlining the extent of the fireplace with a label.

**Floor to Floor Alignment:** Multi story properties will be aligned along common interior walls such as stairs. Exterior walls (as mentioned above) will be adjusted based on data interpretation, ground level capture and standard dimensional wall assemblies.



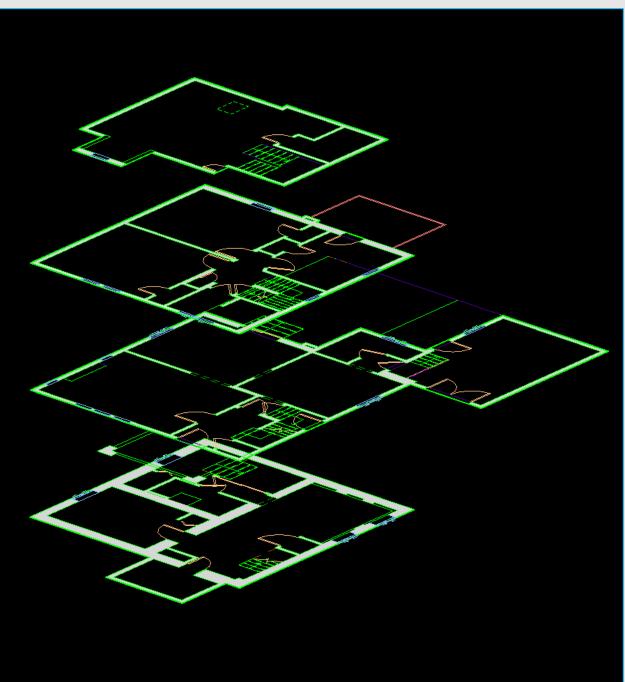


Figure # 3 - Floor to Floor Alignment

**⊡**iGUIDE®

**Doors:** Represented using a block, with all the available door types featured in iGUIDEs. Doors are measured to the nearest 2" (51mm) intervals. Door widths are measured by the door opening width, measured from inside frame to inside frame.

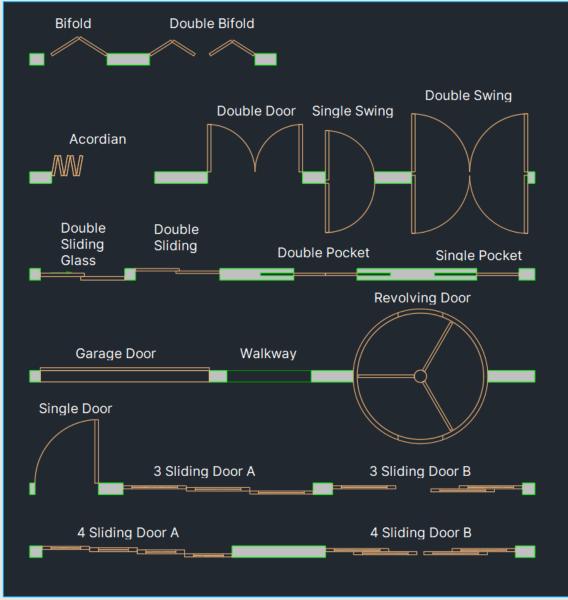


Figure # 4 - Door Styles/Types



**Windows:** Represented using a block, with seven available types shown below. Windows are measured to the nearest 1" increments. Window widths are set to include the frame surrounding the glazing.



Figure # 5 - Window Styles/Types

**Curtain Walls:** Represented using a wall type, with a default 2.5x2.5 inch (63.5 mm x 63.5 mm) mullions. Curtain Walls are measured to the nearest 1" (25mm) increments.

**Stairs:** Represented with single lines indicating the steps going up and down. Risers are cosmetically represented and may not reflect the true value. Each set of stairs will have the corresponding label block.

 Stairs visible from four feet above the floor level down are not shown and have a break line. The four-foot cutline may be adjusted by drafters to include more of the stairs to match the iGUIDE.

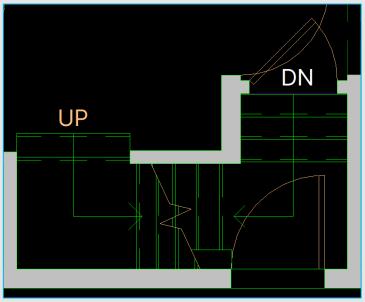


Figure # 6 - Stair Representation



**Exterior Features:** Exterior features such as porches, decks and balconies will be represented with single lines indicating where they are located.

- Exterior Stairs/Ramps: Exterior Stairs and/or ramps will be represented on the Floor Plan.
- Exterior Columns: External Columns that support the main structure will be represented on the Floor Plan.

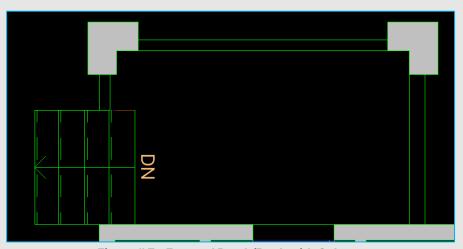


Figure #7 - External Porch/Deck with Columns

**AIA Layers:** All components created are set under the specific layer determined by the AIA (American Institute of Architects) Layer Standard.

**Room Labels\*:** Annotative room labels with varying sizes used to clearly indicate specific rooms.

**Room Boundaries:** Complete polylines outlining edges of rooms primarily used for determining the area of the room.

• Room Boundaries (polylines) are all turned off by default.

#### Room Areas\*:

- Room Areas are indicated for Major Rooms such as bedrooms, kitchens, living rooms, etc.
- Room Areas are not indicated for Minor Rooms such as hallways, closets, etc.
- Room Areas for spaces such as voids and stairs are not indicated.

#### **Room Measurements\*:**

- Not in the form of a Dimension String, but in the form of a label indicating the longest Width & Length of a room.
- Room measurements are taken paint to paint or interior face of wall to interior face of wall.
- Room measurements are shown for major rooms, similar to what's displayed on the iGUIDE.



### **Room Heights\*:**

- Flat Ceilings will contain a single vertical dimension to the nearest 1" (25mm).
- Sloped, Vaulted or Tray Ceilings will be denoted as variable (VAR.).

<sup>\*</sup>All annotations listed above are dependent on the size of the space. If the room is too congested or small, some or all annotations will be omitted. Generally, annotations are represented in a similar fashion as the iGUIDE Floor Plan.

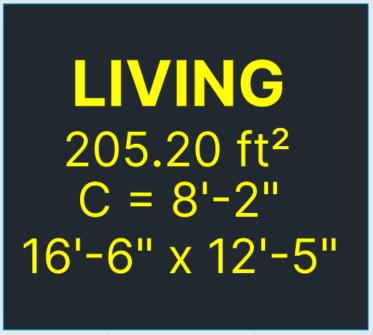


Figure #8 - Room Annotations

**Premium Objects:** Premium objects, millwork, and counters. Outlined with a solid thin thickness line if below four feet from the floor level, and a dashed thin thickness line if under counter, like the iGUIDE.

- Kitchen: Objects such as Fridges, Stoves, Dishwashers & Sinks will be represented.
- Bathroom: Objects such as Toilets, Sinks, Showers & Tubs will be represented.
- Laundry: Objects such as Washers & Dryer will be represented.
- Mechanical: Objects such as a Furnace, Water Heater & Hydro Meters will be represented.
- <u>Commercial/Retail:</u> Objects such as Cubicles, Store Shelving & Janitorial Sinks will be represented.

<sup>\*</sup>Room Dimensions may differ from the DXF & the iGUIDE Virtual Tour.





Figure #9 - Misc. Premium Areas

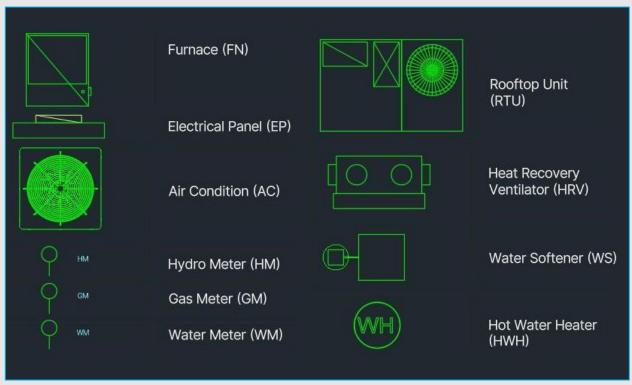


Figure # 10 - Mechanical Objects for Premium Floor Plans





Figure # 11 - Premium Residential DWG Floor Plan Output

# Floor Plan Views

The Floor Plan deliverable matches the DWG's Premium Floor Plan Output and in Revit will appear as below:

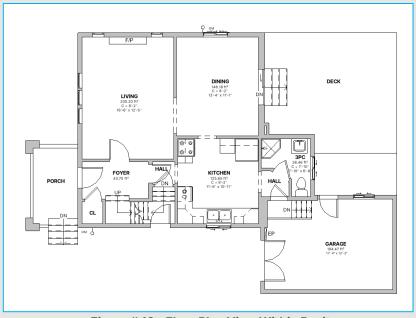


Figure # 12 - Floor Plan View Within Revit



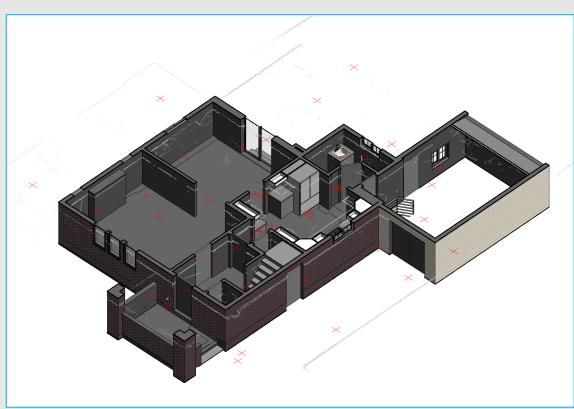


Figure #13 - Premium Floor Plan Output as per 3D View in Revit

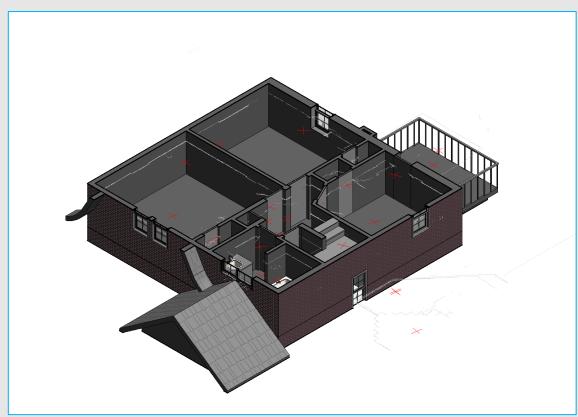


Figure # 14 - Premium Second Floor Plan Output as Per 3D View in Revit



Floor Plan Comparison Matrix

	Premium			
Included	✓ AutoCAD 2018 Drawing File			
	✓ Wall Types & Placement			
	✓ Wall Types at Ideement ✓ Walls Sizes at ½" (10mm/13mm) Tolerances			
	· · · · · · · · · · · · · · · · · · ·			
	✓ Wall Placement at ¼" (5mm/6.5mm) Tolerances			
	✓ Door Types & Placement			
	✓ Window Types & Placement			
	✓ Stairs			
	✓ Structural Elements (Columns, Fireplaces)			
	✓ AIA Layer Format			
	✓ Floor to Floor Alignment			
	External Features (Decks, Patios, Porches)			
	✓ Room Labels			
	✓ Room Area			
	✓ Room Measurements			
	✓ Ceiling Heights (Flat)			
	✓ Premium Objects			
Not	X 3D AutoCAD/3D Representation			
Included	**Ready to Plot Sheets			
	XWall Assembly Details			
	★ Floor Material			
	X Point Cloud  No. 1 of the Community o			
	Project/Survey Coordinates			
	<ul><li>Complex Ceiling Heights/Representation (Sloped, Vaulted or Tray)</li><li>Structural Elements (Beams, Lintels, Joists)</li></ul>			
*Deliverables	are dependent on successfully meeting Capture Requirements.			

# Reflected Ceiling Plan Deliverables

File Format: 2D AutoCAD 2018 drawing file (.dwg).

Walls: Walls provided on the Ceiling Plan are a copy of the Floor Plan.

**Doors/Windows:** Doors & Windows contained within the walls of the floor plan are only visible on the Ceiling Plan if they exceed the cut plane.

• <u>Skylights:</u> Similar to windows provided on the floor plan, skylights will be represented on the ceiling plan to the nearest 1" (25mm).

**Ceiling Types:** Acoustic panels will be represented with an appropriate grid relative to the visuals provided by an iGUIDE Camera System. Drywall ceilings will not appear with any type of hatch pattern. Open ceilings (exposed sub-floor or underside of steel decking) will not be represented with any hatch.

- Open/Exposed Ceilings: Any structural elements such as beams, open web steel joists, wood joists, etc. will not be represented.
- <u>Mouldings and Ornaments:</u> No specialty molding or trims will be represented on the ceiling plan.
- <u>Suspended Architectural Panels:</u> Suspended panels will be represented in an appropriate, approximate location.

**Complex Ceilings\*:** Bulkheads, tray & cove ceilings are represented as a hidden line boundary.

**Sloped/Vaulted Ceilings\*:** A hidden line represents the peak of a vaulted ceiling.

**Roof/Attic Access:** Represented as a block to indicate the location of or access to the Attic of a Residential Property or Roof of a Commercial Property.



**Lighting Elements\*:** Basic representation of recessed lighting, ceiling mounted lighting, pendant/suspended lighting, wall light, recessed fluorescent lighting, suspended fluorescent lighting, ceiling mounted fluorescent, lighting track lighting, linear strip lighting & ceiling fans.

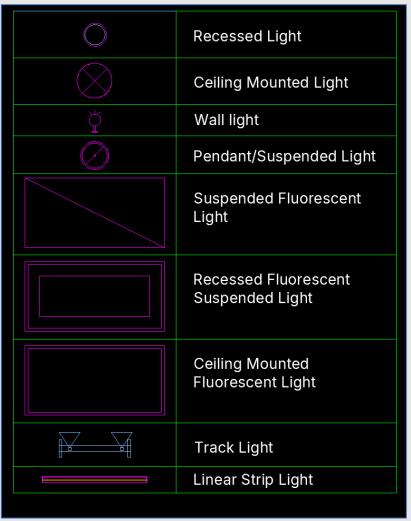


Figure # 15 - Lighting Elements Represented on the DWG Ceiling Plan



**Safety Elements\*:** Emergency Lighting (wall mounted), emergency exit lighting (ceiling mounted), emergency lighting (ceiling mounted), emergency battery units, smoke detectors, carbon monoxide detectors & fire alarm annunciators.

\*Life Safety Plans are not provided. Only basic lighting elements that relate to life safety features. This offering does not suffice as a Life Safety Plan.

$\bigcirc$	Emergency Light – Wall Mounted
$\otimes$	Emergency Light – Ceiling Mounted with Arrow
0	Emergency Light – Ceiling Mounted
	Emergency Battery Unit
	Smoke Detector
	Carbon Monoxide Detector
	Speaker
F	Fire Alarm Annunciator

Figure # 16 - Safety Elements Represented on the DWG Ceiling Plan

**⊡**iGUIDE®

**Mechanical Elements\*:** Surface level air diffusers, air vents, exhaust fans, air grills, ceiling fans & speakers.

• <u>Open/Exposed Mechanical:</u> Any mechanical systems such as ducts will not be represented in open/exposed ceiling areas.

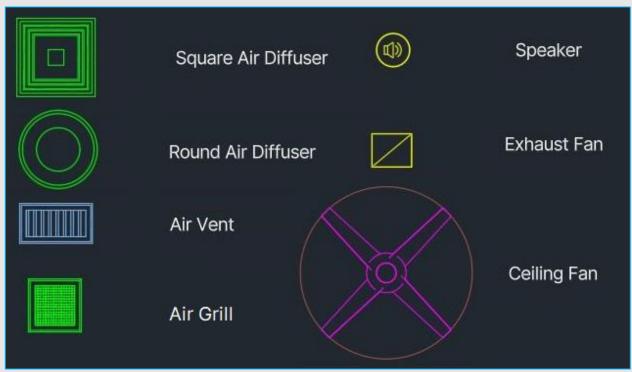


Figure # 17 - Mechanical Elements Represented on the DWG Ceiling Plan





Figure # 18 - Residential Premium Ceiling Plan DWG Output

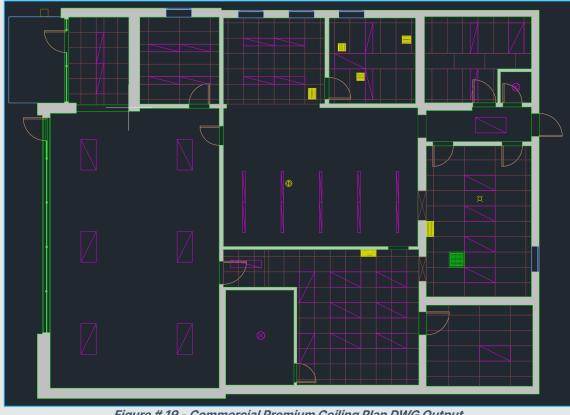


Figure # 19 - Commercial Premium Ceiling Plan DWG Output

# **Ceiling Plan Views**

The Ceiling Plan deliverable matches the DWG's Ceiling Plan Output and in Revit will appear as below:

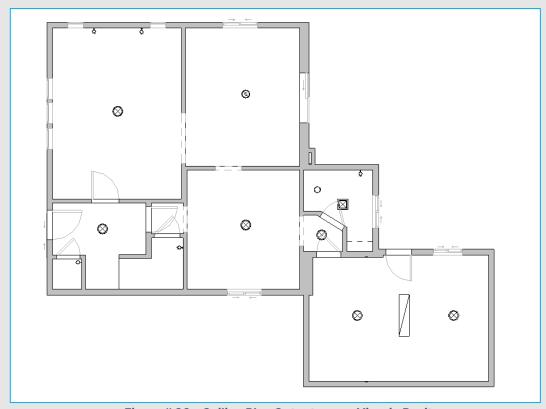


Figure # 20 - Ceiling Plan Output as per View in Revit

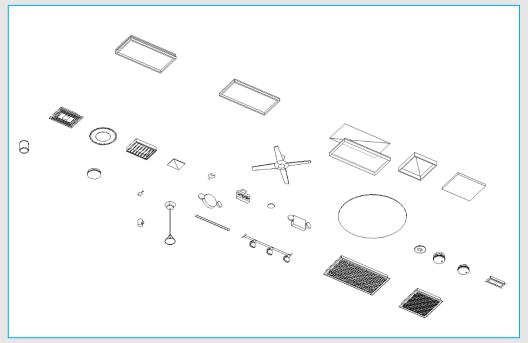


Figure # 21 - Ceiling Objects as Viewed in 3D



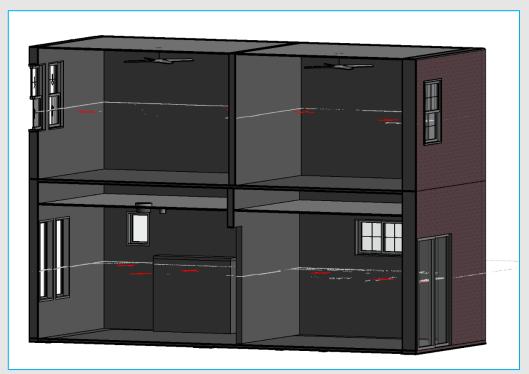


Figure # 22 - Ceiling Plan Elements as Viewed in a 3D Section

Reflected ceiling plan (RCP) drawings are an essential tool in architecture and construction, offering a detailed depiction of the ceiling layout by reflecting it as if seen from below. Unlike traditional ceiling plans, RCP drawings incorporate additional information such as lighting fixtures, HVAC, and other ceiling-mounted or surface level elements.

These drawings typically rely on a combination of floor level measurements and 360-degree images to create a reliable representation. Floor level measurements provide the foundation for the layout, while 360-degree images capture a comprehensive view of the ceiling space from various angles. By integrating these two sources of information via an iGUIDE Camera System, RCP drawings aim to provide a more complete and reliable depiction of the ceiling layout.

While RCP drawings are based on measurements and images, it's important to recognize that they are still approximate representations. Factors such as perspective distortion, variations in ceiling height, ceilings exceeding one storey in height (14 feet, 4.3 meters) and the complexity of ceiling elements can affect the accuracy of the drawings to some extent. All room dimensions and floor areas must be considered approximate and are subject to independent verification.



Reflected Ceiling Plan Comparison Matrix

	Premium	
Included	✓ Ceiling Types	
	✓ Skylights	
	✓ Roof Access Hatches/	
	Attic Access Hatches	
	✓ Bulkheads	
	✓ Standard List Deliverables	
	✓ Premium Objects	
	✓ Surface Level Lighting Fixtures	
	✓ Surface Level Safety Features (Related to Lighting)	
	✓ Surface Level Mechanical Features	
Not	XAnnotations, Measurements or Ceiling Heights	
Included	XLife Safety Plan	
	Sprinkler Systems & Routing	
	★Mechanical Systems & Routing	
	★Electrical Systems & Routing	
	Custom Lighting Fixtures	
	<b>X</b> Structure	
*Deliverables are dependent on successfully meeting Capture Requirements.		
*Ceiling Plan	Deliverable is available as an Add-on.	

# **Elevation Plan Deliverables**

File Format: 2D AutoCAD 2018 drawing file (.dwg).

**Elevation Views:** A view (Drawing) of each core elevation; Front, Rear, Left & Right sides of the building faces (North, South, East, West).

• Attached Structures will only contain the elevational views relative/related to the target unit (E.g. Commercial Unit in a strip mall may only contain a Front & Rear Elevation as an occupying unit exists to the right & left of the target).

Materials/Hatch Patterns\*: An appropriate hatch pattern to represent material will appear on the Elevation Drawing.

- Hatch patterns are available for Siding, Metal, Brick, EIFS/Stucco, Stone, Wood, Wood Slats, CMU (Concrete Masonry Units), Shakers & Shingles.
  - \*Custom Hatch Patterns will not be utilized. The next closest representative material will be used.

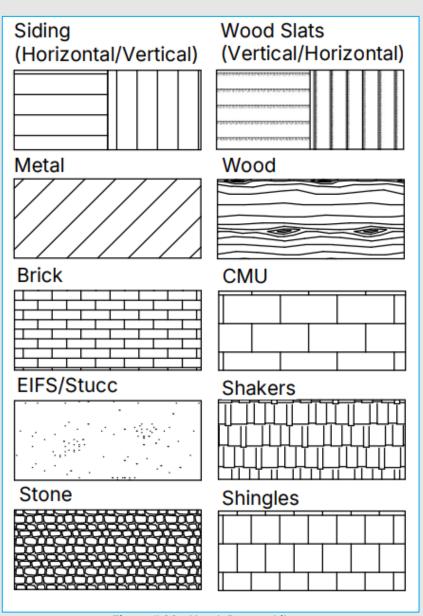


Figure # 23 - Hatch Pattern Library



**Grade Line\*:** An approximate, applicable grade line will be represented for each view.

- <u>Below Grade Items</u>: Any floor below the grade line will not be represented on the Drawings.
- Walk-Out Basements: An approximate grade line will be represented with slope to meet the below grade walk out basement level.
- <u>Stepped Foundations:</u> Each segment of the stepped foundation will be represented where appropriate to match the visuals captured by an iGUIDE Camera System.

**Openings\*:** Both Windows & Doors will be represented with an appropriate directional indicator.

- <u>Attic Vents:</u> Attic Vents typically located towards the peak of a gable, will be represented similar to a window.
- Opening Shapes: Windows & Doors will match the shape captured by an iGUIDE Camera System. Items such as transoms and sidelights will be available in the elevation.
  - \*Window & Doors do not contain any special trims, casing, or framing. Windows & Doors will not display any sills. Windows will not display any shutters next to them. Any additional protrusion or opening such as a dryer vent will not be represented.

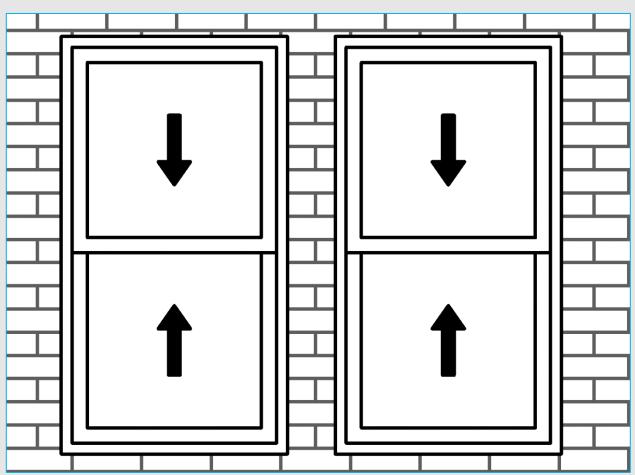


Figure # 24 - Door & Window Opening in Elevation

**Objects:** Related to Mechanical items such as AC Units, Hydro Meters, Gas Meters, etc. that are represented on the Floor Plan, they will be represented in their appropriate locations on the Elevation.

## **⊡**iGUIDE°

**Exterior Elements:** Exterior Elements such as Patios, Decks & Porches that abut the building will be represented in the elevation. This includes railings, columns & stairs if applicable.

 Railing Types: Generic railings are available to depict glass, vertical/horizontal balusters or just guard rails but will not feature an exact replica of shape & style with the property.

**Attachments & Extensions:** Objects/Components such as awnings, overhangs, protrusions from the building will be modelled and represented with a generic material & generic component.

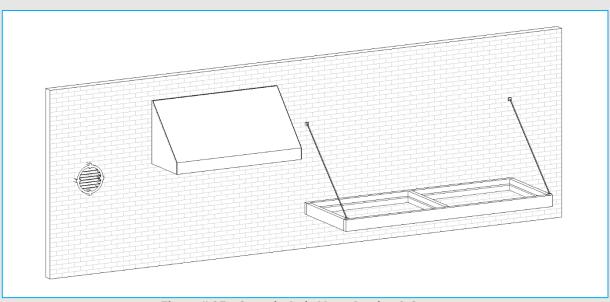


Figure # 25 - Generic Attic Vent, Awning & Canopy

**Spatial Depth Cues:** To convey a sense of depth, a hierarchy of line weights are used to convey if a building face is closer or further from the view.

**Datum Lines:** Key datum lines are represented on the elevation.

- Top of Floor, Underside of Ceiling, Roof.
  - The distance between the Underside of Ceiling & Top of Floor is by default 1'-0" (305mm) dependant on the available data captured by an iGUIDE Camera System.

<sup>\*</sup>Reliability of elevation drawings may be reduced due to technical and/or environmental limitations of the existing site conditions such as building obstructions, building heights exceeding 2 storeys, or extensive wall lengths lacking distinct features. All dimensions must be considered approximate and are subject to independent verification.



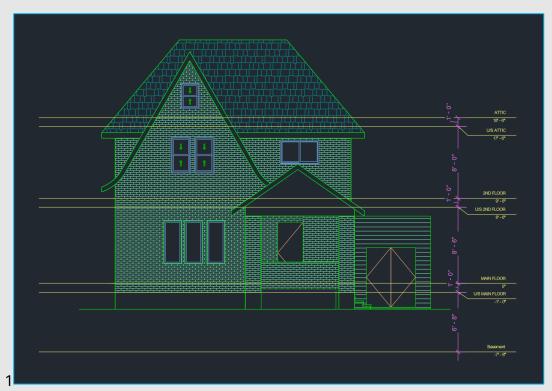


Figure # 26 - Elevation Deliverable as a DWG

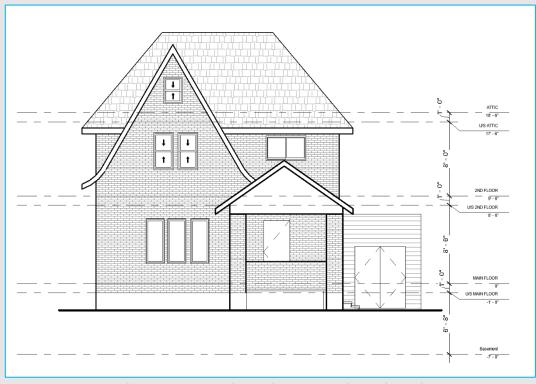


Figure # 27 - Elevation Deliverable as Viewed in Revit



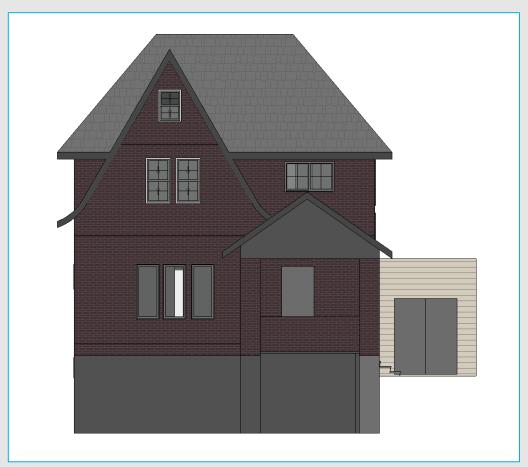


Figure # 28 - Elevation as Viewed in Revit (3D View)

**Elevation Plan Comparison Matrix** 

evacion Fian Companison Matrix		
	Premium	
Included	✓ Material Hatch Patterns	
	✓ Floor to Floor Measurements	
	✓ Datum Lines	
	✓ Roof Placement & Shape	
	✓ Windows/Doors/Openings	
	✓ Chimneys/Floor Level Mechanical	
	✓ Depth Cueing	
Not	★Window/Door Tags	
Included	★Below Grade Elements (Foundation & Footings)	
	X Material Notations	
	★ Sills, Shutters & Other Architectural Cosmetic Features	
	X Roof Slope, Fascia, or Gutters	
	<b>X</b> Signage	



# **Roof Plan Deliverables**

File Format: 2D AutoCAD 2018 drawing file (.dwg).

**Roofing Materials:** The roof plan will be shown with an appropriate hatch pattern for shaker/asphalt shingle roofs.

Commercial roof plans contain no specified hatch patterns.

**Roof Geometry:** Roof connections such as ridges, valleys, hips, and gables are represented on the roof plan but are not denoted.

• Roof Outline: A solid line indicates the extent of the roof & its connections.

**Roof Slope:** Denoted on each segment of the roof with a directional arrow.

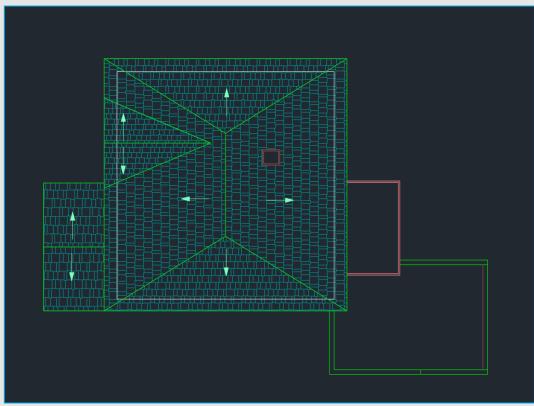


Figure # 29 - Roof Plan Deliverable as a DWG

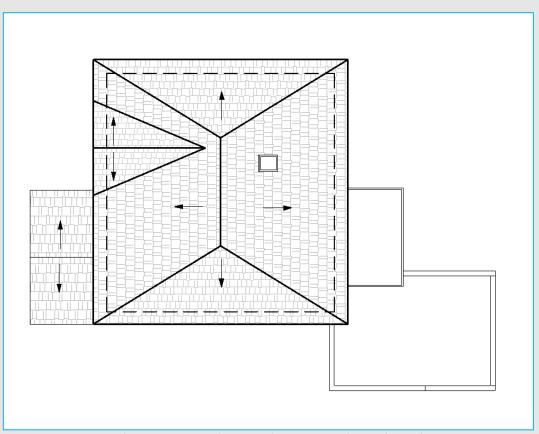


Figure # 30 - Roof Plan Deliverable as Viewed in Revit

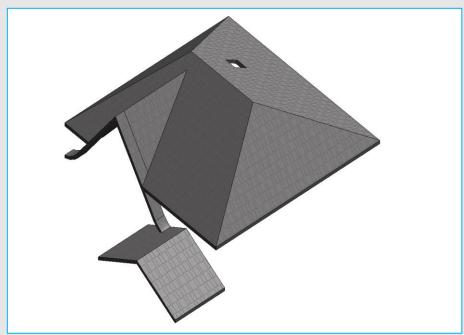


Figure # 31 - Isolated Roof in Revit 3D View

**Roof Components:** Parapets, access hatches, roof mounted equipment and skylights may appear on a roof plan.

- <u>Ventilation:</u> Vents, plumbing vents, gas vents, etc. will not be represented.
- Drainage: Roof Drains or any indication of slope will not be represented.

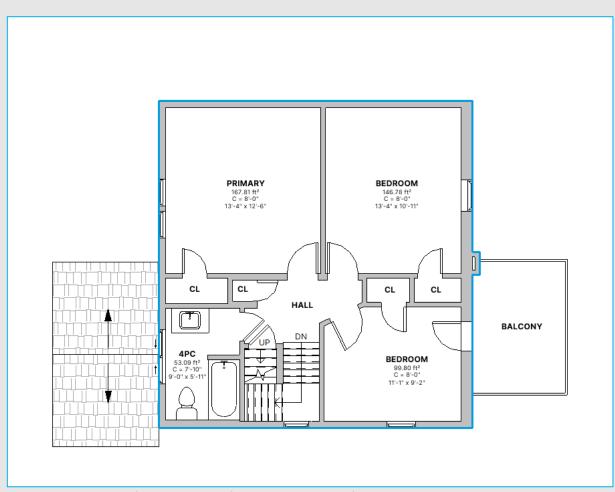


Figure # 32 - Roof Plan Represented with the Second Floor Plan

\*The roof plan may appear appended to the relevant floor plan depending on the cut plane.

Because it is often infeasible to scan most typical residential roofs, relevant exterior scans taken around and away from the perimeter of the property are required. While Roof Plan drawings are based and imagery via the iGUIDE Camera System & Satellite Imagery (when available), it is important to recognize that they are still approximate representations. Factors such as perspective distortion can affect the accuracy of the drawings. Without precise measurements, the drawn roof plan may only provide an approximation of the actual dimensions and layout. All dimensions must be considered approximate and are subject to independent verification.

## Roof Plan Comparison Matrix

	Premium	
Included	✓ Material Hatch Pattern	
	✓ Direction of Roof Slope	
	✓ Indication of Roof Connections	
	✓ Commercial Flat Roofs	
	✓ Commercial Mechanical items	
Not	X Ventilation/Drainage	
Included	X Roof Slope Values	
	<b>X</b> Gutters/Fascia	
*Deliverables	*Deliverables are dependent on successfully meeting Capture Requirements.	

### Model Deliverables

File Format: 3D 2020 Revit file (.rvt).

**Point Cloud:** The 2D DXF & *Point Cloud* is available within the Model as a "symbol" and hidden by default. The DXF layer will be represented at an arbitrary 4feet above the floor level per level.

**Families:** iGUIDE default proprietary families, with appropriate dimensions for easy modification or replacing with other families.

**Levels\*:** Set to the highest measured height per floor, plus a one-foot space between top of level and level of floor above to accommodate floor assembly, modeled with a default two-inch floor.

- <u>Backsplits:</u> Split levels greater than a four-foot difference will be separated onto their own floors.
- No separation of spaces will be shown when a part of the building is located on the same level but separated in the iGUIDE.
- Detached structures attached with a roof would be shown on the appropriate floor plan.

**Interior Walls:** Primarily modeled to follow standard dimensional lumber sizes. The most common interior wall thickness values will be 4 ½" (114mm) & 6 ½" (165mm).

- Wall Thicknesses: represented with a generic material set to ½" (13mm) intervals.
- Wall Placements: walls will be placed so room dimensions are to the nearest 1/4" (6.5mm).
- Wall Heights: all represented at the highest elevation point of the floor.
  - Walls that do not reach the ceiling level will be represented as reliably as possible with the data available.
  - Half-walls will be set to a default of 4'-0" (1220mm).

**Exterior Walls:** Wall widths provided by an operator and ground level point cloud capture will be used as a starting point. The exterior wall width will be modified to adhere to standard dimensional lumber sizes, factoring in common brick or siding construction assembly thicknesses.

• <u>Wall Thickness:</u> Without supporting exterior data captured by an iGUIDE camera system, the exterior wall widths will be massaged to support vertically aligning floors based on interior point cloud data. Represented with a generic material set to ½" intervals.

**Curtain Walls:** Curved or straight curtain wall systems will be shown as a Stacked Curtain Wall.

**Structural Elements:** Features such as fireplaces and columns each have different representations.

• <u>Columns:</u> Solid objects with standard shapes to match the representation in iGUIDEs.

<sup>\*</sup>Spacing between levels may differ from the default 1'-0" based on additional capture requirements.



• <u>Fireplaces\*:</u> Single block outlining the extents of the fireplace with a label. \*Fireplaces are represented as rectangular or triangular.

**Floor to Floor Alignment:** Multi story properties will be aligned along common interior walls such as stairs. Exterior walls (as mentioned above) will be adjusted based on data interpretation, ground level capture and standard dimensional wall assemblies.

**Doors:** Door dimensions are represented to the nearest 2" (51mm) increment.

- Door Type: Door types accurately match the type represented in an iGUIDE.
- Door Widths: Represented to the nearest 2" (51mm) increment.
- <u>Door Heights:</u> Represented to the nearest 2" (51mm) increment.

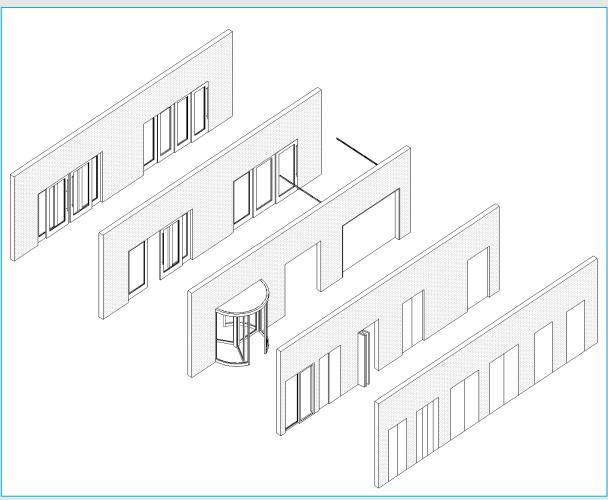


Figure # 33 - Door Types 3D View

**Wall Openings:** Wall openings are represented to the nearest 1" (25mm) increment.

- <u>Dimensions:</u> Height from the floor as well as the opening width & height will be set to the nearest 1" (25mm) increment.
- <u>Pass-Throughs:</u> Openings in the wall that can either be walked through or if the base is off the floor, used for visibility or passing items through.



Windows: Windows are represented to the nearest 1" (25mm) increment.

- <u>Window Type:</u> Window types can be represented as Double-Hung, Single Hung, Louvers/Jalousie, Awning, Casement, Fixed, Sliding & Hopper.
- Window Shape: Square, Rectangular, Circular, Semi-Circular, Triangular.
- Window Width: Represented to the nearest 1" (25mm) increment.
- Window Height: Represented to the nearest 1" (25mm) increment.
- Window Elevation: Represented to the nearest 1" (25mm) increment.

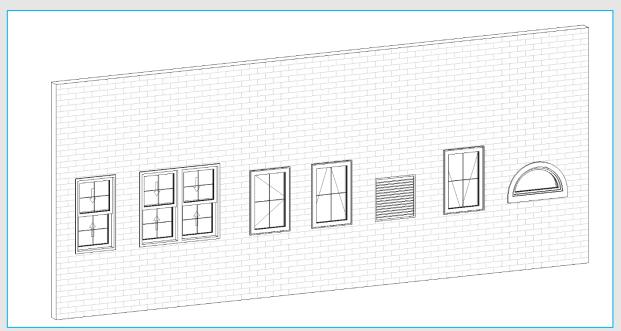


Figure # 34 - Window Types in 3D

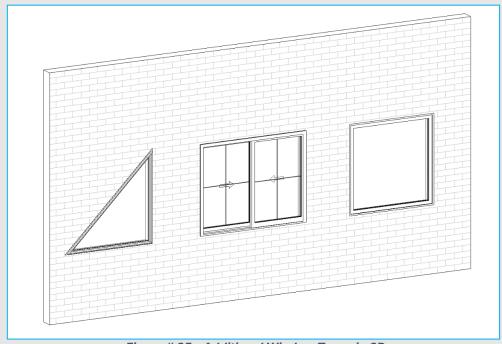


Figure # 35 - Additional Window Types in 3D

**⊡**iGUIDE°

**Stairs:** Represented with single lines indicating the steps going up and down. Each set of stairs will have the corresponding label block.

- Stairs visible from four feet above the floor level descending are not shown and have a break-line.
- Stairs will meet their receiving level in 3D and have an associated generic railing generated.
- Stair tread depth and riser height is a default to match starting position and ending position. True number of risers is not represented in the model or the floor plans.

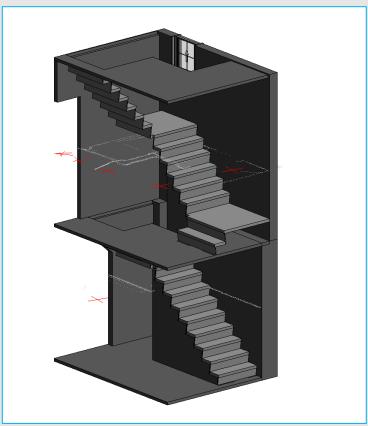


Figure # 36 - Multi-Floor Stair ISO

**Ceilings:** Ceilings are represented as flat. Ceiling dimensions are shown to the nearest 1" (25mm) increment. With 2" (51mm) generic Ceiling assembly.

**Complex Ceilings:** Provided a vertical wall that contacts the ceiling in combination with vertical scan capture, a Sloped, Peaked, Attic, or Tray ceiling type will be represented in Premium RVT files. Ceiling dimensions are shown to the nearest 1" (25mm) increment. With 2" (51mm) generic Ceiling assembly.

- Floating features, small bulkheads, and areas with no clear vertical data will not be represented.
- Tray ceilings will use a default one foot (1'-0") (305mm) dimension to indicate the depth.



**Exterior Spaces:** Generic two-inch floors representing the areas for exterior spaces (porches/patios/decks).

- <u>Exterior Stairs/Ramps:</u> Exterior Stairs and/or ramps will be represented in the Model and on the Floor Plan.
- <u>Exterior Columns:</u> External Columns that support the main structure will be represented in the model and on the Floor Plan.

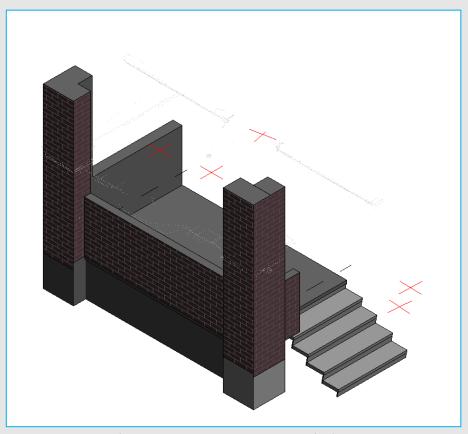


Figure # 37 - Porch, Columns & Stairs in 3D

**Room Labels:** Annotative room labels with varying sizes used to clearly indicate specific rooms.

**Room Boundaries:** Outlining edges of rooms primarily used for determining the area of the room.

Invisible Dividers separate spaces so rooms best match the iGUIDE.

#### **Room Areas:**

- Room Areas are indicated for Major Rooms such as bedrooms, kitchens, living rooms, etc.
- Room Areas are not indicated for Minor Rooms such as hallways, closets, etc.
- Room Areas for spaces such as voids and stairs are not indicated.



#### **Room Dimensions:**

- Single dimensions annotating the longest width and longest length for rooms that have dimensions displayed in the iGUIDE.
- Room dimensions are annotated to the interior face of wall to interior face of wall.
- Room dimensions are shown for major rooms, matching what is displayed on the iGUIDE.

### **Room Heights:**

- Flat Ceilings will contain a single vertical dimension appended to the Room Label.
- Unfinished Ceilings are measured to the underside of the floor joist.
- Sloped, Vaulted or Tray Ceilings will be denoted as "VAR."

**Premium Objects:** Premium objects, millwork, and counters. Outlined with a solid thin thickness line below four feet from the floor level, and a dashed thin thickness line if under the counter, similar to the iGUIDE. Objects used in the model match the objects used in the iGUIDE.

- Base counter height is set to a height of 3-'0". No custom heights will be provided.
- Upper Cabinets will be a generic model with a default 1'-0" depth, 2'-0" height and 4'-6" above the finished floor level.

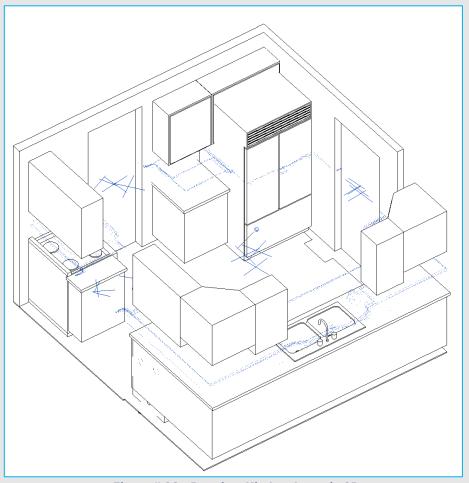


Figure # 38 - Premium Kitchen Items in 3D



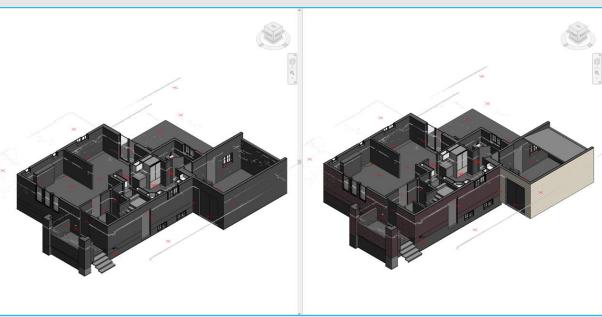


Figure # 39 - RVT Model Standalone Vs. RVT Model Package: Floor Iso

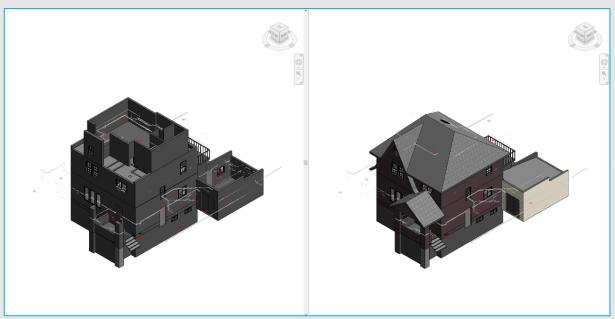


Figure # 40 - RVT Model Standalone Vs. RVT Model Package: 3D View

Model Comparison Matrix

Dua main ma
Premium
Included
✓ Wall Types & Placement
✓ Wall Sizes at ½" Tolerances
✓ Wall Placement at ¼" Tolerances
✓ Door Types & Placement
✓ Window Types & Placement
✓ Stairs
✓ Structural Elements (Columns as Basic Shapes)
✓ Floor to Floor Alignment
✓ Ceilings (Flat)
✓ Complex Ceilings (Sloped, Tray, Boxed)
✓ Ceiling Components (Surface Level Components)*
✓ Point Cloud from DXF file
✓ Exterior Spaces (Decks, Patios, Porches, etc.)
✓ Sloped Roofs (Residential)*
✓ Flat Roofs (Commercial)*
✓ Elevational Façade Materials (Cosmetic)*
✓ Room Labels
✓ Room Areas
✓ Ceiling Heights
✓ Room Dimensions
✓ Premium Objects (Cabinets, Fixtures, Appliances, Floor
Level Mechanical)
Not
Included   Floor Material/Assembly Details
<ul> <li>Ceiling Material/Assembly Details</li> <li>Roofing Material/Assembly Details</li> </ul>
Sections
★ Project/Survey Coordinates
★ MEP (Mechanical, Electrical, Plumbing)
★ Site/Landscaping
Structure such as Beams & Joists *Inclusions are dependent on their relevant Add-ons. For example, to have ceiling components

\*Inclusions are dependent on their relevant Add-ons. For example, to have ceiling components listed in the ceiling plan deliverables appear in the model, the add-on needs to be requested. The Model Deliverable can be ordered as a standalone product but does not reflect the model showcased for the 3D CAD Package.



#### **Dimension Plan Deliverables**

The Dimension Plan is a default deliverable to the 3D CAD Package. Similar to an iGUIDE Alberta Measurement Diagram, the Dimension Plan offers interior "Paint to Paint" dimension strings.

**Dimension Strings:** Depending on the geometry and or scale of the building, the dimension plan will at a minimum contain 1 horizontal string (width) & 1 vertical string (length).



Figure # 41 - Residential Dimension Drawing DWG Output





Figure # 42 - Commercial Dimension Drawing DWG Output

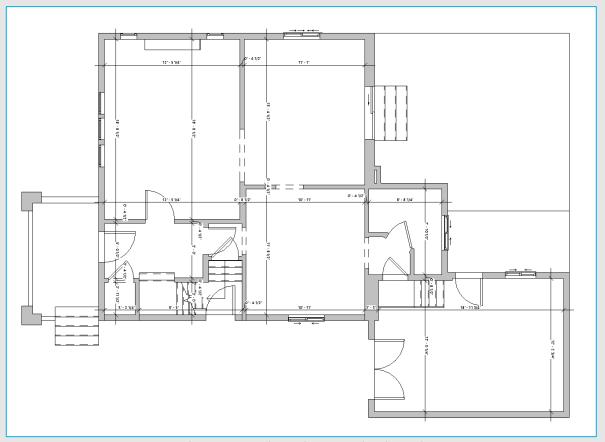


Figure # 43 - Dimension Plan View in Revit



Dimension Plan Comparison Matrix

	Premium
Included	✓ Horizontal Dimension Strings (Width)
	✓ Vertical Dimension Strings (Length)
	✓ Captures Interior Wall Segments
Not	XExterior Wall Thicknesses
Included	X Exterior Dimension Sets

#### Plotted Package Deliverables

File Format: .pdf.

Sheet Size: Standard Letter Size Paper - 8.5" x 11".

#### **Title Block Information:**

**Drawing Title:** The Drawing Title will indicate the "Plan Type" followed by the "Level" of the property.

**Property Address:** The Property Address will reflect the address for the Work Order on an iGUIDE Portal.

**QR Code:** The QR code available on each sheet of the drawing package will link back to the Public URL of the iGUIDE Virtual Tour.

**Link to Virtual Tour:** The "Click Here" text will allow users viewing the PDF in a web browser to click and open the iGUIDE Virtual Tour. The link provided is the Public URL.

**Consultant Logo:** Blue iGUIDE branding image, indicating Planitar Inc. as the producer of the drawings.

**Date:** The date represents the completion date of the plot or the "Print" date.

**Scale:** The scale of the drawing will be determined based on the available paper space. Scale may be shown as 1/8" = 1'-0" up to 1/32" = 1'-0".

**Sheet Number:** The sheet numbers are adapted from elements of the US National CAD Standard. The Sheet Number is broken into 3 core elements, the "Discipline Designator", the "Sheet Type" and the "Sequence Numbers". The Point Cloud & Dimension Drawings are represented as a decimal sheet number in reference to the core Floor Plan Drawing.

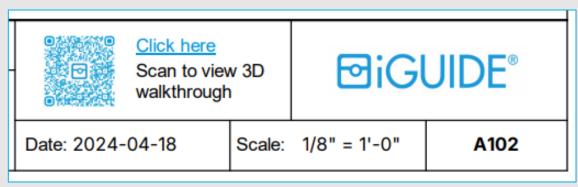


Figure # 44 - Planitar Inc. Title Bock



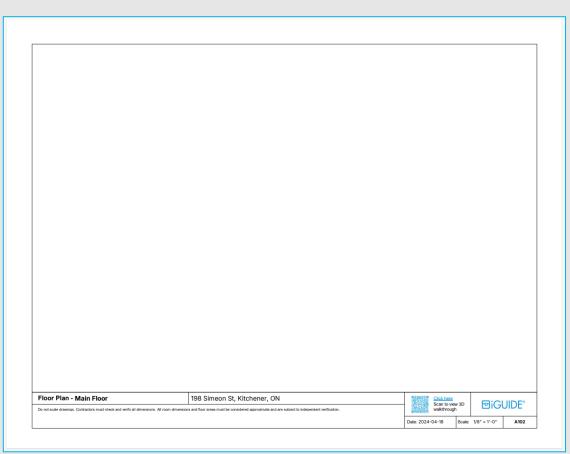


Figure # 45 - Planitar Inc. Title Block

**Disclaimer:** Do not scale drawings. Contractors must check and verify all dimensions. All room dimensions and floor areas must be considered approximate and are subject to independent verification. All documents remain the property of Planitar Inc. Unauthorized use, modifications, and/or reproduction of these documents is prohibited without written permission. The material contained herein reflects Planitar Inc.'s best judgement considering the information available at the time of preparation. Any use which a third party makes of the document, or any reliance on or decisions to be made based on them are the responsibility of such third parties. Planitar Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on the documents.

#### **Sheet Features:**

**North Arrow\*:** The North Arrow is based on the Consultants best judgement through Google Maps.

\*The North Arrow reflected on relevant sheets may not reflect the North Arrow represented on an iGUIDE PDF Floor Plan. If the North Arrow cannot be determined, no arrow will be represented.

**Area Schedule\*:** The Area Schedule represents the Total Gross Area of the building Footprint. The Area Schedule will indicate up to 2 measurements, the Total Gross Area of the whole building and the Total Gross Area of the individual floor. Indicated by a solid blue line the measurement is taken to the furthest exterior point, "Brick to Brick" excluding outdoor elements such as patios, decks, porches, terraces & balconies.

**⊡**iGUIDE°

\*This Gross Area is not in reference to any specified GFA or GLA Measurement Standard. The Area will not be identical to Planitar Inc.'s iGUIDE Method of Measurement or the Reported Interior or Exterior Area of the iGUIDE Report. The Measurement is purely approximate based on the Consultants best judgement considering the information available at the time of preparation. When documenting perimeter walls for levels above the ground level, as well as below-grade perimeter walls, it is important to note that achieving precise measurements may not be feasible due to several factors such as architectural complexities, structural elements, and limitations in access. All room dimensions and floor areas must be considered approximate and are subject to independent verification.

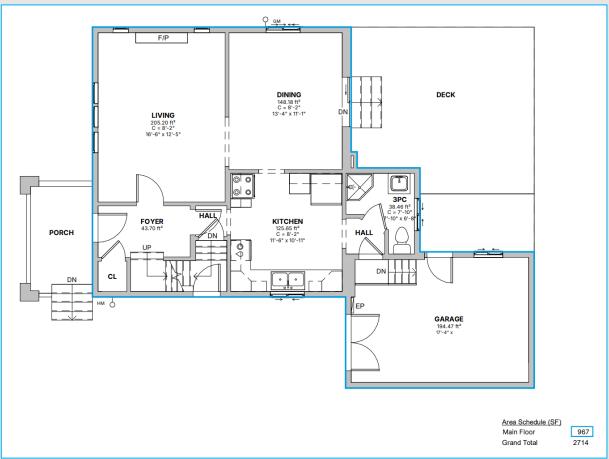


Figure # 46 - Gross Area Measurement, Area Schedule



#### **Unique Sheets:**

**Dimension Drawing:** Similar to iGUIDE's Measurement Diagrams, the Dimensions Drawing provided contains full Interior Dimension strings. There may be 2-4 core interior strings width & length wise of the building.

- For more complicated building geometry, more dimension strings may be represented.
- For less complicated building geometry, less dimension strings may be represented.

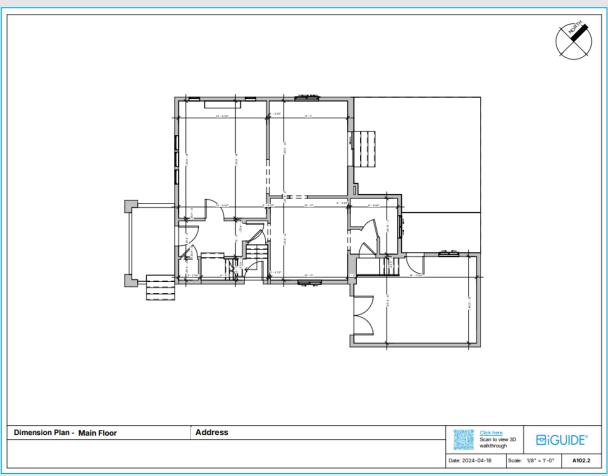


Figure # 47 - Dimension Drawing Plotted on PDF

**⊡**iGUIDE®

**Point Cloud Drawing:** The Point Cloud Drawing is the visible plotted laser data captured by an iGUIDE camera system.

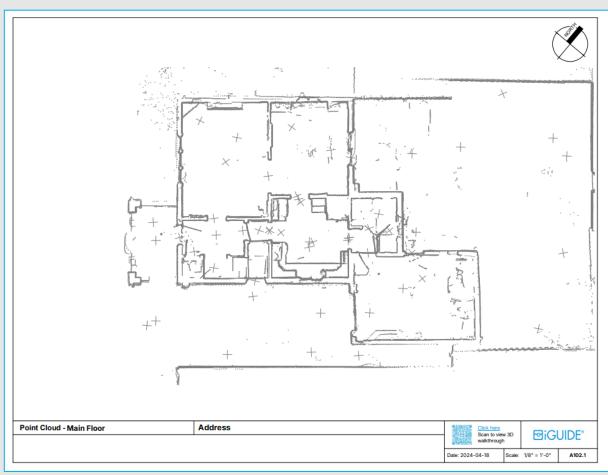


Figure # 48 - Point Cloud Plotted on PDF

**⊡**iGUIDE®

**Legend:** Unlike conventional construction drawings, space is limited so a Legend sheet or "Appendix" is available at the end of the package. The Legend contains all available symbols for Reflected Ceiling Plans and Floor Level Mechanical and any Hatch Pattern used for other drawings.

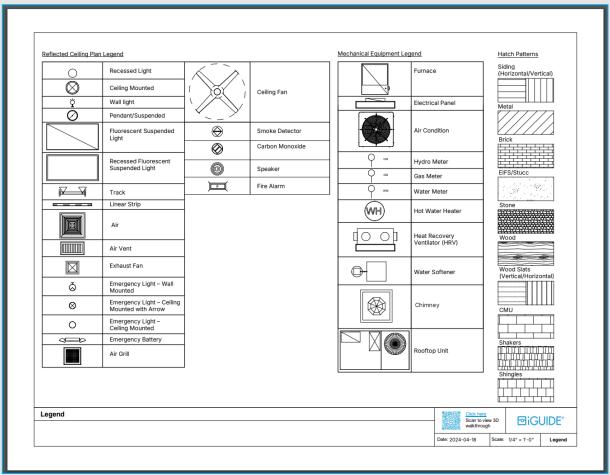


Figure # 49 - Legend/Appendix Sheet



Plotted Package Comparison Matrix

ottou i dok	age comparison waterx
	Premium
Included	✓ Plans (Floors, Ceilings, Dimensions, Roof, Elevations)
	✓ Point Cloud
	✓ Sheet Name
	✓ Property Address
	✓ Measurement Disclaimer
	✓ QR Code & Virtual Tour Link (Public URL)
	✓ Production Date
	✓ Drawing Scale
	✓ Sheet Number
	✓ Legend/Appendix
	✓ North Arrow
	✓ Area Boundary Measurement
Not	X Revision Table
Included	Custom Client Branding
	★Permit Stamp/Permitting Stamp Area
	Custom Sheet Sizes such as 11x17, 18x24 or 24x36

#### **Additional Information**

This section of the document provides additional information not contained within the core body of the deliverables above.

#### Data Interpretation – North America

<u>Data Assumptions/Deviations:</u> In the goal of providing a workable model and subsequent DWG files that has walls at appropriate thicknesses and locations, there will be some assumptions made that may result in deviations from the laser data. Accuracy is always a valuable deliverable, with these assumptions, the DWG file produced maintains its accuracy while also being easily modifiable for any uses. In the cases where the laser data proves to be more accurate, less assumptions will be made, and vice versa, if the laser data is of inadequate quality, more assumptions will be made.

<u>Dimensional Lumber Assumptions:</u> As stated in <u>Interior Walls</u>, typical wall thicknesses will utilize dimensional lumber increments and increase relative to the laser data but not be strictly governed by them. The data will be used as a reference with some discrepancies to ensure the consistency of interior wall thicknesses.

<u>Exterior Wall Assumptions:</u> To ensure the exterior face of all perimeter walls are aligned from floor to floor (with reference to the iGUIDE to determine if a wall is not aligned) the exterior wall thicknesses may deviate from the data provided. This ensures a clean, usable starting point that is aligned and easily editable for continuing the process of completing the file.

#### Data Interpretation - Outside North America

<u>Wall Assumptions:</u> As stated in <u>Interior Walls</u>, typical wall thicknesses will utilize dimensional lumber increments and increase relative to the laser data but not be strictly governed by them. Walls drawn for properties outside of North America will be drawn against the Point Cloud to the nearest ½" (10mm/13mm) whereas room dimensions will be measured to the nearest ¼" (5mm/6.5mm). Interior walls and exterior walls may not contain consistent uniform thicknesses.

<u>Verticality & Alignment:</u> To ensure wall measurements are to the nearest ½" (10mm/13mm) for interior walls & exteriors walls, full floor to floor alignment may not match and cannot be guaranteed for the DWG files.

### **Complex Properties**

Properties of unusual build/architecture may not be possible to provide. Even with an iGUIDE Camera System with detailed lidar capture/scan coverage, providing comprehensive information about complex building structures may not be feasible. While the technology enables precise measurements and mapping, the intricate designs, and functionalities of certain structures, may pose challenging in delivering reliable data.

Complex Properties may include but are not limited to, Yurts, Domes, Places of Worship, Theatres, Stadiums, Arenas, Industrial Facilities, etc. Complex Properties, if completed, may contain limited details. iGUIDEs of non-building structures such Planes, Train & Automobiles will not be provided.



# Gallery

Full Premium PDF Package + Ceiling Add-on

Below is the full Premium Package output which would include the ceiling plan add-on:

Floor Plan - Basement	A101
Point Cloud - Basement	A101.1
Dimension Plan - Basement	A101.2
Floor Plan – Main Floor	A102
Point Cloud – Main Floor	A102.1
Dimension Plan – Main Floor	A102.2
Floor Plan – Second Floor	A103
Point Cloud – Second Floor	A103.1
Dimension Plan – Second Floor	A103.2
Floor Plan – Attic	A104
Point Cloud – Attic	A104.1
Dimension Plan – Attic	A104.2
Roof Plan	A105
RCP – Basement	A106
RCP – Main Floor	A107
RCP – Second Floor	A108
RCP – Attic	A109
Front Elevation	A201
Right Elevation	A202
Rear Elevation	A203
Left Elevation	A204
LEGEND	LEGEND



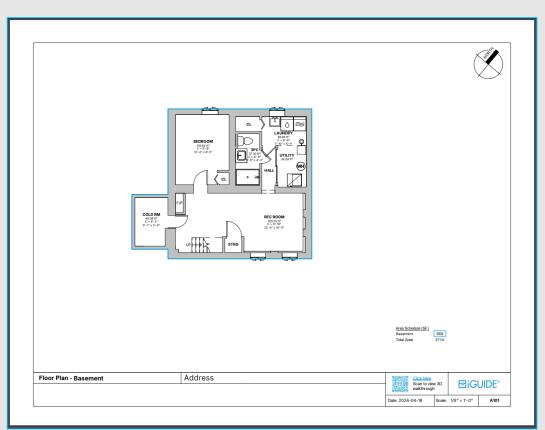


Figure # 50 - Floor Plan - Basement

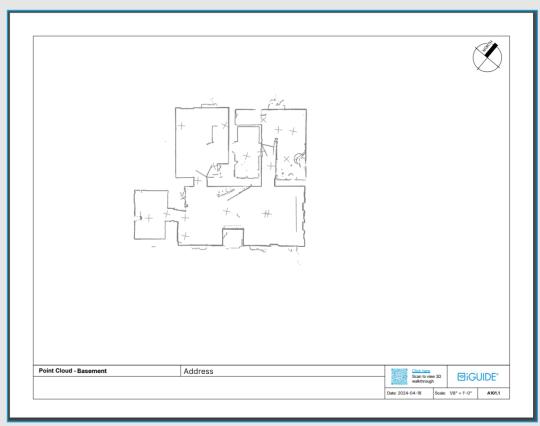


Figure # 51 - Point Cloud - Basement



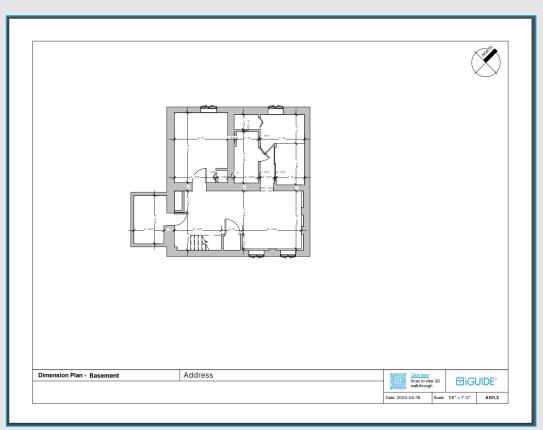


Figure # 52 - Dimension Plan - Basement

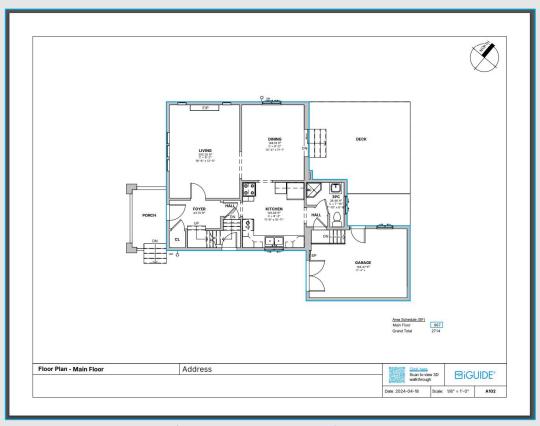


Figure # 53 - Floor Plan - Main Floor

## **⊡**iGUIDE°

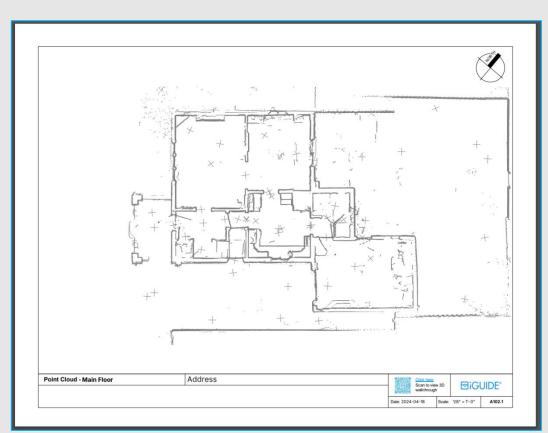


Figure # 54 - Point Cloud - Main Floor

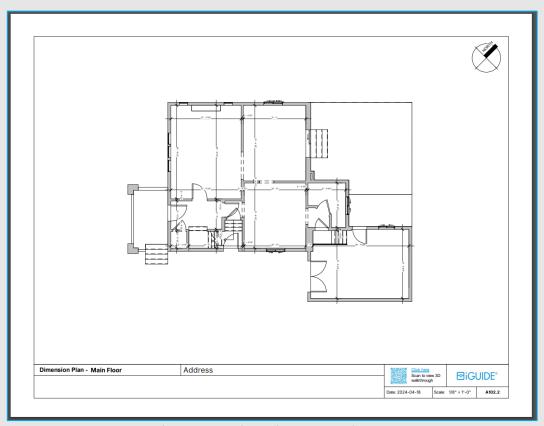


Figure # 55 - Dimension Plan - Main Floor



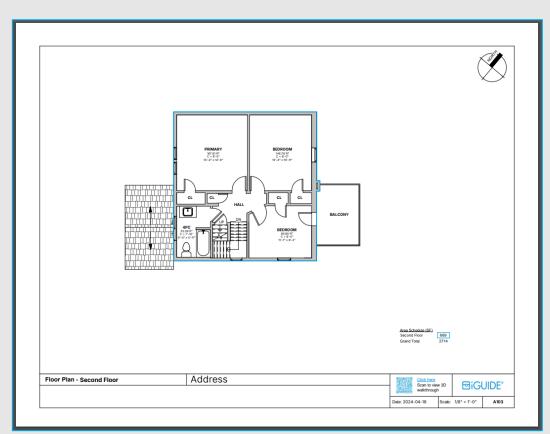


Figure # 56 - Floor Plan - Second Floor

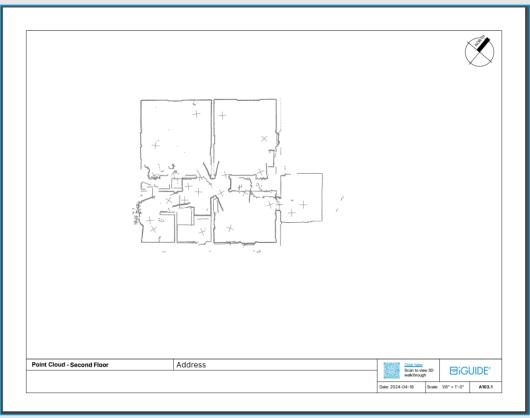


Figure # 57 - Point Cloud - Second Floor



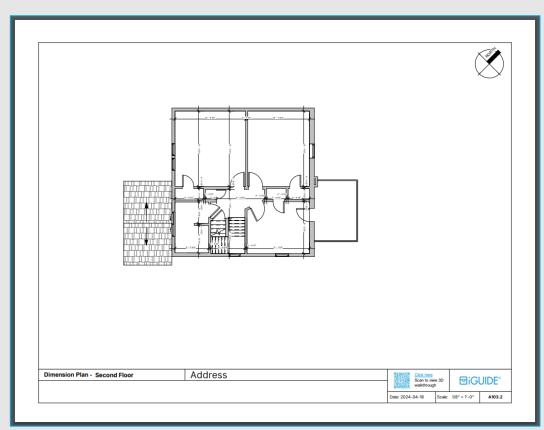


Figure # 58 - Dimension Plan - Second Floor

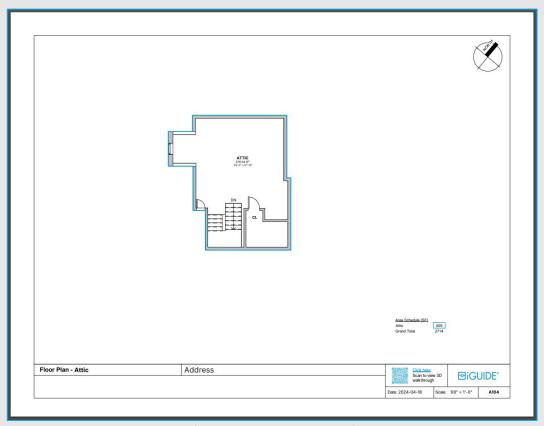


Figure # 59 - Floor Plan - Attic



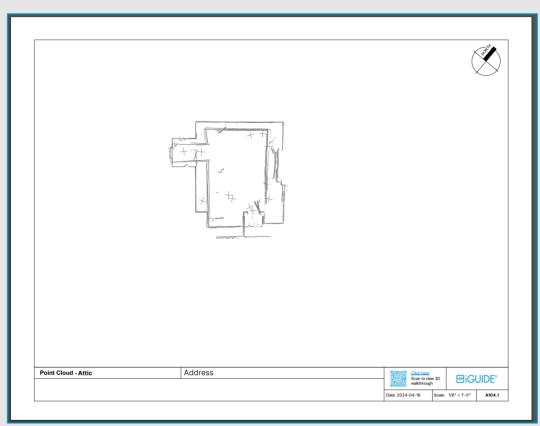


Figure # 60 - Point Cloud - Attic

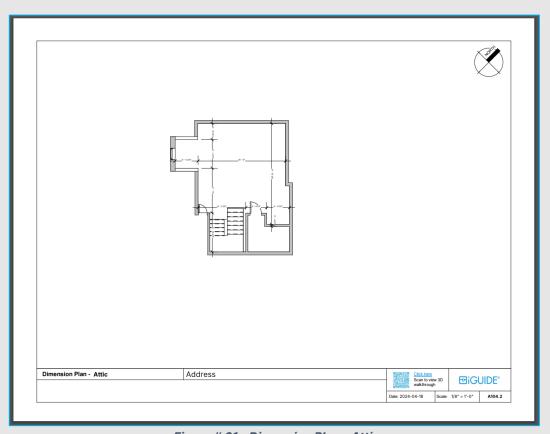


Figure # 61 - Dimension Plan - Attic



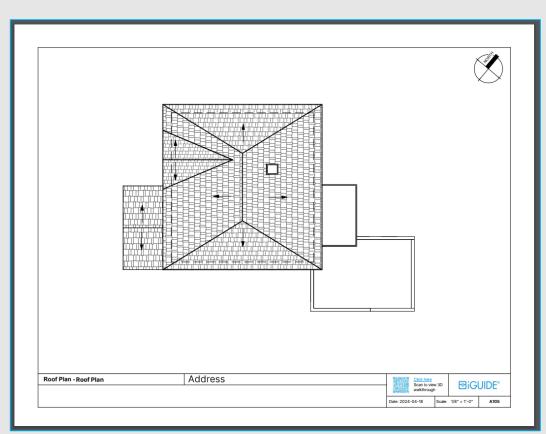


Figure # 62 - Roof Plan

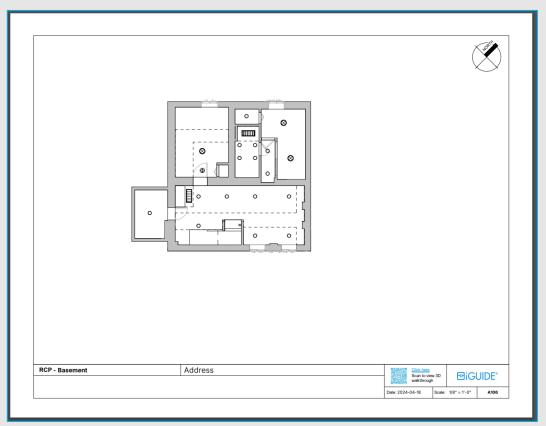


Figure # 63 - RCP - Basement



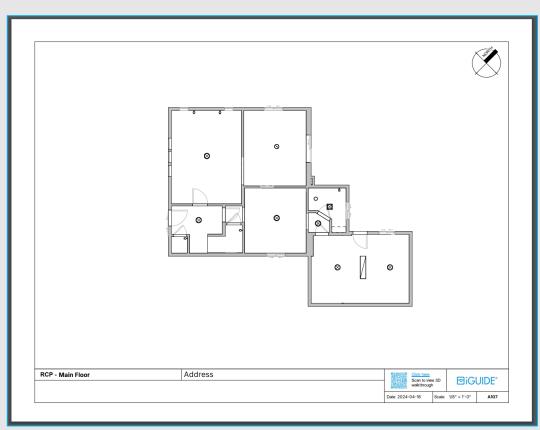


Figure # 64 - RCP - Main Floor

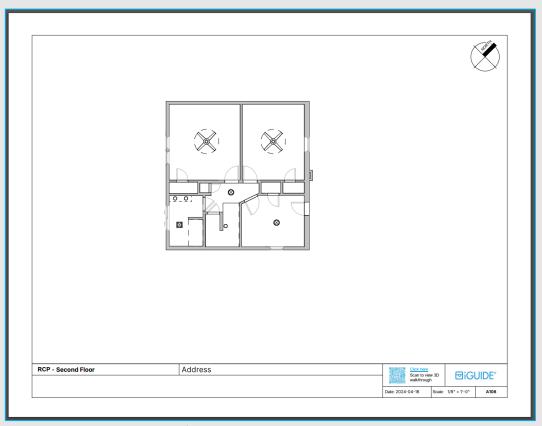


Figure # 65 - RCP - Second Floor



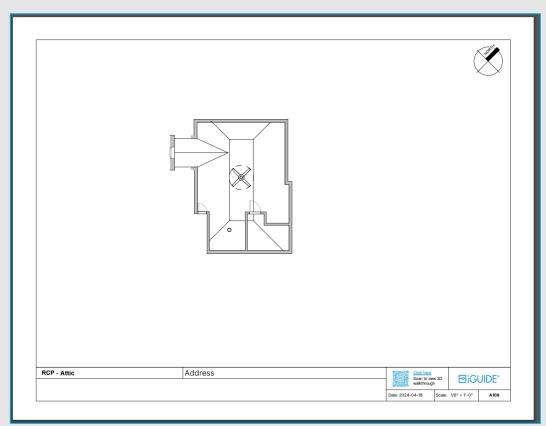


Figure # 66 - RCP - Attic

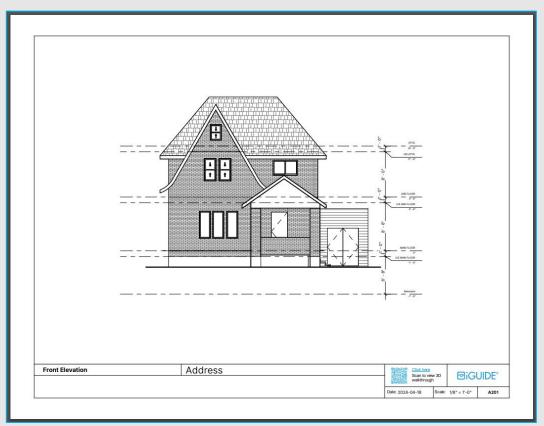


Figure # 67 - Elevation - Front

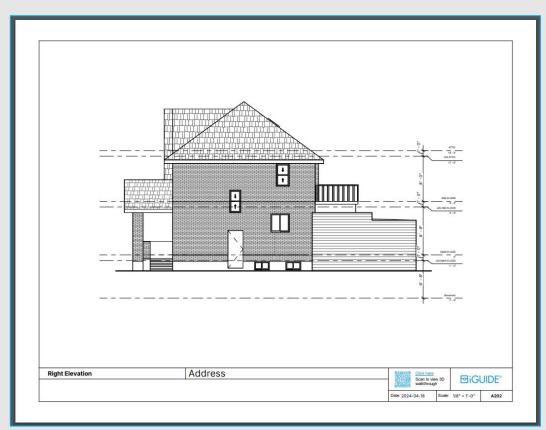


Figure # 68 - Elevation - Right

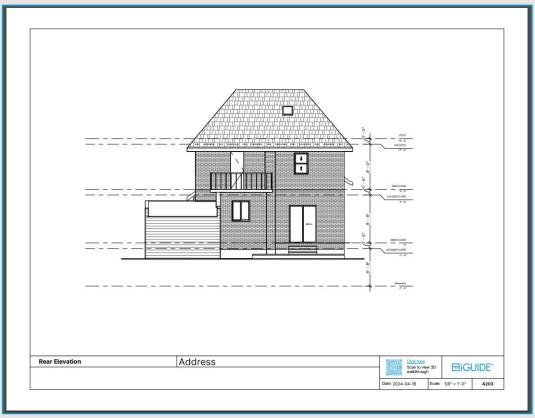


Figure # 69 - Elevation - Rear



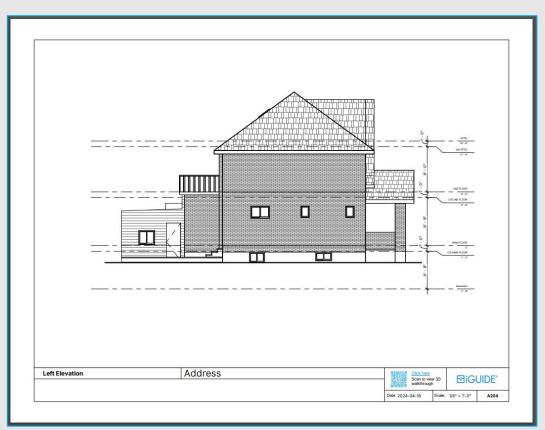


Figure # 70 - Elevation - Left

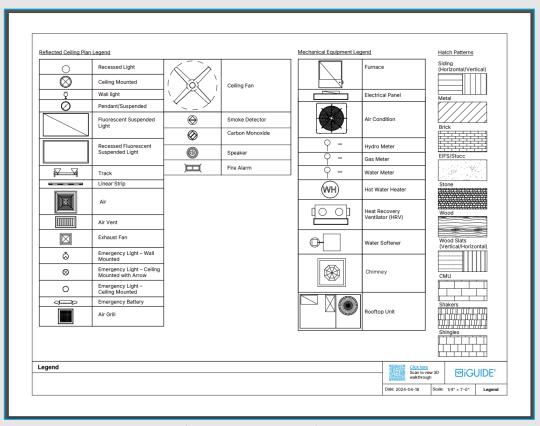


Figure # 71 - Legend - Final Page