2D CAD Package Deliverables

2D CAD Package

The 2D CAD Package is Premium only and is available in Metric or Imperial Units. The following items are available in the 2D 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.
    - Provided by Default.

- **Floor Plans:** 2D AutoCAD 2018 drawing file (.dwg).
    - Provided by Default.

- **Ceiling Plans:** 2D AutoCAD 2018 drawing file (.dwg).
    - Provided as an Add-on.

- **Dimension Plans:** 2D AutoCAD 2018 drawing file (.dwg).
    - Provided by Default.

- **Plotted Package:** 8.5x11 drawing package containing the floor plans, point cloud captures, dimension plans, ceiling plans (if ordered) & legend.
    - Provided by Default.

- **Delivery Time:** 1-7 business days for properties under 10,000ft². Please contact the Support Team for properties over 10,000ft². Delivery times will vary due to property size and complexity.
  *Delivery time is dependent on property size & complexity which may exceed 1-7 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) ✅ Ceiling Plans (.dwg) ✅ Dimension Plans (.dwg) ✅ 8.5x11 Plotted Package (.pdf)
Not Included	❌ Elevation Plans ❌ Roof Plans ❌ Mechanical/Electrical/Plumbing Plans ❌ Life Safety/Building Code Plans ❌ Building Sections/Wall Sections/Detail Sections ❌ Site/Grading/Landscape Plans ❌ Window/Door Schedules ❌ 3D Representations (Model)

DXF	DWG	PDF	

*Deliverables are dependent on successfully meeting Capture Requirements.
*DWG line colours are subject to change and may not reflect the images presented herein.
*2D CAD Package is Premium Only.
*Metric Values listed in the document are rounded.

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 iGUIDE DXF Information 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.
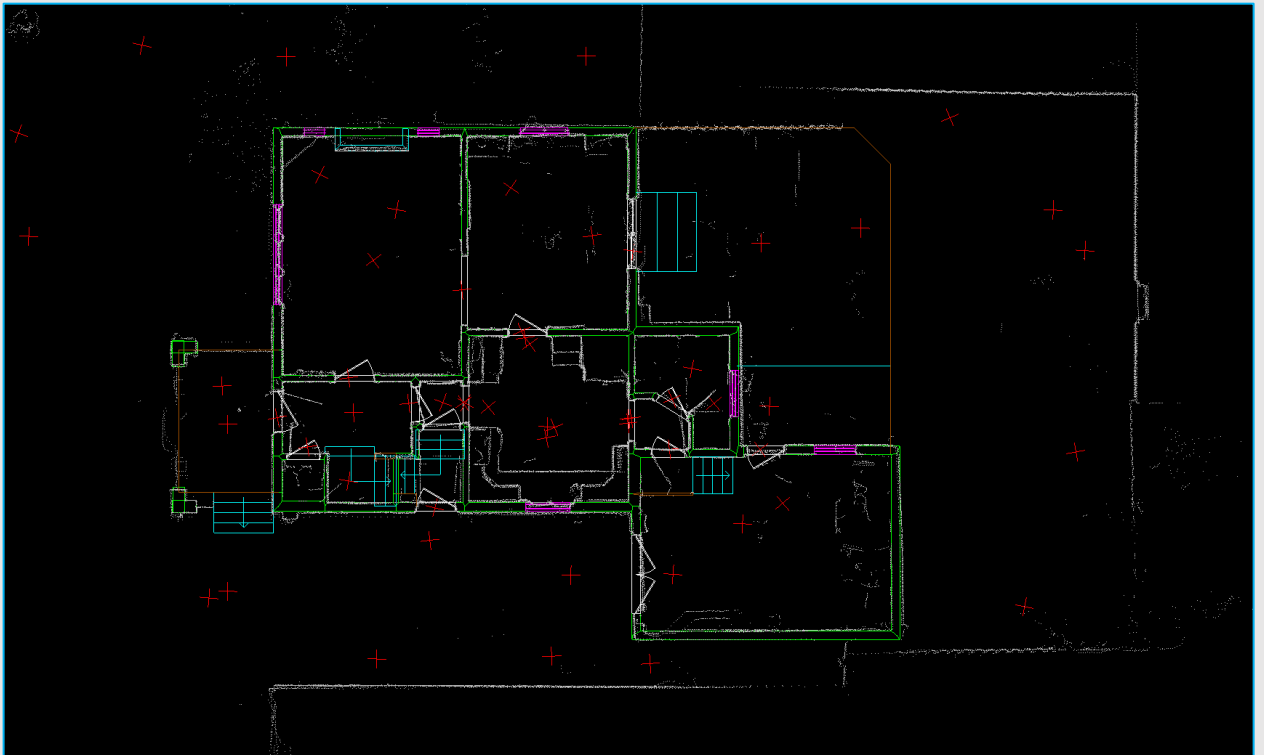

Figure # 1 - Standard Residential DXF File Output

3

Figure # 2 - Standard Commercial DXF File Output

Floor Plan Deliverables

Standard:

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 ½" (114mm) & 6 ½" (165mm).
- <u>Wall Thicknesses:</u> Drawn to follow ½" (13mm) increments.
- <u>Wall Placements:</u> walls will be placed so room dimensions are to the nearest ¼".
- 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.
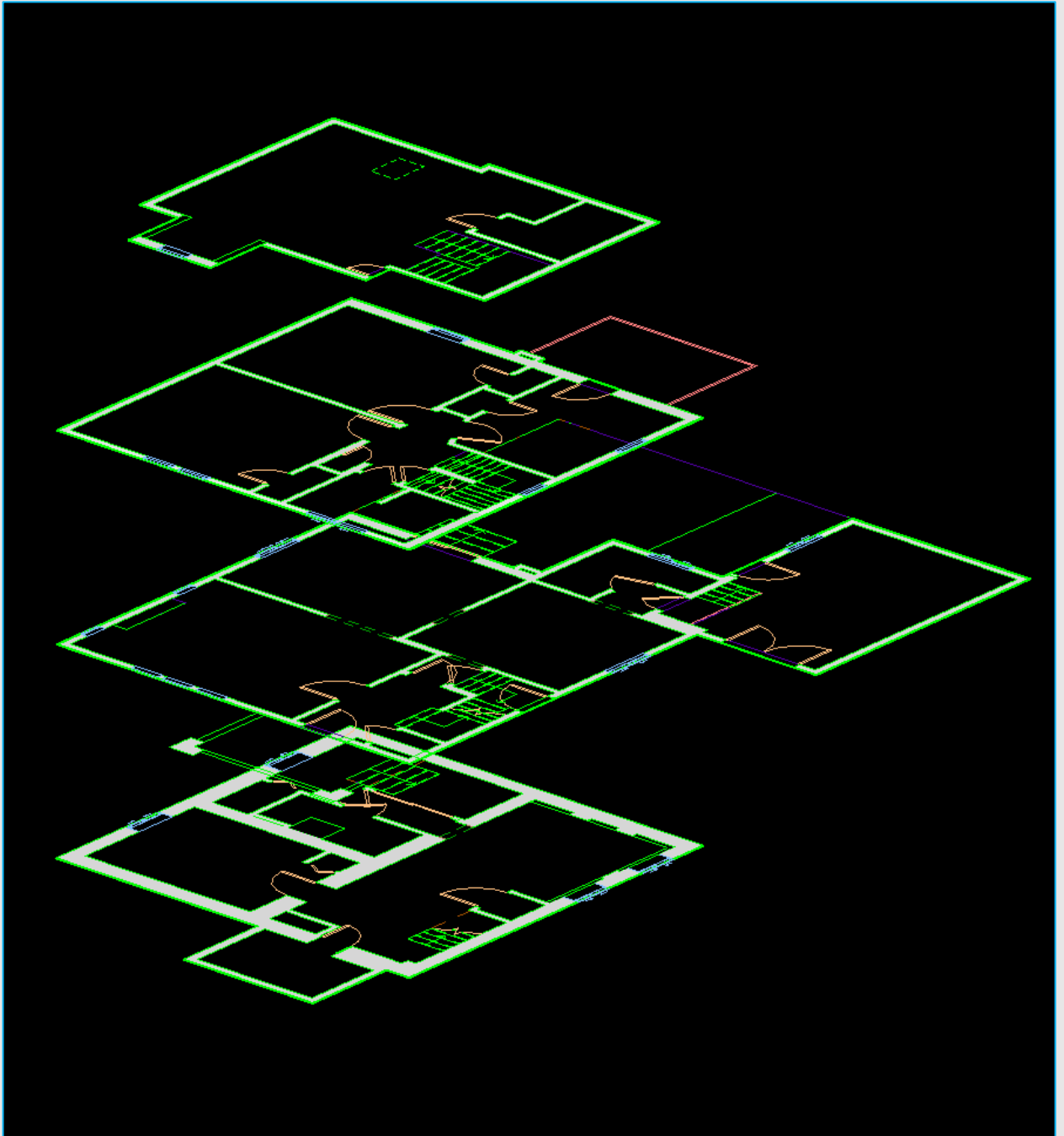
Figure # 3 - Floor to Floor Alignment

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.
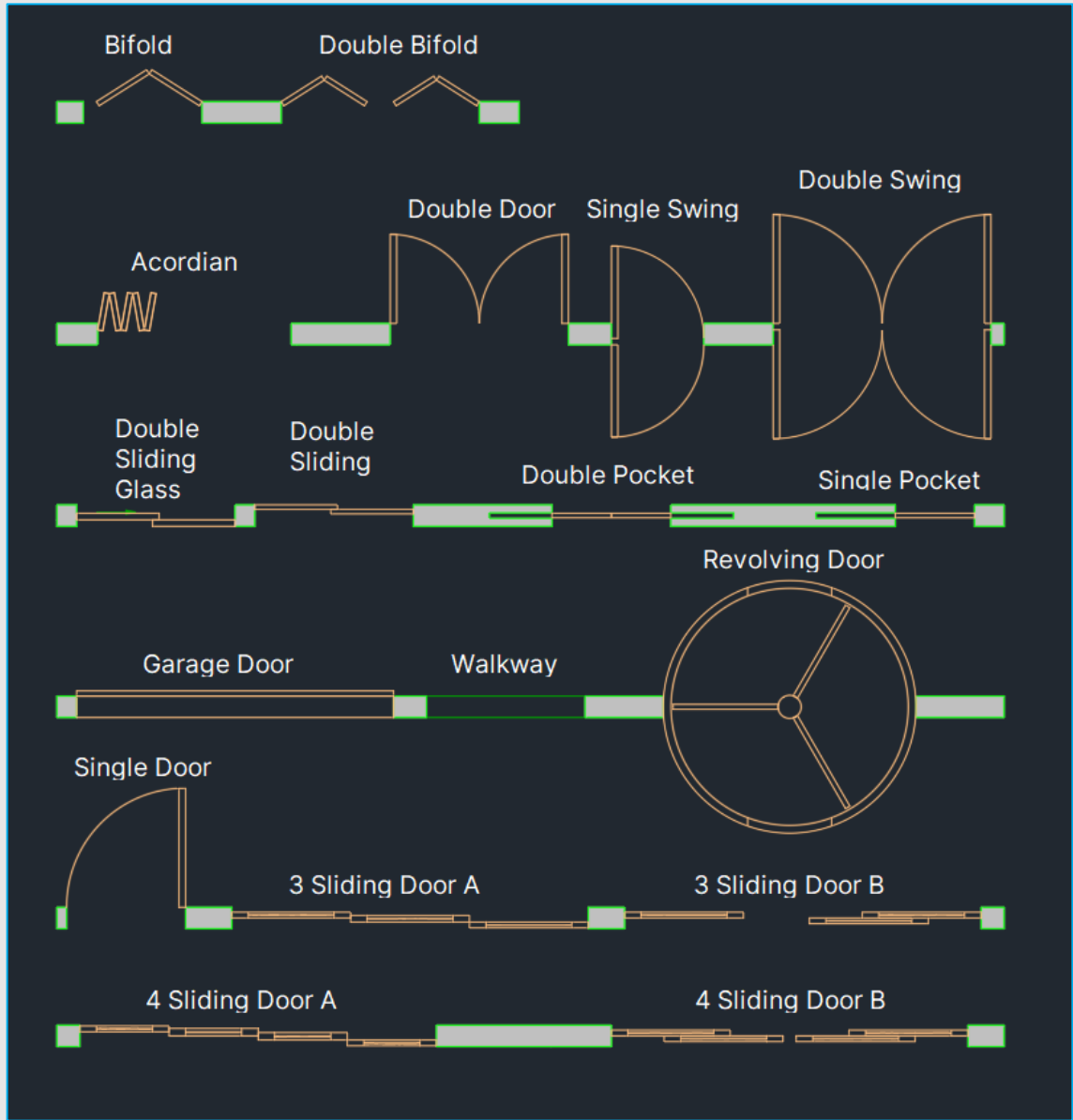

Figure # 4 - Door Styles/Types

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.
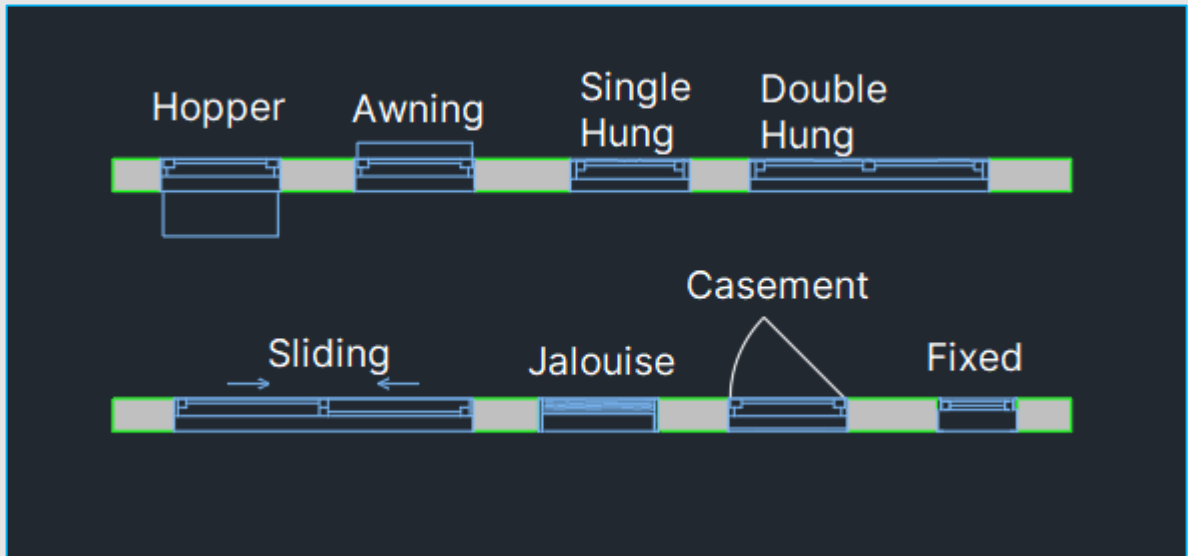
Figure # 5 - Window Styles/Types

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.
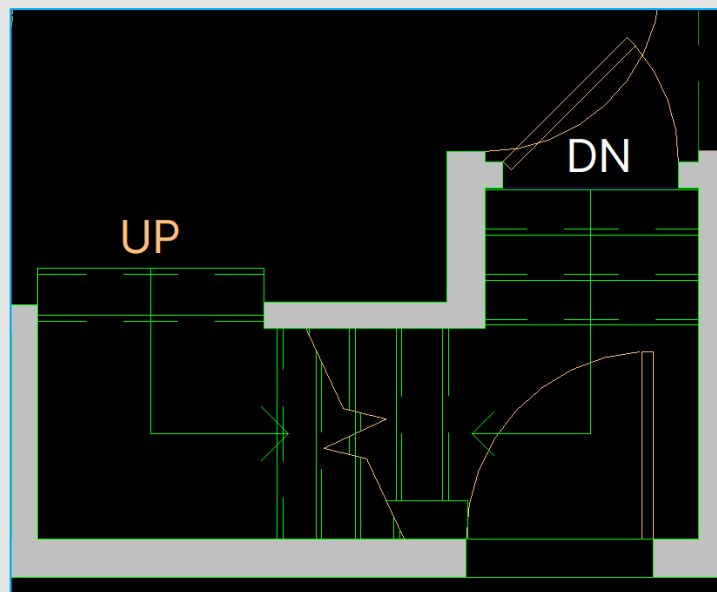
Figure # 6 - Stair Representation

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.
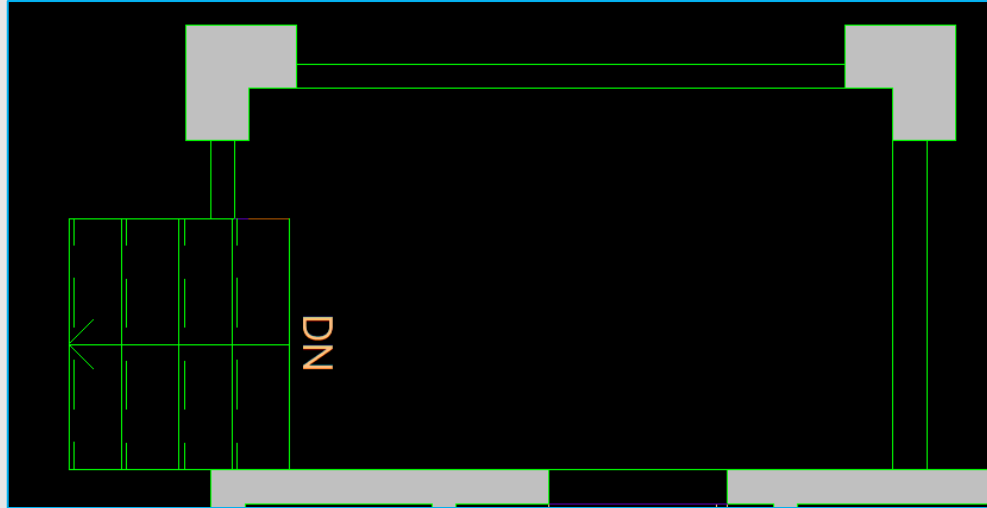

Figure # 7 - External Porch/Deck with Columns

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

Figure # 8 - Standard Residential DWG Floor Plan Output

Premium:

All features listed for Standard Floor Plans contained in the 2D CAD Package in addition to the features listed below.

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.).

*Room Dimensions may differ from the DXF & the iGUIDE Virtual Tour.

*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.

LIVING
205.20 ft²
C = 8'-2"
16'-6" x 12'-5"
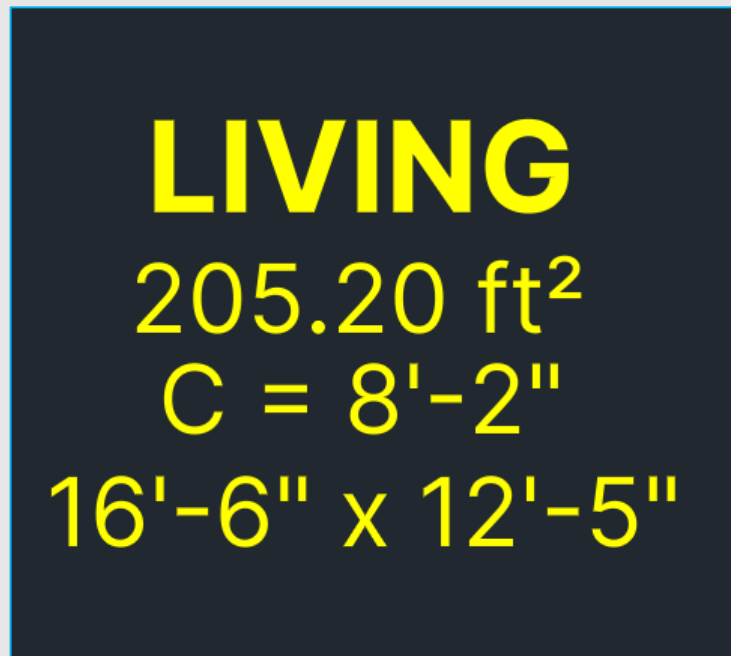
Figure # 9 - Room Annotations

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.
- Commercial/Retail: Objects such as Cubicles, Store Shelving & Janitorial Sinks will be represented.
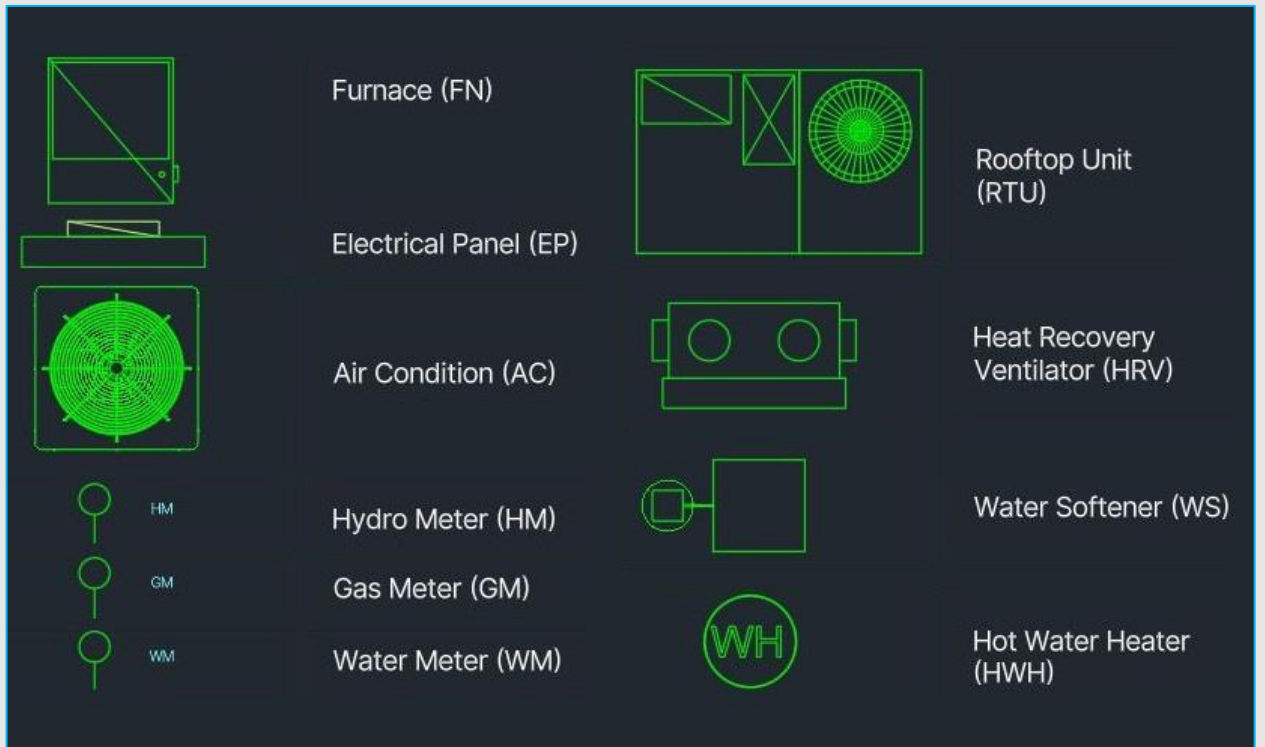
Figure # 10 – Misc. Premium Areas

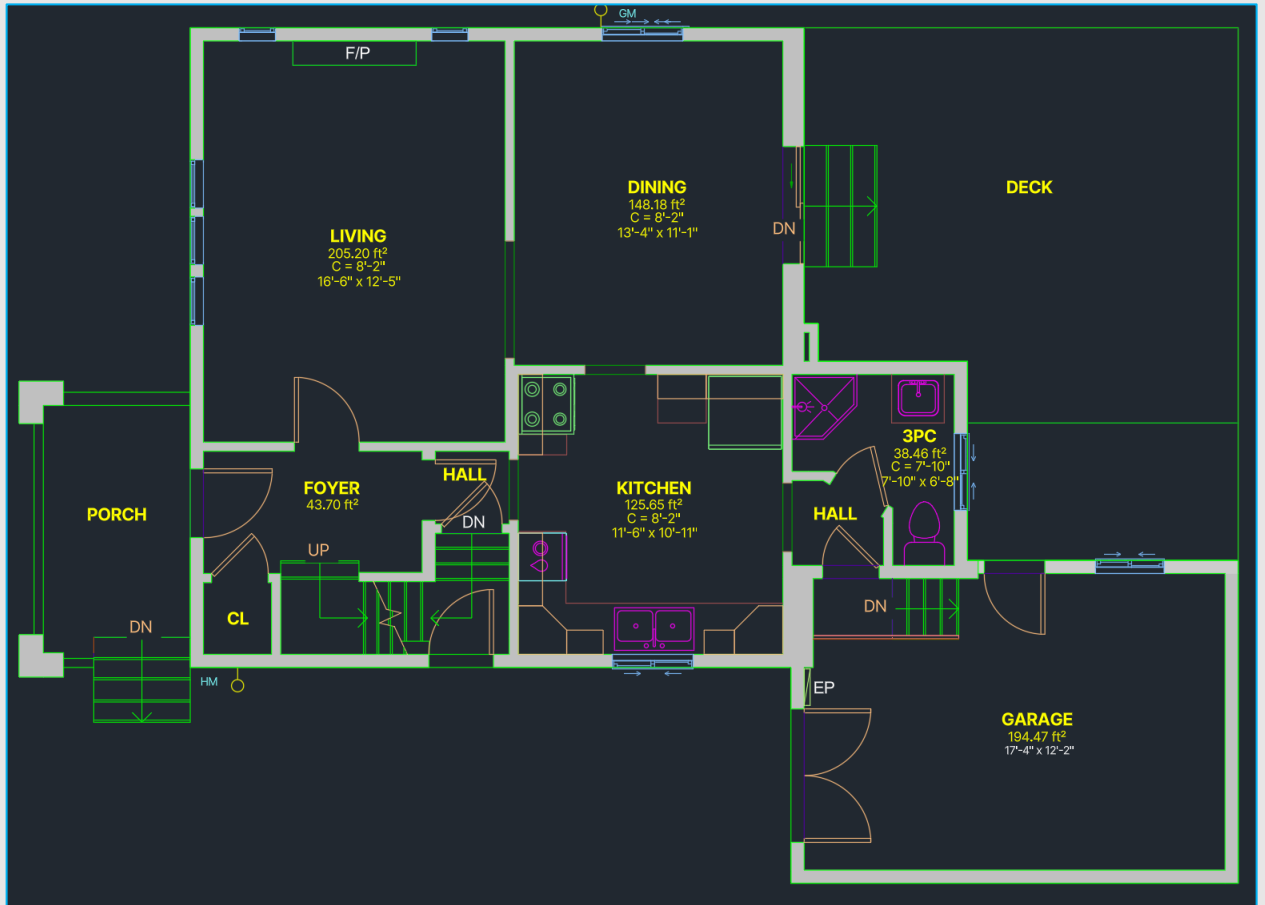*Figure # 11 - Mechanical Objects for Premium Floor Plans*

Figure # 12 - Premium Residential DWG Floor Plan Output

Floor Plan Comparison Matrix

	Standard	Premium
Included	✔AutoCAD 2018 Drawing File ✔Wall Types & Placement ✔Walls Sizes at ½" (13mm) Tolerances ✔Wall Placement at ¼" (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)	✔Standard List Deliverables ✔Room Labels ✔Room Area ✔Room Measurements ✔Ceiling Heights (Flat) ✔Premium Objects
Not Included	✖3D AutoCAD/3D Representation ✖Ready to Plot Sheets ✖Wall Assembly Details ✖Floor Material ✖Point Cloud ✖Project/Survey Coordinates ✖Complex Ceiling Heights/Representation (Sloped, Vaulted or Tray) ✖Structural Elements (Beams, Lintels, Joists)	
*Deliverables are dependent on successfully meeting Capture Requirements. ***Floor Plan Deliverable is available as a standalone product. It is available in Metric or Imperial Units and is available in Standard or Premium (based on iGUIDE selection).**		

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.
- Skylights: 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.
- Mouldings and Ornaments: No specialty molding or trims will be represented on the ceiling plan.
- Suspended Architectural Panels: 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.
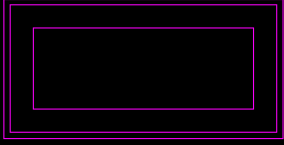

Figure # 13 - Lighting Elements Represented on the DWG Ceiling Plan

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.
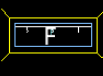
	Emergency Light – Wall Mounted
	Emergency Light – Ceiling Mounted with Arrow
	Emergency Light – Ceiling Mounted
	Emergency Battery Unit
	Smoke Detector
	Carbon Monoxide Detector
	Speaker
	Fire Alarm Annunciator

Figure # 14 - Safety Elements Represented on the DWG Ceiling Plan

Mechanical Elements*: Surface level air diffusers, air vents, exhaust fans, air grills, ceiling fans & speakers.
- Open/Exposed Mechanical: Any mechanical systems such as ducts will not be represented in open/exposed ceiling areas.
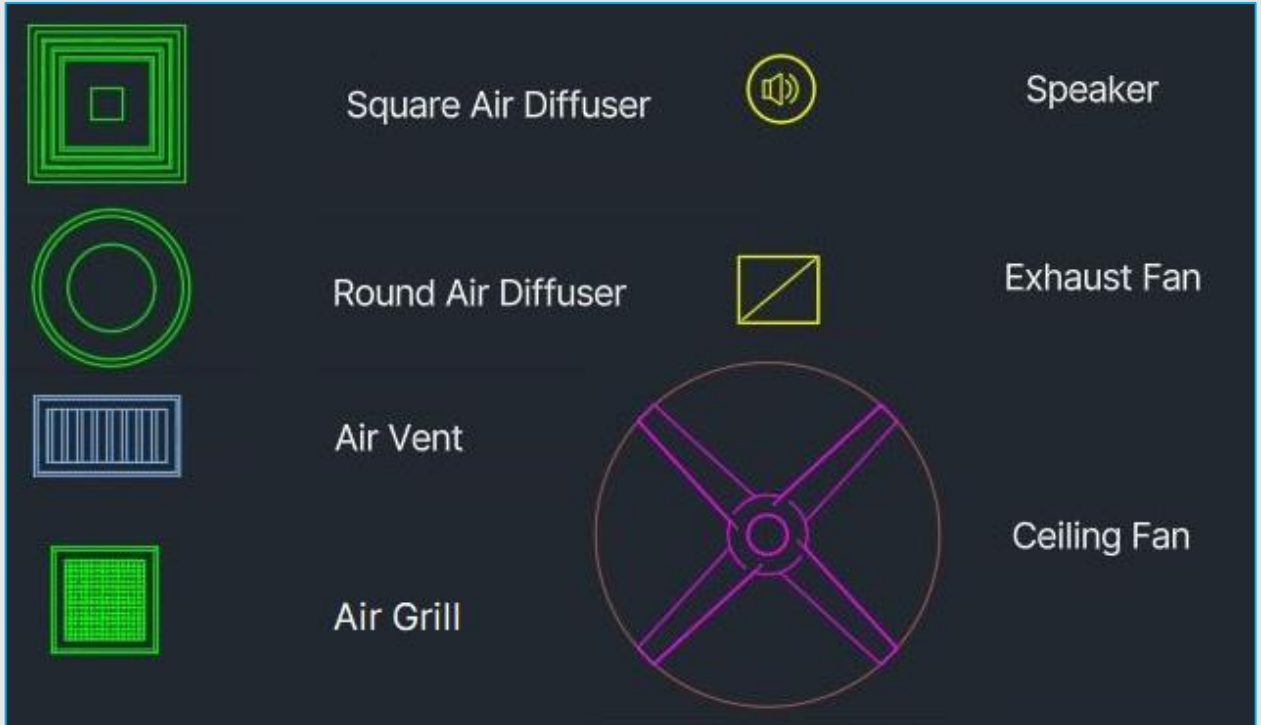

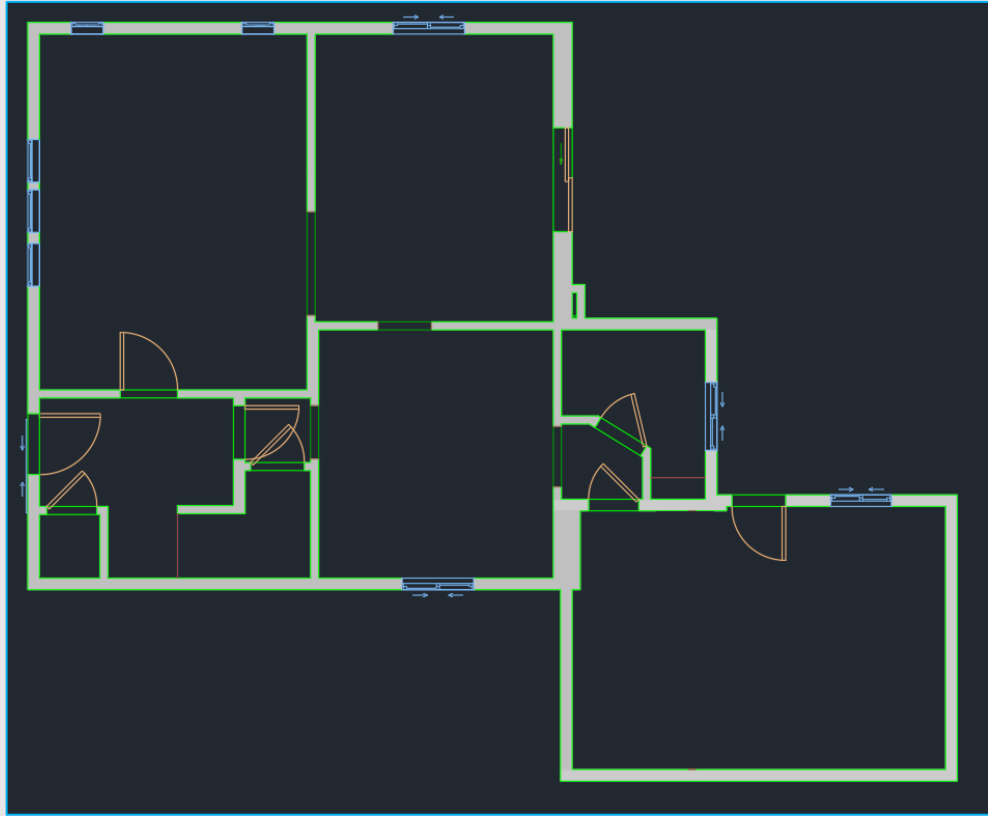*Figure # 15 - Mechanical Elements Represented on the DWG Ceiling Plan*

Figure # 16 - Residential Standard Ceiling Plan DWG Output

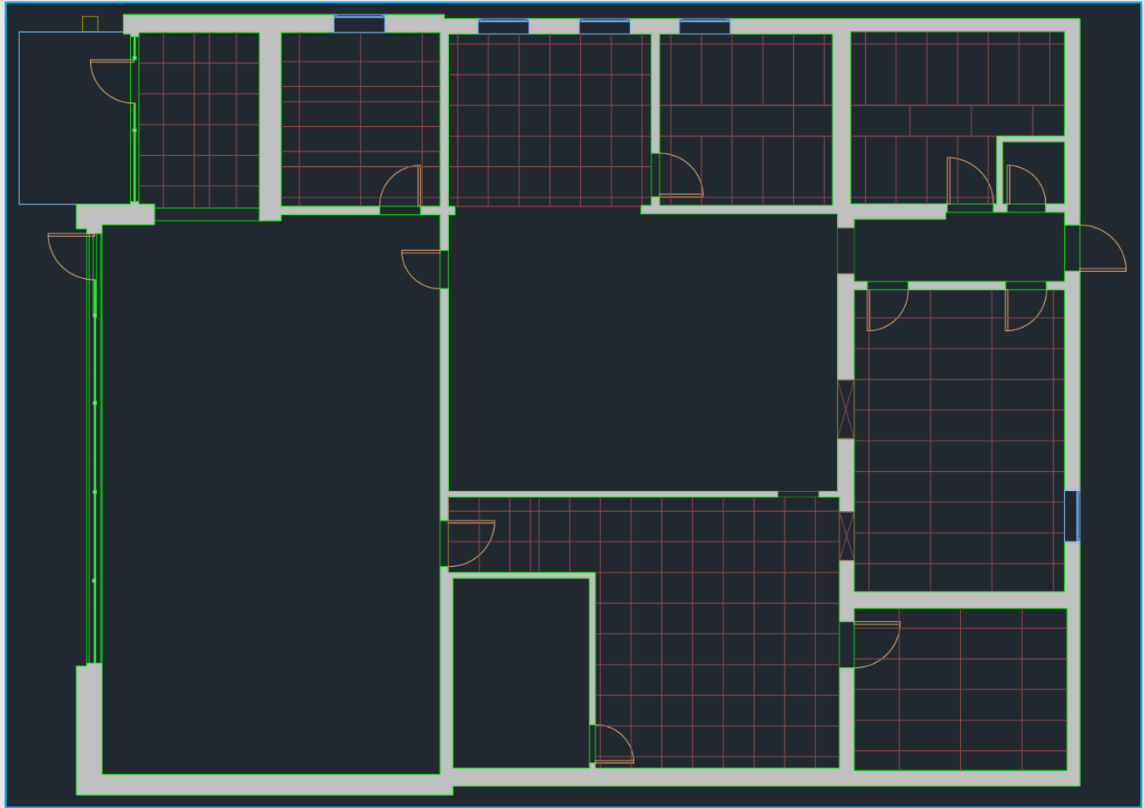*Figure # 17 - Residential Premium Ceiling Plan DWG Output*

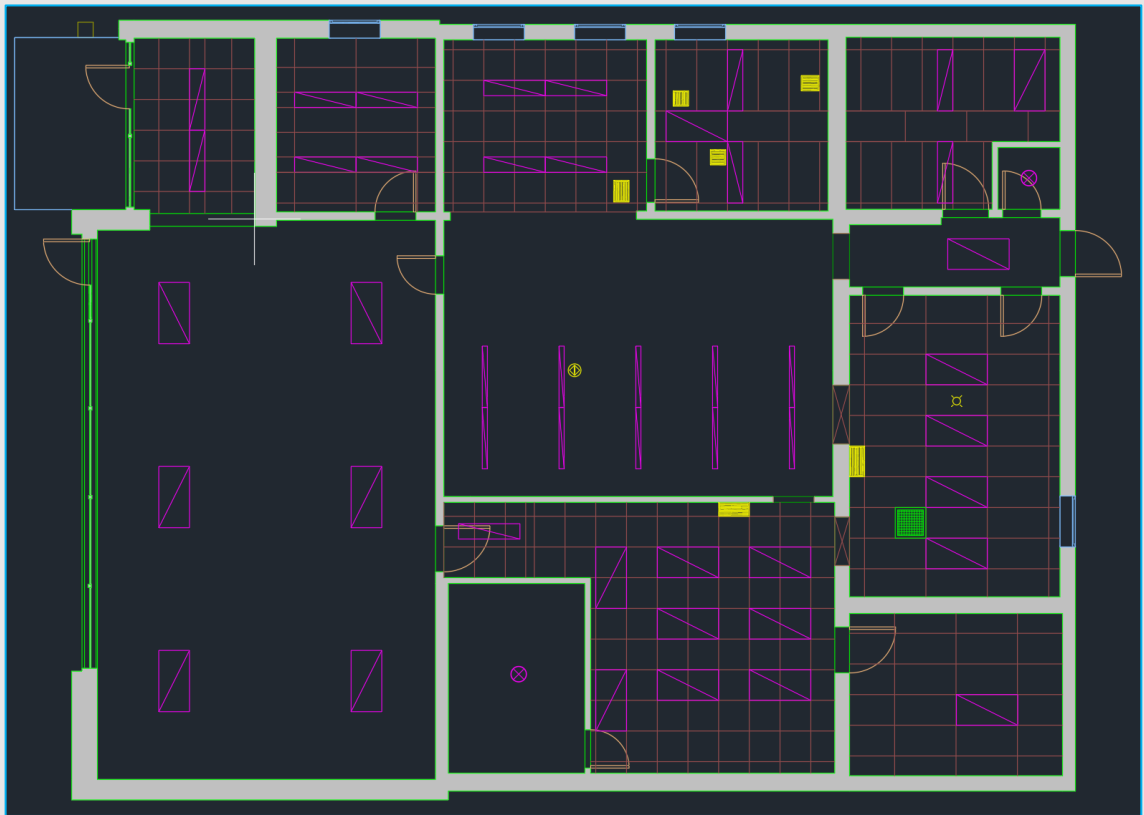*Figure # 18 - Commercial Standard Ceiling Plan DWG Output*

Figure # 19 - Commercial Premium Ceiling Plan DWG Output

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

	Standard	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 Included	✘Annotations, Measurements or Ceiling Heights ✘Life Safety Plan ✘Sprinkler Systems & Routing ✘Mechanical Systems & Routing ✘Electrical Systems & Routing ✘Custom Lighting Fixtures ✘Structure	

*Deliverables are dependent on successfully meeting Capture Requirements.
*Ceiling Plan Deliverable is available as an Add-on to a Standalone Floor Plan. It is available in Metric or Imperial Units and is available in Standard or Premium (based on iGUIDE selection).

Dimension Plan Deliverables

The Dimension Plan is a default deliverable to the 2D 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).
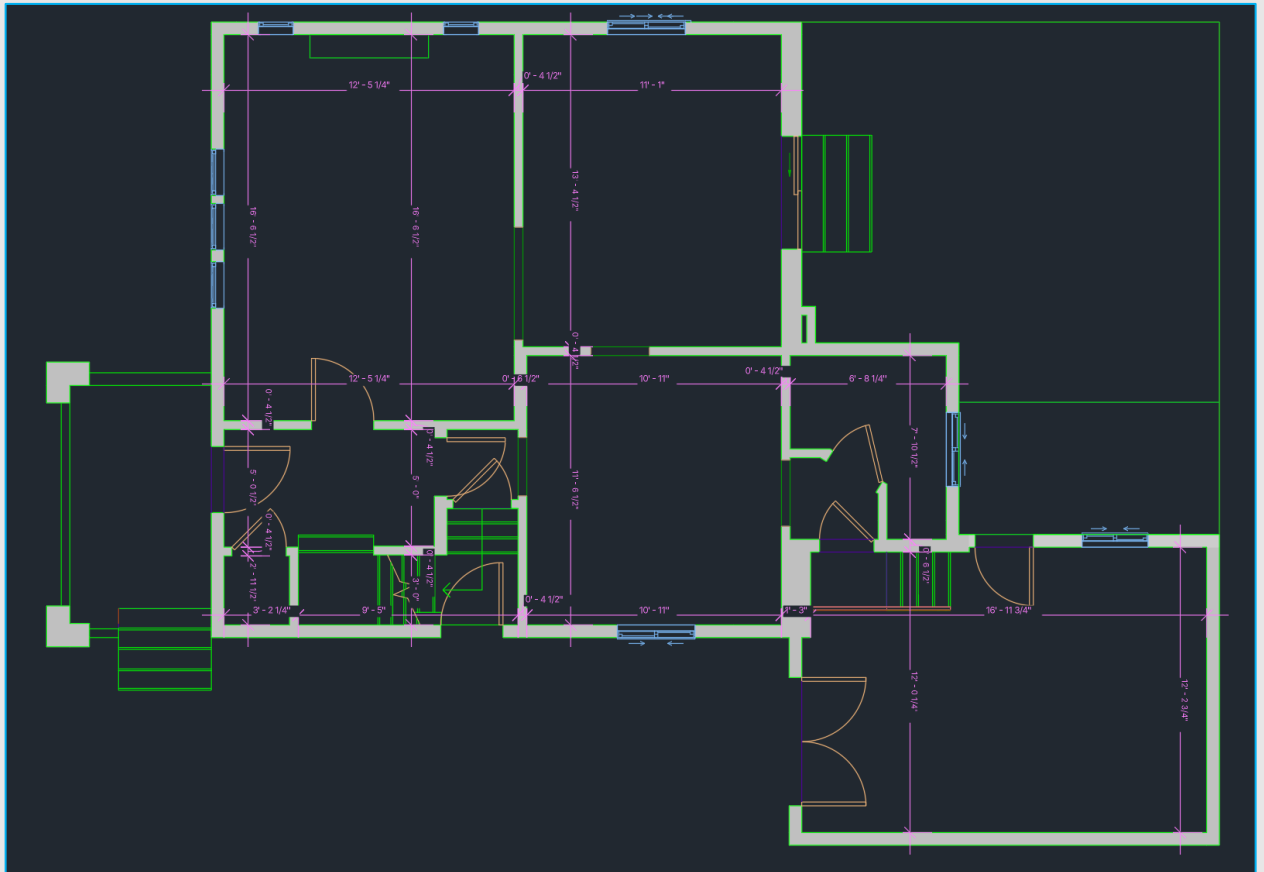

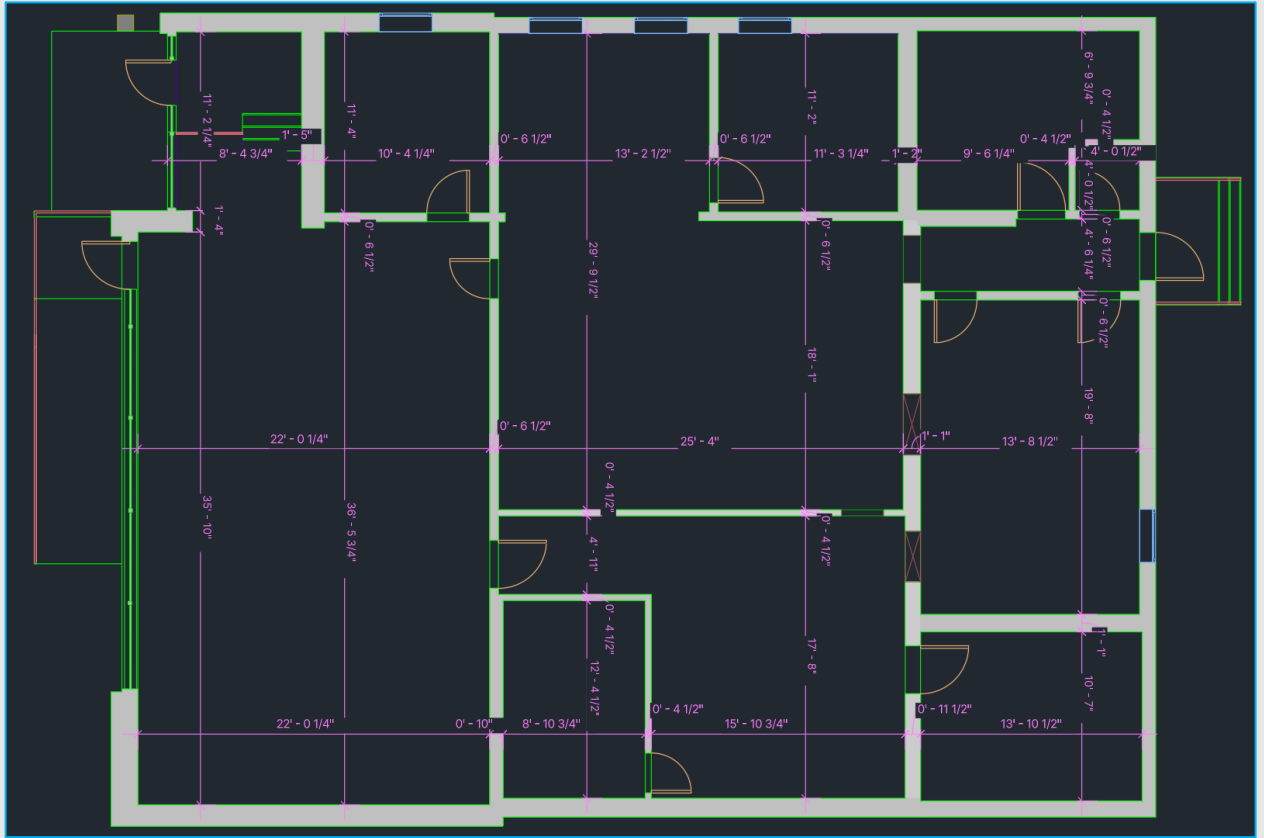*Figure # 20 – Residential Dimension Drawing DWG Output*

Figure # 21 - Commercial Dimension Drawing DWG Output

Dimension Plan Comparison Matrix

	Premium
Included	✔ Horizontal Dimension Strings (Width)
	✔ Vertical Dimension Strings (Length)
	✔ Captures Interior Wall Segments
Not Included	✘ Exterior Wall Thicknesses
	✘ 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" (1:100) up to 1/32" = 1'-0" (1:400).

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.
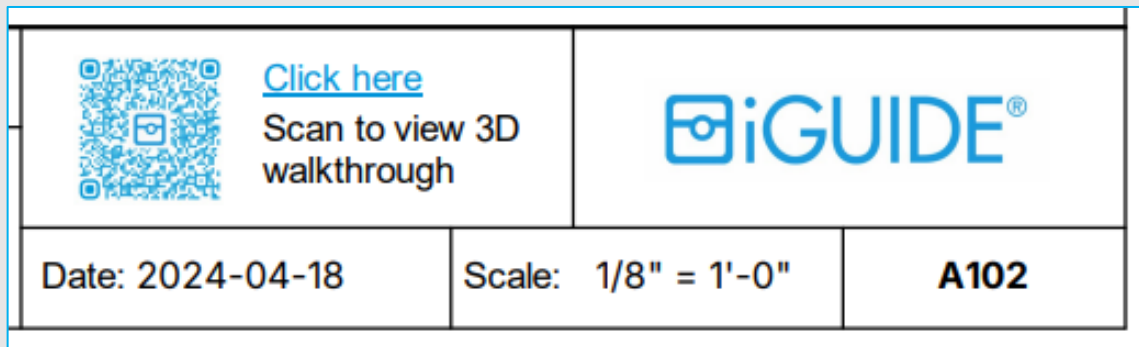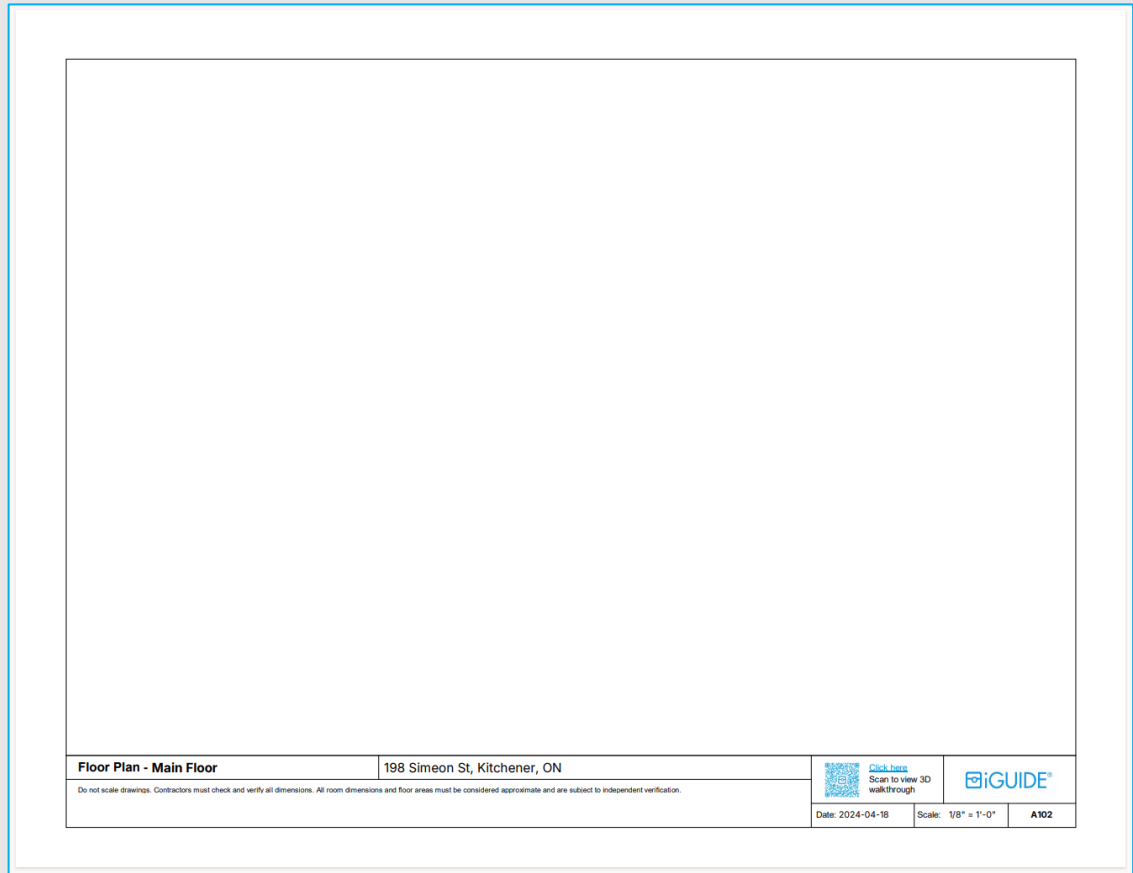

Figure # 22 - Planitar Inc. Title Bock

Figure # 23 - 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 in light of 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.

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.

*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's important to note that achieving precise measurements may not be feasible due to various 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.
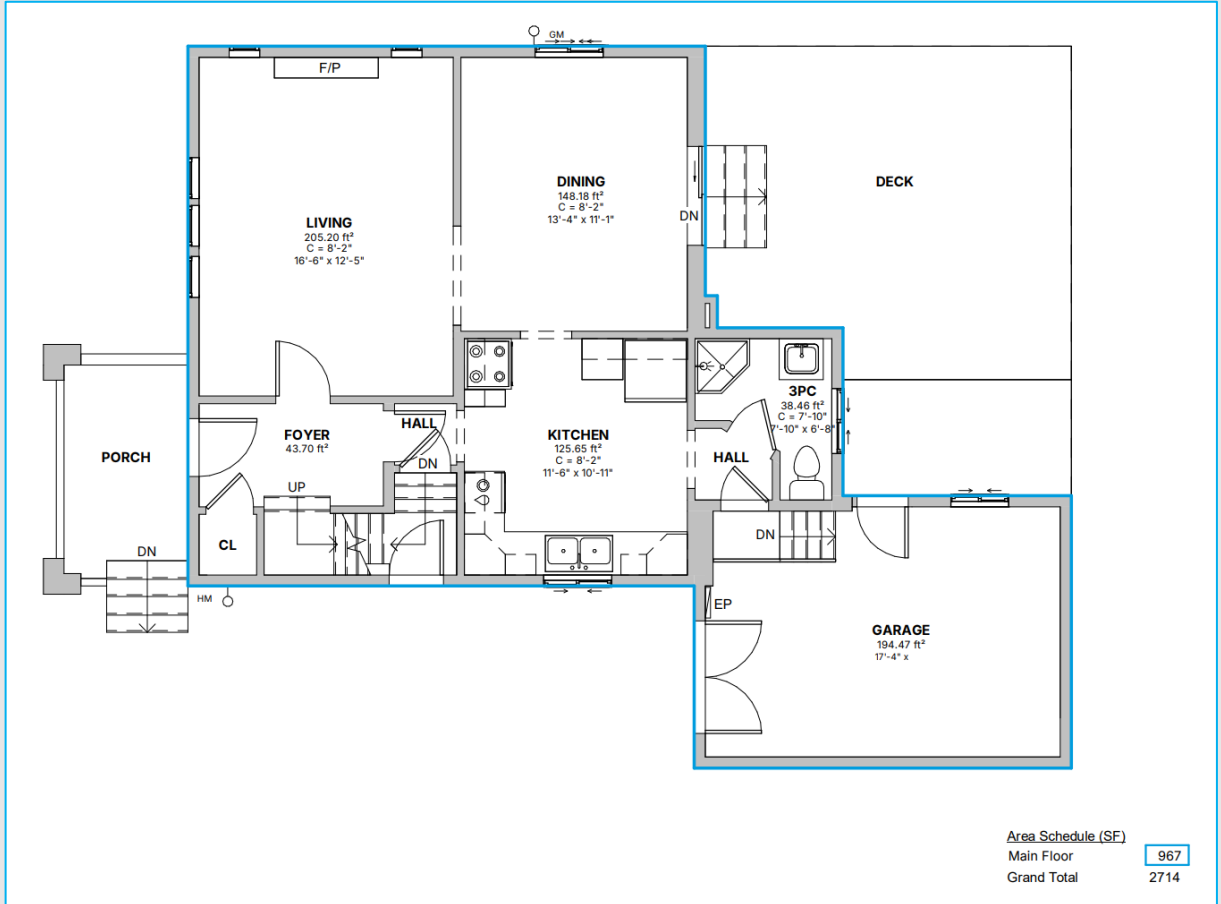
Figure # 24 - Gross Area Measurement, Area Schedule

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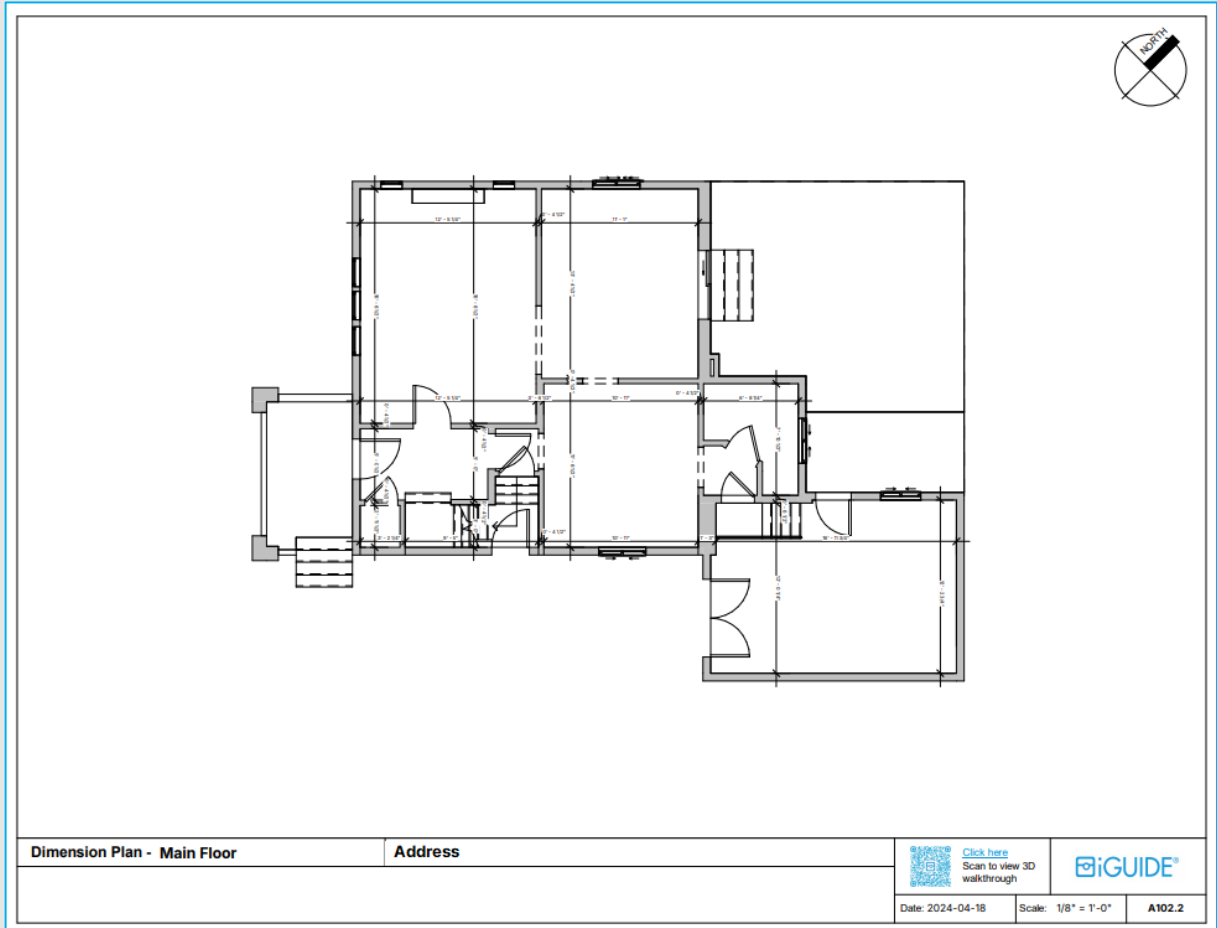- For less complicated building geometry, less dimension strings may be represented.

Figure # 25 - Dimension Drawing Plotted on PDF

Point Cloud Drawing: The Point Cloud Drawing is the visible plotted laser data captured by an iGUIDE camera system.
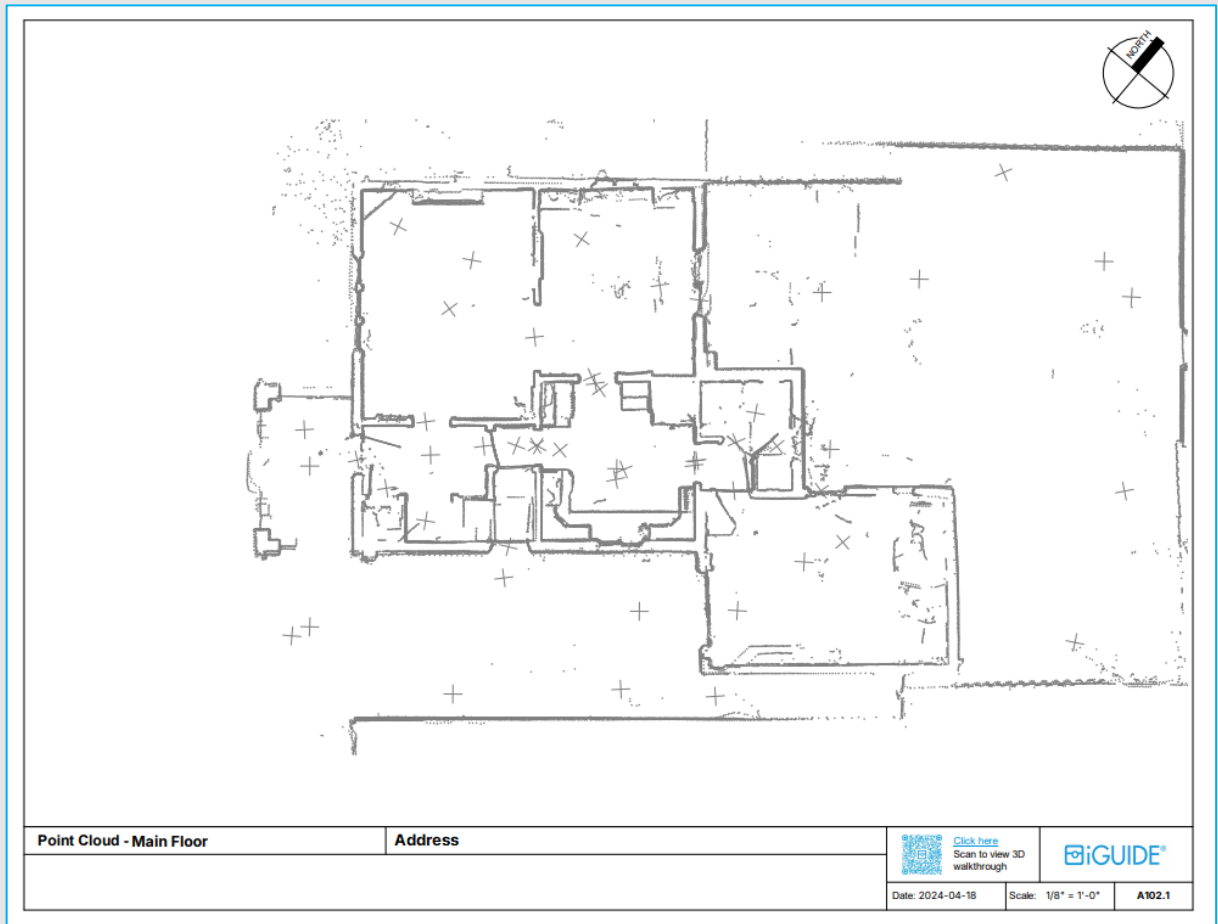
Figure # 26 - Point Cloud Plotted on PDF

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 as well as any Hatch Pattern used for other drawings.

Figure # 27 - Legend/Appendix Sheet

Plotted Package Comparison Matrix

	Premium
Included	✔ Plans (Floors, Ceilings, Dimensions)
	✔ Point Cloud
	✔ Sheet Name
	✔ Property Address
	✔ Measurement Disclaimer
	✔ QR Code & Virtual Tour Link (Public URL)
	✔ iGUIDE Branding Logo
	✔ Production Date
	✔ Drawing Scale
	✔ Sheet Number
	✔ Legend/Appendix
	✔ North Arrow
	✔ Area Boundary Measurement
Not Included	✖ Revision Table
	✖ 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

Data Assumptions/Deviations: In the goal of providing a workable DWG file 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 poor quality, more assumptions will be made.

Dimensional Lumber Assumptions: As stated in Interior Walls, 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.

Exterior Wall Assumptions: 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

Wall Assumptions: As stated in Interior Walls, 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" (13mm) whereas room dimensions will be measured to the nearest ¼" (6.5mm). Interior walls and exterior walls may not contain consistent uniform thicknesses.

Verticality & Alignment: To ensure wall measurements are to the nearest ½" (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**
RCP – Basement	**A106**
RCP – Main Floor	**A107**
RCP – Second Floor	**A108**
RCP – Attic	**A109**
LEGEND	**LEGEND**
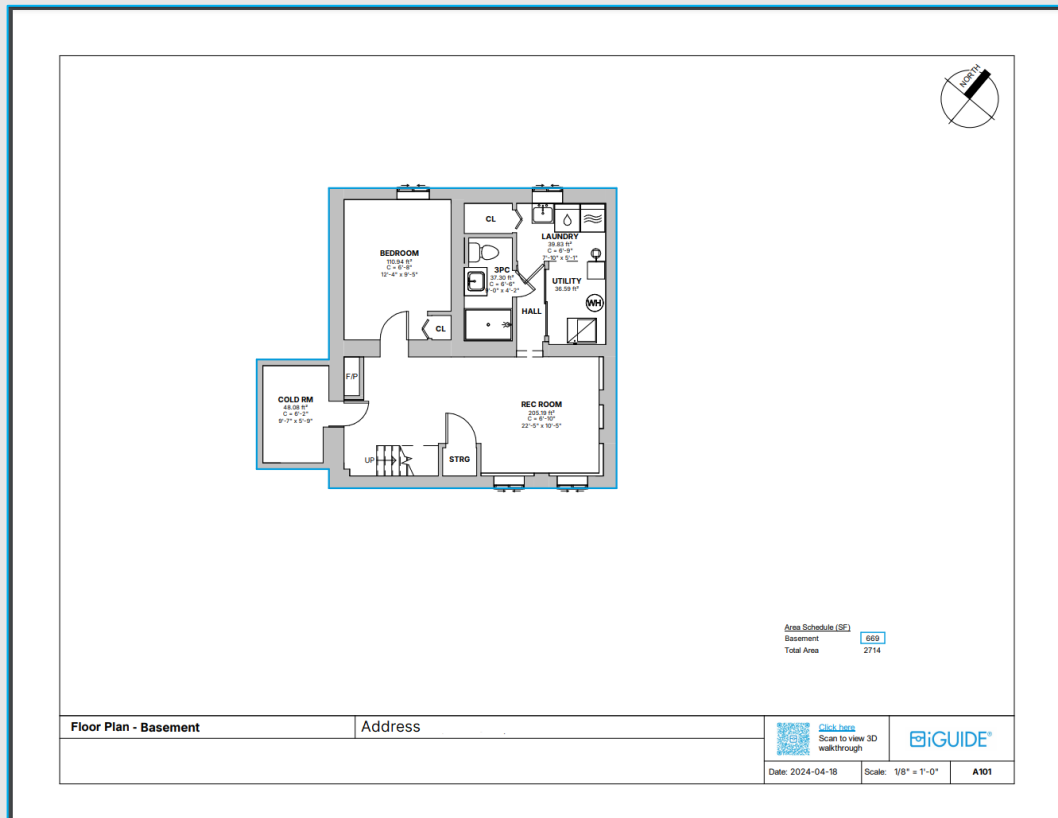
Figure # 28 - Floor Plan - Basement
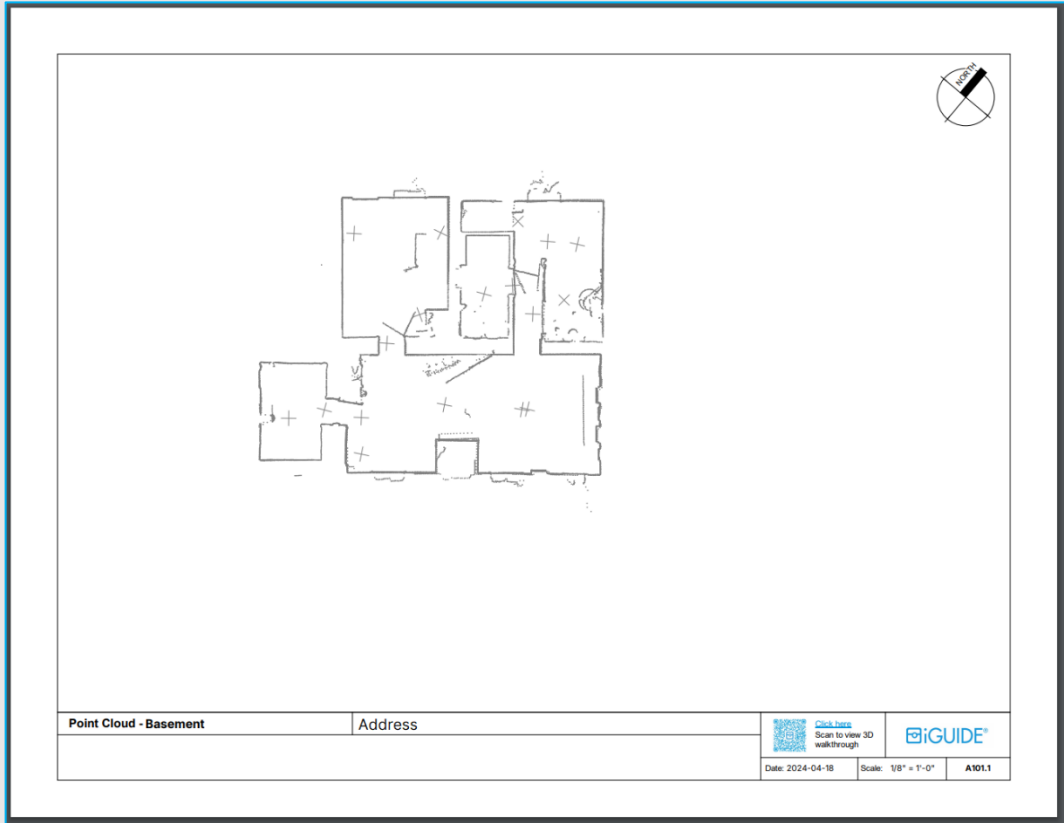
Figure # 29 - Point Cloud – Basement
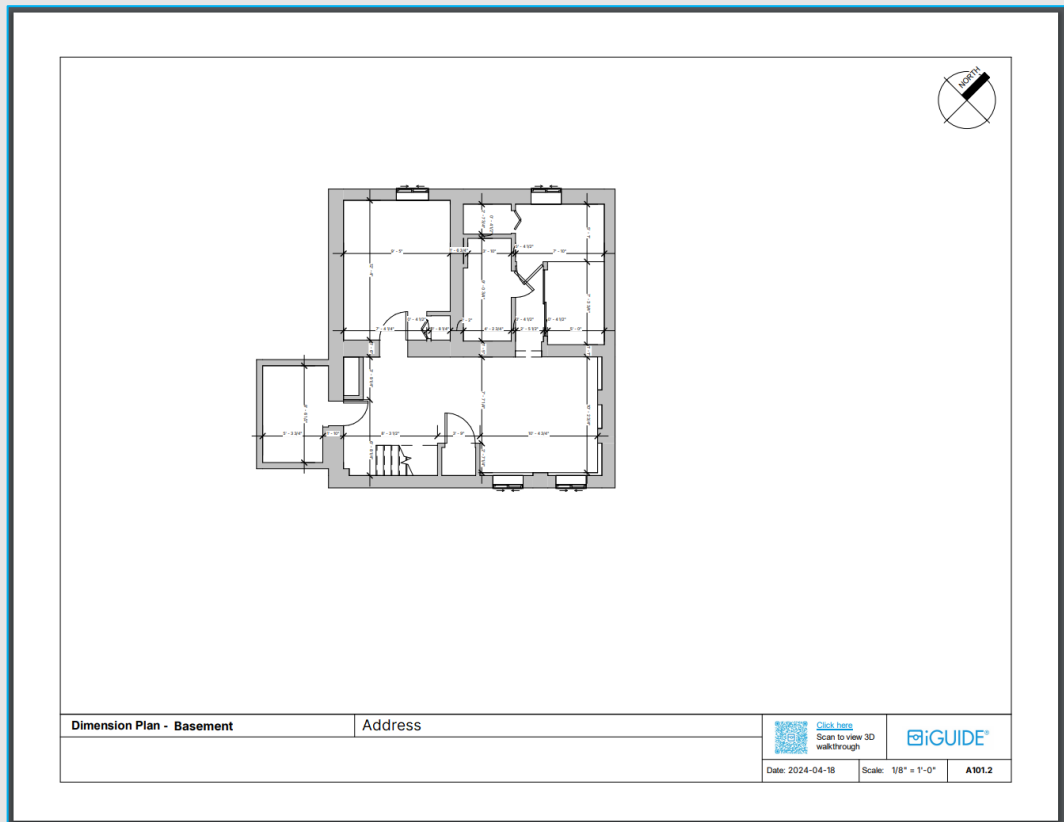
Figure # 30 - Dimension Plan – Basement
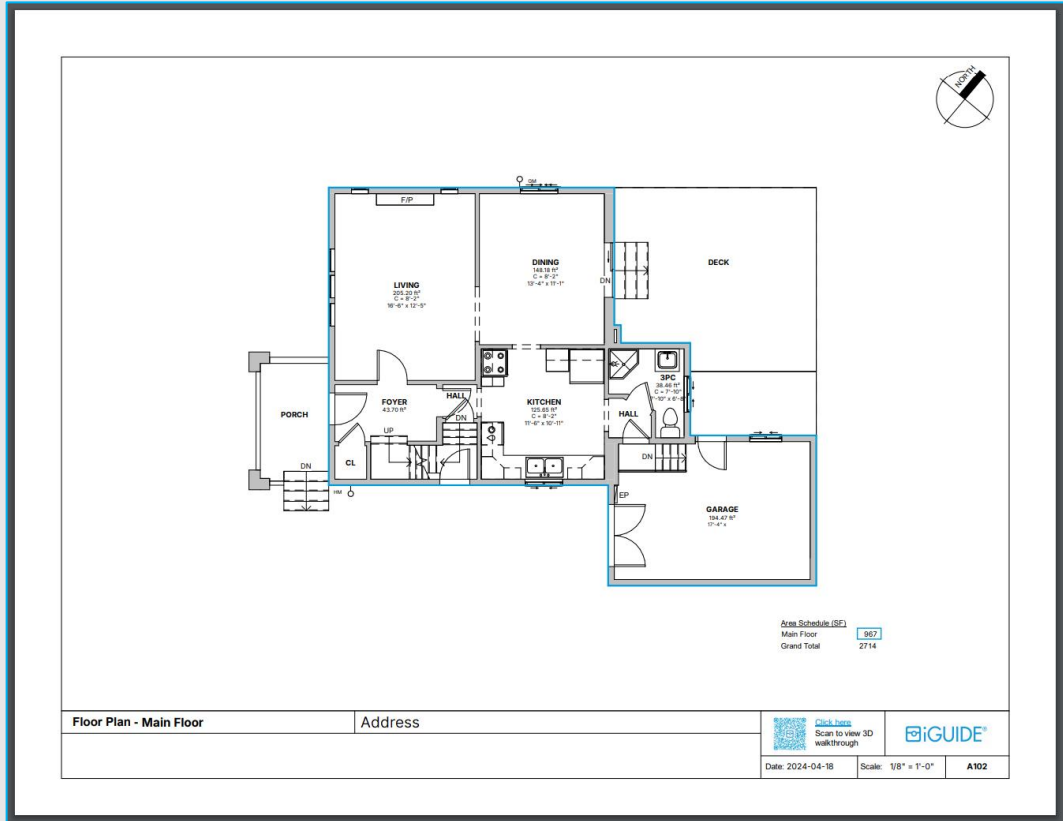
Figure # 31 - Floor Plan - Main Floor
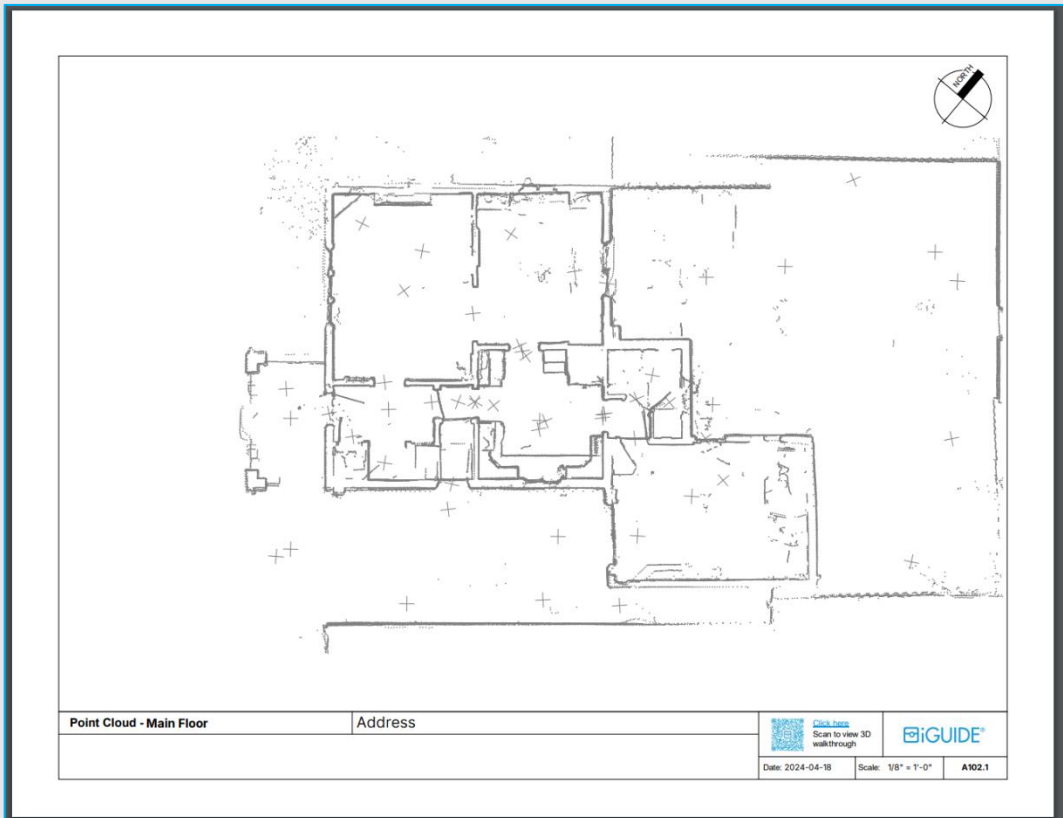
Figure # 32 - Point Cloud - Main Floor
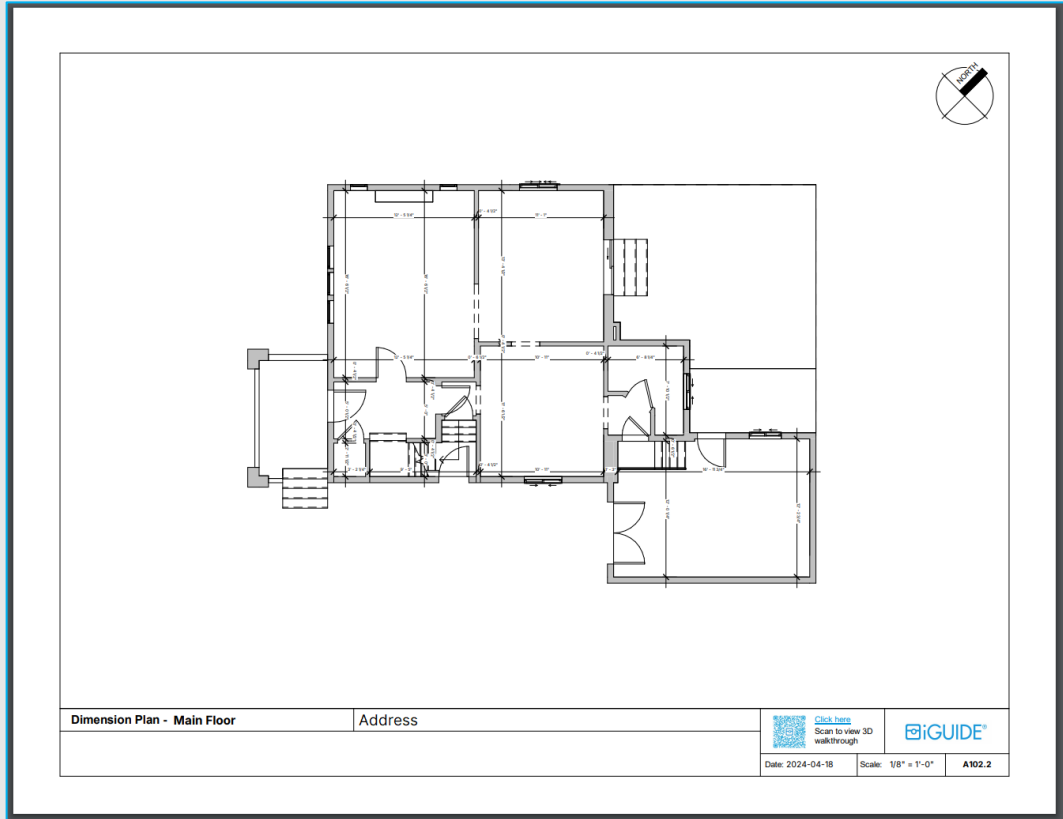
Figure # 33 - Dimension Plan - Main Floor
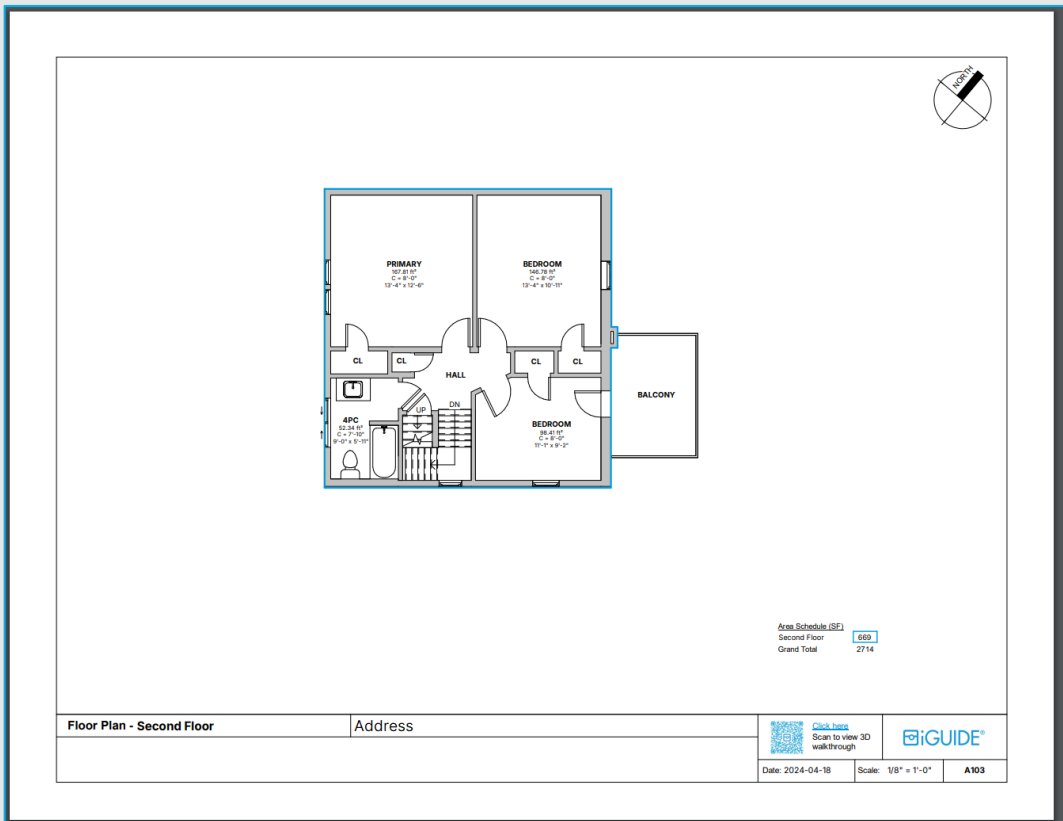
Figure # 34 - Floor Plan - Second Floor
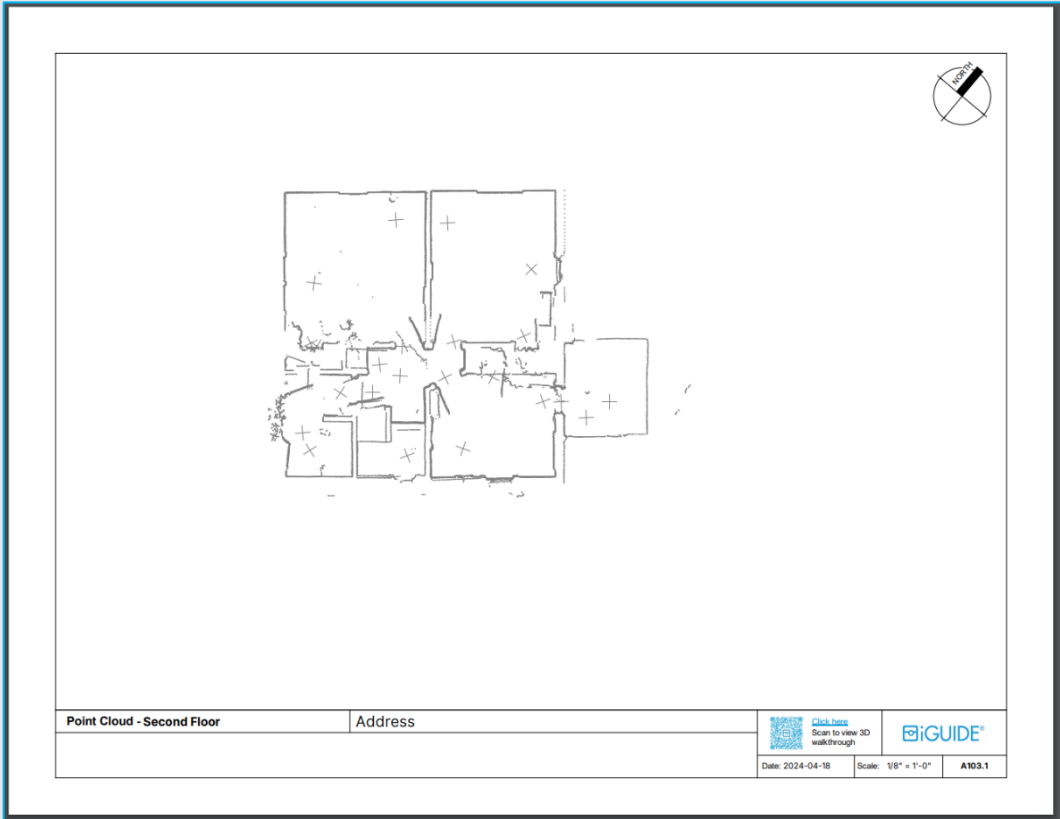
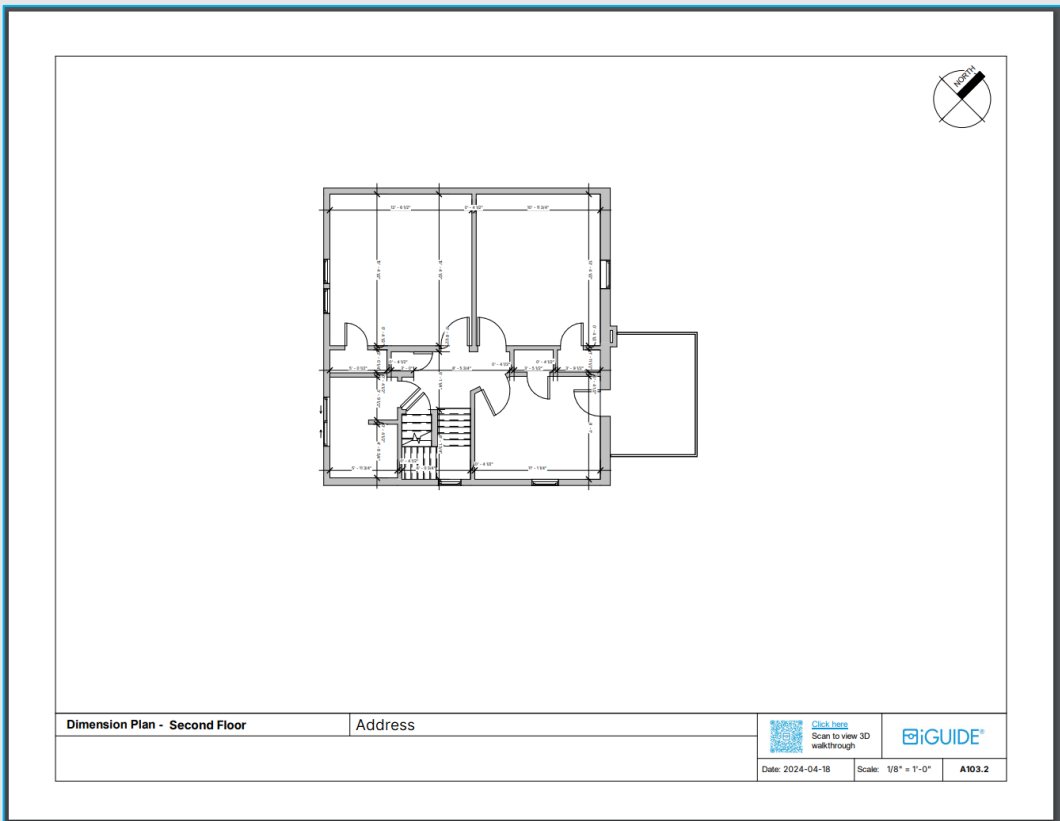*Figure # 35 - Point Cloud - Second Floor*
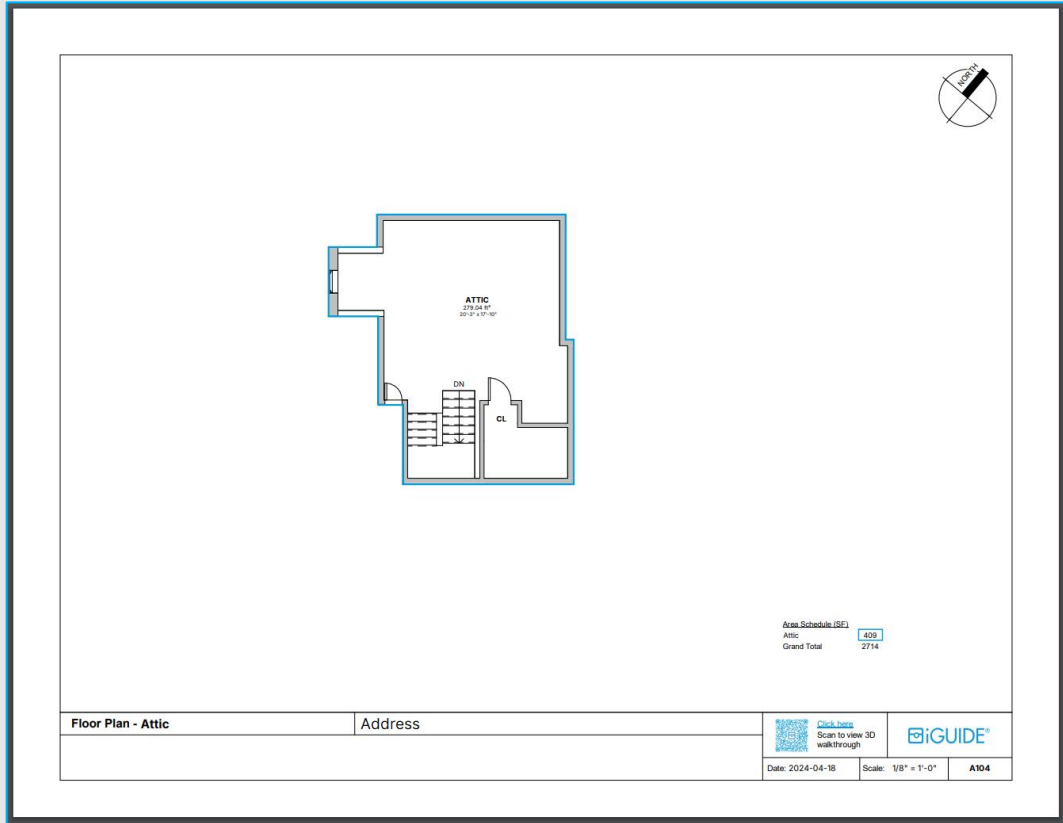

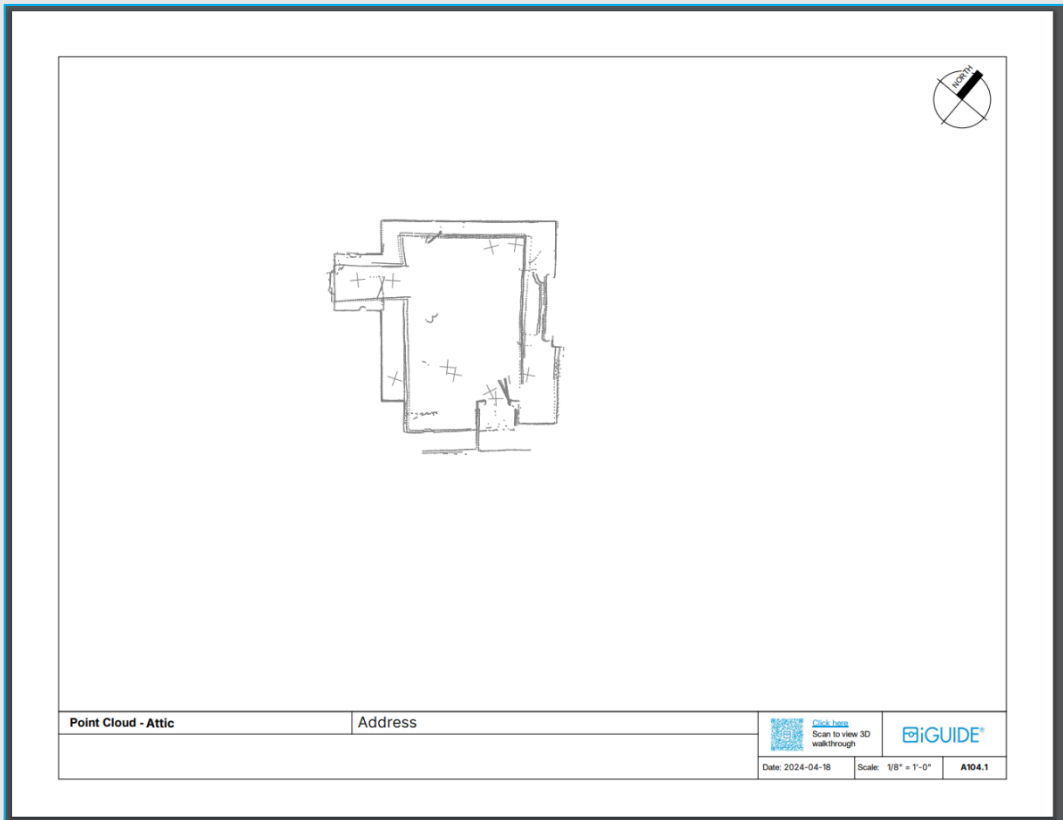*Figure # 36 - Dimension Plan - Second Floor*

Figure # 37 - Floor Plan – Attic

Figure # 38 - Point Cloud – Attic
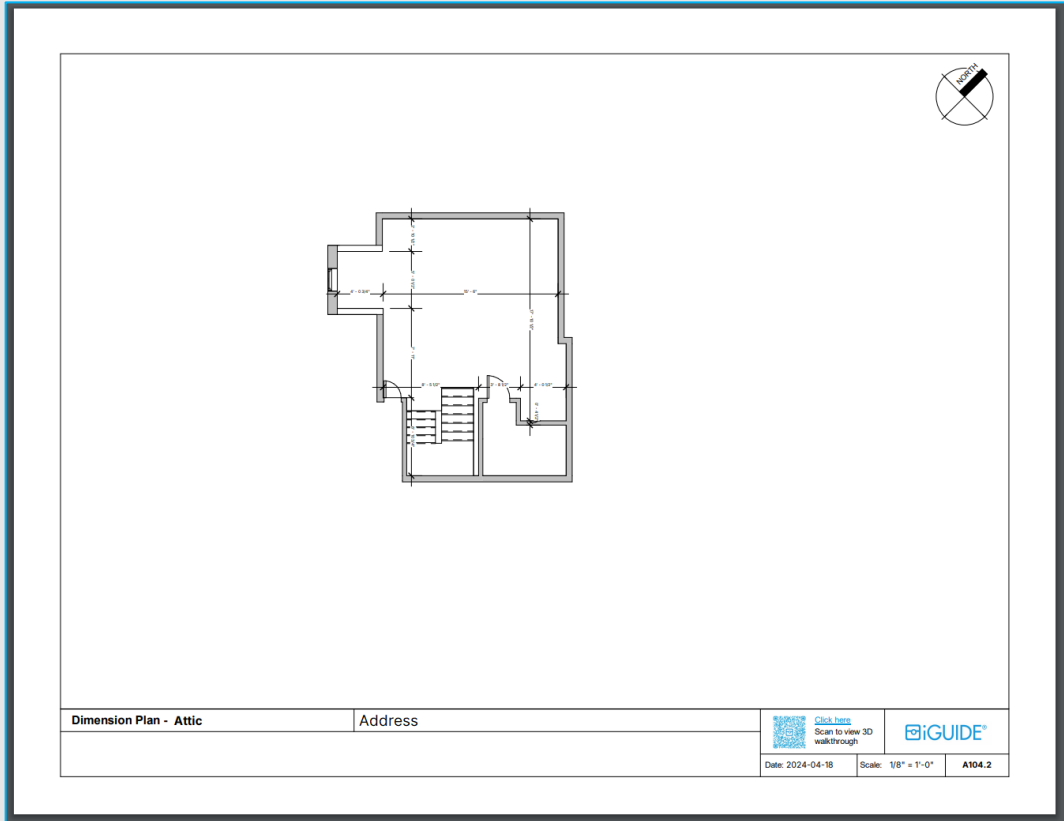
Figure # 39 - Dimension Plan – Attic
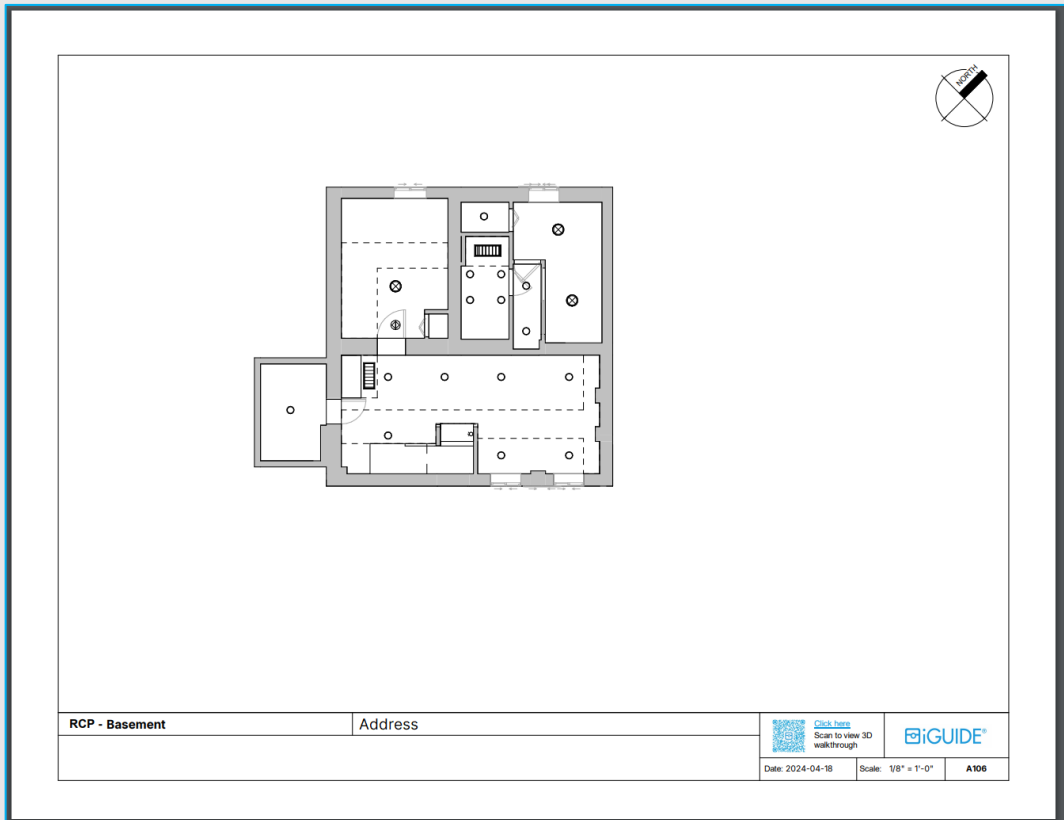
Figure # 40 - RCP – Basement
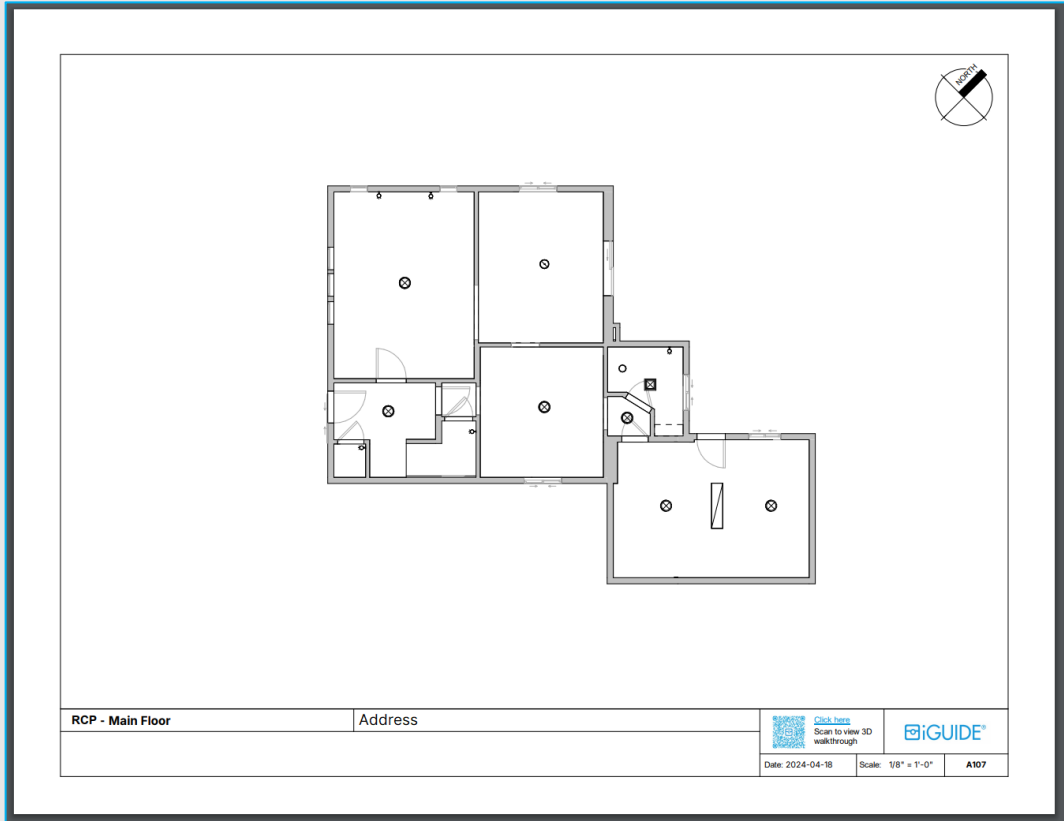
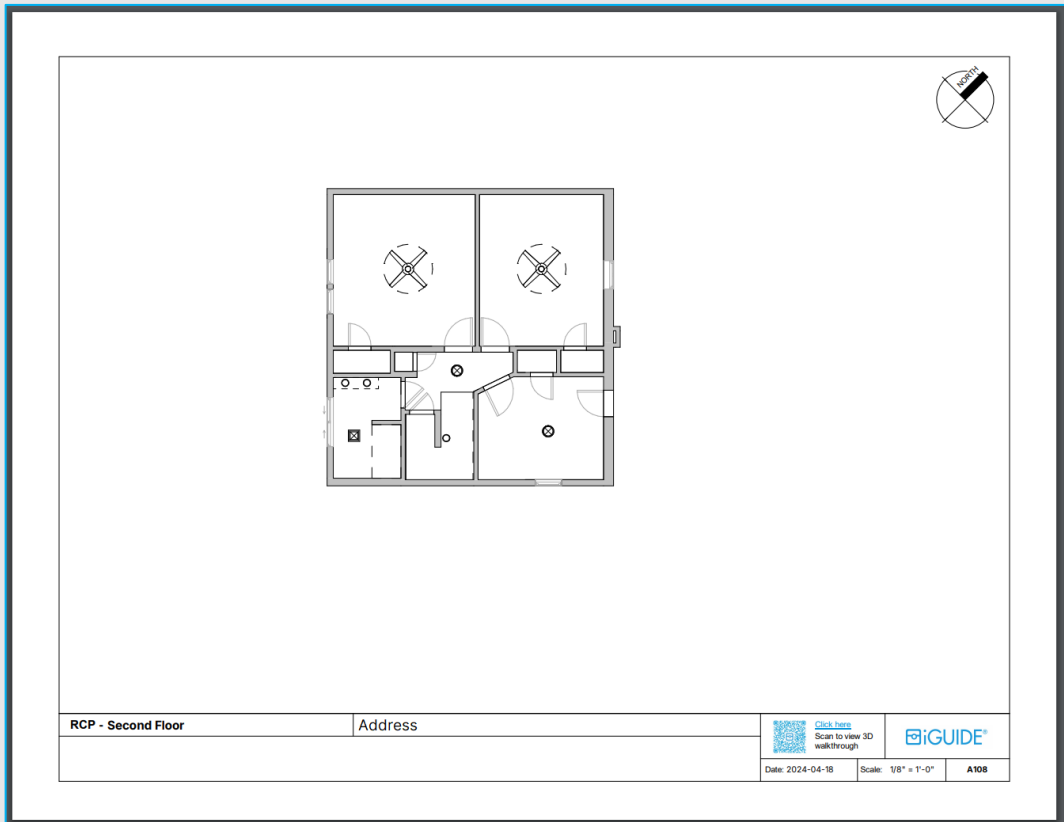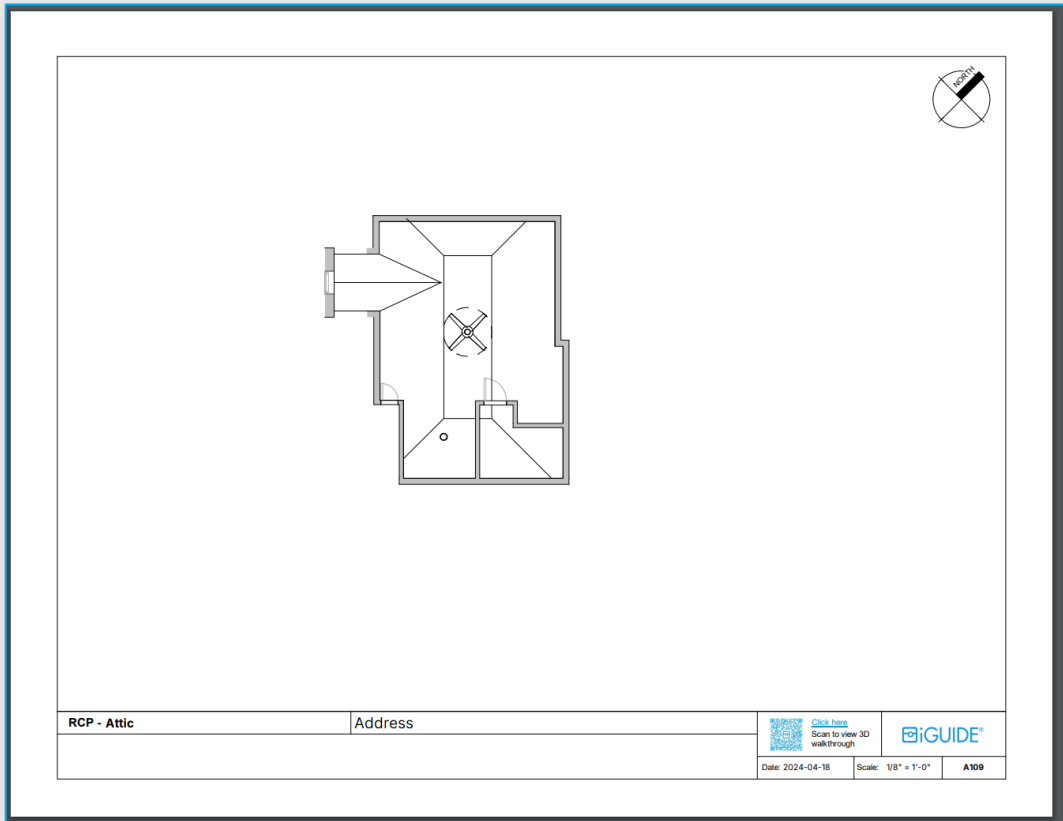**Figure # 41 - RCP - Main Floor**
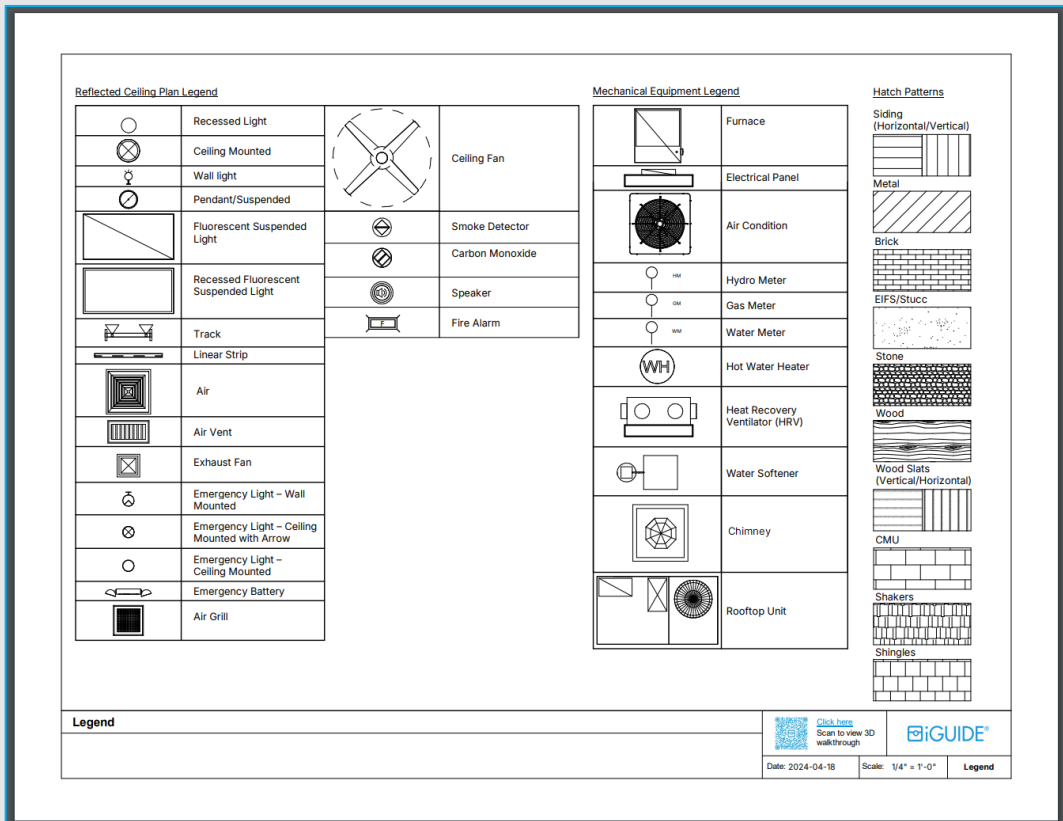

Figure # 42 - RCP - Second Floor

Figure # 43 - RCP – Attic

Figure # 44 - Legend - Final Page