

## Leviton Bluebeam Tools Usage Guide

This handbook contains information pertaining to settings, icons, and methodologies for the best use of the Bluebeam program and Tool Sets.

### 1.0 Installation

#### 1.1 Delete previous versions of tools from Bluebeam

1. Select Tool Chest > Manage Tool Sets
2. Select a tool set to delete; select the “X” icon or press the Delete key.
  - a. Repeat for each tool set.
3. Select [OK] to close the window.

#### 1.2 Ensure all instances of Bluebeam are closed.

#### 1.3 Navigate to “C:\Leviton\Bluebeam Tools”.

1. If installing for the first time, create folder “C:\Leviton\Bluebeam Tools”.
2. Delete contents of folder “C:\Leviton\Bluebeam Tools”.
3. Copy contents of ZIP file into “C:\Leviton\Bluebeam Tools”.
  - a. Installation from the ZIP file may cause issues with the install.
  - b. Some files may be important to reference later. Having them in a known location will be of benefit when that occurs. More details will be provided later in this document.

#### 1.4 Open Bluebeam.

#### 1.5 Tools will install into the active profile.

1. If you are using Leviton tools with others’ tools, make that profile active.
2. If you want to keep tool kits separated, create the profile “Leviton Controls” and make it the active profile.
3. At any time, tools may be added to other profiles by setting the preferred profile active and adding the tools as described in this document.

#### 1.6 Double-click on each tool set in “C:\Leviton\Bluebeam Tools” to load it.

1. Wait for each load to show the completed window in Bluebeam before loading the next tool set.

#### 1.7 Rearrange tool sets as desired

1. Select Tool Chest > Manage Tool Sets.
2. Select a tool set to move; select the “up” or “down” icon to move the tool set into the desired location.
3. Select [OK] to close the window.

### 2.0 Initial Project Use PDF Set-up

#### 2.1 Steps to take prior to placing the first Leviton created icons on a set of plans.

1. Setting up the document correctly at the onset will allow more efficient practices.

#### 2.2 Make a copy and work in the copy.

1. Always have an unmodified copy available.

#### 2.3 Delete sheets not required for your work.

#### 2.4 Slow loading documents and large sets may require additional preparation.

1. Repair document by selecting Document > Repair PDF.
2. Clean-up and speed-up may be attained by selecting Document > Reduce File Size.

#### 2.5 Process markups that came with the drawings.

1. If the markups are necessary to be displayed in your layout, flatten them to their own layer.
2. If the markups are not necessary to be displayed in your layout, delete them.

#### 2.6 Cover design team (Architect, Engineer, etc.) information & stamps as required by your customer with white text box from “Leviton Legends”.

1. Customer comments state we are modifying stamped drawings by adding our design markups. Covering the stamps alleviates the stamping authorities’ concerns.
2. After placing covers on first sheet, right click on each cover, select “Apply to All Pages”. Adjust placement on subsequent pages as necessary.

#### 2.7 Flatten the drawings.

#### 2.8 Delete all layers

1. Do not delete the markup layer noted above if created.

## 2.9 Create Page Labels

1. In the right-side drawer, select the Thumbnails view.
2. Select the first sheet.
3. Select Create Page Labels from the drawer's top menu.
  - a. Select Option Page Region.
  - b. Select [Select]
    - 1.) Zoom in and window the entire Sheet No. area which may contain sheet number text.
    - 2.) In "Selections" add a delineator (ex: " – ").
    - 3.) Select [Add].
    - 4.) Zoom to the Sheet Title and window the area which may contain sheet title text.
    - 5.) Select [OK].
  - c. If the entire set has consistent borders, leave Page Range set at All Pages.
  - d. Select [OK].
4. All sheets will be relabeled.

## 2.10 Set the sheet scale if measurements are required.

1. This step is required if measurement or sensor coverage is necessary.
2. Tool Set icons are created for 1/8" = 1'-0" (1:96). Setting scale will ensure the icons are displayed proportionally appropriately on the sheet.
3. Review your drawings to see which sheets are to which scale.
  - a. Use the noted scale on the drawing.
  - b. Check that the drawing is scale is correct by measuring a known element. These include 2x2 and 2x4 ceiling tile grids.
4. Tools > Measure > Set Scale.
  - a. Set the units.
  - b. Pre Bluebeam v18: set "Store Scale in Page".
  - c. Bluebeam v20 onward: list the pages on which to apply the scale.
5. Repeat for each plan sheet and scale combination.
6. Sheets with details of different scale may have regions of the sheet set to the different scales.

7. Sheets with no scale may be set to 1/8" = 1'-0" (1:96) for consistency when placing icons on these sheets.
8. To place icons on a sheet without regard to scale, deselect the ruler icon on the Tool Set header prior to inserting the icon.

2.11 "Grey-out" the document will make Leviton icons stand out.

1. Select Document > Process > Color Processing.
2. Select "Process Type" [Black and White].
3. Select [OK] to ensure all sheets are processed.
4. Select Document > Process > Color Processing.
5. Select "Process Type" [Modify Colors].
6. Select left Source Color.
  - a. Select the black square.
7. Select To (color on the right).
  - a. Select the far-right column, third from the top gray square.
8. Select {OK} to process.
9. Check other sheets, large documents don't always process all the sheets pre-Bluebeam v18.
  - a. Repeat 4. Thru 8. Above for sheets which aren't modified.
10. Save the document.

### 3.0 Columns

3.1 Several columns have been added to provide better access to icon data.

1. System Type
2. Model
3. Description
4. Room Number
5. Room Name
6. Room Type

7. Control Zone

8. Fixture ID

### 3.2 Import columns

1. Open the lower drawer in Bluebeam.

2. Select Markups List > Columns > Manage Columns

a. Prior to v20: Select the gear icon next to Columns.

3. Select the Custom Columns tab.

4. Select [Import]

a. Navigate to where you've saved the tools.

b. Select "Leviton Columns.xml".

c. Select [Open].

5. Select [Save to Profile]

a. Only necessary the first time.

b. Once saved to profile, these columns will be applied to every PDF which doesn't already have custom columns applied.

c. Repeat step 4 above for any PDF which doesn't automatically include these columns.

6. Active columns must include those noted in 5.1 above.

a. Open the lower drawer in Bluebeam.

b. Select Columns.

c. Check the box next to the columns.

7. Deactivate columns not required for display clarity and simplify extracted data manipulation.

3.3 Opening a PDF where these columns are not available typically means the previous user has applied their own custom columns. Re-import the columns to make this information available for your use.

## 4.0 Tool Sets

4.1 Leviton Controls Bluebeam tools are optimized for the widest use. Some users may prefer changing the contents of the tool sets to meet their individual needs.

#### 4.2 Editing a Tool Set

1. Locally installed version can be edited by the user however the edits will be overwritten by published updates.

#### 4.3 Custom Tool Sets

1. Creating a custom Tool Set using the Leviton Bluebeam Icons.
  - a. Open the Manage Tool Sets window as noted above.
  - b. Select Add.
    - 1.) Name your Tool Set in the Title text box.
    - 2.) Select if it is to be added to all profiles or only the current profile.
    - 3.) Select OK.
  - c. Drag Tool Icons from existing Tools Sets to place copies in the new Tool Set.
  - d. Be mindful of tool updates – icons are not globally updated. Custom tool sets will need to be manually updated by deleting the existing icon and copying the updated icon into it.

### 5.0 Legends

- 5.1 Insert the required legends on each sheet prior to inserting any icons.

- 5.2 There are four (4) legends.

1. Devices This Sheet: the device count, sorted by system.
2. Leviton Exclusions: exclusions and their descriptions.
3. Fixture Control Notes: bookkeeping notes which may also be useful for the installer identifying different control types (0-10V, Forward Phase, Reverse Phase, etc.).
4. GreenMAX Connectivity Notes: bookkeeping notes which may also be useful for the installer to identify different GreenMAX related load and input types.

- 5.3 Icons are assigned to the proper legend.

1. Assignments are accomplished via the gear icon on each tool set.
  - a. Check to ensure the tool set icons are assigned to the appropriate legend prior to placing any icon from that tool set.
2. Adding & deleting icons to a page with an existing legend should automatically alter the legend accordingly.

## 6.0 Icon Use


- 6.1 Hovering over an icon in the Tool Set will display the model number of the product or short description for non-part number items.
- 6.2 Placing an icon
  - 1. At the bottom of the screen is the “Reuse” indicator. When inactive, a command will run once. When active, a command will repeat until another command is selected.
  - 2. Select the desired icon in the Tool Set.
  - 3. Place the icon on the drawing.
    - a. If Reuse is active, place additional icons.
  - 4. It is not necessary to copy & paste existing icons to ensure they are correct throughout the layout
- 6.3 Do not scale, stretch, rotate, or otherwise deform an icon. Bluebeam will recognize this difference as a different item. It doesn’t work like AutoCAD.
- 6.4 Do not change the Custom Columns Description information, Bluebeam will recognize this as a different device. It doesn’t work like AutoCAD.
  - 1. When placing GreenMAX cabinets, indicate their name at the end of the Custom Columns Description (ex: LCP-1) to differentiate the device.

## 7.0 Data Use and Extraction

- 7.1 Custom Columns Data is editable in the right column drawer.
- 7.2 Multiple icons of different type may be selected at the same time and the Custom Column data edited at one time.
  - 1. Example: select all the icons in a room, in the right column drawer edit their Room Number and Room Name.
- 7.3 All instances of a specific model may be selected, and the model number changed.
  - 1. Example: open the bottom drawer; select the column “Model” to sort by model number; scroll down to the model requiring change; select the first one then scroll to where the last one is displayed, hold the shift key and select the last one; with all of the model selected, in the right column drawer, change the model number and select [enter]. All instances of the model will be changed.
  - 2. The above example can be used to quickly change all instances of OSC20-MWW to OSC20-MOW. The legends on each sheet will instantly reflect the change.
- 7.4 If the facility has called out room types, use of the Room Type column can assist in organizing the information appropriately as well as checking to ensure the types are aligned

properly. Additional techniques may be employed to streamline assignment & estimation purposes.

## 7.5 Data Extraction

1. Data may be extracted for use elsewhere.
2. Only the currently visible columns will be extracted.
  - a. Ensure at minimum the columns you wish to extract are as listed in 3.1 above
  - b. Add or remove from visibility columns to meet your needs. For example, “Page Label” being visible allows the extraction breakdown to also be arranged by sheet.
3. Including Room Number (and Room Name) will increase the amount of automation that will be applied to drawing creation.
4. To extract data:
  - a. In the bottom drawer, select Summary  > CSV Summary.
  - b. Ensure all the pages are selected for extraction.
  - c. Ensure all items are checked except “Open File After Creation” and “Include ID Columns”.
  - d. Ensure Include is set to Markups.
  - e. Select the location to extract the data.
  - f. It is highly recommended the file name be changed to something simple with a date and time stamp. Example: “Extraction 20210605-1532.cvs”.
  - g. Open the CVS file in Excel; SaveAs an XLSX file prior to modifying the workbook to ensure your Excel work is saved.
5. Excel Pivot Table may be employed directly against the extracted data to determine either bulk model quantities or broken out by System Type, Room Numbers, Sheets, etc.

**End of Document**