

# PLAN GUARDIAN

## Zone Charts, As-Fitted Drawings & Fire Plans

### User Guide & Training Manual

---

Draw the zone chart, the as-fitted and the evacuation plan on the customer's own floor plan, to scale, with the right symbols — and keep every revision.

Version 1.0

Engineer M8 · [em8portal.com](http://em8portal.com)

## Plan Guardian at a glance

Plan Guardian is the drawing tool inside the EM8 Portal for the documents a fire and security installer has to produce and keep: the zone chart by the panel, the as-designed and as-fitted drawings, the fire strategy, the evacuation plan. Import the customer's floor plan, set the scale, place the symbols, draw the zones, and export. Every save is a revision, so the drawing that went in the O&M manual in March is still there in September after two changes.

| Where                 | What it does                                                                                                                                                      |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Plans list</b>     | Every plan on your account with its type, status (Draft, Active, archived) and last update. Search, filter, create, archive.                                      |
| <b>The editor</b>     | The plan on a canvas: the imported floor plan underneath, symbols, zones, shapes and text on top. Toolbar down the side, symbol palette and zone panel alongside. |
| <b>Symbol palette</b> | Standard symbols by discipline — Fire Alarm, Intruder Alarm, CCTV, Access Control, Emergency Lighting. Search by name.                                            |
| <b>Zones</b>          | Numbered, named, coloured areas drawn on the plan. Zone areas are calculated from the scale.                                                                      |
| <b>Revisions</b>      | Every save is a new revision with a label. Earlier revisions can be opened and exported.                                                                          |
| <b>Export</b>         | The plan as a JPG, landscape or portrait, for the job pack, the panel, or the customer.                                                                           |

- **To scale** — set the scale once from two points a known distance apart and every measurement and zone area is real metres.
- **The right symbols** — a palette per discipline, so a fire plan uses fire symbols and a CCTV as-fitted uses camera symbols.
- **Revisions, not overwrites** — a plan is never edited in place. The drawing you issued stays as issued.
- **PDFs in, JPGs out** — the architect's PDF goes straight in; the finished plan comes out as an image anything can open.

**How to use this guide:** Section 2 is a plan from start to finish; it is the one to read. Section 3 is the editor tool by tool.

# Contents

---

| Section             | Covers                                               |
|---------------------|------------------------------------------------------|
| 1. Getting started  | Signing in, the plans list, plan types and statuses  |
| 2. Making a plan    | Create, import, scale, draw, save, export            |
| 3. The editor       | Every tool on the toolbar; symbols; zones; revisions |
| 4. Quick reference  | The routine, and the glossary                        |
| 5. Common questions | Troubleshooting                                      |

# 1. Getting started

## 1.1 Signing in

1. Go to your EM8 Portal address and sign in.
2. From the left-hand menu choose **Plan Guardian**. You land on the plans list.

**If you see an upgrade screen:** your account does not have Plan Guardian, or has reached its plan limit. Contact Engineer M8 or visit Billing.

## 1.2 The plans list

One row per plan: title, type, status, when it was last updated. Search by title; filter by status. Click a row to open it in the editor. **Archive** hides a plan you no longer need without deleting it — its revisions are kept.

## 1.3 Plan types

| Type                   | Use it for                                                 |
|------------------------|------------------------------------------------------------|
| <b>Zone Chart</b>      | The drawing by the fire panel showing which zone is where. |
| <b>As-Designed</b>     | The system as proposed, before installation.               |
| <b>As-Fitted</b>       | The system as installed — what actually went where.        |
| <b>Fire Strategy</b>   | Compartments, escape routes, fire-fighting provisions.     |
| <b>Evacuation Plan</b> | The "you are here" plan on the wall.                       |
| <b>Virtual Mockup</b>  | A proposal drawing for a quote — cameras on a plan, say.   |
| <b>Other</b>           | Anything else.                                             |

The type is a label for finding the plan later. It does not change what the editor can do.

## 2. Making a plan

### Making a plan

Import the floor plan, set the scale, draw, save a revision.



Scale first. Measurements and zone areas are wrong until it is set, and the editor says so.

*A saved revision is never edited — the next save is the next revision, and every earlier one stays readable.*

*Six steps. Scale before drawing.*

### 2.1 Create

1. On the plans list click **New plan**.
2. Enter a **title** — "ACME House — Ground Floor Zone Chart" — choose the **plan type**, and add a description if useful.
3. Click **Create & open editor**.

### 2.2 Import the floor plan

1. In the editor click **Import floor plan**.
2. Choose the file: PDF, PNG or JPG, up to 25 MB. A multi-page PDF imports page 1 only — split the PDF first if the floor you want is on page 3.
3. A PDF is converted to an image in your browser and then uploaded; nothing is sent until the conversion succeeds.
4. The floor plan appears as the background layer.

### 2.3 Set the scale

Until the scale is set, the editor tells you so and every measurement and zone area is wrong. Do it before drawing anything.

1. Click **Set scale** on the toolbar.
2. Click two points on the plan a known distance apart — the ends of a wall dimensioned on the architect's drawing, a door opening, a grid line.
3. Enter the real distance between them in **metres**. Apply.

The editor reports the scale it has worked out. If the drawing carries a scale bar, use its two ends — it is the most accurate reference on the page.

### 2.4 Draw

- **Place symbols** — pick the discipline and the symbol in the palette, click the plan where it goes. Search the palette by name.
- **Draw zones** — the zone tool, click each corner, press **Enter** to close. Number it, name it, colour it in the zone panel.
- **Rectangles, lines and text** — for anything the symbols do not cover: a riser, a cable route, a note.
- **Select & move** to adjust anything; **Pan** to move around; **Measure** to check a distance.

## 2.5 Save a revision

Click **Save as new revision**. The plan is saved with a revision label — v1, v2 — and the previous one is kept. Save when the drawing is at a state worth keeping: after the survey, after design sign-off, after commissioning. A revision is not edited afterwards; the next change is the next revision.

## 2.6 Export

Choose **Landscape** or **Portrait**, then **Export as JPG image**. The image is the plan as it appears on the canvas, at print resolution, for the job pack, the O&M manual, or laminating for the panel.

## 3. The editor

### The toolbar

Eleven tools, left to right.



Zone: click the corners, press Enter to close it. Landscape and Portrait switch the page.

The tools, in toolbar order.

### 3.1 The tools

| Tool                                        | Does                                                                                                       |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Select &amp; move</b>                    | Click a symbol, zone, shape or text to select it; drag to move it; delete with the Delete key.             |
| <b>Pan</b>                                  | Drag the whole view. Scroll to zoom.                                                                       |
| <b>Place symbol</b>                         | Puts the symbol chosen in the palette where you click.                                                     |
| <b>Draw zone polygon</b>                    | Click each corner in turn; Enter closes the polygon and opens it in the zone panel.                        |
| <b>Measure distance</b>                     | Click two points; the distance in metres is shown (needs the scale).                                       |
| <b>Set scale</b>                            | Two points and a real distance — 2.3.                                                                      |
| <b>Rectangle / Line</b>                     | Plain shapes for anything without a symbol.                                                                |
| <b>Text annotation</b>                      | A label on the plan — a room name, a note to the installer.                                                |
| <b>Import floor plan</b>                    | Replace the background — a revised drawing from the architect, say. Symbols and zones stay where they are. |
| <b>Landscape / Portrait</b>                 | The page shape for export.                                                                                 |
| <b>Export as JPG / Save as new revision</b> | Section 2.5 and 2.6.                                                                                       |

### 3.2 Symbols

The palette is grouped by discipline: **Fire Alarm**, **Intruder Alarm**, **CCTV**, **Access Control**, **Emergency Lighting**. Each holds the standard symbols for that trade — detectors, call points, sounders, panels; PIRs, contacts, keypads; cameras by type; readers and locks; luminaires. Type in the search box to filter across all of them.

A symbol is placed at its centre point. Select it to move it; delete and place again to change it. Symbols do not carry text of their own — add a text annotation beside one for an address or a label.

### 3.3 Zones

The **zone panel** lists every zone on the plan with its number, name and colour. **Add zone** starts the polygon tool; draw, press Enter, then fill in:

- **Zone number** — required, and what the panel and the zone chart use.

- **Zone name** — Reception, First Floor East.
- **Colour** — pick a distinct one per zone so the chart reads at a glance.
- **Description** — optional.

With the scale set, each zone's area is calculated. Delete a zone from the panel; it asks first.

### 3.4 Revisions

The editor opens on the current revision. Every **Save as new revision** adds one; the list of revisions on the plan lets you open an earlier one, and export it, without changing it. There is no "save" that overwrites — that is deliberate, because an as-fitted that was quietly changed after handover is a drawing nobody can rely on.

**Draft and Active.** A plan is Draft while it is being worked on and Active once it has been issued. Set the status on the plans list. Archived plans are hidden from the list but kept, revisions and all.

## 4. Quick reference

### 4.1 The routine

| When                  | What                                                                                                    | Where              |
|-----------------------|---------------------------------------------------------------------------------------------------------|--------------------|
| New job               | Create the plan; import the floor plan; set the scale                                                   | New plan → editor  |
| After survey          | Place the proposed devices; save revision; export for the quote                                         | Editor             |
| After design sign-off | Save revision; set the plan Active                                                                      | Editor, plans list |
| After commissioning   | Move anything that moved; draw the zones; save the as-fitted revision; export for the O&M and the panel | Editor             |
| A change later        | Open the plan; change it; save a new revision                                                           | Editor             |
| Job finished for good | Archive                                                                                                 | Plans list         |

### 4.2 Glossary

| Term                    | Meaning                                                                                          |
|-------------------------|--------------------------------------------------------------------------------------------------|
| Floor plan / background | The imported drawing everything is placed on.                                                    |
| Scale                   | Metres per pixel, set from two points of known distance. Needed for measurements and zone areas. |
| Symbol                  | A standard device icon from the palette, placed on the plan.                                     |
| Zone                    | A numbered, named, coloured polygon — a fire alarm zone, or any area.                            |
| Revision                | One saved state of the plan. Never edited; superseded by the next.                               |
| Zone chart              | The plan type kept by the fire panel showing zones.                                              |
| As-fitted               | The drawing of the system as actually installed.                                                 |

## 5. Common questions

---

### **The measurement is obviously wrong.**

The scale is not set, or was set from two points that were not really the stated distance apart. Set it again from a dimension printed on the drawing, or the scale bar.

### **My PDF imported the wrong floor.**

Only page 1 of a PDF is imported. Split the PDF so the floor you want is page 1, or export that page as a PNG and import that.

### **The import failed.**

The file is over 25 MB, or the PDF could not be converted in the browser. Try exporting it as a PNG at a lower resolution from your PDF viewer.

### **I need to change a plan that has been issued.**

Open it, make the change, save as a new revision. The issued revision is untouched and still exportable.

### **The customer sent a revised floor plan.**

Import it as the new background. Symbols and zones stay where they were, so check them against the new drawing and move what needs moving.

### **I cannot find a symbol.**

Search the palette by name. If it is genuinely not there, use a rectangle or line with a text label, and tell Engineer M8 which symbol is missing.

### **I archived a plan by mistake.**

Filter the plans list to archived; it is still there, revisions and all. Ask Engineer M8 to restore it.

### **A page shows an error after an update.**

Refresh the page. This almost always follows a new release.

**Need help?** Your Engineer M8 contact is your first port of call for anything this guide does not cover — including missing symbols and feature requests.