Fire and Security Specification

Object Styles Used

- **Fire Alarm Devices**
  - For all fire alarm devices including smoke and heat detectors
  - For detectors symbolic code lines (showing the reach of them)

- **Security Devices**
  - For all security devices, alarm controls and alarm panels

- **Specialty Equipment**
  - Fire Protection
    - For fire protection elements including fire hose reels and fire extinguishers

- **Sprinklers**
  - For all fire sprinklers
  - For fire sprinklers symbolic code lines (showing the reach of the sprinkler)

**Detail Levels - all Fire and Security items**

- **3d Elevation Plan**
  - Coarse: Plan annotative symbol only shown (size varies depending on view scale)
  - Medium: Plan annotative symbol and real size unit shown
  - Fine: Plan real size symbol shown

  - The fine detail within the smaller objects (as shown in example) are created with model lines and/or model text. They will show on 3ds and elevations when the views visual style is set to wireframe, hidden, shaded, consistent colours or realistic and the detail level is set to “Fine”

- All plan representation is as follows:
  - Coarse detail level: Symbol only
  - Medium detail level: Symbol and object
  - Fine detail level: Object only

**Detail Levels - Alarm Boards**

**ELEVATIONS AND 3D DETAIL LEVELS**

To achieve the real size solid filled representation (as shown below in Fine Mode) requires solid fill elements that show in 3d and elevation views. To turn off these elements, set the 3d and/or elevation views detail level to “Medium” (or use visibility graphic overrides).

The solid filled element uses a material called “Solid fill for Boards”.

**Use of Shared Symbol Families and Schedules**

A lot of the symbols within the families require a certain set-up process to allow them to show on walls as well as on ceilings and also allows them to have automatic wall-ceiling symbol interchange.

This set-up process requires them to be "shared" families.

One of the implications of sharing these nested families is that these symbols and light sources will schedule with the real fittings (resulting in double counting).

To counter this, all the shared symbol families have as many of their parameter values as possible assigned to “Symbol Only” - allowing you to filter them out from within your schedule so they are disregarded.

All of these symbols also appear within your project browser: their names all begin with "Symbol_

**Example of shared symbol family naming**

**Example of shared symbol family parameter values**
Common Instance Parameters

Plan Symbol Offsets and Leaders allow you to correctly document fixtures that are aligned vertically. These parameters are not available for sprinklers and fire hose reels.

The Revit standard “Elevation” parameter cannot currently be used in labels, tags or schedules. To overcome this limitation use the “Reported Elevation” parameter.

The RevitWorks Elevation Reporter add-in (Premium version only) ensures that the “Elevation” and the “Reported Elevation” parameters are always synchronised. If the add-in is not loaded you will need to manually update it.

Cut Plane Extensions allow you to show low level components on your Reflected Ceiling Plans and high level components on your Floor Plans.

Common Type Parameters

All fixtures come with symbol fill options allowing for more graphical differentiation where required.

“Show Fixture Label” shows the “Fixture Label” text parameter as an annotation label within the family. These labels are in a set position relative to the symbol and rotate with the family while staying readable.

Alternatively, you could turn this off and tag your family which gives greater flexibility in the positioning and orientation of the label.
Fire and Security Specification

Fire Alarm Devices

- **3d**: FIRE - Detectors
- **Wall Symbol**: Heat Detector
- **Ceiling Symbol**: Smoke Detector

Fire Alarm Devices (Premium only)

- **3d**: FIRE - Manual Call Point
- **Wall Symbol**: FIRE - Manual Call Point
- **Ceiling Symbol**: FIRE - Sounder Horn
- **Wall Symbol**: FIRE - Sounder Horn
- **Wall Symbol**: FIRE - Sounder Speaker
- **Wall Symbol**: 136mm Diameter
- **Wall Symbol**: 180mm Diameter
- **Wall Symbol**: FIRE - Sounder Wall Plate
- **Wall Symbol**: FIRE - Sounder Wall Plate
- **Wall Symbol**: FIRE - Strobe
- **Wall Symbol**: 100 x 90h

Fire Controllers

- **3d**: FIRE - Extinguisher
- **Wall Symbol**: FIRE - Extinguisher

Fire Controllers (Premium only)

- **3d**: FIRE - Sprinklers
- **3d**: FIRE - Sprinklers With Escutcheon
- **3d**: FIRE - Sprinklers Without Escutcheon
- **3d**: FIRE - FHR
- **3d**: Recessed Cabinet
- **3d**: Reel Only
- **3d**: Surface Mounted cabinet

**NOTES!**

1. 3d images as shown are in detail level “Fine mode”
2. Wall and ceiling symbols as shown are in detail level “Coarse” mode
3. All symbols can have labels added.
4. Labels as shown in images are the out-of-the-box defaults and can be easily changed or turned on/off from within the fixtures type properties (refer previous page for screenshot)

Additional Feature for Fire Sprinklers

All sprinklers have the ability to show the extent of the sprinklers reach by setting code line type parameters within the family and ticking the “Show Design Code Lines” instance parameter. These lines are on their own sub-category (as shown on page 1. “Object Styles Used”) so can be turned off view-wide where required.
Security Devices

- SECURITY - Sounder and Strobe
- SECURITY - Sounder and Strobe
- SECURITY - Strobe

100 x90h

Security Devices (Premium only)

- SECURITY - Breakglass
- SECURITY - Breakglass
- SECURITY - Camera
  - Ceiling Mounted
  - Wall Mounted
- SECURITY - Camera Enclosed
  - 130mm
- SECURITY - Credential Reader
  - 80 x80 x20d
- SECURITY - Door Release Push Button
- SECURITY - Door Release Push Button
- SECURITY - Door Release Request to Exit
  - SECURITY - Door Release Request to Exit
- SECURITY - Keypad
  - 85x122x28d
  - 190x135x30d
- SECURITY - PIR Sensor
  - 100mm
- SECURITY - PIR Sensor Directional
  - Ceiling 60w x100d
  - Wall 60w x100d
- SECURITY - Sounder Horn
- SECURITY - Sounder Horn
- SECURITY - Sounder Speaker
  - 136mm Diameter
  - 180mm Diameter
- SECURITY - Sounder Wall Plate
- SECURITY - Sounder Wall Plate

3d Wall Symbol Ceiling Symbol

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Fire and Security Specification

Alarm Panels

Refer page 1 for explanation of how symbols work at different detail levels.

Fire Panels (Premium only)

- Security - Alarm Panel
  - 3d
  - Wall Symbol
  - Recessed 450w x 600h x 130d
  - Surface 450w x 600h x 130d

Alarm Controls (Premium only)

- Security - Alarm Controls
  - Day Time Alarm
  - Electric Mortice
  - Interlock
  - Lock Position Switch
  - Reed Switch

Magnetic Locks (Premium only)

- Security - Magnetic Lock
  - 3d
  - Wall/Ceiling Symbol
  - Double
  - Single

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