Athena-Security Weapons Detection System User Guide for REVIT

A group of people walking

Description automatically generated

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# Introduction

Athena-Security BIM files were created in and are to be operated in Autodesk® Revit®. It consists of a test model, families, views, and plans.

# Revit Version

This family is developed using Revit® 2021 and can be upgraded to the newest versions.

# Families

In this guide, you will find (3) families.

1. Weapons Scanning Pole
2. Kiosk
3. Printer

A tablet with a colorful screen

Description automatically generatedA blurry image of a person walking

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Figure 1. Weapons Scanning Pole

A black box with a label

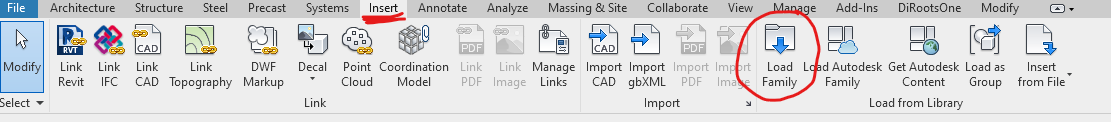
Description automatically generated

Figure 2. Kiosk

Figure 3. Printer

# Load Family into Project

To load all the types or just specific ones desired on the project, you will need to LOAD FAMILY and select the folder containing the downloaded family file (RFA).



# Instance Hosting

All of the families are work plane-based, and is typically hosted on the same plane as the top of floor. It is recommended to place instances in the project using a floor plan prior to moving the instance to a desired location. The “Mounting Height” parameter offsets the base of the printer and kiosk. The weapons scanning pole can be offset with the “Offset from Host” parameter.

A screenshot of a computer

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## Weapons Scanning Pole – Type Parameters

The clearance for the weapons scanning pole can be controlled via type parameters. “Lane Width” controls the width in between the inner face of the poles. Lane widths are locked to be between 30” and 39”.

The length of the electrical and mechanical noise clearances can be controlled via “Elec Noise Clearance” and “Mech Noise Clearance”, respectively. The clearances are locked to 5’ and 3’, respectively, and can be adjusted to meet project requirements because in some cases, 2’ clearances are allowed.

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# Weapons Scanning Pole – Instance Parameters

The weapons scanning pole has clearance requirements for sources associated with mechanical and electrical noise. Clearance visibility of the poles can be set by a combination of the Front, Rear, Left, and Right clearance visibility checkboxes. The front of the pole pairs is determined by the arrow in between the poles.

A diagram of a diagram

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# Kiosk – Type Parameters

The kiosk mounting type is set via type parameters. The kiosk is representative of the control or operator unit (i.e. iPad tablet). The family can be set to either “Wall Mount” or “Desk Mount”. “Mounting Height” sets the centerline offset of the kiosk above the hosted level, which is typically the level. When “Desk Mount” is selected, the “Desk Mount Length” will extend the kiosk further above the host without changing the location of the base. Desk Mount Lengths are locked to be in between 3’ and 5’-6”.

A drawing of a sign post

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The default touch screen dimensions are for the iPad 11 Pro in landscape orientation. Nested within the wall and desk mount types is the “Touch Screen” family with adjustable dimensions for any tablet.

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# Kiosk – Instance Parameters

“Touch Screen Angle” adjusts the angle of the touch screen relative to the horizontal. The wall mount type has (2) joints, one at the base of the wall mount, and another towards the front of the kiosk.

“Wall Mount – Pivot Angle (Arm)” adjusts the angle of the joint adjacent to the kiosk.

“Wall Mount – Pivot Angle (Wall)” adjusts the angle of the joint adjacent to the base.

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Figure 4 Wall Mount with 45-degree arm angle.

Figure 5 Default Wall Mount Position

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Description automatically generated

Figure 6 Wall Mount with -45-degree wall angle.

# Printer - Instance Parameters

The printer family does not have instance parameters that affect visibility or function.

# Printer - Type Parameters

Like the desk mount kiosk, the printer’s mounting height adjusts the height of the base. The dimensions can be adjusted. The default size is the Star mC-Label3 printer in imperial units.

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# S100-VIEWS

This sheet has been set up to show examples of how to utilize the families.

View 1 – Plan View is for viewing all possible combinations of the weapons scanning pole clearances as well as default visibility for the kiosks and printer. There are also notes to drafters and designers in blue.

View 2 – 3D Views is an isometric view of View 1 without notes.

View 3 – Sample Lobby is a sample design of a lobby with (2) weapons scanning lanes, kiosks for each lane, and a printer.

# S101-SINGLE LINE DIAGRAMS

Like the desk mount kiosk, the printer’s mounting height adjusts the height of the base. The dimensions can be adjusted. The default size is the Star mC-Label3 printer in imperial units.