



Kane Security Screens – Revit Guide

This Revit Guide is intended to supplement the Kane Security Screens Revit Content Library which has been developed by Revitus. This guide will assist you with valuable information to help you get the most out of this Revit Content. Please note that this is a basic guide and is not meant to be all-inclusive of the full functionality of the Security Screen Families. It will however give you a great overview of the parameters included and how each is to be used.

For the purpose of this guide, all information will be based on the S-NR5-O Reveal Mount family.

First and foremost, always make sure you are working with the latest available Version of the Kane Security Screen Families. Note that the Version of the Family has been included under “Identity Data” within each Family file (as shown with the red arrows below). Currently, the latest release for all Families is v3.1.

Identity Data		
URL	http://www.kaneinnovations.com/	=
Product Page URL	http://www.kaneinnovations.com/	=
Parent Company	Kane Innovations	= "Kane Innovations"
Manufacturer	Kane Security	= "Kane Security"
Manufacturer Address 1	2250 Powell Ave	= "2250 Powell Ave"
Manufacturer Address 2	Erie, PA 16506	= "Erie, PA 16506"
Manufacturer Phone Number	800.773.2439	= "800.773.2439"
Manufacturer Email Contact	mailto:help@kaneinnovations.com?Subject=Revit Inquiry	=
Security Level	Level 5: Heavy Vandalism	= "Level 5: Heavy Vandalism"
Description	Operable Steel NarrowLine Security Screen	=
Model	S-NR5-O	=
Type Comments		=
Copyright Notice	© Kane Innovations. All Rights Reserved.	= "© Kane Innovations. All Rights Reserved."
CSI MasterFormat	08 56 66	= "08 56 66"
Assembly Code	E1010110	=
Created By	Revitus	= "Revitus"
Creator URL	http://www.revituspro.com/	=
BIM Version Available (Earliest)	2011	= "2011"
BIM Version	v3.1	= "v3.1"

The “**Identity Data**” grouping of parameters includes typical parameters associated with this type of Component (Specialty Equipment wall based). Please note the “Product Page URL”, which will link you directly to the kanescreens website to give you more information about the product you are working with and will allow you to download specifications and other related publications.

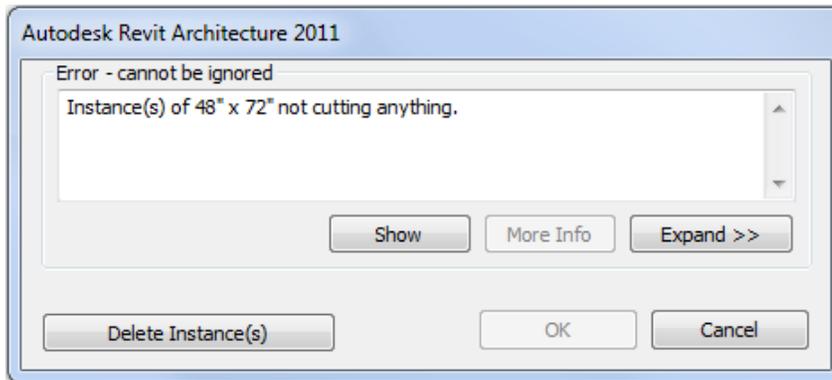
Also important to note, please understand that it is okay to contact the creator of this content should you need further assistance when working with the Kane Security Screens Revit Families. Just access the revituspro website and send an e-mail through the “Contact Us” page.

General Items

These Security Screen Families have been set-up using the Specialty Equipment wall based.rft family template file. They require a wall to be placed in the Revit model to act as a host.

Each Security Screen Family has been created to allow a 1-wide or 2-wide frame only. Should your specific design require ganged units of 3-wide or more, you should use all single wide units and insert the supplementary family components for the mullions (e.g. Frame-Mullion-Kane_Security_Screens-Level_5-Steel_NarrowLine-(S-NR5-O)-Reveal).

All Reveal Mounted Screen Families have been created with a 1/16” offset above the Head of the Frame. This has been done to avoid the following error message.



If you were to try to place a 48” x 72” Reveal Mount Security Screen over a 48” x 76” window, Revit would give you the error message shown. Based on this logic, there may be times where you need to modify the family file to accommodate the required placement of the component, specifically when trying to design complex ganged units that are multi-high units.

Family Types should always be named by units measured in inches with the width followed by the height (e.g. 48” x 72” is correct; 4’-0” x 6’-0” is incorrect).

Generally speaking, if there are standard options available for a component, all options are included in drop-down selection lists for your convenience. This typically applies to parameters under the groupings for “Construction” and “Materials and Finishes”. Please understand that this functionality has required a nested family to be loaded for each list option, thus making the file size slightly larger. To reduce file size and increase performance, feel free to purge the Family file of all other nested families after you have made your selections for your specific design requirements. If you choose to purge the file or modify it in any way, give the family file a new name (most commonly done by adding a project number prefix).

The parameters and options of each Family File will vary slightly, but the logic of this guide will be consistent throughout the entire Security Screen Revit Content Library. For each product specific component, refer to the product specifications for more information and available options.

All Standard Materials, Finishes and Infill Types are included in each Family File. Therefore, when any Security Screen Family file is loaded into a Revit project file, all Materials will be loaded with it. Feel free to customize the “Powder Coat – Kane Security Screens – Custom” as required.

The recommended file path for storing these Family Files is as follows: Under the default “Imperial Library”, Under “Specialty Equipment”, Create a new folder called “Kane Security Screens”. This is the folder where all Kane Security Screen Families should be stored.

Family Parameter Groupings

Under the “**Constraints**” grouping of parameters, please understand that these parameters are all controlled by “rules” that should not be modified. These rules have been established based on the specifications of the products, so they should not be tampered with unless approved by Kane or Revitus.

Parameter	Value	Formula
Constraints		
Show Aesthetic Horizontal Brace and Mullion	<input type="checkbox"/>	= and(Show Center Mullion, Show Aesthetic Horizontal Brace)
Show Aesthetic Horizontal Brace No Mullion	<input checked="" type="checkbox"/>	= and(No Center Mullion, Show Aesthetic Horizontal Brace)
Show Structural Horizontal Brace and Mullion	<input type="checkbox"/>	= and(Height > 4', Show Center Mullion)
Show Center Mullion	<input type="checkbox"/>	= Width > 4' 2"
No Center Mullion	<input checked="" type="checkbox"/>	= not(Show Center Mullion)
Show Structural Horizontal Brace No Mullion	<input checked="" type="checkbox"/>	= and(Height > 4', No Center Mullion)

Under the “**Construction**” grouping of parameters, note that these parameters will vary based on the Security Screen Family you are working with. Function and Mounting Type will always be predefined and should not be modified. The other parameters (Egress and Lock Option in this case) will offer a drop-down selection box of all available options for each parameter. Please note that these are Shared Parameters, so these values can be scheduled.

Construction		
Egress and Lock Option	Roto-Lift Emergency Egress	=
Function	Operable	= "Operable"
Mounting Type	Reveal Mount	= "Reveal Mount"

Construction		
Egress and Lock Option	Roto-Lift Emergency Egress	=
Function	Roto-Lift Emergency Egress	=
Mounting Type	Roto-Lift Emergency Egress with Exterior Maintenance Access	=
Graphics		
	Exterior Maintenance Access Only	

Graphic showing drop-down selection extended box for Shared Parameter

Under the “**Graphics**” grouping of parameters, note that all of these parameters should be modified to meet the required design.

For the S-NR5-O, if your Screen Height exceeds 48”, the Structural Horizontal Brace will automatically be displayed (as defined above in the Constraints parameter). With this in mind, Show Aesthetic Horizontal Brace can be selected (checked) if you require an additional brace to compliment the frame pattern of your window (to achieve a 3-High Unit). Similarly, if your Screen Height is less than 48”, you can still have one Horizontal Brace (essentially a 2-High Unit) by selecting Show Aesthetic Horizontal Brace. You will see later that you can control the height of each brace independently.

Furthermore, Screen Infill and Primary Finish Graphics are both Materials parameters that only affect the appearance of the model geometry in 3D and Elevation views (and all Shaded and rendered views). It is important to note that modifying these parameters has no effect on how the component is scheduled, and that the Revit User must coordinate these two parameters with those found under the “Materials and Finishes” grouping.

Graphics		
Show Aesthetic Horizontal Brace	<input checked="" type="checkbox"/>	=
Screen Infill	Metal - Screen Infill - Kane Security Screens - Wire Cloth	=
Primary Finish Graphics	Powder Coat - Kane Security Screens - White	=

Under the “**Text**” grouping of parameters, note that these parameters are included to offer important design limitations of the components. These comments have been supplied in accordance with the specifications and should not be modified.

Text		
Glass Clearance from Infill	2 Inches Minimum Recommended	= "2 Inches Minimum Recommended"
Vertical Mullion Note	Vertical Mullion Required for each 50 Inches of Width	= "Vertical Mullion Required for each 50 Inches of Width"
Horizontal Brace Note	Horizontal Brace Required for Units Higher than 48 Inches	= "Horizontal Brace Required for Units Higher than 48 Inches"
Maximum Panel Size Limitation	33 S.F.	= "33 S.F."

Under the “**Materials and Finishes**” grouping of parameters, it is important to note first that these are Shared Parameters and can be scheduled. These values should be coordinated with the parameters found under the “Graphics” parameter grouping. Also note that these parameters offer drop-down lists of all available options for your convenience. Modifying these parameters has no effect on how the model geometry looks graphically – to modify the appearance of the model geometry, change the parameters under the “Graphics” grouping.

Materials and Finishes		
Primary Finish	Powder Coat - White	=
Main Frame and Infill Finish	Powder Coat - Black	= "Powder Coat - Black"
Infill Type	Wire Cloth - 12-Mesh, .028-inch Diameter Stainless Steel	=

Under the “**Dimensions**” grouping of parameters, note that it is here where you will modify the overall size of your Security Screen. Coordinate the Width and Height Dimensions with your Family Type name, but use inches as your units for the Family Type name (e.g. 48” x 72”). You can also modify the height of the two Horizontal Braces independently here. Wall Inset is an Instance Based parameter which will facilitate insertion and placement of the Security Screen in multiple wall types.

Dimensions			
Width	4' 0"	=	
Wall Inset (default)	0' 0 3/8"	=	
Aesthetic Horizontal Brace Center from Bottom	4' 0"	=	
Structural Horizontal Brace Center from Bottom	2' 0"	=	
Height	6' 0"	=	

Under the “**Data**” grouping of parameters, information concerning product testing data is described here. Note that only the Level 5 and higher products have been tested to date, all of which have passed the HUD Heavy tests for Sag, Impact and Forced Entry. These parameter values should not be modified. HUD is an acronym for Housing and Urban Development.

Data			
Passed HUD Heavy Sag Test	<input checked="" type="checkbox"/>	=	
Passed HUD Heavy Impact Test	<input checked="" type="checkbox"/>	=	
Passed HUD Heavy Forced Entry Test	<input checked="" type="checkbox"/>	=	

Under the “**Other**” grouping of parameters, Head Height and Sill Height are included. Sill Height is an Instance Based parameter that can be set before placing the component in the model. Head Height is solely a “reporting parameter” that will take the value of the Sill Height, and add to it the Height of the Frame.

Other			
Head Height (report)	9' 4"	=	
Sill Height (default)	3' 4"	=	

The “Identity Data” grouping of parameters is shown on the first page of this guide and is self-explanatory.

End of basic Guide

05/23/2011