
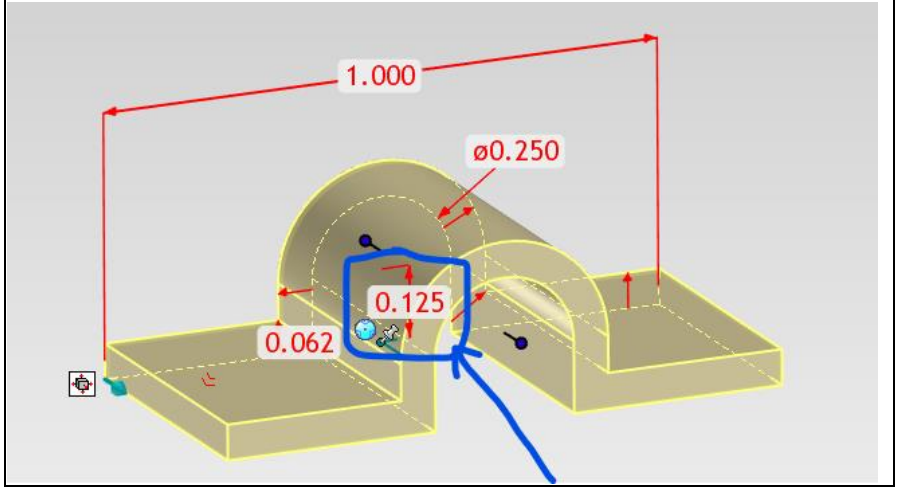
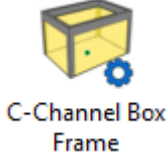


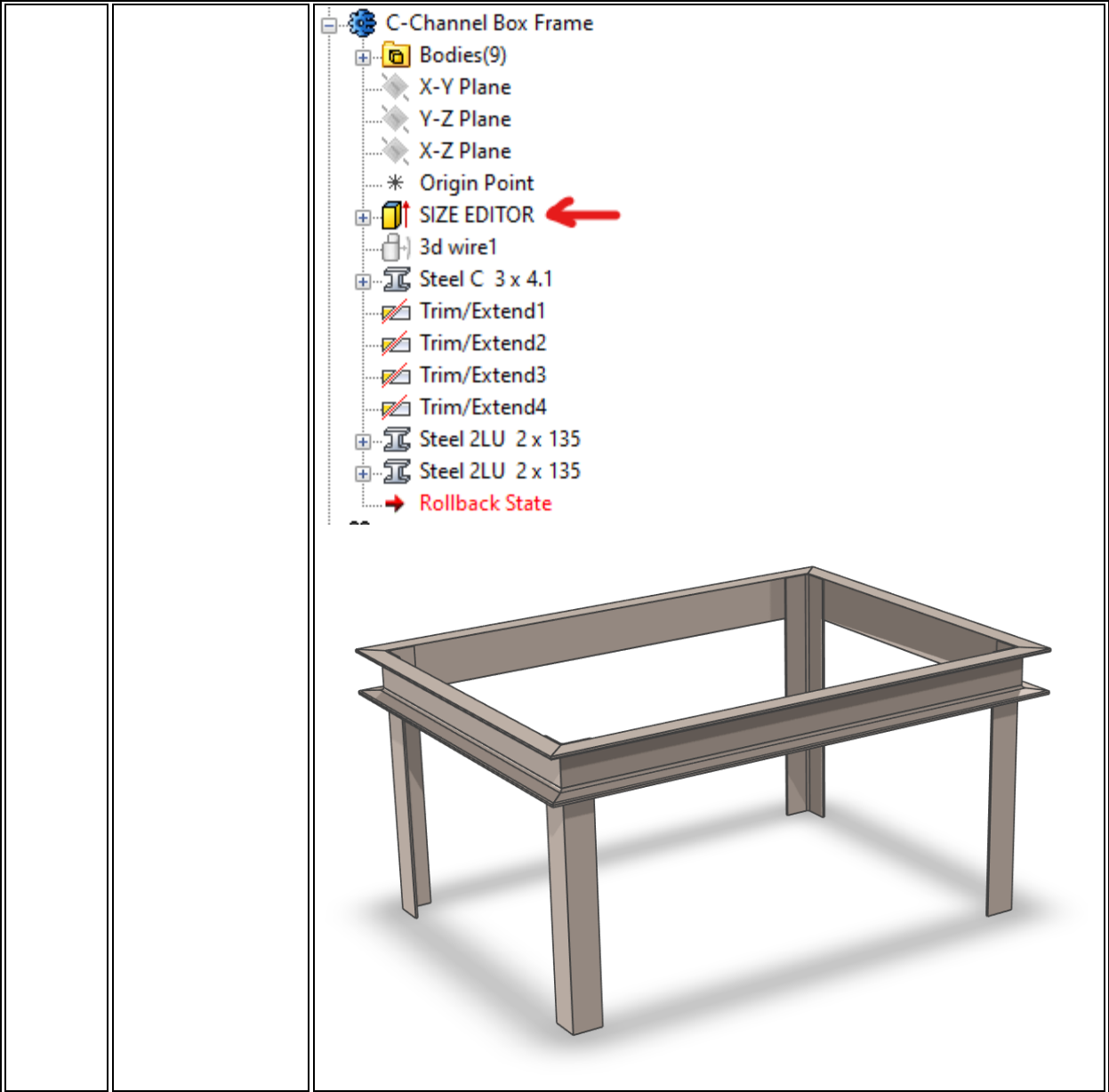
Mag-TOOLS

New Enhancements 2024

General Announcements:

- Some icons have been updated.
- Removed "0-" prefix from all sub-groups.
- Renamed sub-group "0-SHMTL" to "SHEETMETAL" for clarity.
- Dividers have been added to create "sectioned" areas for "Whats New" and Sub-Groups".
- Placed all people figures into new sub-group "PEOPLE"

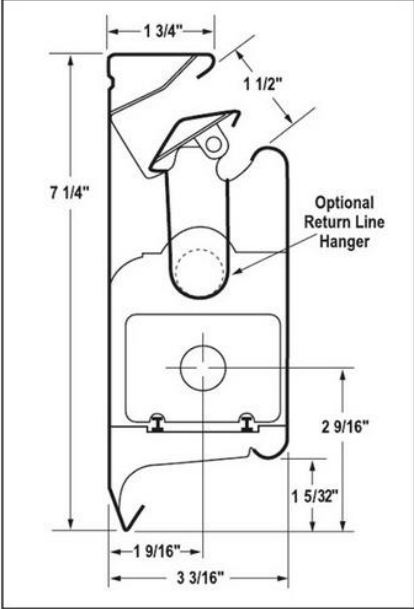
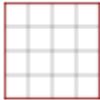



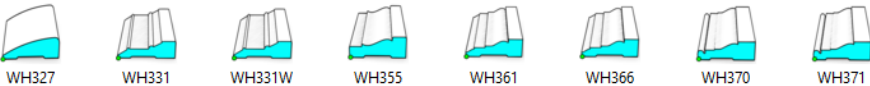
Sub-Group	Tool	Description
	 <p>Loop Single</p>	<p>Loop Single (formerly "Wire Bracket") Added more geometric constants for better success. Also added Center of Radius constraint dimension (ie. 0.125) for more control. Also updated to be dropped as an Intellishape if desired.</p> 
	 <p>C-Channel Box Frame</p>	<p>C-Channel Box Frame. A Structured part steel frame construction. C Channel top frame with angle legs. Reize the frame using the "SIZEBOX EDITOR" in the feature tree. Of course, you can edit the components as desired using standard IronCAD methods.</p>

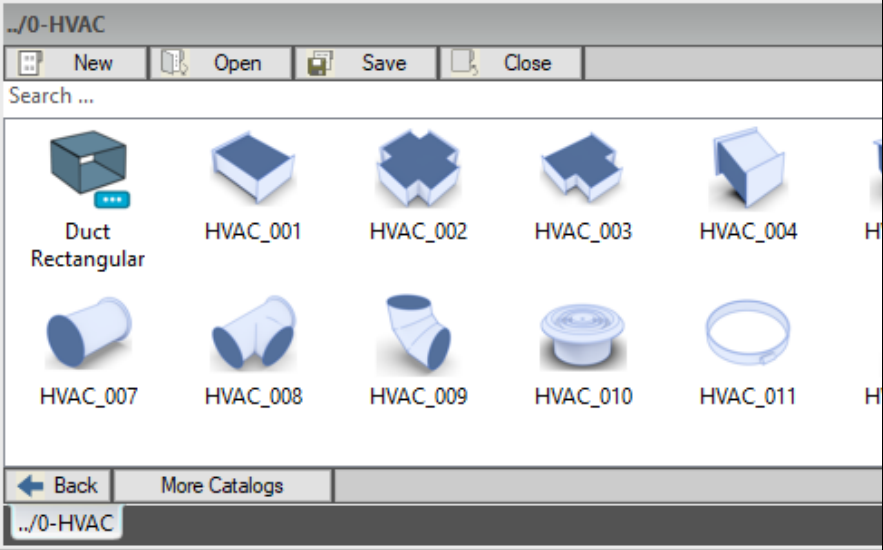
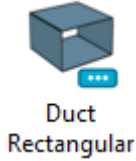
















ARCH

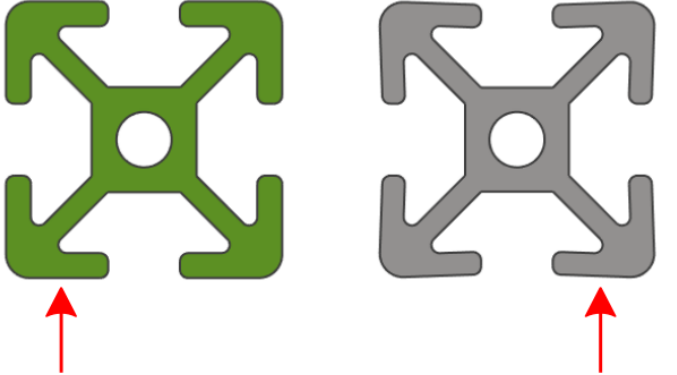




HeatBase 750-1B
 Baseboard heating assembly accurate to Haydon specs.
 Includes IC-MECH web hook to product site.



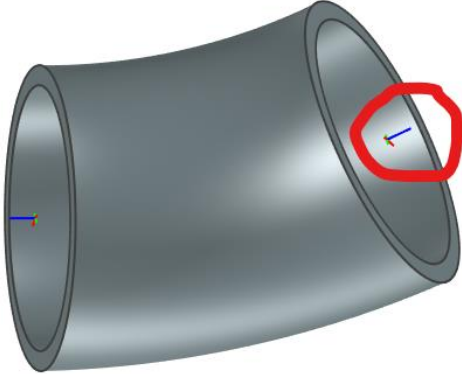
		
<p>ARCH</p>	 <p>12in Grid</p>  <p>12in</p>	<p>12in Grid 12in Grid_Dark</p> <p>These parts are zero thickness surface modes which are 10ft x 10ft square by default. Of course you can edit the size as desired. A grid texture has been applied visually to show a 12" square grid pattern with quarter sub lines. One in a light transparent color and the other in a dark mode color. This is accurate and is intended for quick conceptual feedback. You cannot snap to the grid. The models are set to be Ghosted by default. So to edit it, you will need to Un-Ghost first.</p>
<p>ARCH</p>	 <p>Floor Plan Freeform</p>	<p>Floor Plan Freeform</p> <p>Allows you to sketch any desired floor plan shape require which maintaining wall thickness.</p>
<p>ARCH</p>	 <p>Door Trim</p>	<p>Door Trim</p> <p>A structured part that allows you to resize the door frame trim as required and the trim shape will update automatically. You can edit the trim shape as required or use the predefined case profiles available as shown below.</p> 
<p>HVAC</p>		<p>0-HVAC</p> <p>New sub-group with common HVAC ductwork components. This is for conceptual design in its current start and has built-in</p>


		<p>SmartAssembly paired connections. You can edit the parts as needed to resize to suit.</p> <p>WATCH GIF</p>  <p>NOTE: The "Duct Rectangular" has been moved to this new sub-group for consistency.</p> 
	 <p>Stitch Weld</p>	<p>Stitch Weld. Updated the Stitch Weld to include design variations from .125 thru .312 bead diameters. Updated geometry to a 1/4 round type profile instead of full round and will no longer be included in Bill of Materials. This provides better visualization in renderings. The length of bead controlled using the Intellishape H handle. The number of beads and the distance between them is controlled through the Intellishape pattern feature.</p>
	 <p>Weld Bead</p>	<p>Weld Bead. Updated the Weld Bead to include design variations from .125 thru .312 bead diameters. Updated geometry to a 1/4 round type profile instead of full round and will no longer be included in Bill of Materials. This provides better visualization in renderings. The length of bead controlled using the Intellishape H handle.</p>

	 <p>Weld Profile</p>	<p>Weld Profile. A 2D profile cross-section that can be edited through direct dimension to change bead symmetrically. Used primarily with the Sweep command, but can be used as desired elsewhere.</p>
 <p>UTILITIES</p>	 <p>Extruded Aluminum</p>	<p>Extruded Aluminum. Web link to Eagle Aluminum online interactive catalog.</p>
 <p>UTILITIES</p>	 <p>ShareCAD</p>	<p>ShareCAD A Free online utility to share CAD data using a web browser. Sometimes users ask for import of native CAD drawing file formats or BIM file formats other than IFC, like NavisWorks files etc. Then this is useful. Of course you have the built in sharing in IronCAD for native file sharing.</p>
		<p>Extruded Aluminum Profiles from Eagle Aluminum productline. These are some of the common profiles used. There are two versions, the post fix of "SQ" indicates the profile has been modified to be truly square for designing purposes. The other is the actual profile of purchased parts. Its recommended to use the "SQ" versions when designing to allow proper snapping and positioning. The actual shapes can be used for more realism if desired after design is completed.</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>TS10-10_SQ</p> </div> <div style="text-align: center;">  <p>TS10-10</p> </div> <div style="text-align: center;">  <p>TS10-10 MonoSlot_SQ</p> </div> <div style="text-align: center;">  <p>TS10-10 MonoSlot</p> </div> <div style="text-align: center;">  <p>TS10-10 BiSlotOpp_SQ</p> </div> <div style="text-align: center;">  <p>TS10-10 BiSlotOpp</p> </div> <div style="text-align: center;">  <p>TS10-10 BiSlotAd_SQ</p> </div> </div>

		 <p>Shape is a true SQUARE to help design.</p> <p>Actual purchased part is not square.</p>
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 FASTENER	 Shim Washer	<p>Shim Washer A simple washer that's dimension driven for I.D and O.D. and use handle for thickness.</p>
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 PIPE	 45d Long Radius Elbow	<p>45d Long Radius Elbow Added the missing attachment point to the elbow.</p> 
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	 Steel Frame TS10-10	<p>Steel Frame TS10-10 Structured Steel Frame which is set by default to use the eagle T-slot TS10-10. This is using the T-SLOT Custom Structured Frame files included in this release.</p>
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Properties

✓ ✕ 🖱️

Frame Feature ▲

Select Path and specify Standard, Family, Size.

Frame Member Selection ▲



Standard T-SLOT ▼

Shape TS10-10 ▼

Size Default ▼

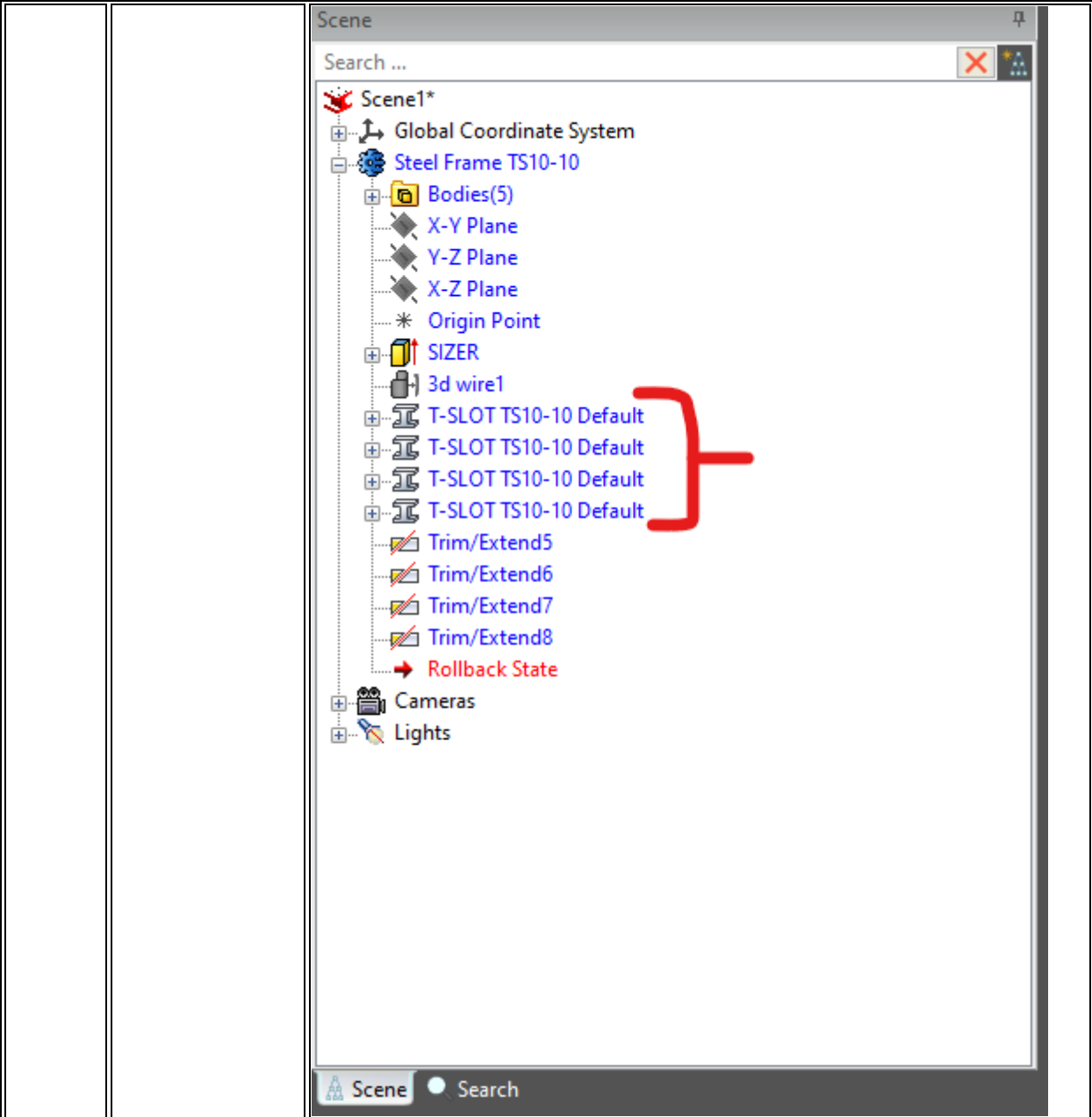
Path Steel Frame TS10-10\3d wire1\Edg


Flip Path Direction

Section Orientation ▲

Section Ref Direction

Angle(deg) 0.00000(deg)



	 <p>Steel Frame 001</p>	<p>Steel Frame 001 Structured Steel Frame which is set to 1" x 1" Square Tubing by default. This is using the MAG2023 Custom Structured Frame files included in this release. See "MAG2023 Custom Frame" below.</p>
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		<p>MAG2023 Custom Frame We have setup a new custom frame for Structural Tubing-Square with sizes from 1/2 to 1-1/2" Squares. This is used when generated steel structured frames in Structured part mode.</p>
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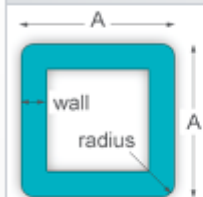
Properties



Frame Feature

Select Path and specify Standard, Family, Size.

Frame Member Selection



Standard: MAG2023

Shape: Structural Tubing - Square

Size: 1.0

- Path
- 0.5
 - 0.625
 - 0.75
 - 0.75 HD
 - 0.875
 - 1.0
 - 1.0 HD
 - 1.25
 - 1.25 HD
 - 1.25 HD2
 - 1.5
 - 1.5 HD
 - 1.5 HD2
 - 1.5 HD3

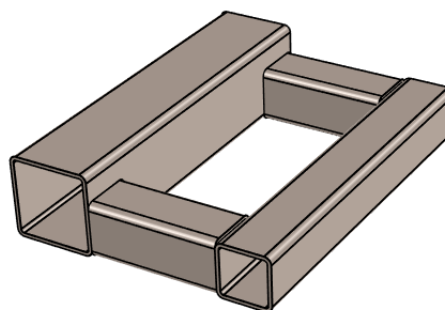
Section Orientation

Section Ref Direction

Angle(deg)

Search ...

- C:\Users\End User\Documents\IRONCAD 2023\Steel Frame
- Global Coordinate System
- Steel Frame 001
 - Bodies(5)
 - X-Y Plane
 - Y-Z Plane
 - X-Z Plane
 - Origin Point
 - SIZER
 - 3d wire1
 - MAG2023 Structural Tubing - Square 1.5
 - MAG2023 Structural Tubing - Square 1.0
 - MAG2023 Structural Tubing - Square 1.0
 - MAG2023 Structural Tubing - Square 1.0
 - Trim/Extend1
 - Trim/Extend2
 - Trim/Extend3
 - Trim/Extend4
 - Rollback State
- Cameras
- Lights



INSTALLATION:

Installation is required to gain access to these custom frames. Make sure to make a backup copy of the folder "CustomStructuredFrame" prior to overwriting as outlined below.

- Simply unzip the files supplied in "CustomStructuredFrame.zip" into the following directory and overwriting the current "CustomStructuredFrame" folder C:\Users\End User\AppData\Local\IronCAD\IRONCAD\25.0\en-us

Structured Steel

In this release we have set on a journey beyond just catalog items and venture deeper into the database of components.

- We have setup a new custom frame profiles for use when generated steel structured frames in Structured part mode.
- **INSTALLATION:** Installation is required to gain access to these custom frames. Make sure to make a backup copy of the folder "CustomStructuredFrame" prior to overwriting as outlined below. Simply unzip the files supplied in "CustomStructuredFrame.zip" into the following directory and overwriting the current "CustomStructuredFrame" folder C:\Users\End User\AppData\Local\IronCAD\IRONCAD\25.0\en-us

Custom Frame Profile: "Structural Steel -Square"

We have setup a new custom frame for Structural Tubing-Square with sizes from ranging from 1/2 to 1-1/2" Squares. This is used when generated steel structured frames in Structured part mode.

There are available under the "MAG2023" Standard.

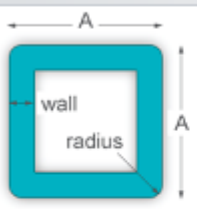
Properties

✓ ✕ 🛠

Frame Feature

Select Path and specify Standard, Family, Size.

Frame Member Selection



Standard: MAG2023

Shape: Structural Tubing - Square

Size: 1.0

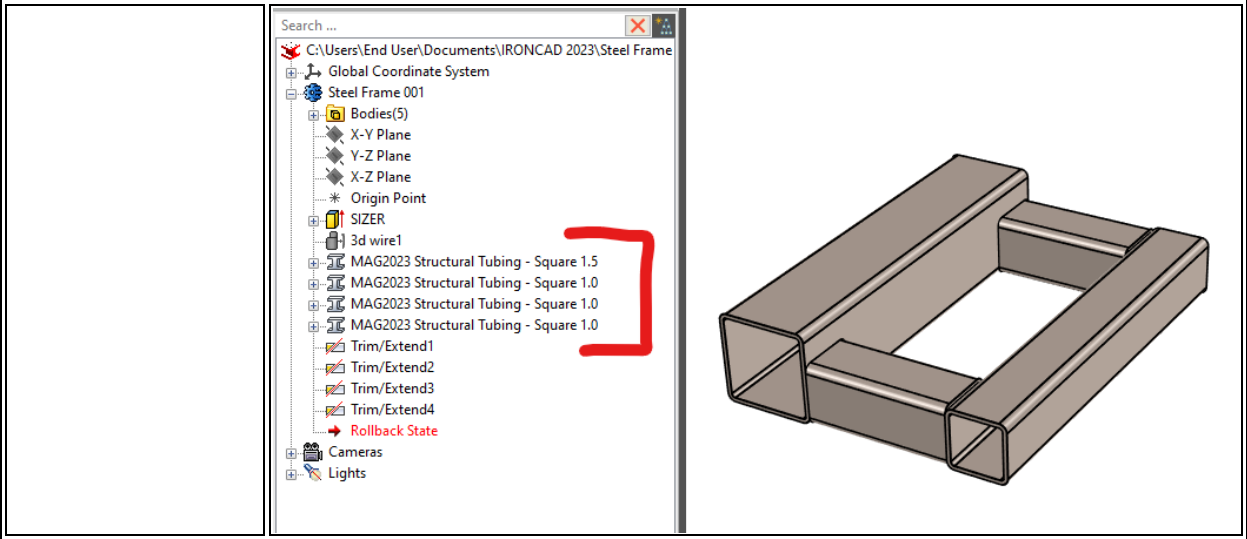
Path

Section Orientation

Section Ref Direction

Angle(deg)

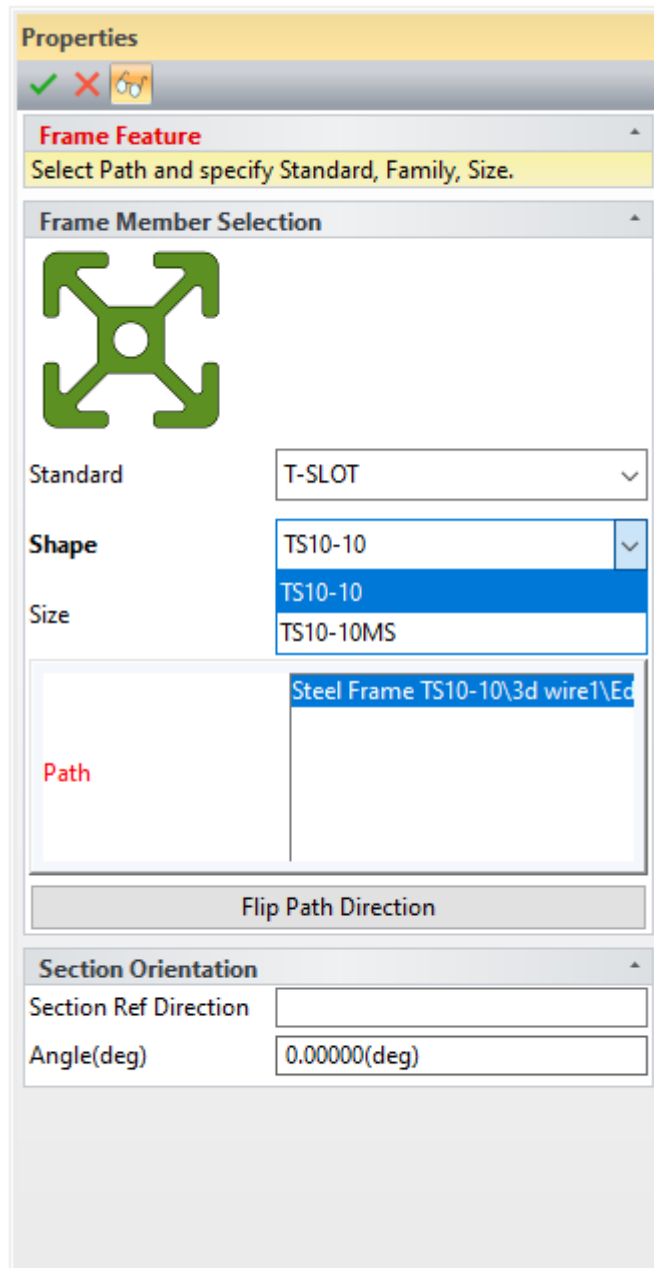
1.0
0.5
0.625
0.75
0.75 HD
0.875
1.0
1.0 HD
1.25
1.25 HD
1.25 HD2
1.5
1.5 HD
1.5 HD2
1.5 HD3

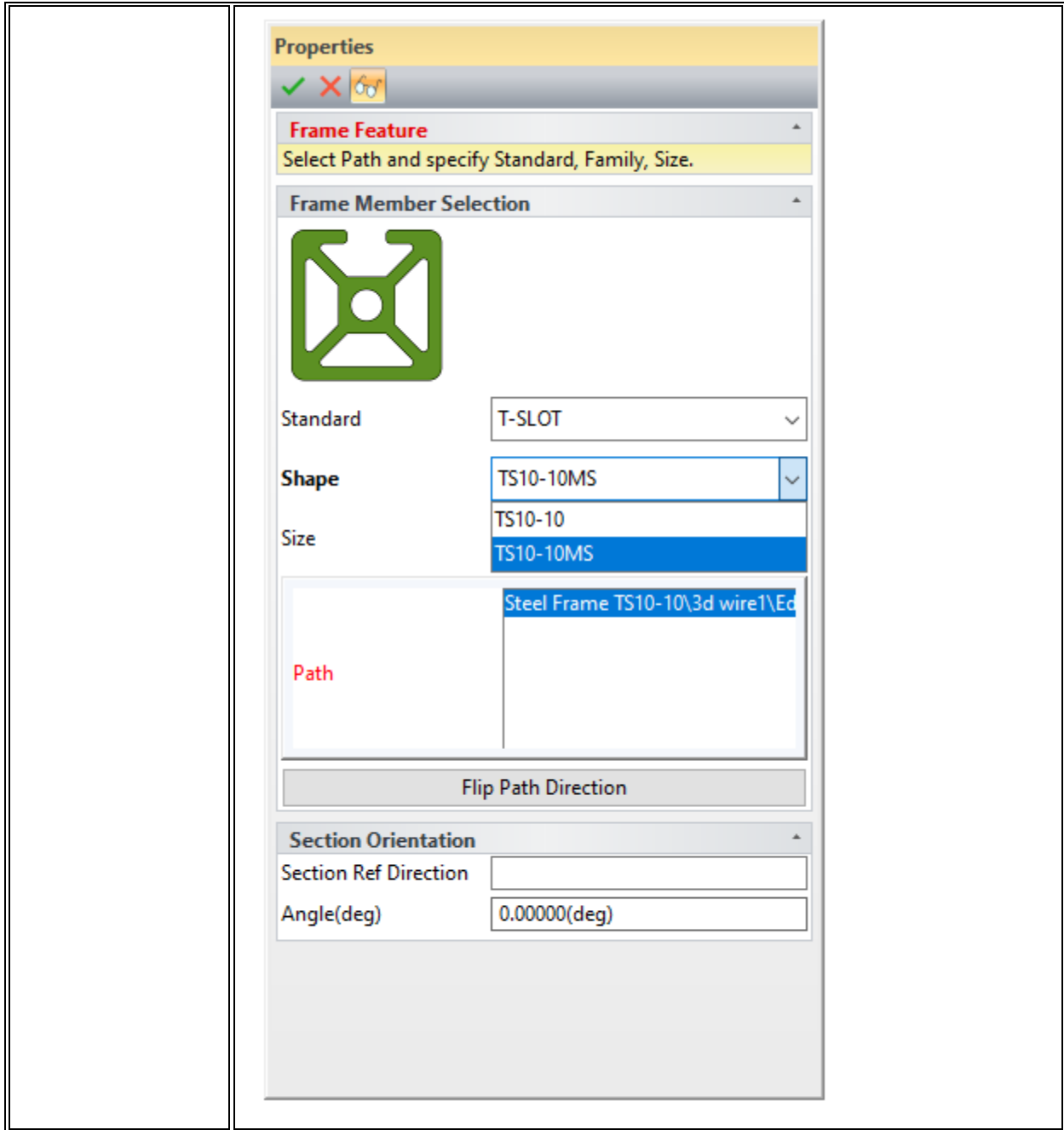


**Custom Frame Profile:
"Structural Steel -Slotted"**



We have setup a new custom frame for T-Slot extrusions based on the Eagle product line. This is used when generated steel structured frames in Structured part mode.





There are available under the "T-SLOT" Standard.





Artificial Intelligence

 <p>AI</p>	 <p>ChatGPT</p>	<p>ChatGPT</p> <p>ChatGPT: Optimizing Language Models for Dialogue. OpenAI trained a model called ChatGPT which interacts in a conversational way. The</p>
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		<p>dialogue format makes it possible for ChatGPT to answer followup questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests. ChatGPT is a sibling model to InstructGPT, which is trained to follow an instruction in a prompt and provide a detailed response.</p> <p>Also a Youtube tutorial to help you get started.</p>
 <p>AI</p>	 <p>MidJourney</p>	<p>MidJourney Midjourney is an automatic image creator using artificial intelligence. Simply enter what your looking for with some key prompts and the image well be created for you. This is no limit to the use for this, only limit is your imagination. Some examples are for marketing, storytelling, design enhancement and more.</p>
 <p>AI</p>	 <p>Dall-E</p>	<p>Dall-E Dall-E is an automatic image creator using artificial intelligence. Simply enter what your looking for with some key prompts and the image well be created for you. This is no limit to the use for this, only limit is your imagination. Some examples are for marketing, storytelling, design enhancement and more.</p>