

GF Revit

Tips and Tricks

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1. Dealing with invalid products

In an efficient design process, occasionally invalid products can be inserted unintentionally. To avoid mismatches it would be beneficial to highlight those products in the project. For that purpose, GF Piping Systems introduced exclamation mark, check view, and Smart BOM.

Red exclamation marks in the 3D view and floor plan will be triggered automatically when an invalid product is generated in Revit (Image 1)

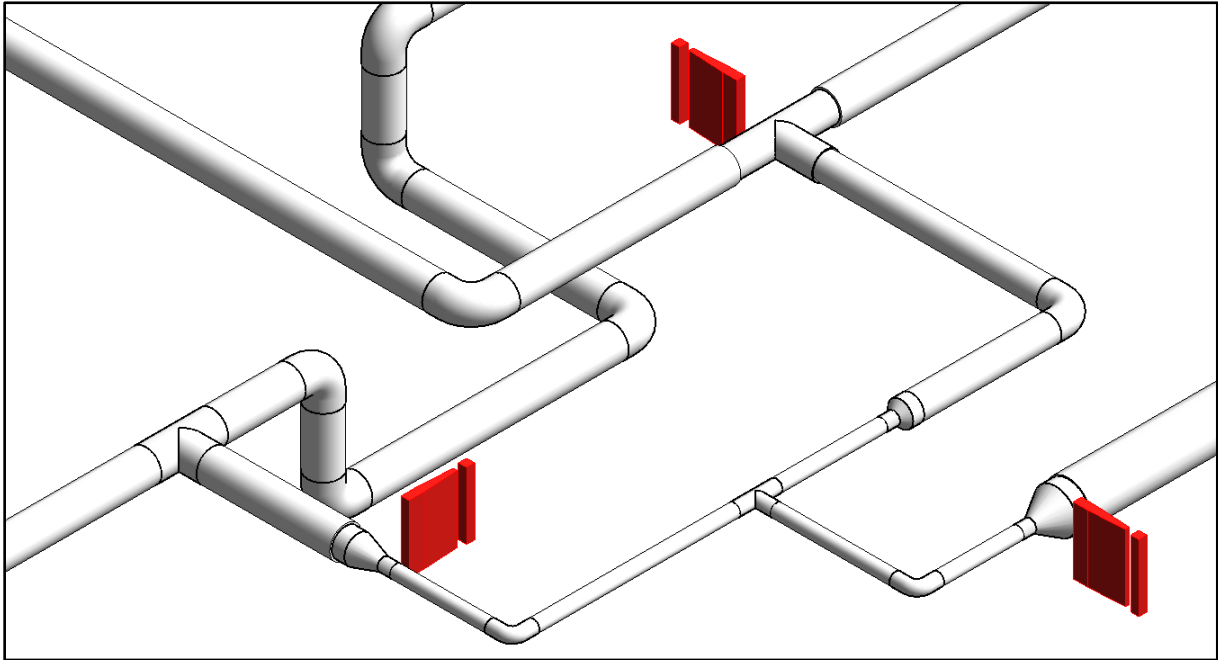


Image 1: Invalid products with red exclamation marks in 3D view

Meanwhile GF check view (Image 2) shows invalid pipe fittings and accessories colored in red and pipes with invalid lengths in orange. (Image 3)

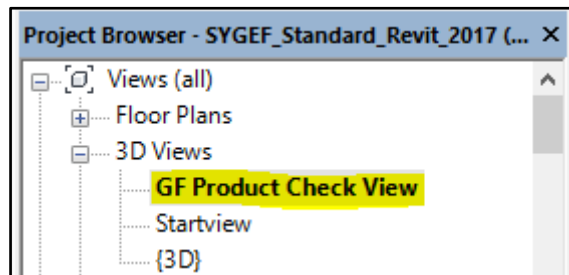


Image 2: Location of product check view

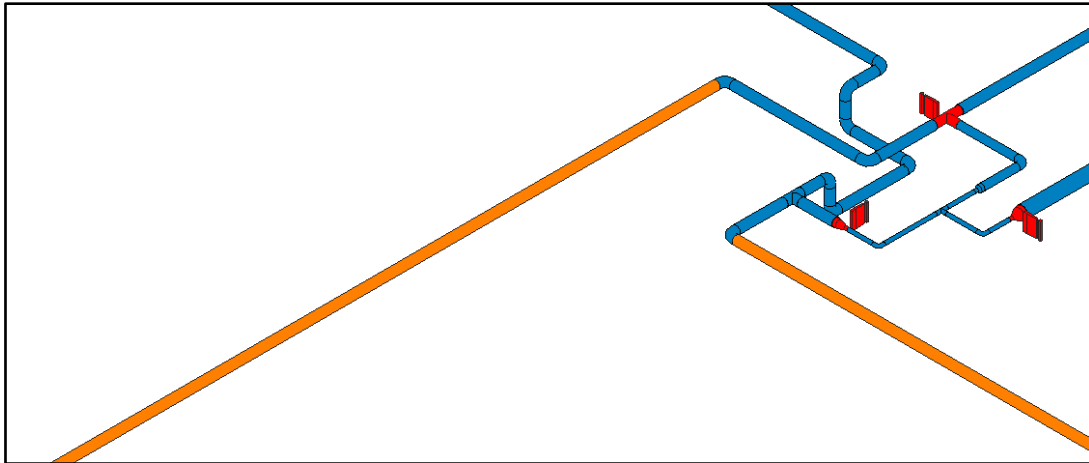


Image 3: Product check view with invalid fittings in red and too long pipes in orange

Furthermore, GF Piping Systems Revit content offers Smart BOM, which identifies invalid products, and even if users forgot to solve design issues leaving those products in design they would be visible in schedules (Image 4).

A	B	C	D	E	F
Pcs	size			GF Article Nr.	Article Description
	1	2	3		
1	50,000	40,000	50,000	0	0
1	20,000	50,000		0	0
1	20,000	80,000		0	0
1	20,000	20,000		735 018 707	SYGEF Standard bend 90 SDR21/PN16 d25
1	20,000	20,000		735 018 707	SYGEF Standard bend 90 SDR21/PN16 d25
1	40,000	40,000		735 018 710	SYGEF Standard bend 90 SDR21/PN16 d50
1	50,000	50,000		735 018 711	SYGEF Standard bend 90 SDR21/PN16 d63
1	50,000	50,000		735 018 711	SYGEF Standard bend 90 SDR21/PN16 d63
1	50,000	50,000		735 018 711	SYGEF Standard bend 90 SDR21/PN16 d63

Image 4: Smart BOM with indicated invalid products in red

2. Simple trick combining GF Contain-It™ secondary containment with a complete line of thermoplastic piping systems

We have good news for GF Revit users who already have a primary piping system design and who use the Contain-It™ system for a secondary containment to prevent leakages in the main piping system. This short chapter will present a straightforward solution.

To apply a secondary pipe on a primary piping system:

1. Copy all GF Revit Contain-It™ secondary containment content to a project file with the primary piping system design.
2. Once it is completed, select the primary piping system design and activate the "Copy" function.
3. Once the copy function is activated, click on the "Paste" drop-down menu to choose "Aligned to same place"
4. After enabling that function there should be some warnings such as " There are identical instances in the same place. This will result in double counting in schedules." Do not click anything and proceed to the next step.
5. From the Modify/Multi-Select tab click 'Change Type' (Image 5).
6. Once it is activated, choose your desired GF Contain-It™ secondary containment system you would like to apply from the properties palette (Image 6).
7. After selecting the desired pipe type it will be changed in a few seconds.

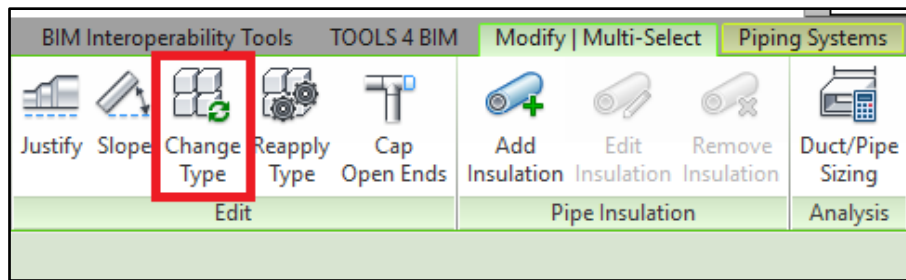


Image 5: The function to change type

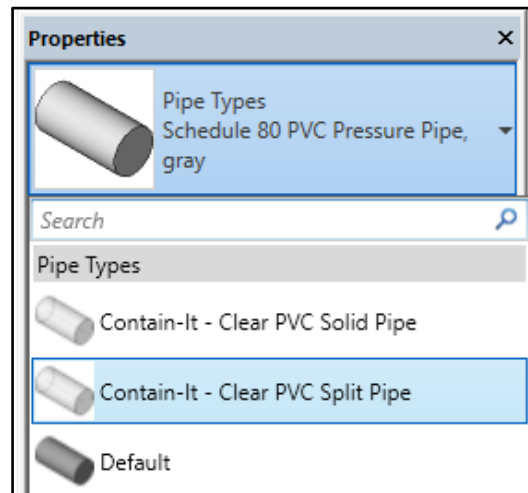


Image 6: Example of choosing a desired Contain-It™ secondary containment system

Remarks

This approach works fairly well with elbows and tees, however, it bypasses reducers and once secondary containment is enabled, users should pay attention to primary pipes reducers so if needed they could insert the applicable product from the secondary containment.

Furthermore, this is not the ideal method when the primary piping system has couplers as it limits conversion of secondary containment systems; therefore, it would be advisable to add couplers, unions, or sockets to the primary system after the application of the secondary containment system.

3. Flanges for flange adapters

Flanges for flange adapters do not have assigned connections to connect to the flanges as easily as possible. One of the simplest way would be:

1. Open a floor plan and find the relevant flange adapter
2. From the System tab click 'Pipe Fittings' and find a desired flange from the properties palette (Image 7)
3. Once the desired flange is selected, type the required DN size in the parameter field "connection_diameter1" (Image 8)
4. Hover the cursor over the flange adapter controlling the flange's position with the spacebar
5. Left-clicking will place the flange in the desired position (Image 8)

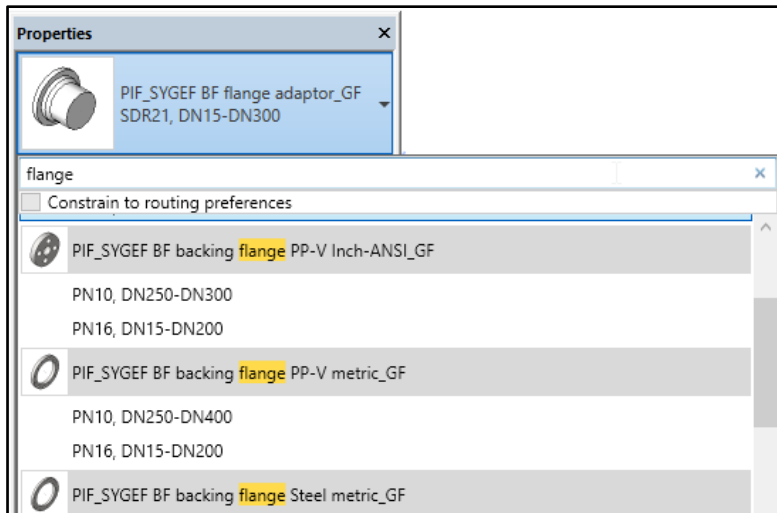


Image 7: Searching for the desired flange

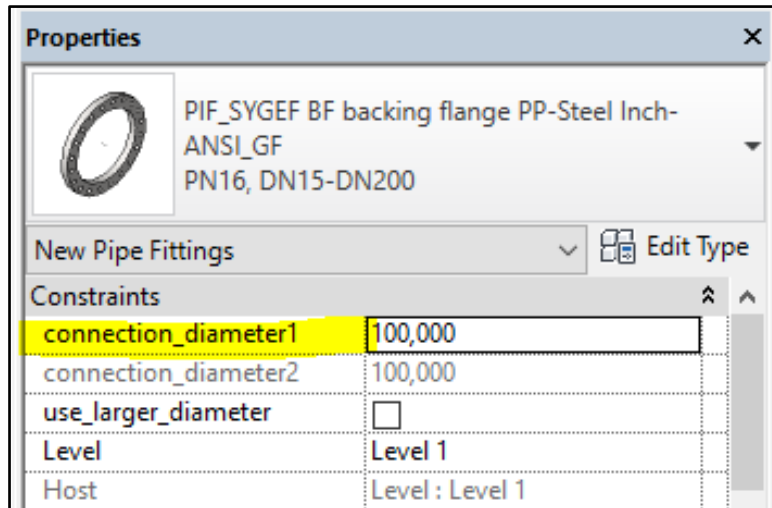


Image 8: Changing a size for a flange

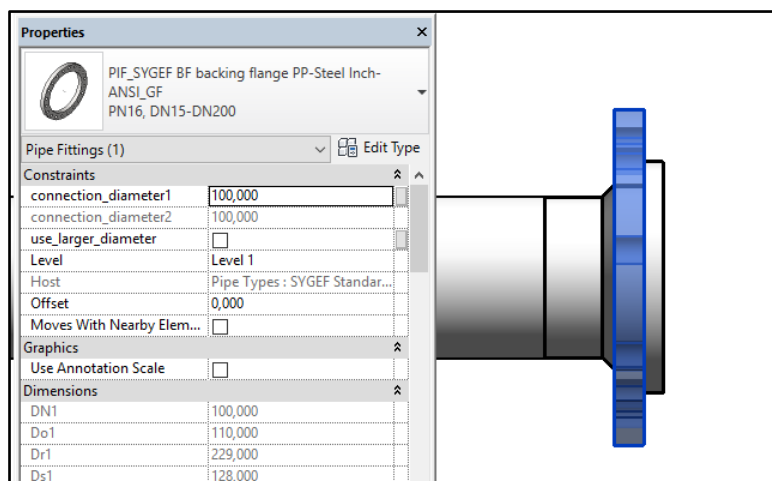


Image 9: Result after placing a flange to the right position

4. Flange adapters with integrated couplers

Flange adapters with integrated couplers have certain limitations when it comes to controlling the direction; therefore, GF Piping Systems suggests a little trick, which might help to save time in the design process. One of the easiest way of placing that kind of flange adapter would be:

1. From the System tab click 'Pipe Fittings' and find a desired flange adapter from the properties palette
2. Once a desired flange adapter is selected, place the flange adapter at the end of the pipe (Image 10)
3. It is very likely that your flange adapter is the other way round. If this is the case, you need to disconnect the pipe keeping a certain gap between the pipe and flange adapter (Image 11)
4. Select the disconnected flange adapter and click the spacebar a few times to correct the direction (Image 12)
5. Once the direction of the flange adapter is adjusted, connect the pipe to the flange adapter again (Image 13)

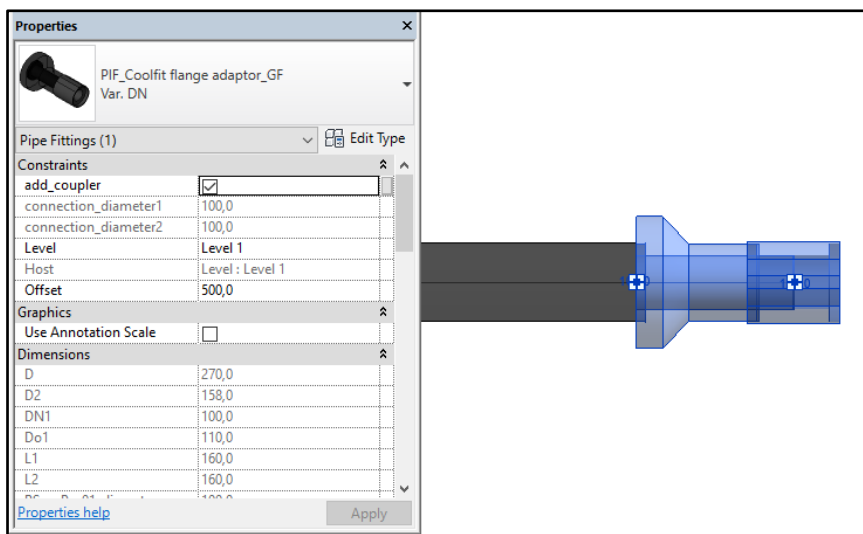


Image 10: The inserted flange adapter with the wrong orientation

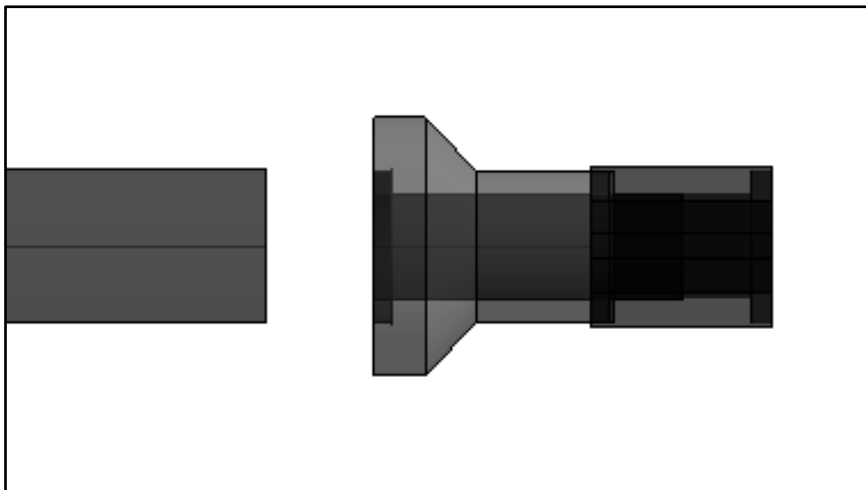


Image 11: Leaving a gap between the flange adapter and the pipe

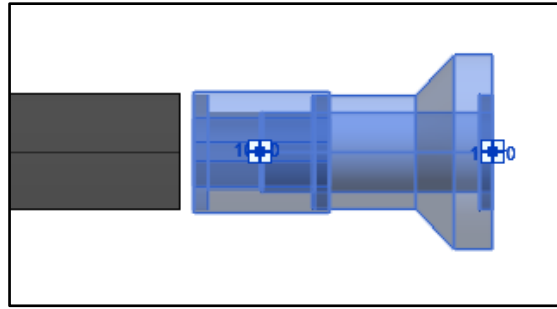


Image 12: The corrected orientation of the flange adapter

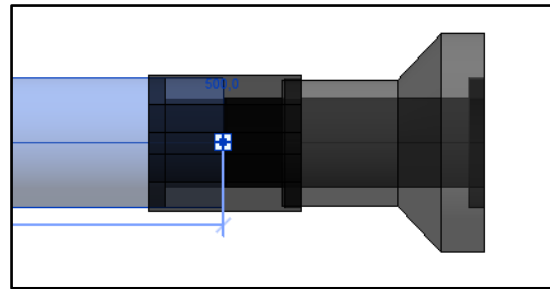


Image 13: Result after connecting the pipe to the flange adapter

5. Working with saddles

GF saddles are modelled according to the standard method in Revit; therefore the standard approach can be used. However, GF Piping Systems wants to make our users' lives easier and created a pipe type with saddles. If GF users need to have saddles, they should simply select the pipe type with the indication "Saddle" and a pre-defined saddle will be inserted in a same way as a tee (Images 14, 15 and 16).

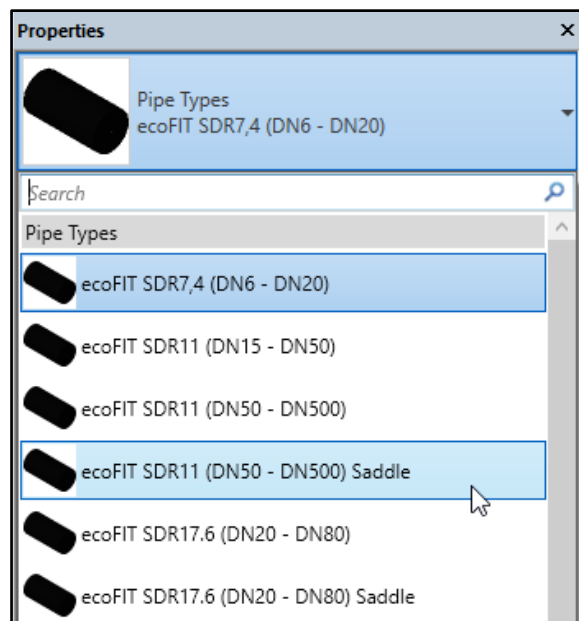


Image 14: Pipe types for saddle

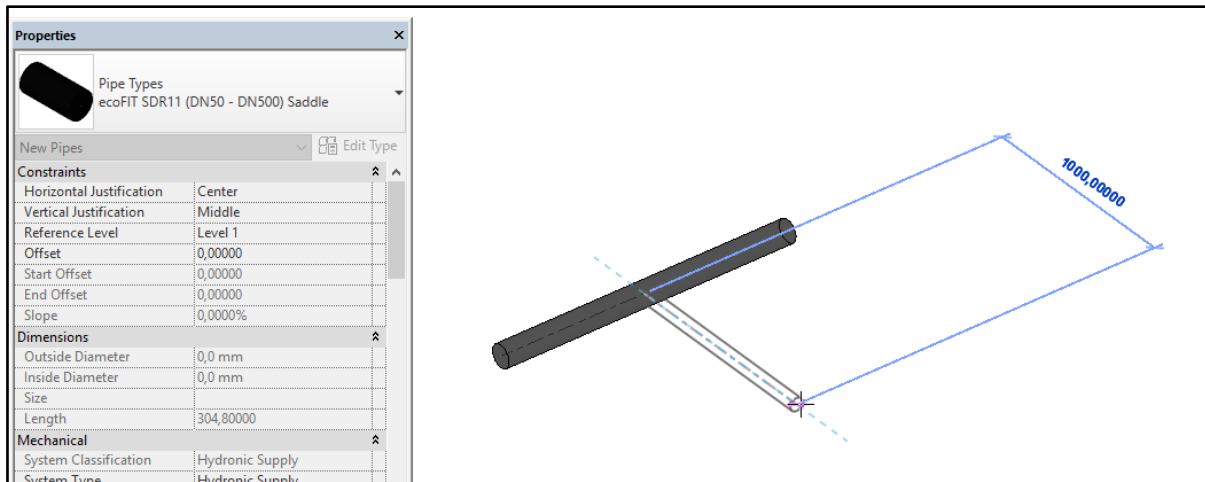


Image 15: Adding the branch to the main run

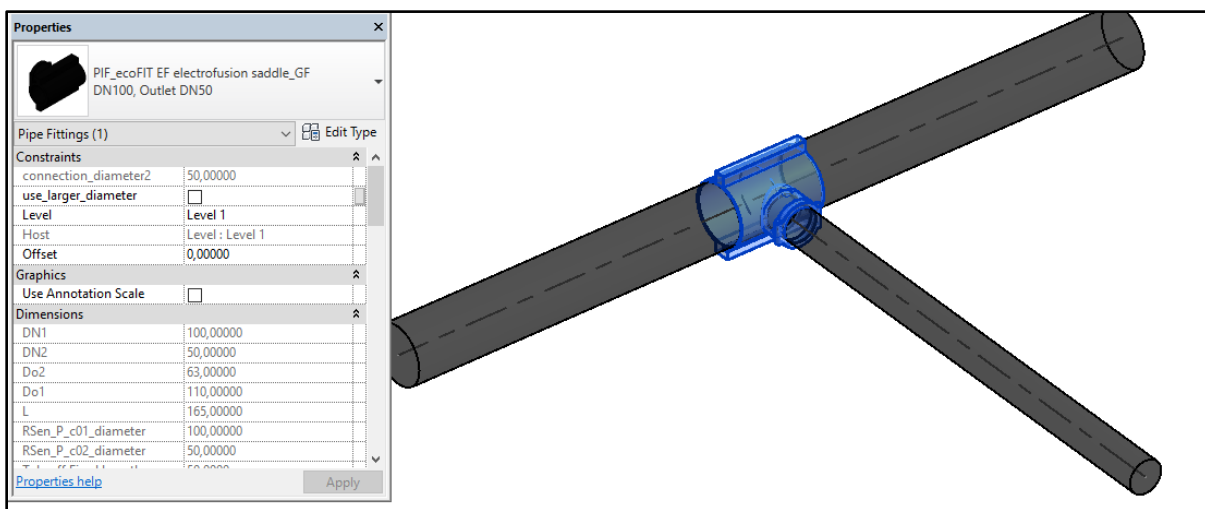


Image 16: Result of inserted saddle