

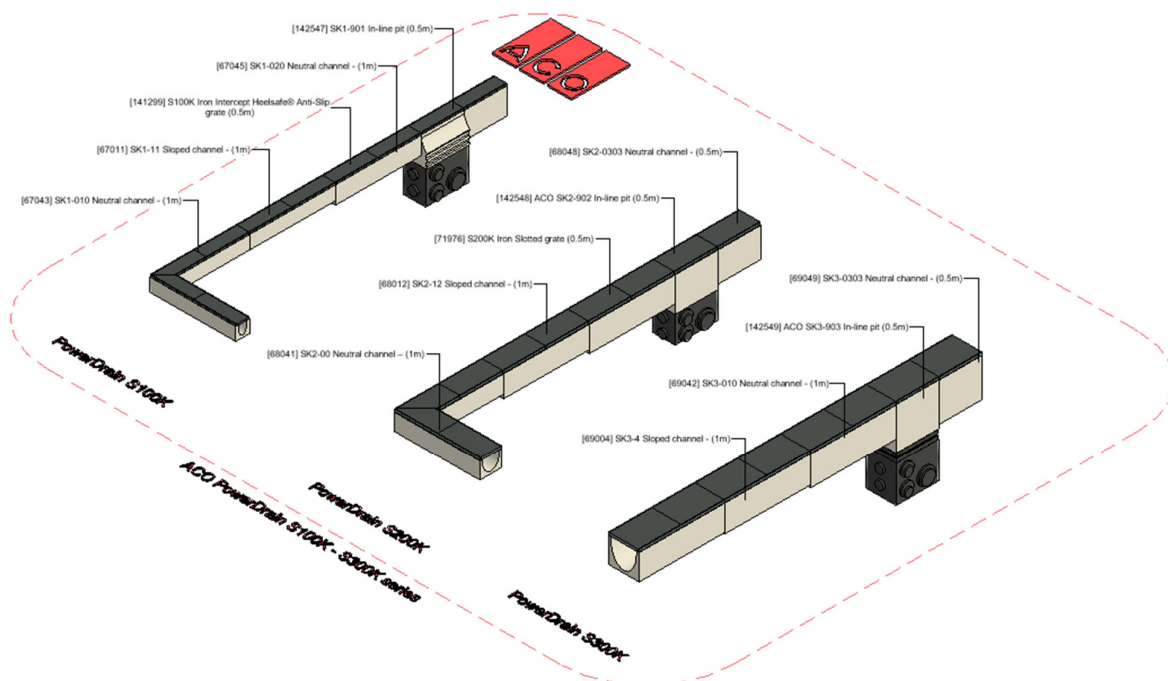
ACO_PowerDrain_S100K - S300K_series_AUS

User Guide for Autodesk Revit files

ACO PowerDrain S100K – S300K Packages

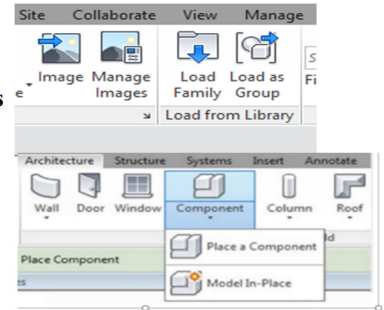
This project includes the following Revit families along with accessories.

1. PF_ST_PowerDrain_S100K_Channels_AUS_ACO.rfa
2. PF_ST_PowerDrain_S200K_Channels_AUS_ACO.rfa
3. PF_ST_PowerDrain_S300K_Channels_AUS_ACO.rfa
4. PowerDrain_SK1-901G_In-line_pit
5. PowerDrain_SK2-902G_In-line_pit
6. PowerDrain_SK3-903 In-line pit (0.5m)



Loading ACO PowerDrain S100K – S300K into the project:

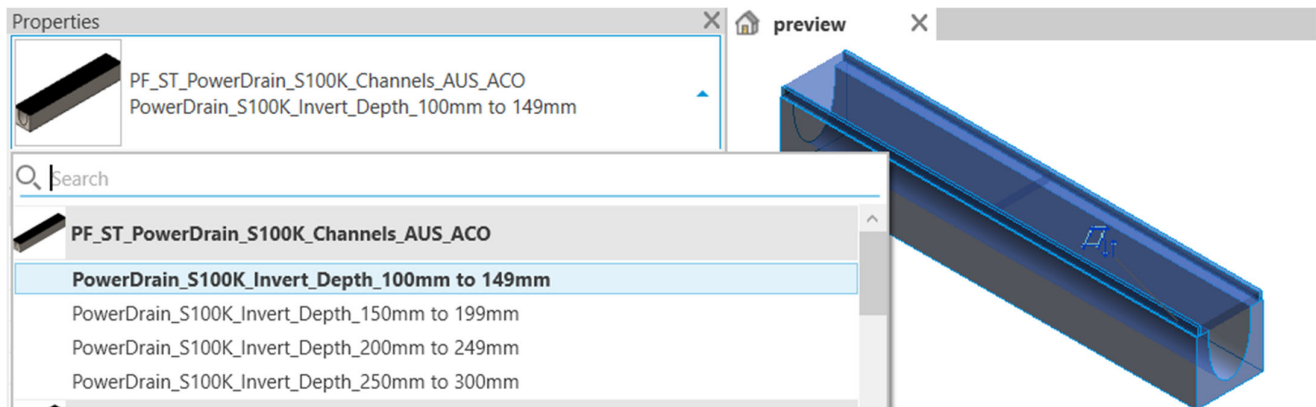
1. Download the **ACO_PowerDrain_S100K - S300K_series** project file and save it to a suitable location.
2. Select any one of the family **S100K – S300K** from **ACO_PowerDrain_S100K - S300K_series** load to your project.
3. Navigate to the “Insert” icon on the Revit ribbon and click “Load Family”
4. The file can now be placed into your project. Navigate to the “Architecture/Component” icons on the Revit ribbon and click “Place a Component”



Placing of families

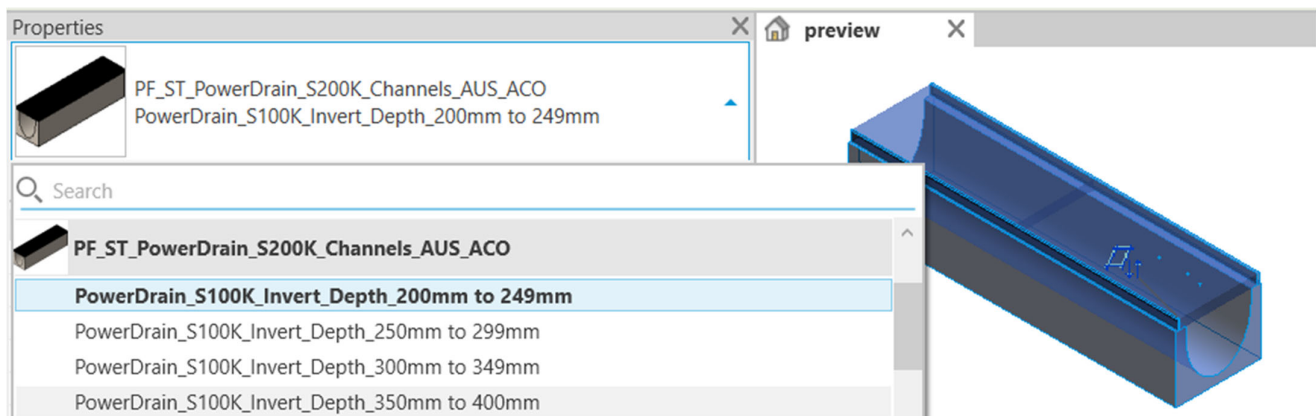
For S100K/ Channels

1. Click on the model – At properties tool bar, it will display family name and types.
2. **PF_ST_PowerDrain_S100K_Channels_AUS_ACO.rfa** family consists of different **Invert Depths** from **PowerDrain S100K Invert Depth 100mm to 149mm** up to **PowerDrain S100K Invert Depth 250mm to 300mm Channels** including **Ductile iron edge rail** user must select the appropriate family type from the “Properties” drop down menu.



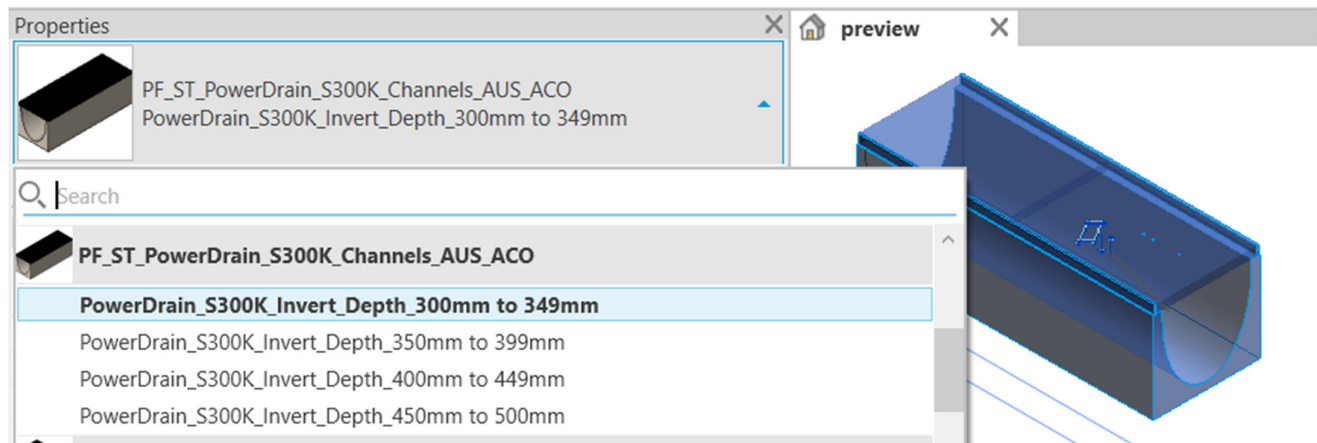
Similarly, For S200K

1. Click on the model – At properties tool bar, it will display family name and types.
2. **PF_ST_PowerDrain_S200K & Channels_AUS_ACO.rfa** family consists of different **Invert Depths** from **PowerDrain S200K Invert Depth 200mm to 249mm** up to **PowerDrain S200K Invert Depth 350mm to 400mm Channels** including **Ductile iron edge rail** user must select the appropriate family type from the “Properties” drop down menu.



Similarly, For S300K

1. Click on the model – At properties tool bar, it will display family name and types.
2. **PF_ST_PowerDrain_S300K_Channels_AUS_ACO.rfa** family consists of different **Invert Depths** from **PowerDrain_S300K_Invert_Depth_300mm to 349mm** up to **PowerDrain_S300K_Invert_Depth_450mm to 500mm Channels** including **Ductile iron edge rail** user must select the appropriate family type from the “Properties” drop down menu.

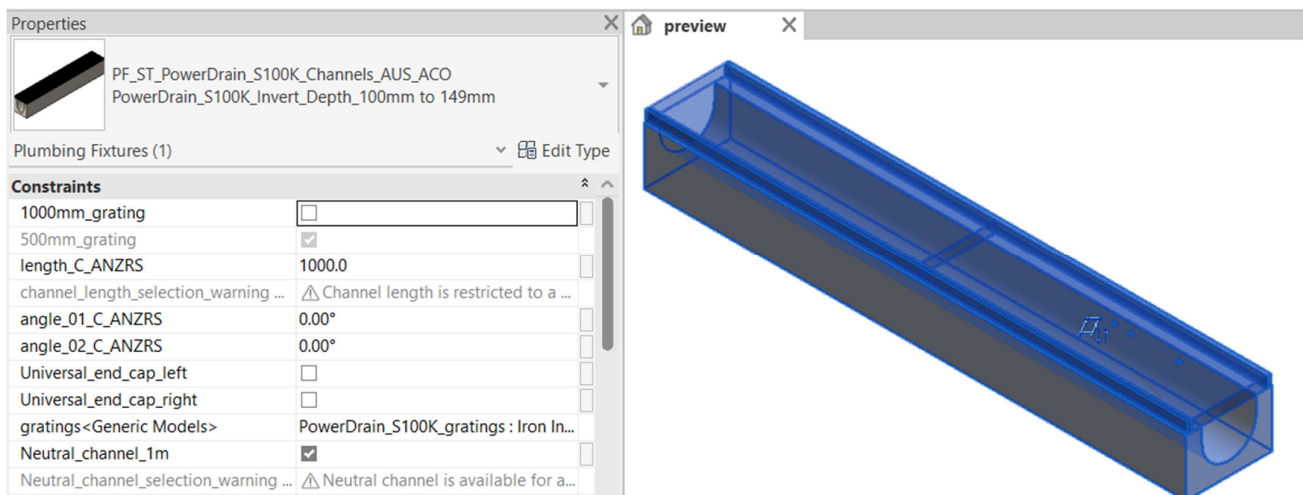


Selection of Channels:

For S100K Channels

1. Click on the model – At properties tool bar, it will display family name and types.
2. **PF_ST_PowerDrain_S100K_Channels_AUS_ACO.rfa** The family includes various invert depths, ranging from **PowerDrain_S100K_Invert_Depth_100mm-149mm** up to **PowerDrain_S100K_Invert_Depth_250mm-300mm**, and supports **Ductile iron edge Rail Channels**. The user must select the appropriate family type from the **Properties** drop-down menu. Based on this selection, two channel options are available: **Neutral** and **Sloped**.
3. To specify a **Neutral channel_1m length**, enable the **Neutral channel_1m** checkbox.
 - To specify a **Neutral channel_0.5 m length**, enable the **Neutral channel_1m** checkbox and then enter **500 mm** or less than **500 mm** in the **length_C_ANZRS** parameter.
 - To specify a **Sloped channel_1m length**, leave the **Neutral channel_1m** checkbox unchecked.
4. After choosing the channel type, the user must then enter the required invert depth value in the **Invert Depth** parameter, corresponding to the invert depth selected in the family type.
5. **Neutral channel selection warning note !:**
This warning appears when a neutral channel is selected. It indicates the available neutral channel depths, and the user must enter these values according to the invert depth chosen in the family type from the **Properties** drop-down menu.
6. **Sloped channel selection warning note !:**
This warning appears when a sloped channel is selected. It indicates the available sloped channel depths, and the user must enter the values according to the invert depth chosen in the family type from the **Properties** drop-down menu.
7. **Channel length selection warning note !:**
This warning always appears. Users can specify any channel length between the minimum of **300 mm** and the maximum of **1000 mm** by entering the desired value in the **length_C_ANZRS** parameter.

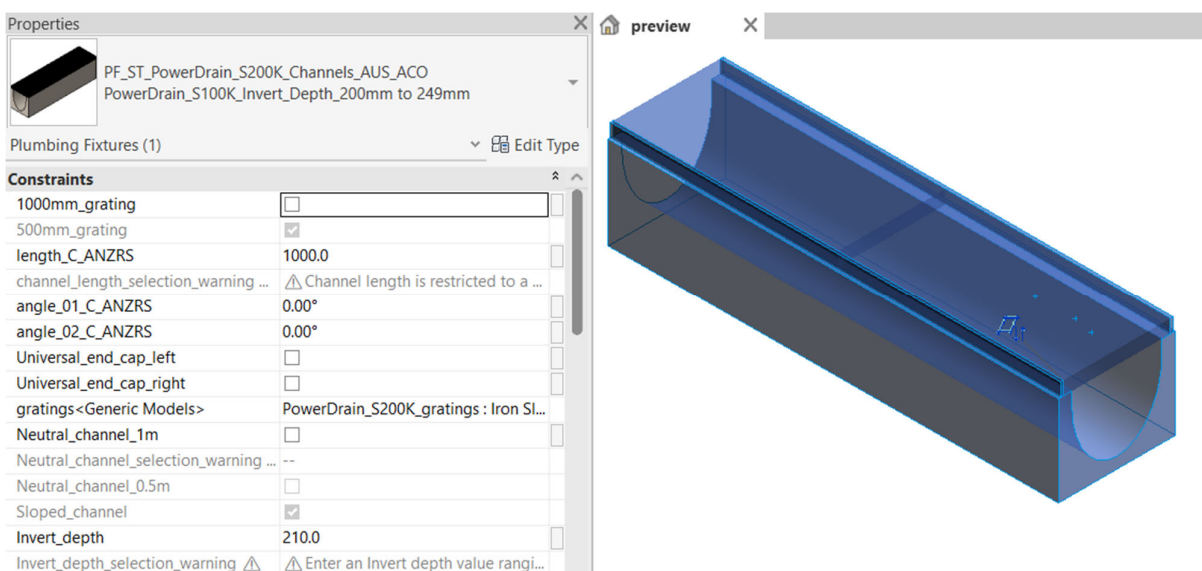
Note: If the user enters a value less than 300 mm or greater than 1000 mm, a constraints error will be displayed.



Similarly, For S200K Channels

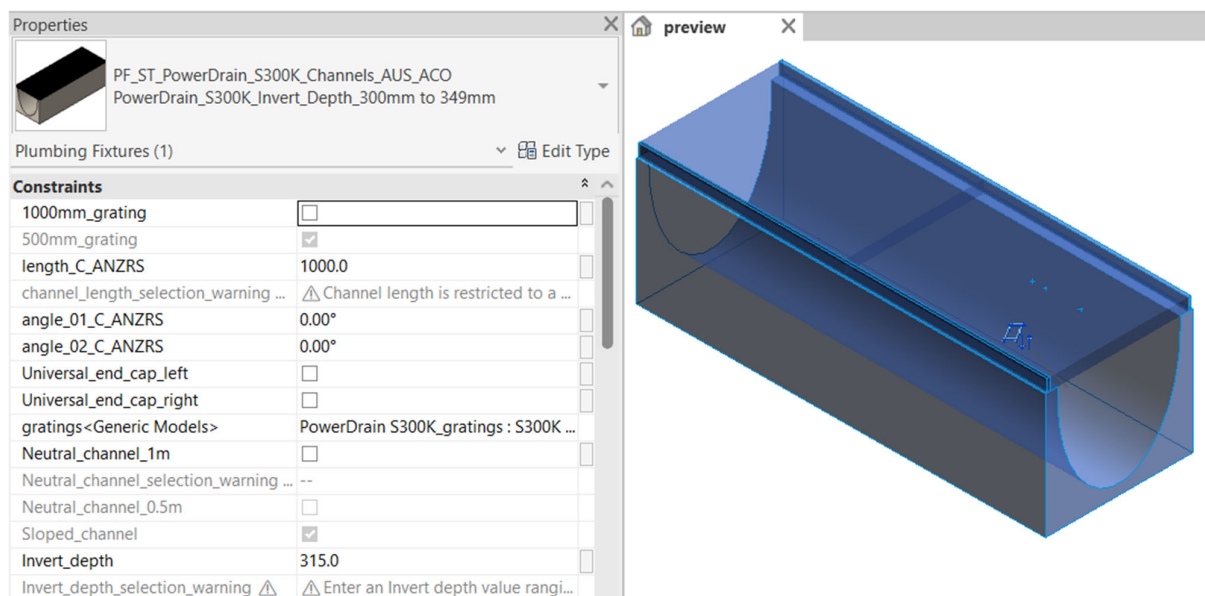
1. Click on the model – At properties tool bar, it will display family name and types.
2. **PF_ST_PowerDrain_S200K_Channels_AUS_ACO.rfa** The family includes various invert depths, ranging from **PowerDrain_S200K_Invert_Depth_200mm-249mm** up to **PowerDrain_S200K_Invert_Depth_350mm-400mm**, and supports Ductile iron edge Rail Channels.
The user must select the appropriate family type from the **Properties** drop-down menu. Based on this selection, two channel options are available: **Neutral** and **Sloped**.
3. To specify a **Neutral channel_1m** length, enable the **Neutral channel_1m** checkbox.
To specify a **Neutral channel_0.5 m** length, enable the **Neutral channel_1m** checkbox and then enter **500 mm** or less than **500 mm** in the **length_C_ANZRS** parameter.
To specify a **Sloped channel_1m** length, leave the **Neutral channel_1m** checkbox unchecked.
4. After choosing the channel type, the user must then enter the required invert depth value in the **Invert Depth** parameter, corresponding to the invert depth selected in the family type.
5. **Neutral channel selection warning note !:**
This warning appears when a neutral channel is selected. It indicates the available neutral channel depths, and the user must enter these values according to the invert depth chosen in the family type from the **Properties** drop-down menu.
6. **Sloped channel selection warning note !:**
This warning appears when a sloped channel is selected. It indicates the available sloped channel depths, and the user must enter the values according to the invert depth chosen in the family type from the **Properties** drop-down menu.
7. **Channel length selection warning note !:**
This warning always appears. Users can specify any channel length between the minimum of **500 mm** and the maximum of **1000 mm** by entering the desired value in the **length_C_ANZRS** parameter.

Note: If the user enters a value less than 500 mm or greater than 1000 mm, a constraints error will be displayed.



Similarly, For S300K Channels

1. Click on the model – At properties tool bar, it will display family name and types.
2. **PF_ST_PowerDrain_S300K_Channels_AUS_ACO.rfa** The family includes various invert depths, ranging from **PowerDrain_S300K_Invert_Depth_300mm-349mm** up to **PowerDrain_S300K_Invert_Depth_450mm-500mm**, and supports Ductile iron **edge Rail Channels**.
The user must select the appropriate family type from the **Properties** drop-down menu. Based on this selection, two channel options are available: **Neutral** and **Sloped**.
To specify a **Neutral channel_1m length**, enable the **Neutral channel_1m** checkbox.
To specify a **Neutral channel_0.5 m length**, enable the **Neutral channel_1m** checkbox and then enter **500 mm** or less than **500 mm** in the **length_C_ANZRS** parameter.
To specify a **Sloped channel_1m length**, leave the **Neutral channel_1m** checkbox unchecked.
3. After choosing the channel type, the user must then enter the required invert depth value in the **Invert Depth** parameter, corresponding to the invert depth selected in the family type.
4. **Neutral channel selection warning note !:**
This warning appears when a neutral channel is selected. It indicates the available neutral channel depths, and the user must enter these values according to the invert depth chosen in the family type from the **Properties** drop-down menu.
5. **Sloped channel selection warning note !:**
This warning appears when a sloped channel is selected. It indicates the available sloped channel depths, and the user must enter the values according to the invert depth chosen in the family type from the **Properties** drop-down menu.
6. **Channel length selection warning note !:**
This warning always appears. Users can specify any channel length between the minimum of **500 mm** and the maximum of **1000 mm** by entering the desired value in the **length_C_ANZRS** parameter.
Note: If the user enters a value less than 500 mm or greater than 1000 mm, a constraints error will be displayed.

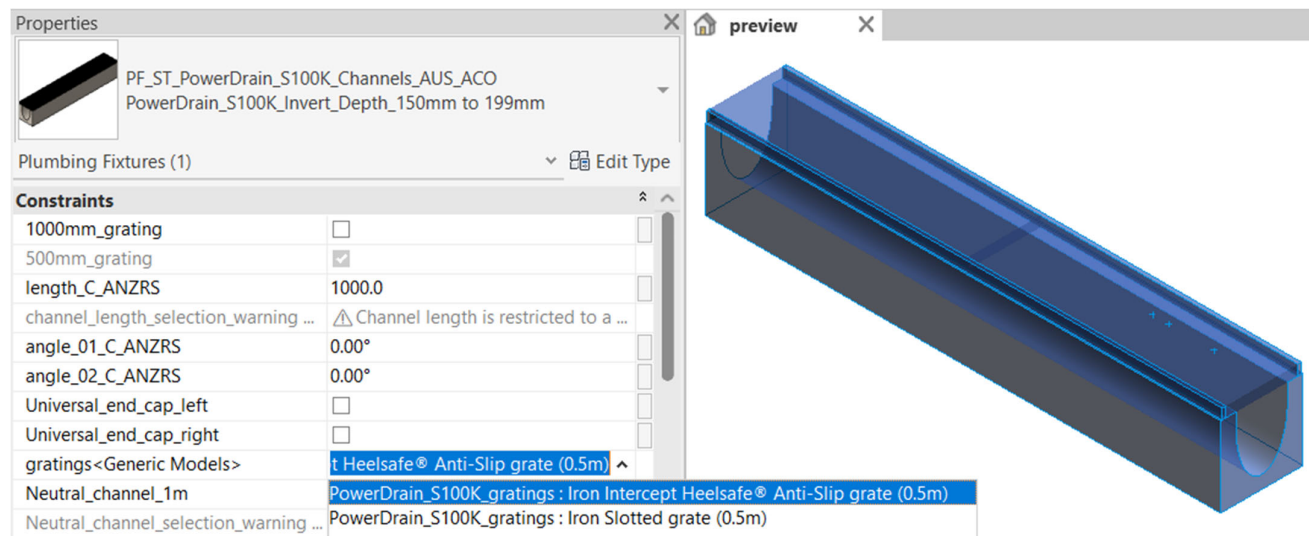


Selection of Gratings for Channels:

For S100K Channels

Click on the model – At properties tool bar, it will display gratings<Generic models> click on the Down arrow for selecting the different gratings select the appropriate gratings for the channel.

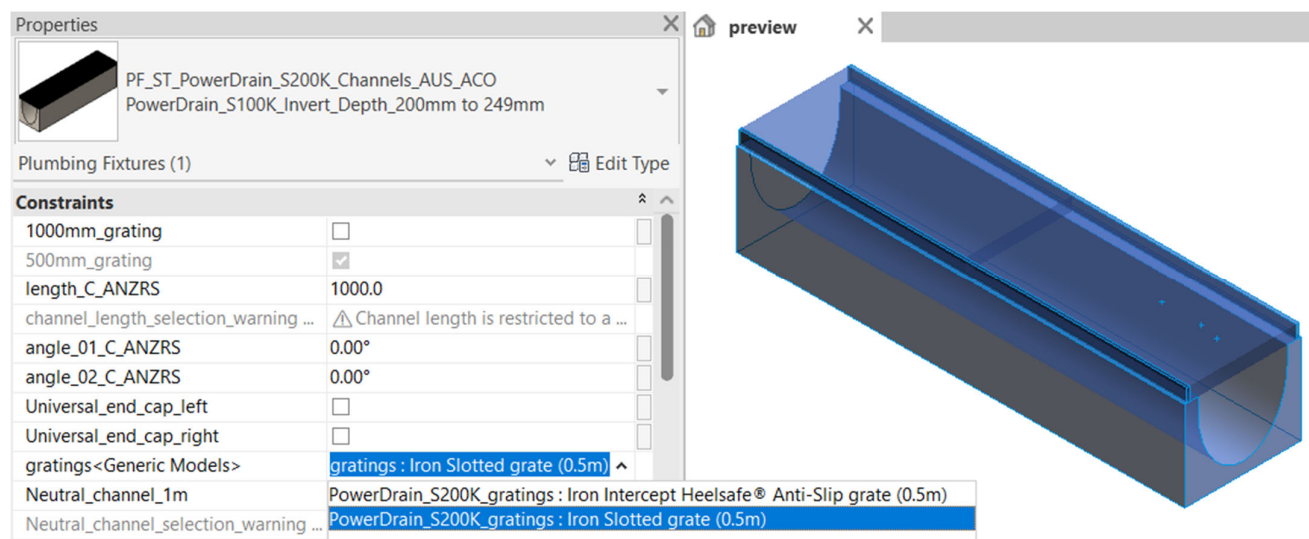
According to the requirement the user can select either 500mm_grating or 1000mm_grating.



Similarly, For S200K Channels

Click on the model – At properties tool bar, it will display gratings<Generic models> click on the Down arrow for selecting different gratings select the appropriate gratings for the channel.

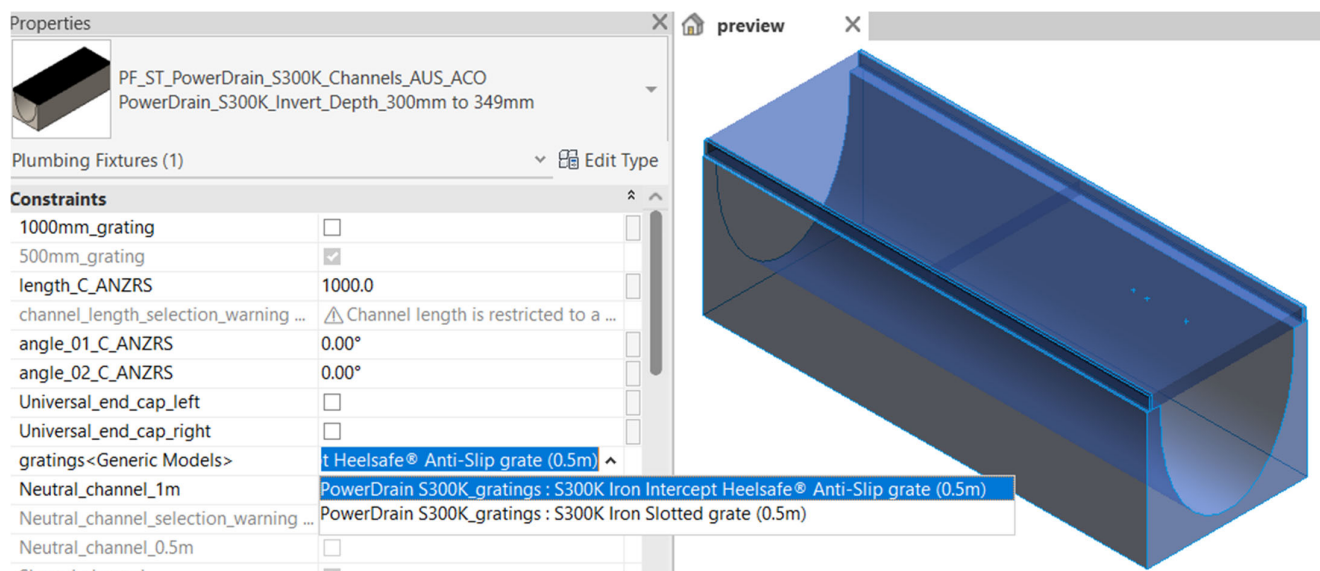
According to the requirement the user can select either 500mm_grating or 1000mm_grating.



Similarly, For S300K Channels

Click on the model – At properties tool bar, it will display gratings<Generic models> click on the Down arrow for selecting different gratings select the appropriate gratings for the Channels.

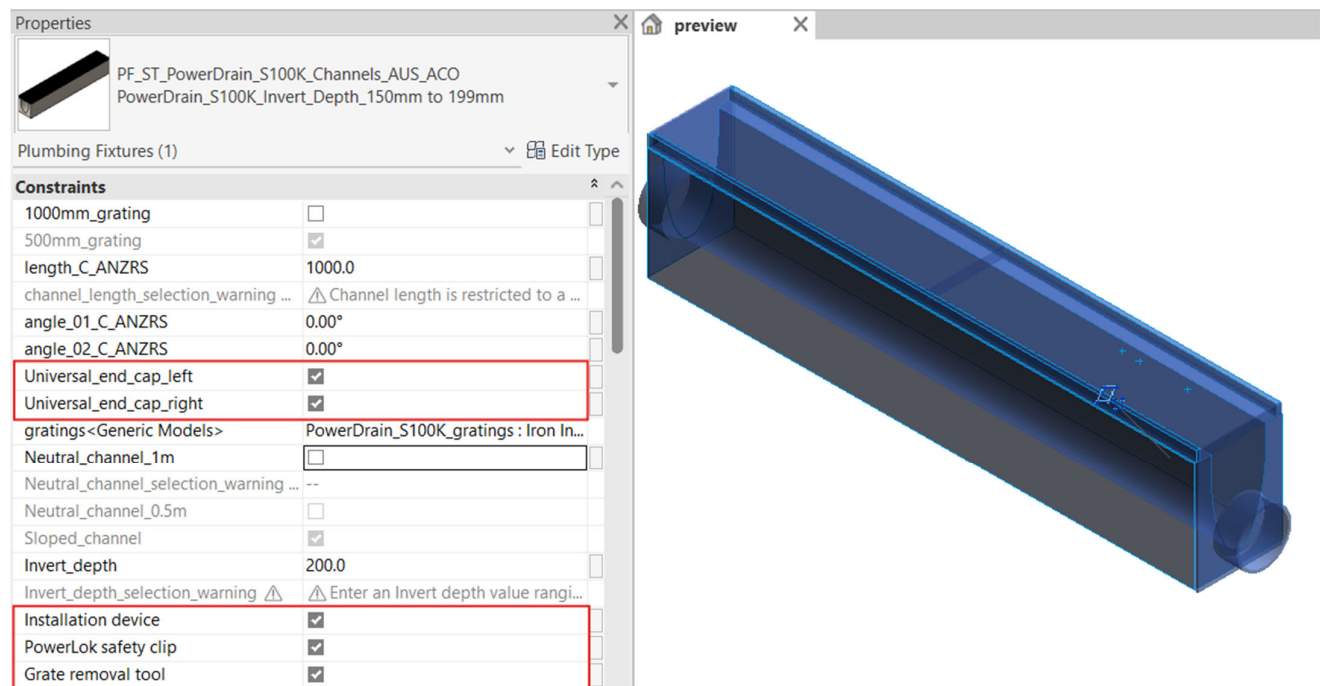
According to the requirement the user can select either 500mm_grating or 1000mm_grating.



Selection of Accessories for Channels:

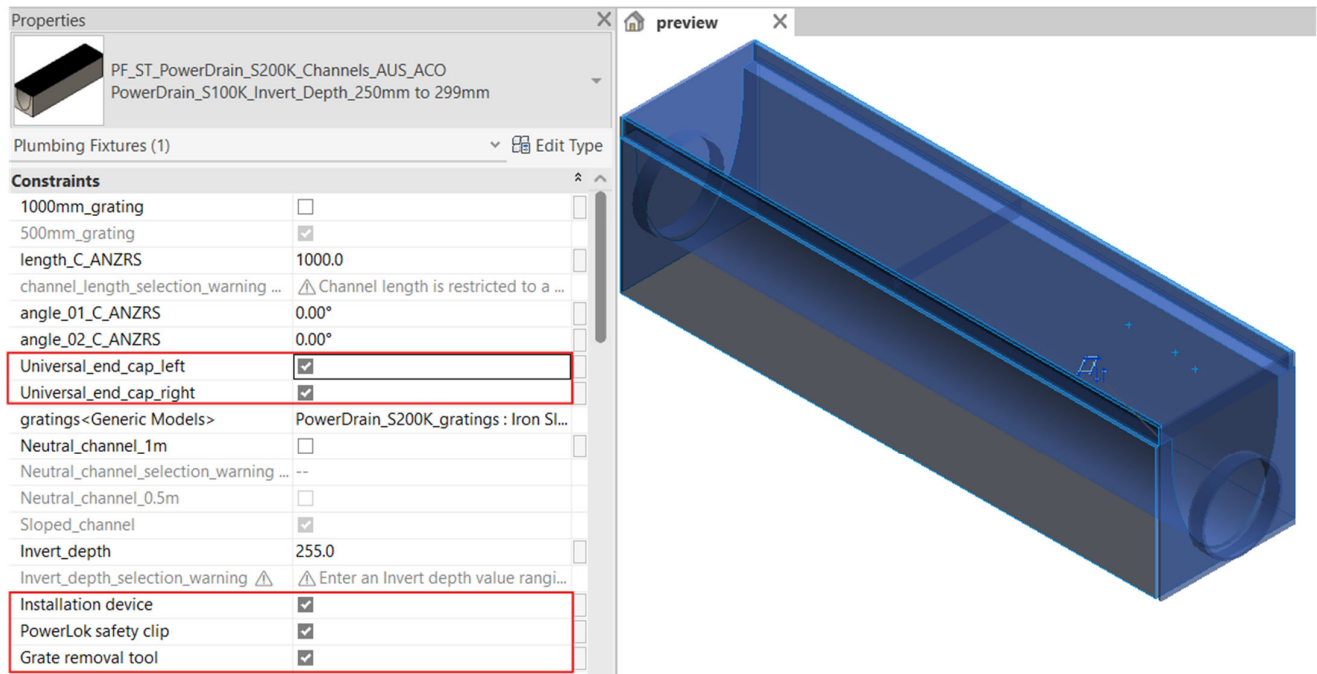
For S100K Channels

Click on the model, at properties tool bar, it will display a list of accessories such as Universal endcaps, Installation device, Grate removal tool, PowerLok safety clip. If user needs Accessories just select by checking the tick box, if don't just uncheck the list as shown below.



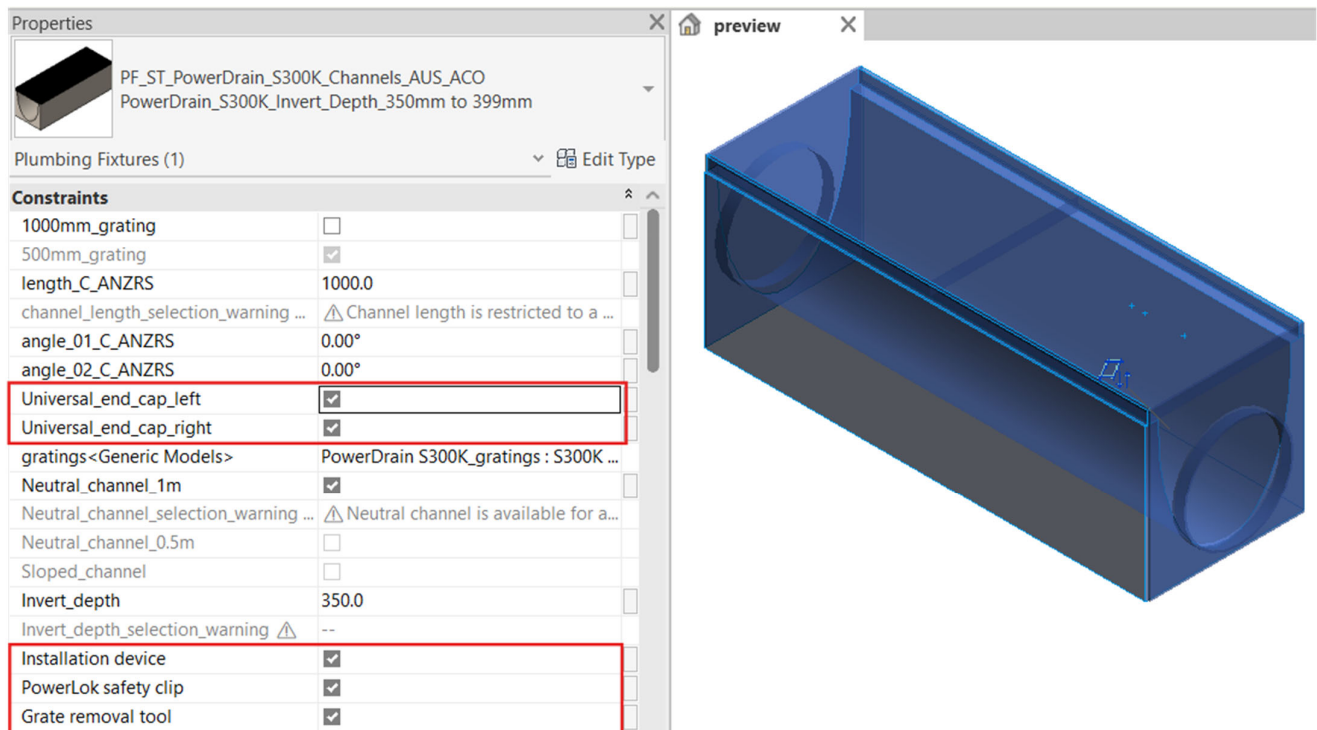
Similarly, For S200K Channels

Click on the model, at properties tool bar, it will display a list of accessories such as Universal endcaps, Installation device, Grate removal tool, PowerLok safety clip. If user needs Accessories just select by checking the tick box, if don't just uncheck the list as shown below.



Similarly, For S300K Channels

Click on the model, at properties tool bar, it will display a list of accessories such as Universal endcaps, Installation device, Grate removal tool, PowerLok safety clip. If user needs Accessories just select by checking the tick box, if don't just uncheck the list as shown below.

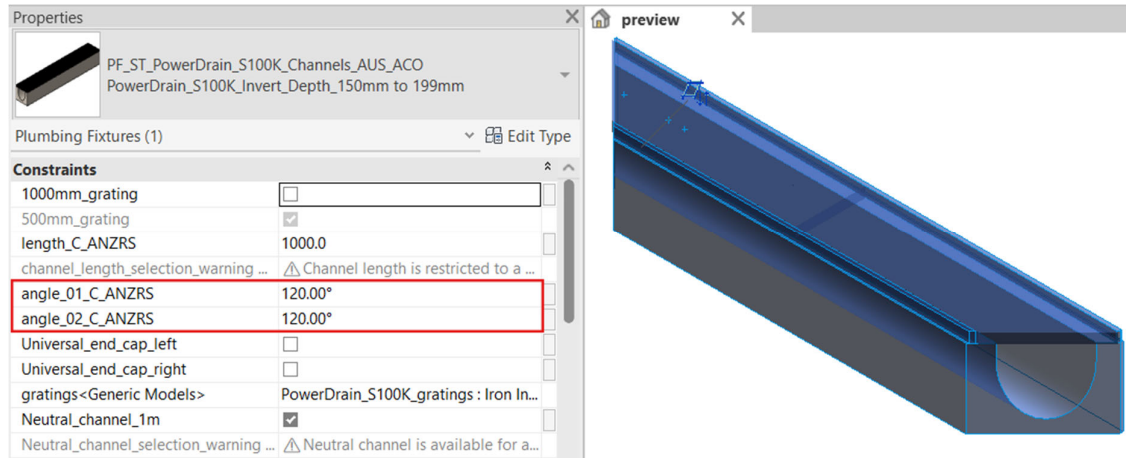


For Angular cut:

For S100K Channels

Click on the model – At properties tool bar, it will display two angles such as **angle_01_C_ANZRS** (left side) and **angle_02_C_ANZRS** (right side). We can enter the corresponding angles to make the angular cut on the Channels.

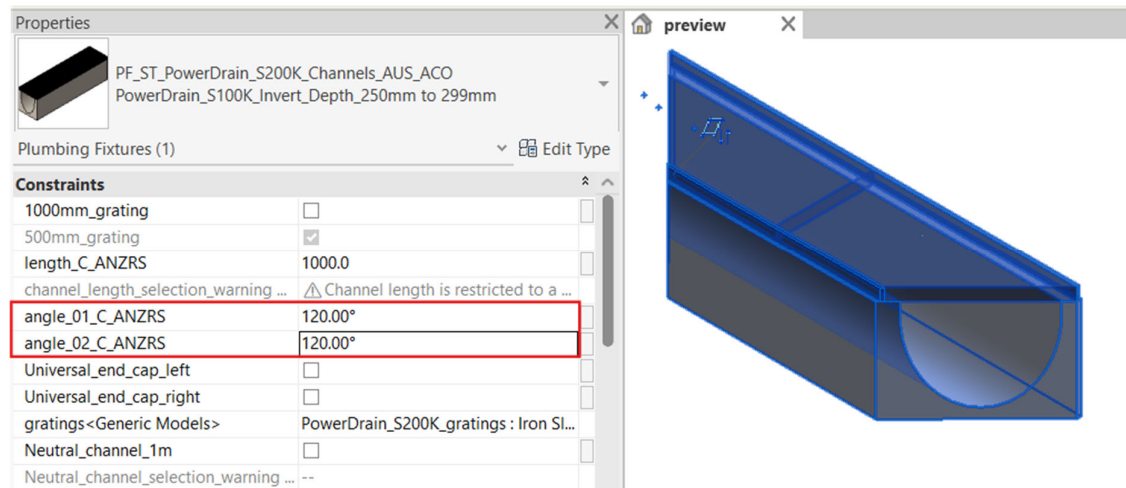
Note: While using Endcaps make sure that angular value should be as zero.



For S200K Channels

Click on the model – At properties tool bar, it will display two angles such as **angle_01_C_ANZRS** (left side) and **angle_02_C_ANZRS** (right side). We can enter the corresponding angles to make the angular cut on the Channels.

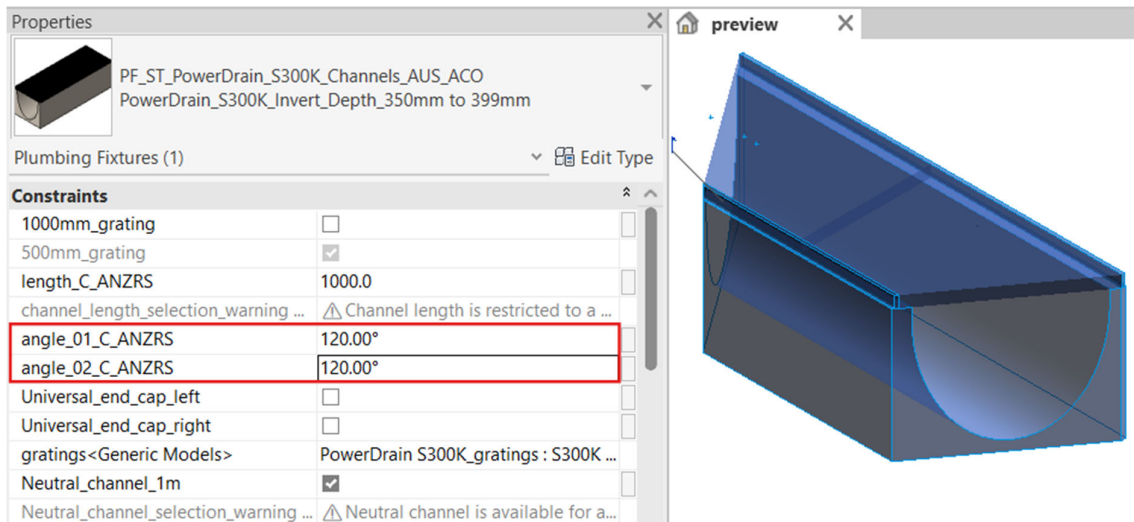
Note: While using Endcaps make sure that angular value should be as zero.



For S300K Channels

Click on the model – At properties tool bar, it will display two angles such as **angle_01_C_ANZRS** (left side) and **angle_02_C_ANZRS** (right side). We can enter the corresponding angles to make the angular cut on the Channels.

Note: While using Endcaps make sure that angular value should be as zero.

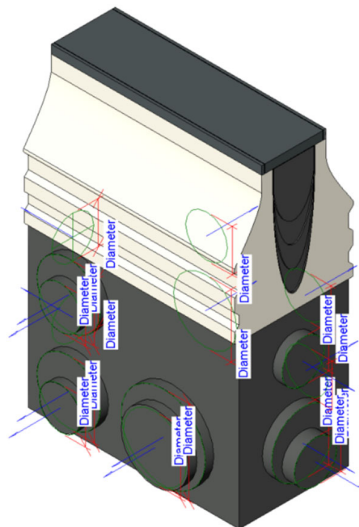


Selection of In-line pit:

PowerDrain S100K in-line pit

1. Click on the model – At properties tool bar, it will display family name and types.
2. **PowerDrain_SK1-901G_In-line_pit. rfa** family consists of Ductile Iron edge rail user must select the appropriate family type from the “Properties” drop down menu.

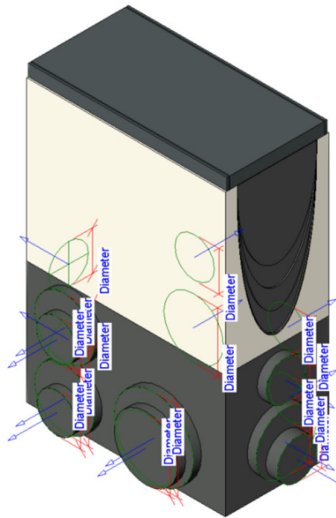
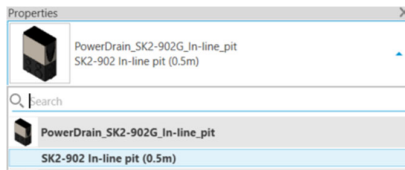
PowerDrain SK1-901G In-line pit



PowerDrain S200K in-line pit

1. Click on the model – At properties tool bar, it will display family name and types.
2. **PowerDrain_SK2-902G_In-line_pit. rfa** family consists of Ductile Iron edge rail user must select the appropriate family type from the “Properties” drop down menu.

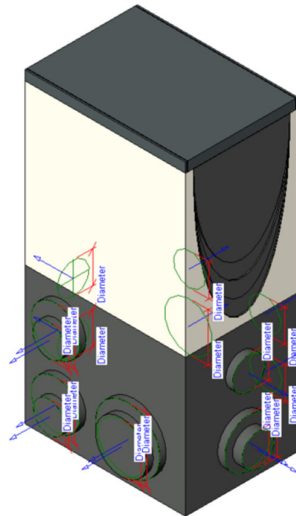
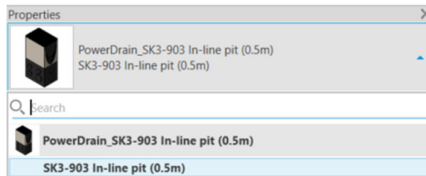
PowerDrain SK2-902G In-line pit



PowerDrain_S300K In-line pit

1. Click on the model – At properties tool bar, it will display family name and types.
2. **PowerDrain_SK3-903 In-line pit (0.5m). rfa** family consists of Ductile Iron edge rail user must select the appropriate family type from the “Properties” drop down menu.

PowerDrain SK3-903 In-line pit

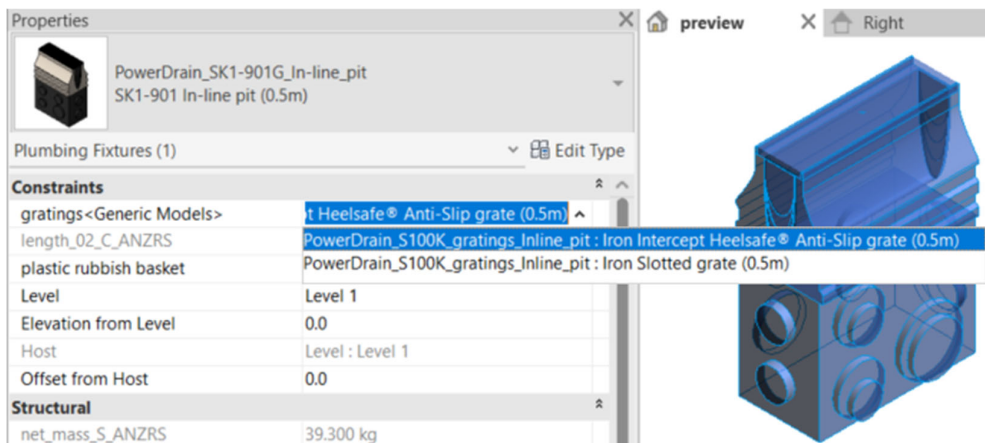


Selection of Gratings for In-line pit

PowerDrain S100K in-line pit

PowerDrain_SK1-901G_In-line_pit

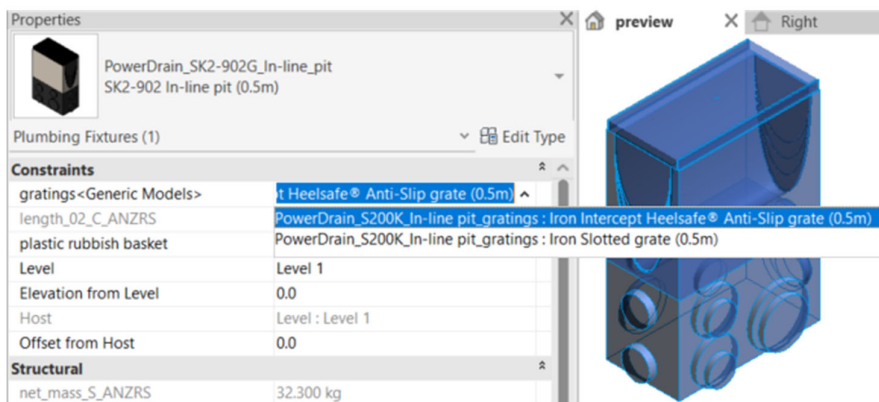
Click on the model – At properties tool bar, it will display gratings<Generic models> click on the Down arrow for selecting the two different gratings select the appropriate gratings for the channel.



PowerDrain S200K in-line pit

PowerDrain_SK2-902G_In-line_pit

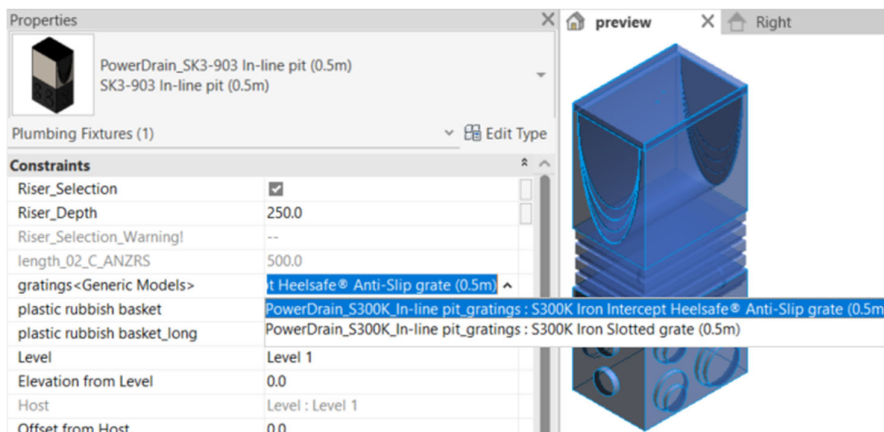
Click on the model – At properties tool bar, it will display gratings<Generic models> click on the Down arrow for selecting the two different gratings select the appropriate gratings for the channel.



PowerDrain S300K in-line pit

PowerDrain_SK3-903 In-line pit (0.5m)

Click on the model – At properties tool bar, it will display gratings<Generic models> click on the Down arrow for selecting the two different gratings select the appropriate gratings for the channel.



Selection of Accessories for In-line pit:

Click on the model, at properties tool bar, it will display a list of accessories such as Riser_Selection, plastic rubbish basket, plastic rubbish basket_long. If user needs Accessories just select by checking the tick box, if don't just uncheck the list as shown below.

Plumbing Fixtures (1)	
Constraints	
Riser_Selection	☒
Riser_Depth	250.0
Riser_Selection_Warning!	--
length_02_C_ANZRS	500.0
gratings<Generic Models>	PowerDrain_S300K_In-line pit_gratings : S300K Iron Interc...
plastic rubbish basket	☒
plastic rubbish basket_long	☒
Level	Level 1

Material Library:

The ACO Powerdrain_S100K - S300K files contain materials that are already pre-loaded into the components. When loading the ACO Powerdrain_S100K - S300K files into your project the pre-loaded materials will automatically transfer through.

Schedules and quantities:

The information such as Article numbers, Descriptions, net mass, URL, Manufacturer, Product range, etc. within the parameters is stored as “shared Parameters” so can easily be appeared when creating a schedule and quantities in the project environment.

<ACO PowerDrain_S100K - S300K series>

A	B	C	D	E	F	G	H	I
Count	code supplier article C ANZRS	Item description	net mass S ANZRS	URL	Manufacturer	productrang	OmniClass Title	Info technical C ANZRS
1	67010	SK1-10 Sloped channel - (1m)	26.50 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
1	67011	SK1-11 Sloped channel - (1m)	27.00 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
1	67043	SK1-010 Neutral channel - (1m)	26.50 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
1	67045	SK1-020 Neutral channel - (1m)	31.10 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
1	67050	SK1-0403 Neutral channel - (0.5m)	19.80 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
PF ST PowerDrain S100K Channels AUS ACQ.5								
1	68002	SK2-2 Sloped channel - (1m)	36.60 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
1	68012	SK2-12 Sloped channel - (1m)	41.60 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
1	68041	SK2-00 Neutral channel - (1m)	36.10 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
1	68045	SK2-000 Neutral channel - (1m)	45.60 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
1	68048	SK2-0003 Neutral channel - (0.5m)	32.00 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
PF ST PowerDrain S200K Channels AUS ACQ.5								
1	69004	SK3-4 Sloped channel - (1m)	60.70 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
1	69041	SK3-00 Neutral channel - (1m)	59.10 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
1	69042	SK3-010 Neutral channel - (1m)	64.10 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
1	69049	SK3-0003 Neutral channel - (0.5m)	41.80 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
PF ST PowerDrain S300K Channels AUS ACQ.4								
1	142547	SK1-001 In-line pit (0.5m)	39.30 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
PowerDrain SK1-001G In-line pit: 1								
1	142548	ACO SK2-002 In-line pit (0.5m)	32.30 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
PowerDrain SK2-002G In-line pit: 1								
1	142549	ACO SK3-003 In-line pit (0.5m)	39.90 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
PowerDrain SK3-003 In-line pit (0.5m): 1								
1	97477	K100XS100'S100K Installation device	0.30 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain Installation device ACQ.1								
1	10443	PowerLock safety clip	0.10 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain PowerLock safety clip ACQ.1								
6	96082	S100K Iron Slotted grate (0.5m)	5.60 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
4	141299	S100K Iron Intercept Heelsafe® Anti-Slip grate	6.80 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
ZZZ do not use PF ST PowerDrain S100K gratings ACQ.5								
1	01498	ACO Type 901 In-line plastic rubbish basket	0.50 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
ZZZ do not use PF ST PowerDrain S100K In-line plastic rubbish basket ACQ.1								
7	71976	S200K Iron Slotted grate (0.5m)	14.50 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
2	142685	S200K Iron Intercept Heelsafe® Anti-Slip grate	8.70 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
ZZZ do not use PF ST PowerDrain S200K gratings ACQ.9								
1	13999	ACO PowerDrain S200K - Type 902 In-line	0.50 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain S200K In-line plastic rubbish basket ACQ.1								
1	97478	S200K Installation device	1.30 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain S200K Installation device ACQ.1								
1	10443	PowerLock safety clip	0.10 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain S200K PowerLock safety clip ACQ.1								
3	02445	S300K Iron Slotted grate (0.5m)	24.40 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
4	142686	S300K Iron Intercept Heelsafe® Anti-Slip grate	14.80 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain S300K gratings ACQ.7								
1	142686	S300K Iron Intercept Heelsafe® Anti-Slip grate	14.80 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain S300K In-line pit gratings ACQ.1								
4	97479	PowerDrain S300K Installation device	2.20 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain S300K Installation device ACQ.4								
2	141729	Optional plastic riser	4.50 kg	www.acodrain.com.au	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain S300K plastic riser: 2								
4	10443	PowerLock safety clip	0.10 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST PowerDrain S300K PowerLock safety clip ACQ.4								
1	98665	ACO Plastic rubbish basket - long	1.80 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST rubbish basket long ACQ.1								
1	142685	S200K Iron Intercept Heelsafe® Anti-Slip grate	8.70 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/products/powerdrain/details
ZZZ do not use PF ST S200K In-line pit gratings ACQ.1								
1	98653	ACO PowerDrain S300K - Type 903 In-line	1.60 kg	https://ilacodrain.com	ACO	PowerDrain Rainwater Removal		https://ilacodrain.com.au/trench-drains/powerdrain/
ZZZ do not use PF ST S300K In-line plastic rubbish basket ACQ.1								

Grand total: 63