RevitWorks HVAC Catalogue

revitworks
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Summary - Imperial version

This document catalogues all of the HVAC equipment and Air Terminal families that are provided within the RevitWorks HVAC collections and shows the out-of-the-box (OOTB) family types supplied.
The **standard collection** includes items that architects generally require and the **premium version** includes additional items for engineers.

Standard collection includes:

Supply, return and exhaust air terminals
Supply and return linear slot diffusers
Supply air grills
Return air diffusers
FCU Cassettes

Active and passive chilled beams
Split systems (heat pumps)
Heat recovery units (HRUs)
Surface mounted fans
Exhaust and outside air louvres

Just single round spigot air terminals and diffusers

Additional Premium collection includes:

Air handling units (AHUs)
Fan coil units (FCUs)
FCU plenums
Computer air-con (CRAC) units
Variable air volume (VAV) units
Attenuators
Additional multi-spigot and shaped air terminals and diffusers
Fans (in-line and standalone)
Plinths
Penetration Markers

Standard Collection: **Over 45 families are provided, with over 115 preconfigured types.**
Premium Collection: **Over 195 families are provided, with over 540 preconfigured types.**

Users can create more types to add to the collection, change dimensions, change spigot locations, materials, specifications and air flows to create unlimited variations of these families.

Please read this document in conjunction with the RevitWorks HVAC Equipment and Air Terminal Specification PDFs which explain detail levels, object categories, shared parameters, type and instance parameters.

Supply, Return and Exhaust Air Terminals

Supply, return and exhaust air terminals are provided assembled with spigots, plenums and necks. They also come with diffuser pull-down selections within them (refer to the next section).
Note: The standard collection just comes with single round spigot versions.

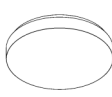Shown with rectangular diffusers. (families provided with round diffusers as well)
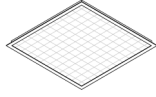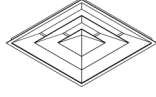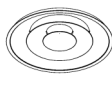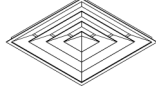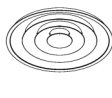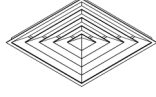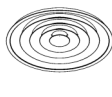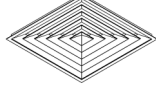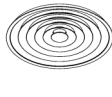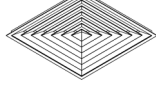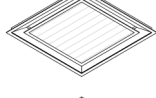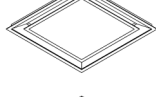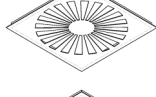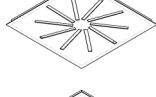
	1 Spigot	2 Spigots	3 Spigots	No Plenum	Diffuser only (use for direct mounting to exposed ducts or for ceiling plenums)
Air Terminal Round spigots					
Air Terminal Rectangular spigots					
Air Terminals Oval spigots					

Supply Air Terminal Types provided

HVAC_Air Terminal SA Rect (1 Round Spigot)

2x2' Louvre
2x2' Louvre without Plenum
2x2' Planar
2x2' Planar without Plenum
2x2' Swirl Radial no Vanes
2x2' Swirl Radial no Vanes without Penum
2x2' Swirl Radial with Vanes
2x2' Swirl Radial with Vanes without Plenum
2x2' Swirl Slotted
2x2' Swirl Slotted without Plenum
(blank) 2x2'
(blank) 2x2' Swirl
(blank) 2x2' Swirl without Plenum
(blank) 2x2' without Plenum
(blank) 4x2'

18 families provided with types as shown

Return Air Terminal Types provided

HVAC_Air Terminal RA Rect (1 Round Spigot)

2x2' Grille
2x2' Grille without Plenum
4x2' Grille
(blank) 2x2'
(blank) 2x2' without Plenum
(blank) 4x2'

Exhaust Air Terminal Types provided

HVAC_Air Terminal EA Rect (1 Round Spigot)

2x2' Grille
2x2' Grille without Plenum
4x2' Grille
(blank) 2x2'
(blank) 2x2' without Plenum
(blank) 4x2'

Supply Air (Diffuser only) Families provided

HVAC_Air Terminal SA Rect (Diffuser Only)

15x15" Louvre
15x15" Planar
15x15" Swirl Radial no Vanes
15x15" Swirl Radial with Vanes
15x15" Swirl Slotted
(blank) 15x15"
(blank) 15x15" Swirl

HVAC_Air Terminal SA Round (Diffuser Only)

15" Louvre
15" Planar
15" Swirl Radial no Vanes
15" Swirl Radial Slotted
15" Swirl Radial with Vanes
(blank) 15"
(blank) 15" Swirl

Return Air (Diffuser only) Families provided

HVAC_Air Terminal RA Rect (Diffuser Only)

2x2'
4x2'
15x15"
(blank) 2x2'
(blank) 4x2'
(blank) 15x15"

HVAC_Air Terminal RA Round (Diffuser Only)

2'
15"
(blank) 2'
(blank) 15"

18 families provided for each with types as shown

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Supply, Return and Exhaust Air Diffusers and Grilles

All diffusers and grilles as shown below are part of the collection and are chosen within the air terminal families with a pull down menu (refer to the Air Terminal Specification.pdf document for details).

	3D (fine detail)	**Plan** (fine detail)		**3D** (fine detail)	**Plan** (fine detail)
Blank (i.e. low detail)			Round Blank (i.e. low detail)		
Grille			Round Grille		
Louvres 1 blade			Round Louvres 1 blade		
Louvres 2 blades			Round Louvres 2 blade		
Louvres 3 blades			Round Louvres 3 blade		
Louvres 4 blades			Round Louvres 4 blade		
Louvres 5 blades			Round Louvres 5 blade		
Planar Perforated					
Planar Plain			Round Planer		
Swirl radial 15 slots no vanes			Round Swirl 15 Slots No Vanes		
Swirl radial 15 slots with vanes			Round Swirl 15 Slots With Vanes		
Swirl radial 20 slots no vanes			Round Swirl 20 Slots No Vanes		
Swirl radial 20 slots with vanes			Round Swirl 20 Slots With Vanes		
Swirl slotted 10 slots			Round Swirl Slotted 10 Slots		
Swirl slotted 15 slots			Round Swirl Slotted 15 Slots		

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Fan Coil Unit (FCU) Cassettes

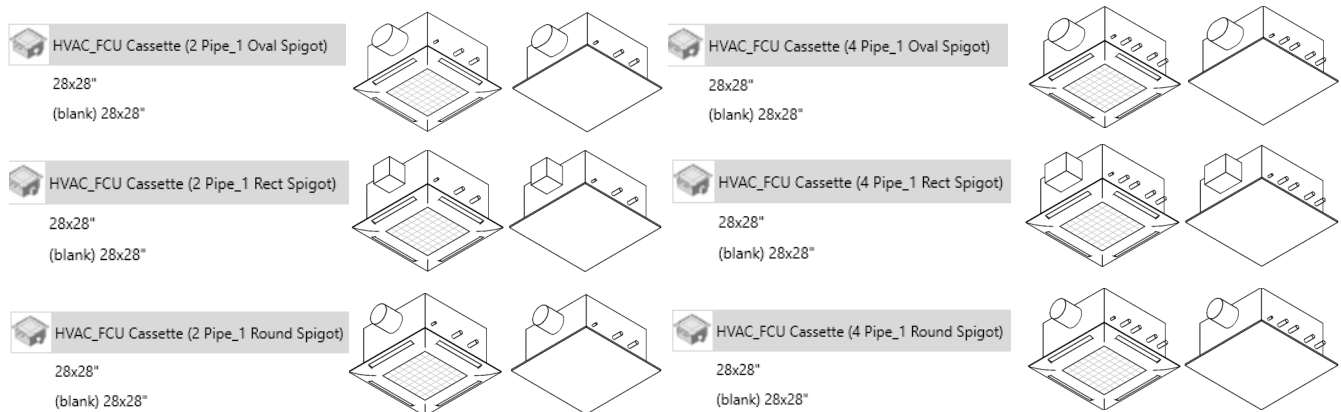FCU Cassettes are provided assembled with spigots and plenums. Just like the Air Terminals, they also come with diffuser pull-down selections within them (refer to the previous section) to enable users to add different types.

Different families are provided depending on whether they are 2-pipe or 4-pipe and also on the shape of the spigot (rectangular, round or oval).

Different types are provided for the different diffuser (or grill) selections (1 type is provided, but a user can choose a blank diffuser (i.e. low detail version)

Hint: All duct and water pipe spigots can be moved to different locations (including to the top of the plenum) - refer to the specification document for details

HVAC_FCU Cassette (2 Pipe_1 Oval Spigot)
28x28"
(blank) 28x28"

HVAC_FCU Cassette (4 Pipe_1 Oval Spigot)
28x28"
(blank) 28x28"

HVAC_FCU Cassette (2 Pipe_1 Rect Spigot)
28x28"
(blank) 28x28"

HVAC_FCU Cassette (4 Pipe_1 Rect Spigot)
28x28"
(blank) 28x28"

HVAC_FCU Cassette (2 Pipe_1 Round Spigot)
28x28"
(blank) 28x28"

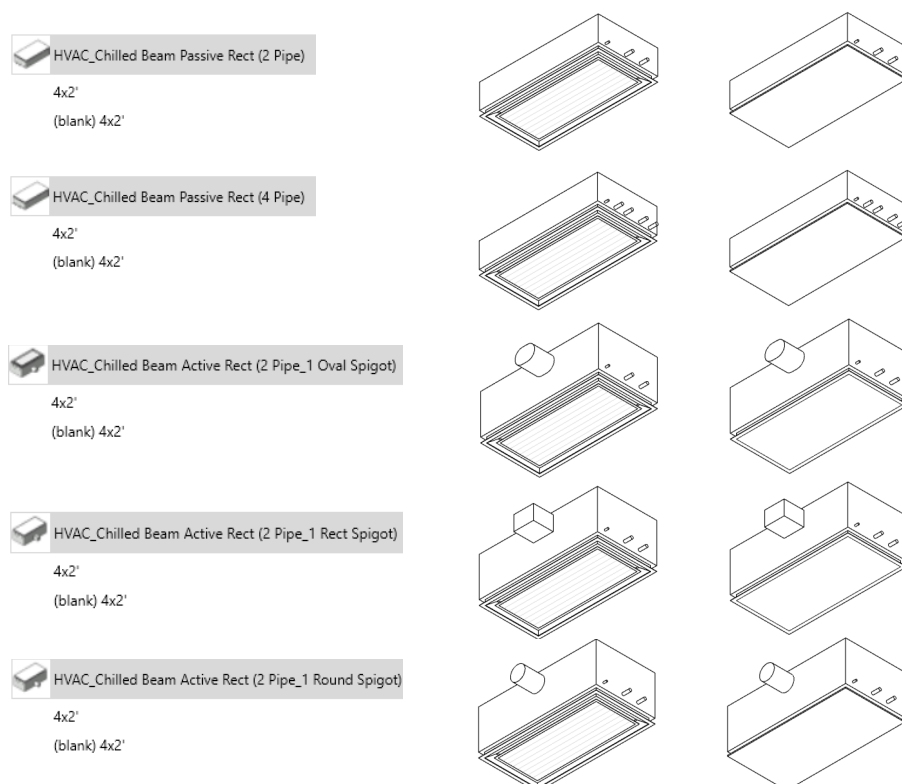HVAC_FCU Cassette (4 Pipe_1 Round Spigot)
28x28"
(blank) 28x28"

Active and Passive Chilled Beams

Chilled beams are provided assembled with spigots and plenums. Just like the Air Terminals, they also come with diffuser pull-down selections within them (refer to the previous page) to enable users to add different types.

Different families are provided depending on whether they are active or passive, have 2-pipes or 4-pipes and also on the shape of the spigot (rectangular, round or oval).

Different types are provided for the different diffuser (or grill) selections (1 type is provided, but a user can choose a blank diffuser (i.e. low detail version)

Hint: All duct and water pipe spigots can be moved to different locations (including to the top of the plenum) - refer to the specification document for details

HVAC_Chilled Beam Passive Rect (2 Pipe)
4x2'
(blank) 4x2'

HVAC_Chilled Beam Passive Rect (4 Pipe)
4x2'
(blank) 4x2'

HVAC_Chilled Beam Active Rect (2 Pipe_1 Oval Spigot)
4x2'
(blank) 4x2'

HVAC_Chilled Beam Active Rect (2 Pipe_1 Rect Spigot)
4x2'
(blank) 4x2'

HVAC_Chilled Beam Active Rect (2 Pipe_1 Round Spigot)
4x2'
(blank) 4x2'

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Active Chilled Beams

...continued from previous page

HVAC_Chilled Beam Active Rect (4 Pipe_1 Oval Spigot)

4x2'

(blank) 4x2'

HVAC_Chilled Beam Active Rect (4 Pipe_1 Rect Spigot)

4x2'

(blank) 4x2'

HVAC_Chilled Beam Active Rect (4 Pipe_1 Round Spigot)
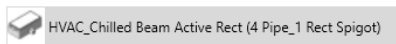
4x2'

(blank) 4x2'

Supply & Return Air Linear Slot Diffusers

3D (fine detail)

HVAC_Air Terminal Linear Slot (Diffuser Only)

1 Slot

2 Slots

3 Slots

4 Slots

(blank) 1 Slot

(blank) 2 Slots

(blank) 3 Slots

(blank) 4 Slots

Heat Recovery Units (HRU)

HRUs are provided with spigots and connections included. They also come with 3d modelled adjustable clearance zones and control boxes.

Hint: All spigots, control boxes and clearance zones can be moved to different locations (including to the top of the unit) - refer to the specification document for details

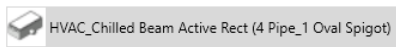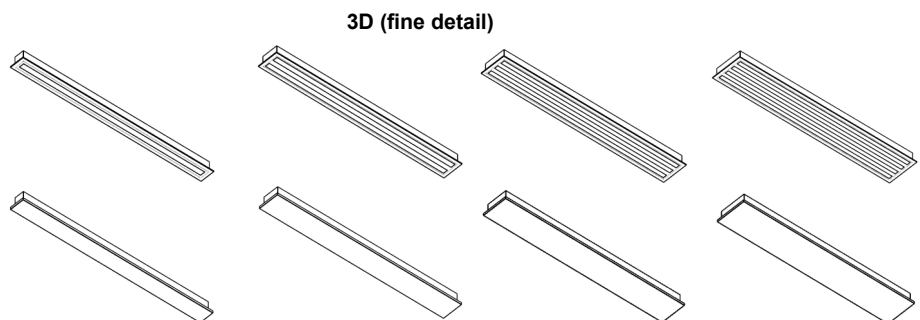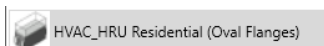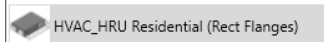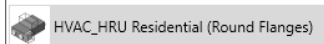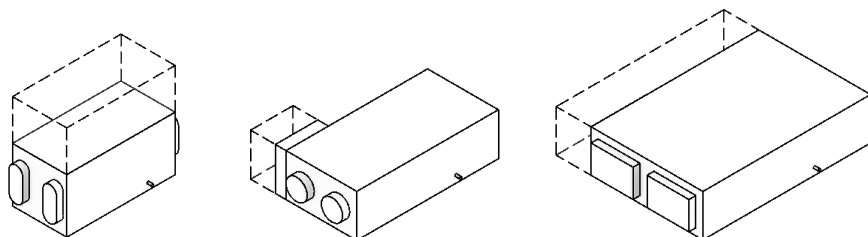HVAC_HRU Residential (Oval Flanges)

32x16x16"h

HVAC_HRU Residential (Rect Flanges)

47x32x12"h

HVAC_HRU Residential (Round Flanges)

40x24x12"h

Note! Refer to *the* premium section for additional HRUs included in the premium package
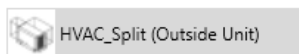
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Split Systems

Split Systems are provided as shown
If users are *au fait* with the family editor, they can create more versions by editing
the nested components within these ones and then adding it to the collection.

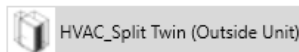HVAC_Split (Hi Wall)
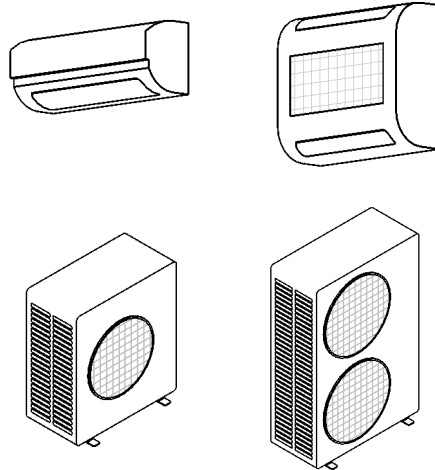
32x12x10"d

HVAC_Split (Low Wall)

28x24x10"d

HVAC_Split (Outside Unit)
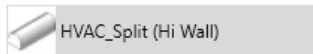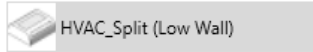
32x12x22"h (1 Phase)

35x16x32"h (3 Phase)
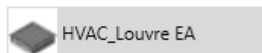
HVAC_Split Twin (Outside Unit)

35x16x53"h (1 Phase)

35x16x53"h (3 Phase)

Exterior Louvres

Rectangular, trapezoidal and round louvres with exhaust air (EA) or outside air (OA)
connectors are provided with adjustable blade spacing, depths and angles as well
as other standard adjustable dimensional parameters.

HVAC_Louvre EA	HVAC_Louvre OA
1x1'	1x1'
4x2'	4x2'
4x2/40"	4x2/40"
40x40"	40x40"
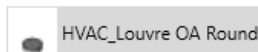
HVAC_Louvre EA Round	HVAC_Louvre OA Round
1'ø	1'ø
2'ø	2'ø
40"ø	40"ø

Fans - Surface mounted

HVAC_Fan Surface Mounted Circular

12øx2"

HVAC_Fan Surface Mounted Rectangular
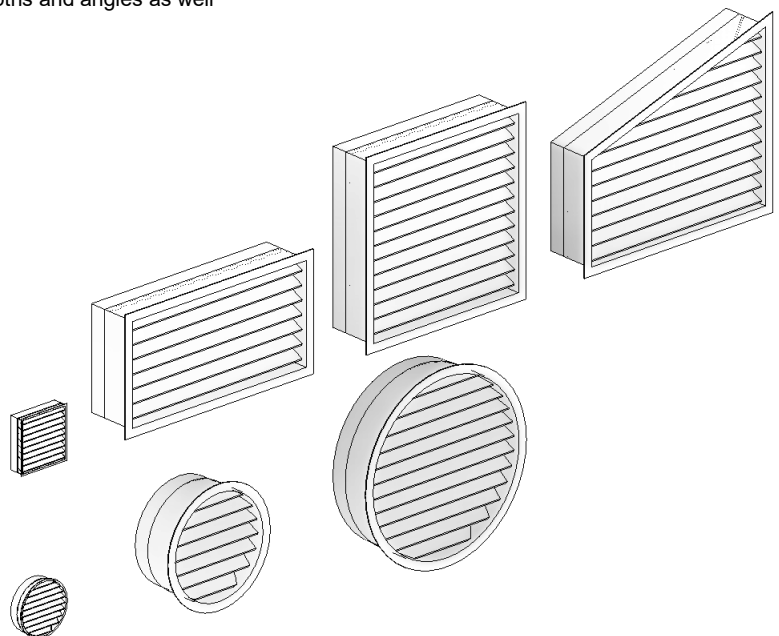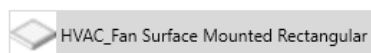
12x12"

END OF STANDARD COLLECTION
(continue for additional items within the Premium collection)

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Fans - Premium version only
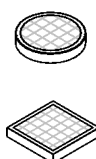
Fans are provided as shown with 3d modelled adjustable clearance zones

HVAC_Fan Inline (breaks into duct)

4ø_8øx12"

6ø_10øx12"

8"ø_12øx16"

HVAC_Fan Inline

20øx24" (1 phase)

20øx24" (1 phase) with legs

35øx47" (3 phase)

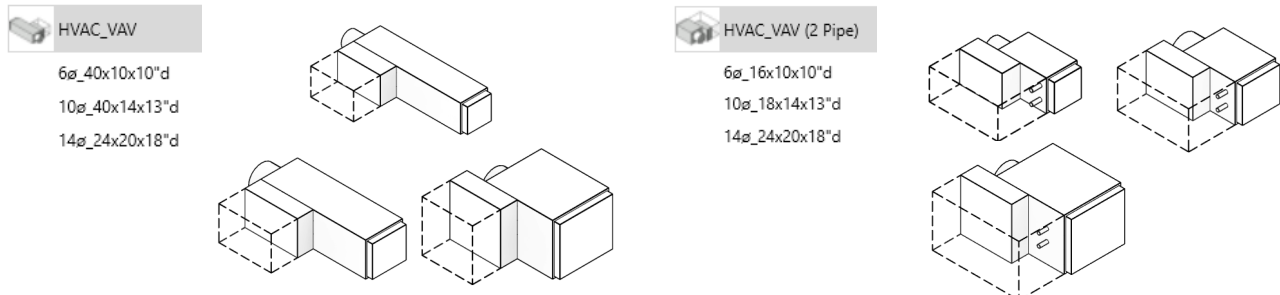35øx47" (3 phase) with legs
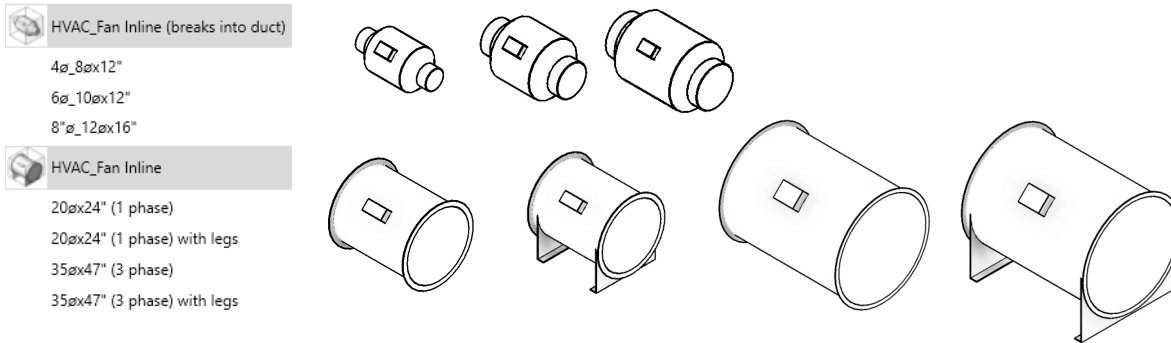
Variable Air Volume (VAV) Units - Premium version only

VAVs are provided with spigots and connections included. They also come with 3d modelled adjustable clearance zones, control boxes and options for turning on and off the base.
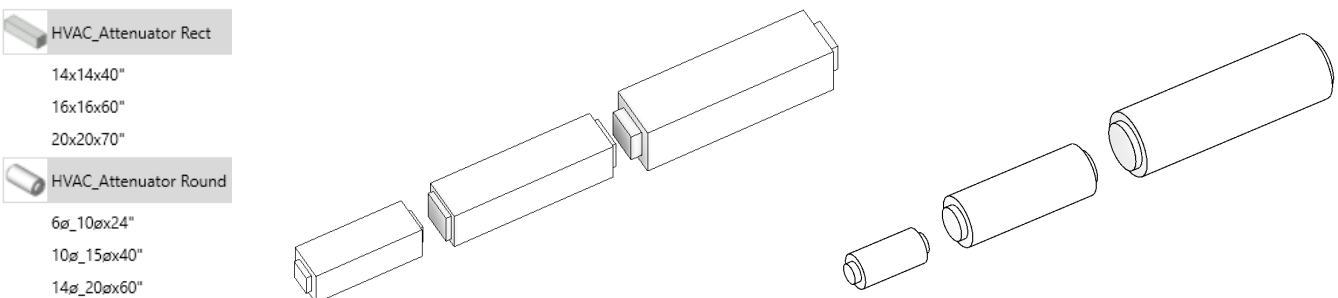
Different families are provided depending on whether they have pipes or not

Hint: All spigots, control boxes and clearance zones can be moved to different locations (including to the top of the unit) - refer to the specification document for details

HVAC_VAV

6ø_40x10x10"d

10ø_40x14x13"d

14ø_24x20x18"d

HVAC_VAV (2 Pipe)

6ø_16x10x10"d

10ø_18x14x13"d

14ø_24x20x18"d

Attenuators - Premium version only

Attenuators are provided with spigots and connections included.

HVAC_Attenuator Rect

14x14x40"

16x16x60"

20x20x70"

HVAC_Attenuator Round

6ø_10øx24"

10ø_15øx40"

14ø_20øx60"

Computer Room Air-Con (CRAC) Units - Premium version only

A CRAC unit is provided as shown with 3d modelled adjustable clearance zones and options for turning on and off the base.

HVAC_CRAC (2 Pipe)

32x32x70"h

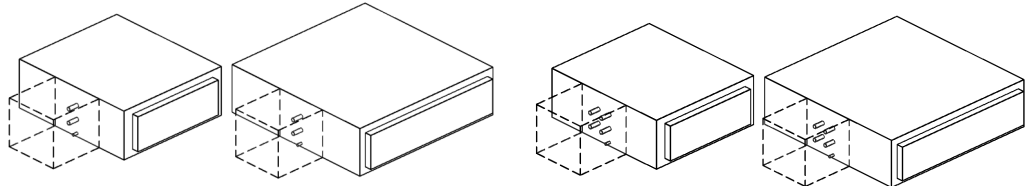# RevitWorks HVAC Catalogue

Fan Coil Units (FCUs) - Premium version only

FCUs are provided with spigots and connections included. They also come with 3d modelled adjustable clearance zones and options for turning on and off the base.

Different families are provided depending on whether they are 2-pipe or 4-pipe FCUs.

Hint: All spigots and clearance zones can be moved to different locations (including to the top of the FCU) - refer to the specification document for details

HVAC_FCU (2 Pipe)
35x32x14"h
47x47x14"h
HVAC_FCU (4 Pipe)
35x32x14"h
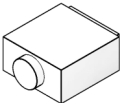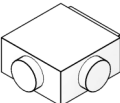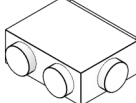47x47x14"h

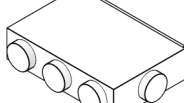## Fan Coil Unit Plenums - Premium version only
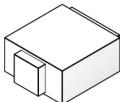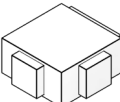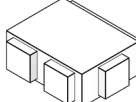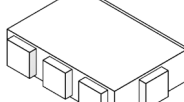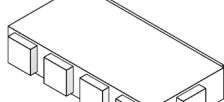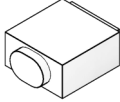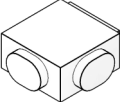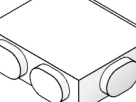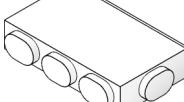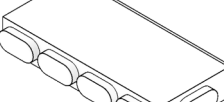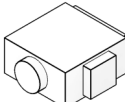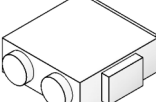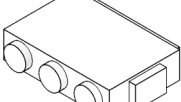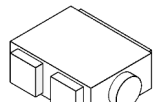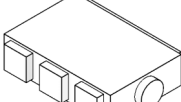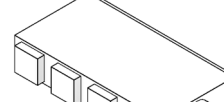
A variety of FCU Plenums are provided with a number of different shaped spigots and connections included.

Different families are provided depending on whether they have supply air, return air, or outside and return air plenums, the number of spigots that they have to connect ducts to (1-5) and the shape of the spigots (rectangular, round or oval + some combinations)

All of these combinations mean **64 different FCU plenums are provided** out-of-the-box.

Hint: All spigots can be moved to different locations (including to the top of the plenum): location and size are controlled with instance parameters - refer to the specification document for details

Depending on the type of plenum selected, the out-of-the-box positions of the spigots vary; images below are indicative only.

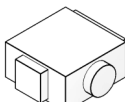|	1 Spigot	2 Spigots	3 Spigots	4 Spigots	5 Spigots
FCU Plenums (round spigots)					
FCU Plenums (rectangular spigots)					
FCU Plenums (oval spigots)					
FCU Plenums (round + 1 rect spigots)					
FCU Plenums (rect + 1 round spigots)					

Supply, Return and Exhaust Air Linear Slot Plenums - Premium version only

Supply, return and exhaust air linear plenums are provided as separate components for the linear diffusers, allowing users to place them easily at different locations along the linear diffuser lengths.

Different families are provided depending on spigot shape (round, rectangular or oval) and for supply and return air versions.

Different types are provided to match the widths of the linear diffusers provided

3D

HVAC - Plenum SA Linear Slot (1 Oval Spigot)	HVAC - Plenum RA Linear Slot (1 Oval Spigot)	HVAC_Plenum EA Linear Slot (1 Oval Spigot)	Plenum SA linear slot Oval spigot
1 slot 1200mm	1 slot 1200mm	1 slot 1200mm	
2 slot 1200mm	2 slot 1200mm	2 slot 1200mm	
3 slot 1200mm	3 slot 1200mm	3 slot 1200mm	
4 slot 1200mm	4 slot 1200mm	4 slot 1200mm	
HVAC - Plenum SA Linear Slot (1 Rect Spigot)	HVAC - Plenum RA Linear Slot (1 Rect Spigot)	HVAC_Plenum EA Linear Slot (1 Rect Spigot)	Plenum SA linear slot Rectangular spigot
1 slot 1200mm	1 slot 1200mm	1 slot 1200mm	
2 slot 1200mm	2 slot 1200mm	2 slot 1200mm	
3 slot 1200mm	3 slot 1200mm	3 slot 1200mm	
4 slot 1200mm	4 slot 1200mm	4 slot 1200mm	
HVAC - Plenum SA Linear Slot (1 Round Spigot)	HVAC - Plenum RA Linear Slot (1 Round Spigot)	HVAC_Plenum EA Linear Slot (1 Round Spigot)	Plenum SA linear slot Round spigot
1 slot 1200mm	1 slot 1200mm	1 slot 1200mm	
2 slot 1200mm	2 slot 1200mm	2 slot 1200mm	
3 slot 1200mm	3 slot 1200mm	3 slot 1200mm	
4 slot 1200mm	4 slot 1200mm	4 slot 1200mm	

Air Handling Units (AHUs) - Premium version only

AHUs are provided with spigots and connections included. They also come with 3d modelled adjustable clearance zones and options for turning on and off the base.

Different families are provided depending on whether they are 2-pipe or 4-pipe AHUs and also on the type of duct spigots included in the family; Outside Air (OA), Supply Air (SA), Return Air (RA), and/or Exhaust Air (EA).

Hint: All spigots and clearance zones can be moved to different locations (including to the top of the AHU) - refer to the specification document for details

HVAC_AHU OA-SA (2 Pipe)
80x43x40"h

HVAC_AHU OA-SA (4 Pipe)
80x43x40"h

HVAC_AHU OA-SA-RA (2 Pipe)
80x43x40"h

HVAC_AHU OA-SA-RA (4 Pipe)
80x43x40"h

HVAC_AHU OA-SA-RA-EA (2 Pipe)
80x43x40"h

HVAC_AHU OA-SA-RA-EA (4 Pipe)
80x43x40"h

AHU OA-SA (2 pipe)| Back

AHU OA-SA-RA (2 pipe) Back

AHU OA-SA-RA-EA (2 pipe) Back

AHU OA-SA (4 pipe) Back

AHU OA-SA-RA (4 pipe) Back

AHU OA-SA-RA-EA (4 pipe) Back

AHU OA-SA Front

AHU OA-SA-RA Front

AHU OA-SA-RA-EA Front

RevitWorks HVAC Catalogue

Heat Recovery Units (HRU) - Premium Version Only

HRUs are provided with spigots and connections included. They also come with 3d modelled adjustable clearance zones and control boxes.

Hint: All spigots, control boxes and clearance zones can be moved to different locations (including to the top of the unit) - refer to the specification document for details

HVAC_HRU OA-EA (Oval Flanges)	HVAC_HRU OA-RA (Oval Flanges)	HVAC_HRU SA-EA (Oval Flanges)	HVAC_HRU SA-RA (Oval Flanges)
32x16x16"h	32x16x16"h	32x16x16"h	32x16x16"h
HVAC_HRU OA-EA (Rect Flanges)	HVAC_HRU OA-RA (Rect Flanges)	HVAC_HRU SA-EA (Rect Flanges)	HVAC_HRU SA-RA (Rect Flanges)
47x32x12"h	47x32x12"h	47x32x12"h	47x32x12"h
HVAC_HRU OA-EA (Round Flanges)	HVAC_HRU OA-RA (Round Flanges)	HVAC_HRU SA-EA (Round Flanges)	HVAC_HRU SA-RA (Round Flanges)
40x24x12"h	40x24x12"h	40x24x12"h	40x24x12"h
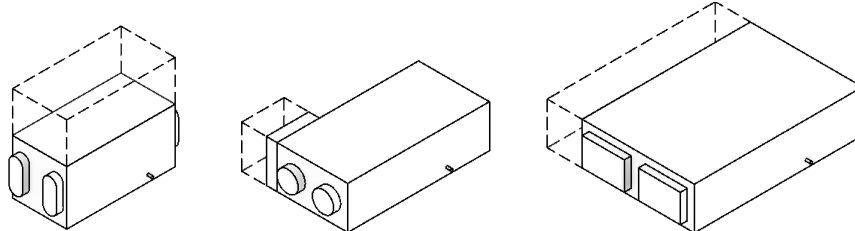
Plinths - Premium Version Only

Plinths are provided with options for chamfers to each edge

HVAC_Plinth

24"x48"x4"h
48"x96"x6"h
60"x90"x6"h
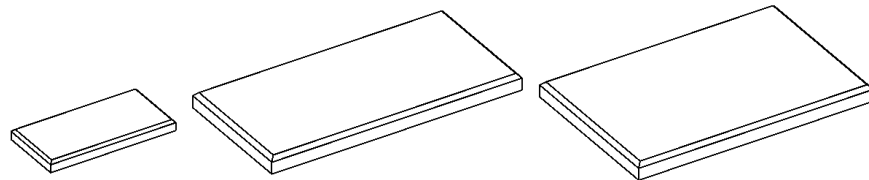
Penetration Markers - Premium Version Only

Schedulable penetration markers are provided with options including service zone sizes, required clearances and "look and feel" symbol sizing.

HVAC_Penetration Marker Rectangular

6" Fins

HVAC_Penetration Marker Round

6" Fins