

FAMILIES MANUAL
REVIT

RAIN  BIRD

Table of Contents

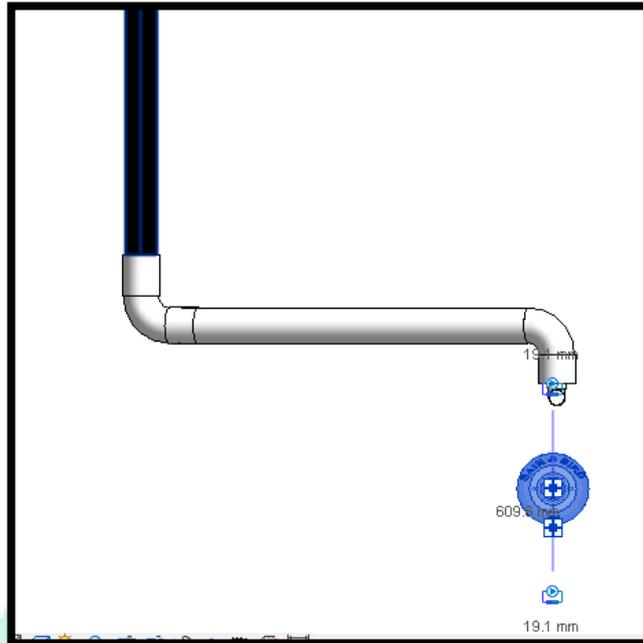
1. SPRINKLERS.....	3
2. NOZZLES.....	6
3. ROTORS.....	11
4. ARTICULATED JOINTS.....	14
5. VALVES.....	16
6. VALVES BOX.....	18
7. CONTROLLERS/ BOXES AND PEDESTALS.....	21
8. PUMP STATIONS.....	24
9. PIPING.....	27



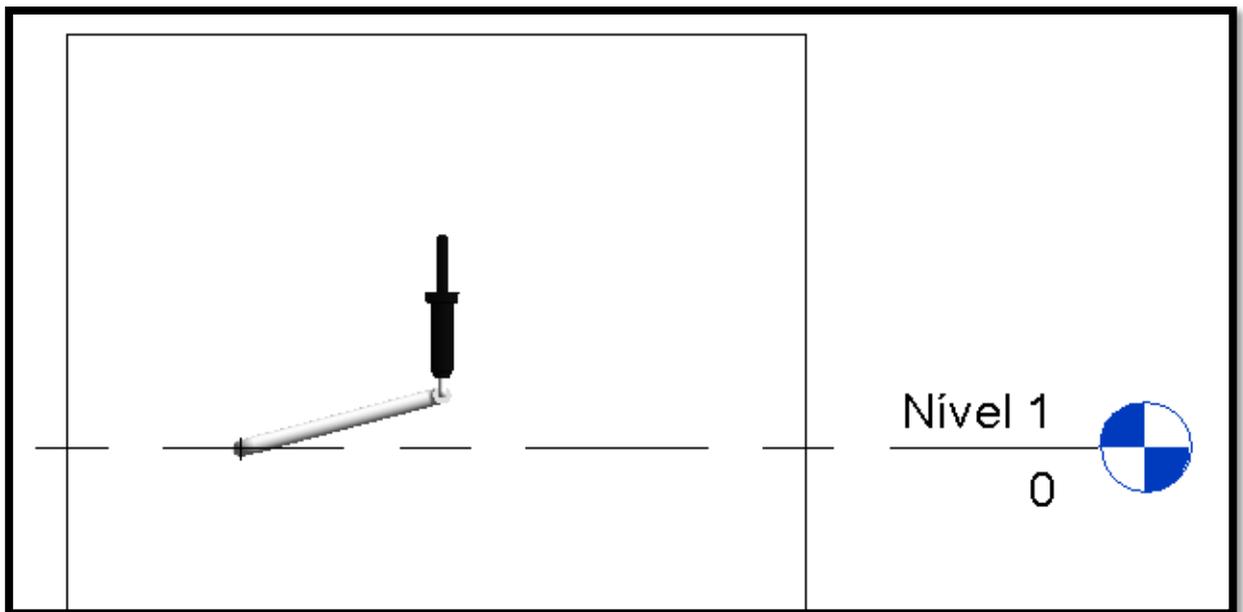
1. Sprinklers

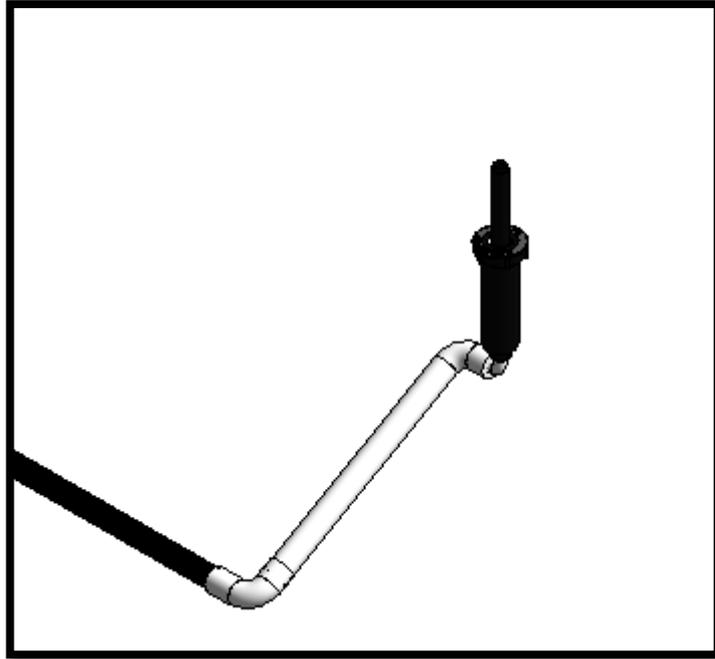
The Sprinklers Families are positioned vertically on the floor plan. The family will be hosted in relation to the inserted view level. Offsetting may be done with the elevation from level parameters within REVIT.

Floor plan view:

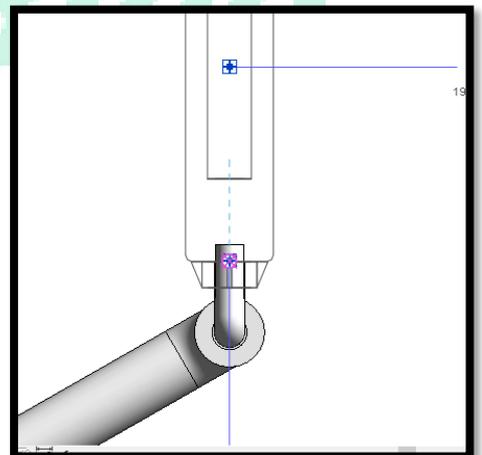
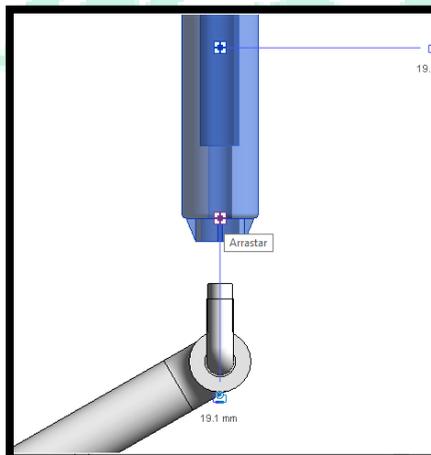
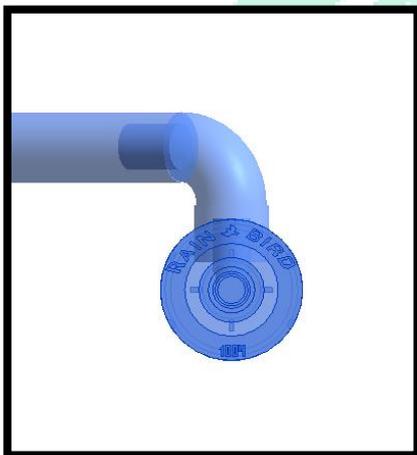


Section view:



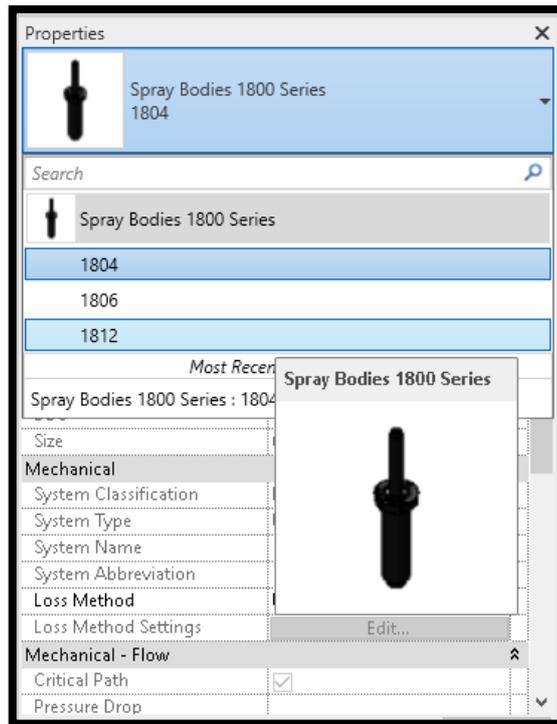
3D view:

How to make the connection between the sprinkler and the families of Pipes and Articulated Joints (Swing Joints and Swing Pipe). First, align the family to the articulated connector on the floor plan. Once aligned, in a cut view, simply join the snaps. To do so, drag the sprinkler snap to the connector snap. As illustrated by the following images:

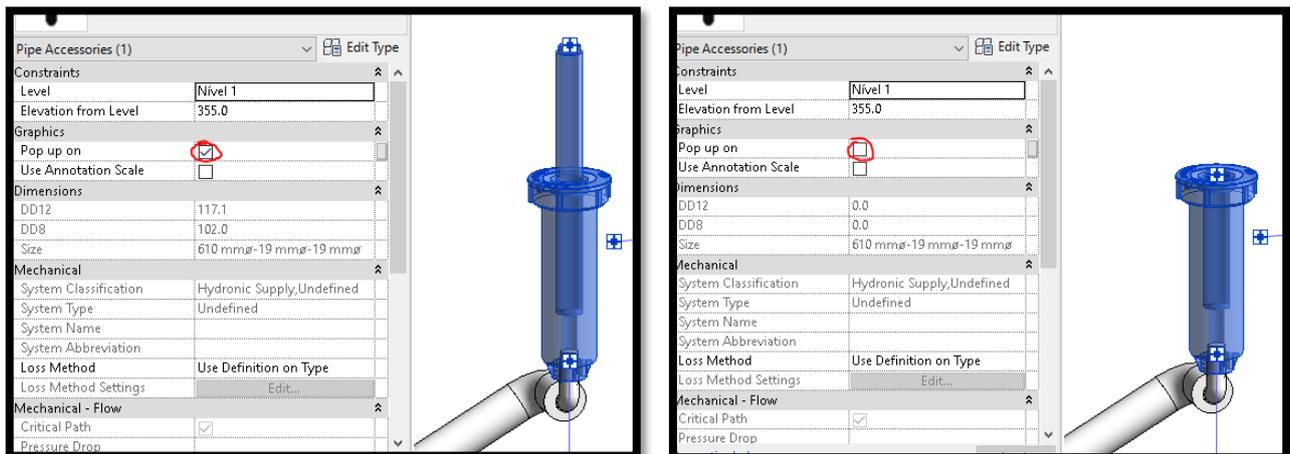


On Properties:

- changes to the type of Sprinklers can be made as illustrated below:



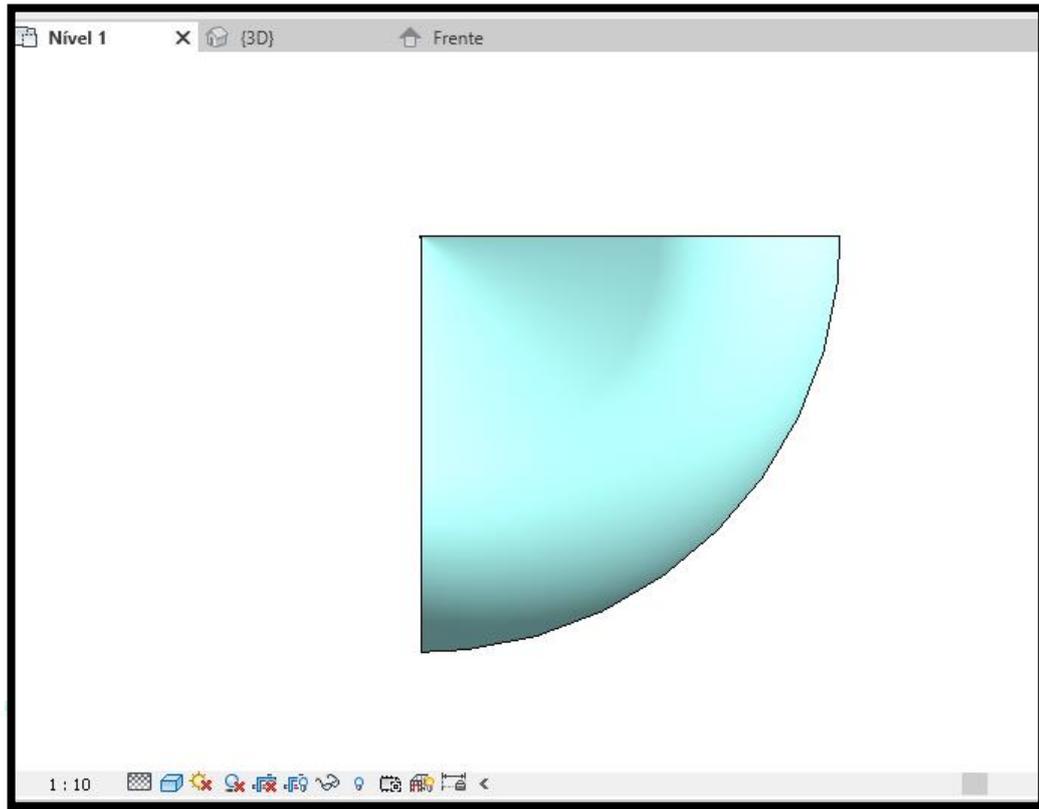
- Under Graphics parameters, there is an option to turn Pop Up on/off, as seen in the image below:



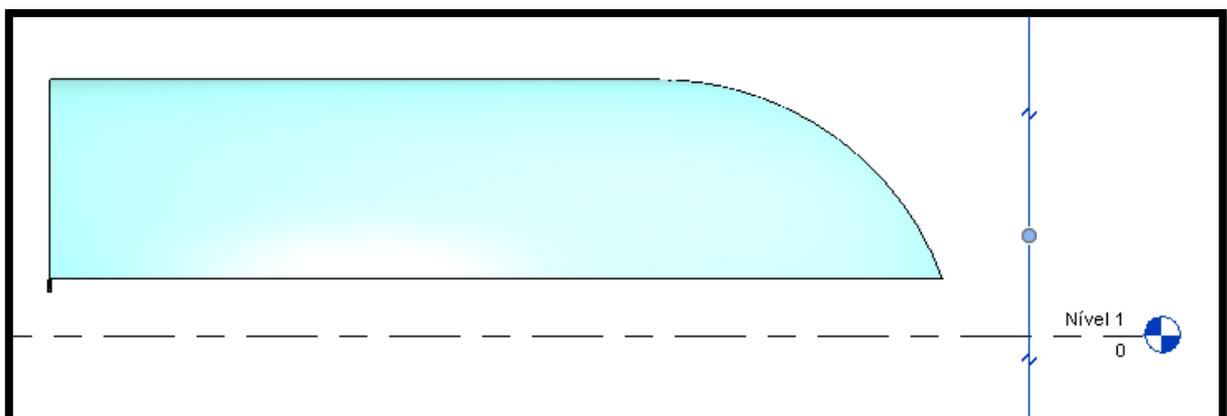
2. Nozzles

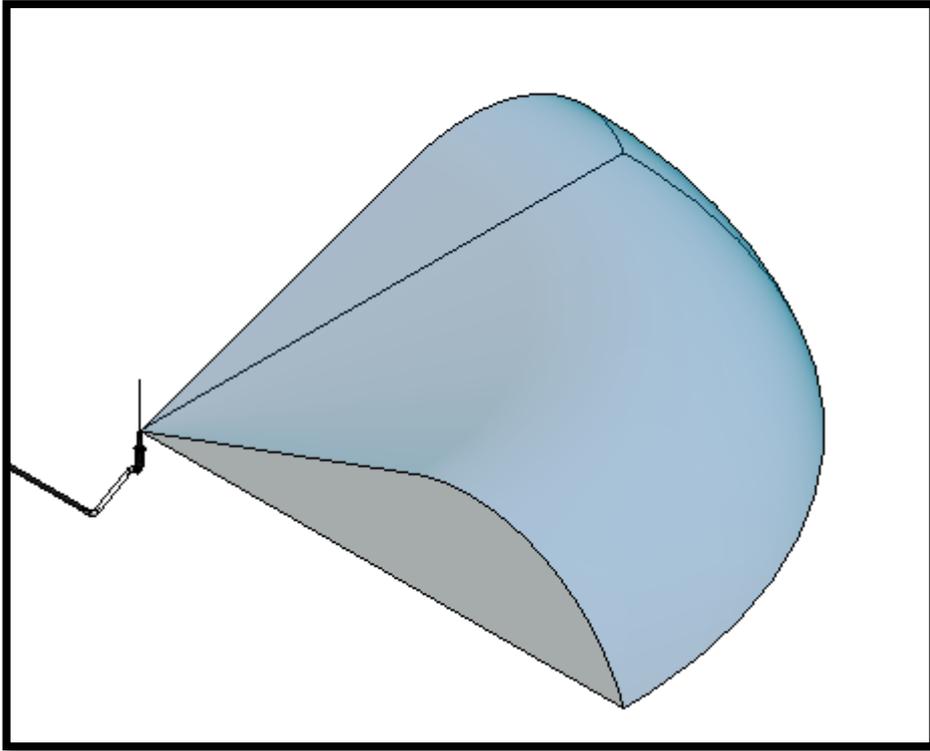
The Nozzles Families are positioned vertically on the floor plan. The family will be hosted in relation to the inserted view level. Offsetting may be done with the elevation from level parameters within REVIT.

Floor plan view:

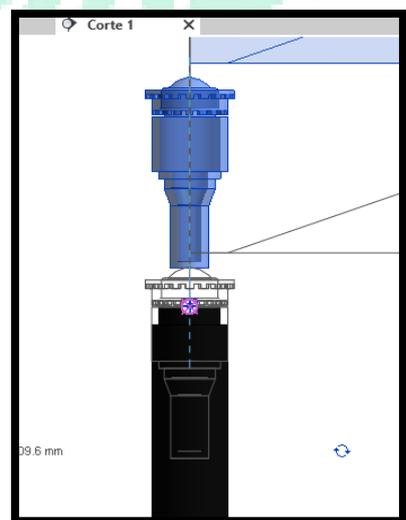
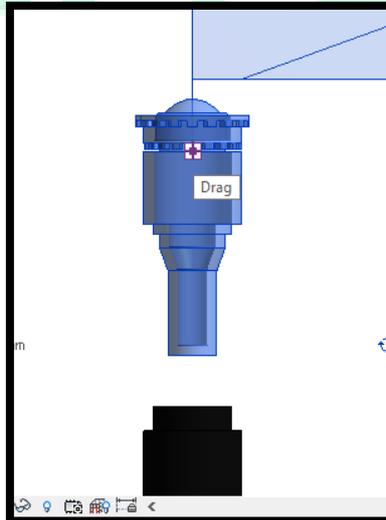
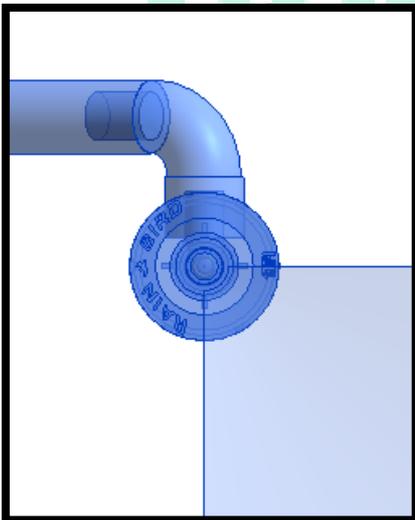


Section view:



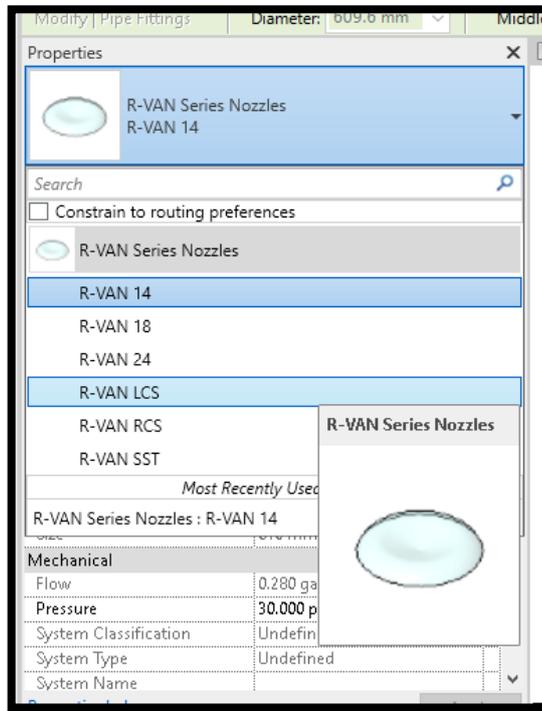
3D view:

How to make the connection between the Nozzles and the Sprinklers families. First, align the family to the Sprinkler on the floor plan. Once aligned, in a cut view, join the snaps. To do so, drag the sprinkler snap to the connector snap. As illustrated by the following images:

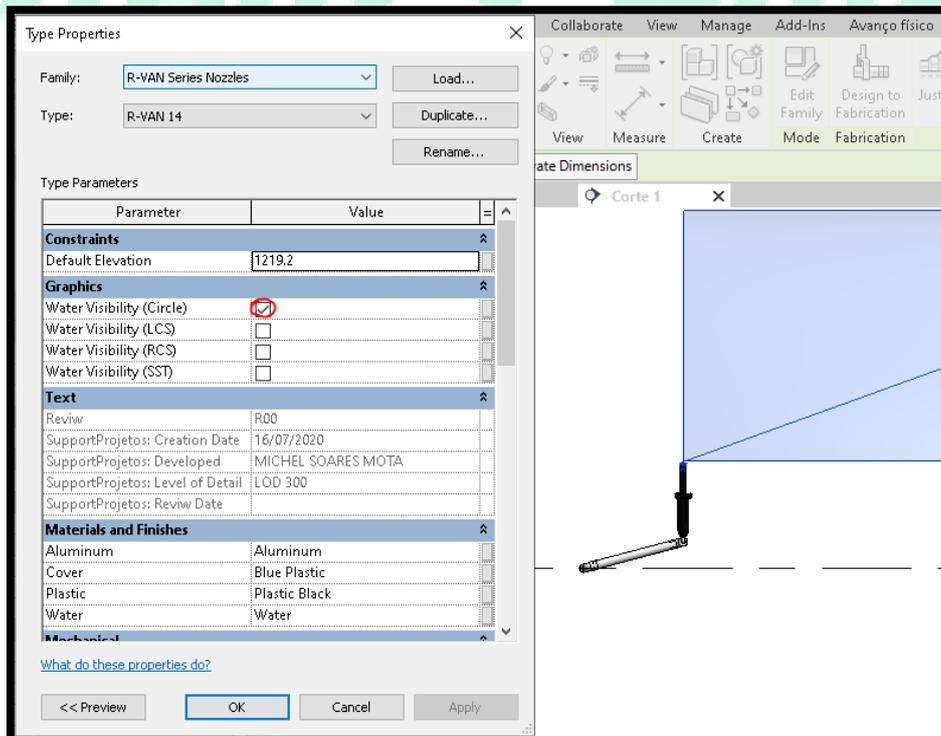


On Properties:

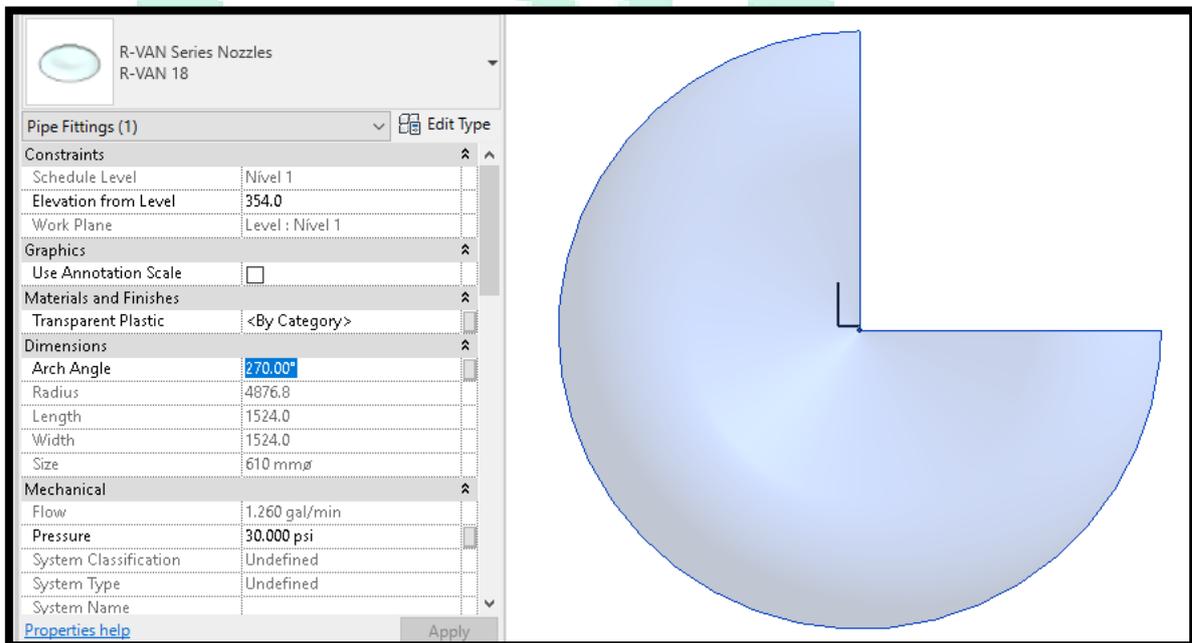
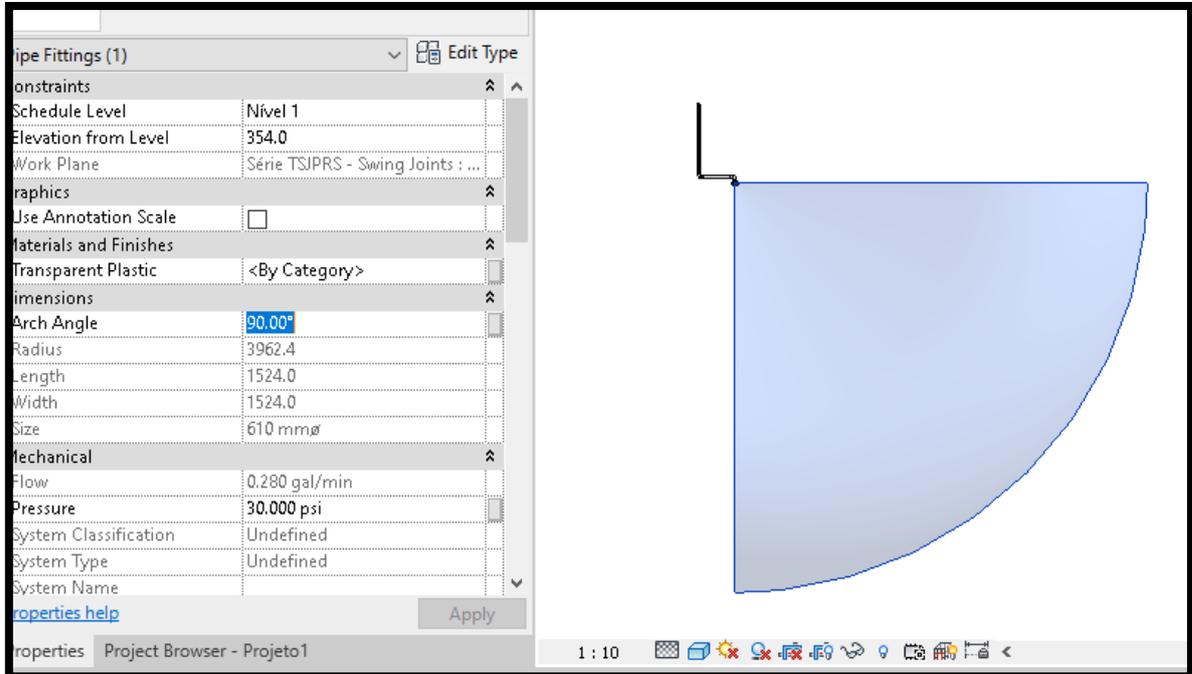
- changes to the type of Nozzles can be made as illustrated below:



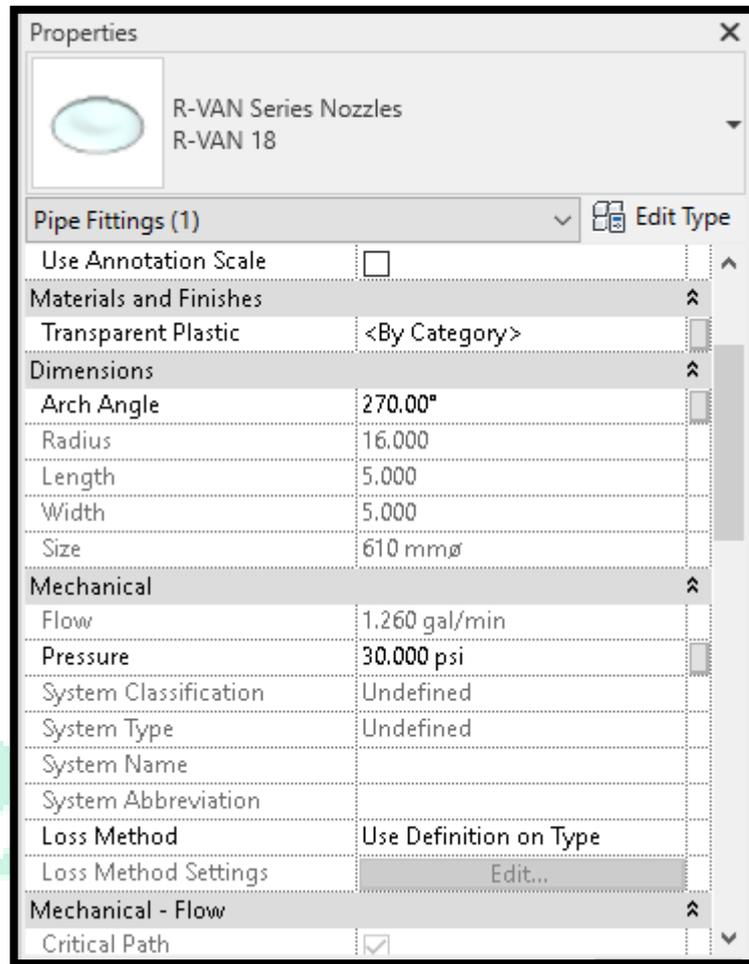
- Under Type Properties > Graphics parameters, there is an option to turn the water visibility circle on/off for each nozzle, as seen on the images below:



- Under Dimensions parameters, there is an option to change the opening angle of the nozzles, as seen on the images below:



- Under Mechanical parameters, there is an option to change the desired pressure, which, along with the water's arch angle, will provide the flow and range, as seen in the image below:



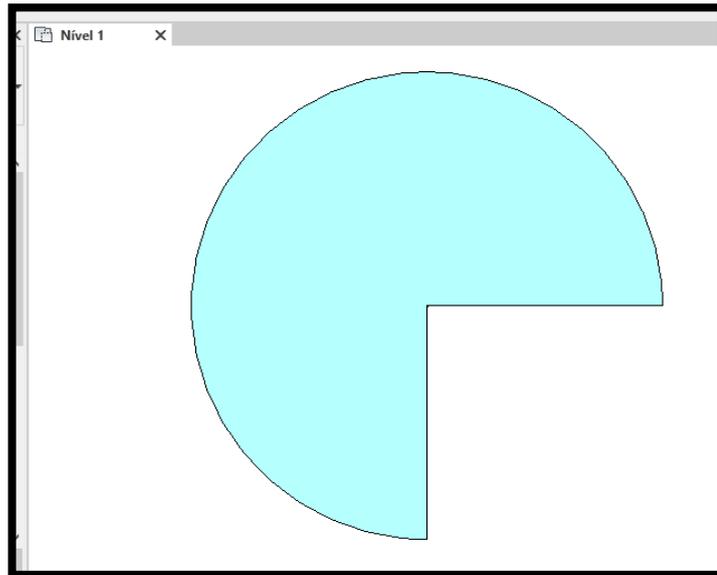
The screenshot shows the Properties dialog box for an R-VAN Series Nozzle (R-VAN 18). The dialog is organized into several sections:

- Pipe Fittings (1)**: Includes a checkbox for "Use Annotation Scale" which is currently unchecked.
- Materials and Finishes**: Shows "Transparent Plastic" with a dropdown menu set to "<By Category>".
- Dimensions**: Lists several parameters:
 - Arch Angle: 270.00°
 - Radius: 16.000
 - Length: 5.000
 - Width: 5.000
 - Size: 610 mmø
- Mechanical**: Lists parameters related to flow and pressure:
 - Flow: 1.260 gal/min
 - Pressure: 30.000 psi
 - System Classification: Undefined
 - System Type: Undefined
 - System Name: (empty)
 - System Abbreviation: (empty)
 - Loss Method: Use Definition on Type
 - Loss Method Settings: Edit...
- Mechanical - Flow**: Includes a checkbox for "Critical Path" which is checked.

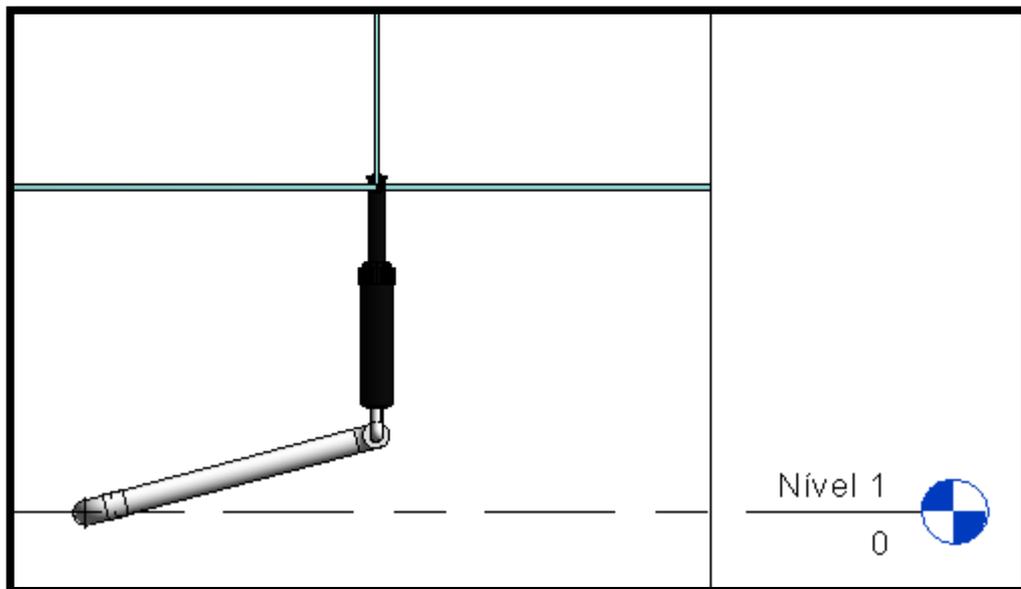
3. Rotors

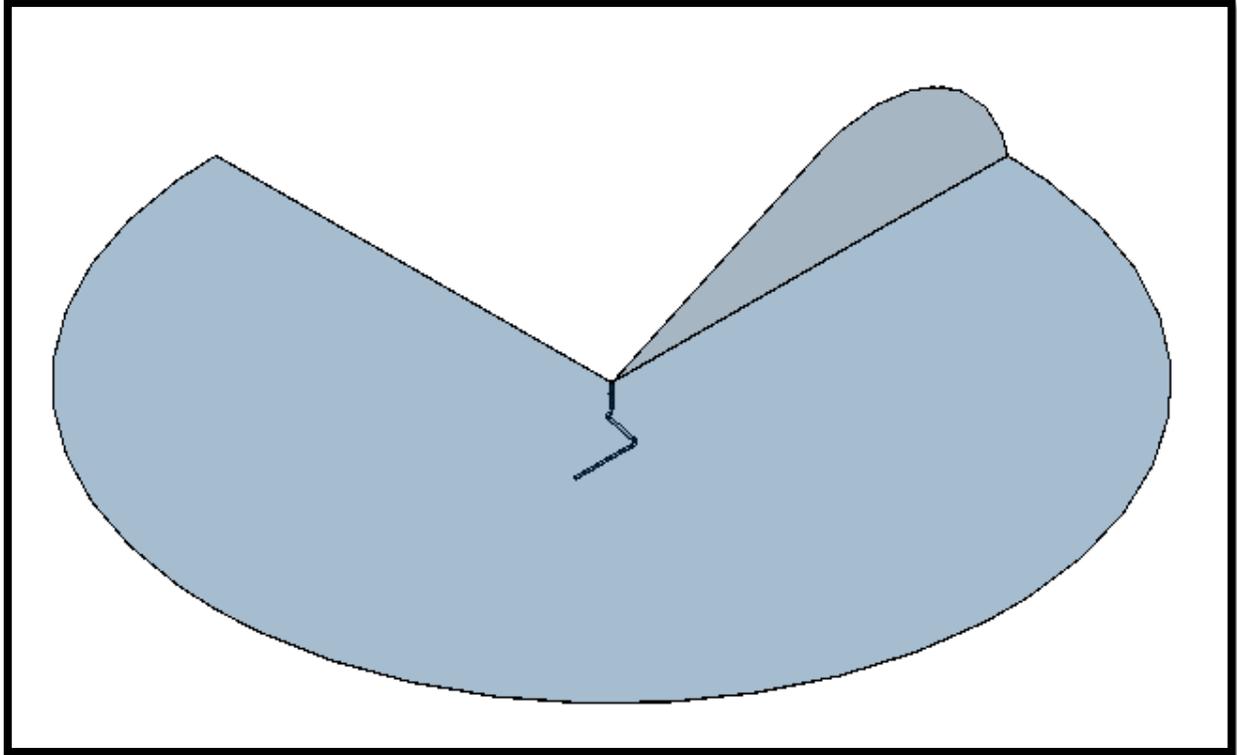
The Rotors Families are positioned vertically on the floor plan. The family will be hosted in relation to the inserted view level. Offsetting may be done with the elevation from level parameters within REVIT.

Floor plan view:

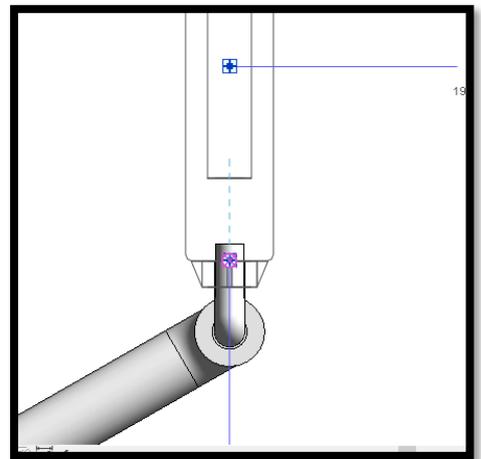
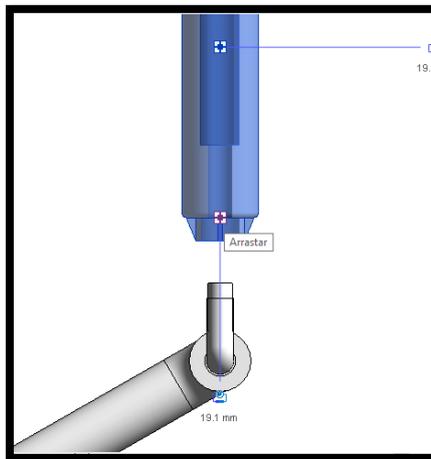
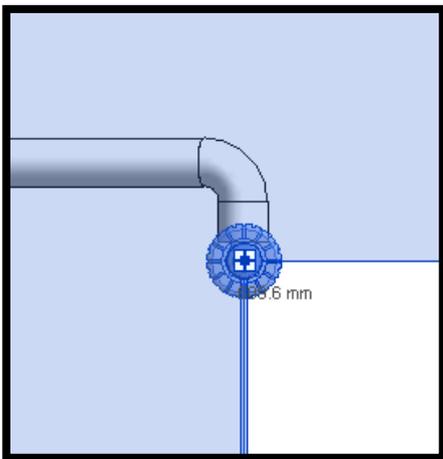


Section view:



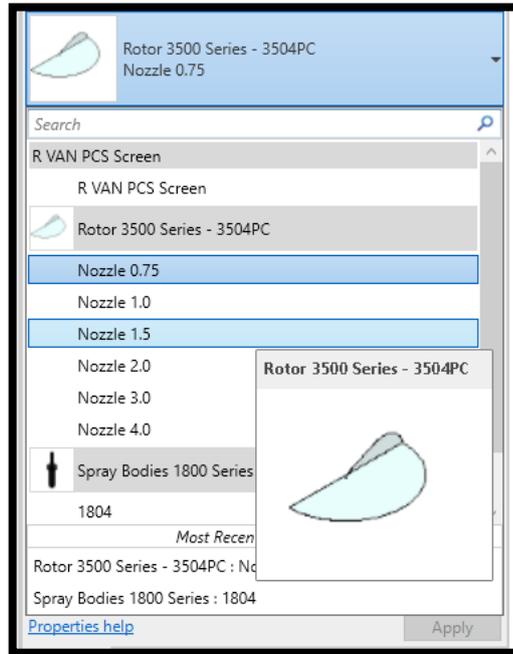
3D view:

How to make the connection between the Rotors and the families of Pipes and Articulated Joints (Swing Joints and Swing Pipe). First, align the family to the articulated connector on the floor plan. Once aligned, in a cut view, simply join the snaps. To do so, drag the sprinkler snap to the connector snap. As illustrated by the following images:

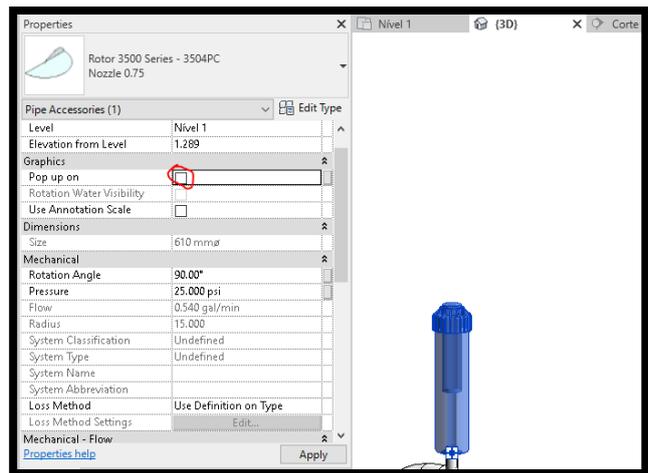
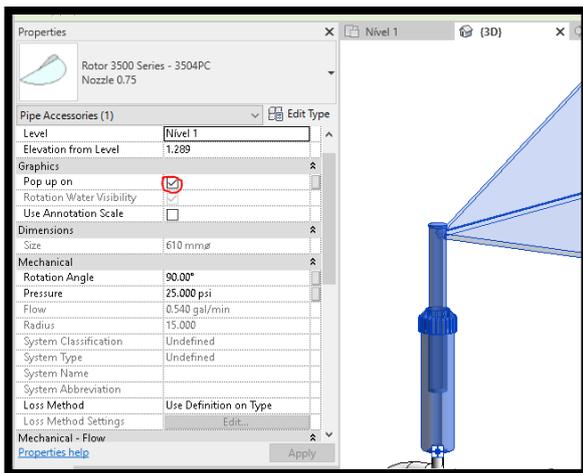


On Properties:

- changes to the type of Rotors can be made as illustrated below:



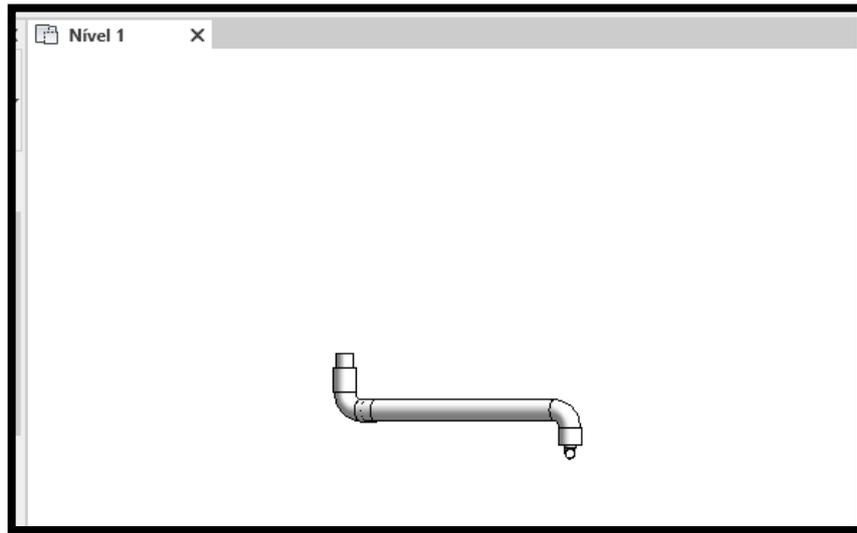
- Under Graphics parameters, there is na option to turn Pop Up on/off, as seen in the image below:



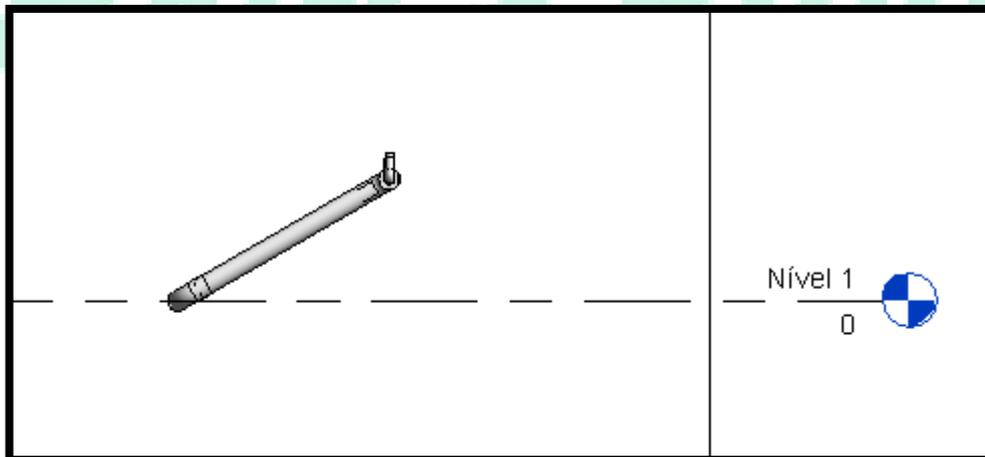
4. Articulated Joints

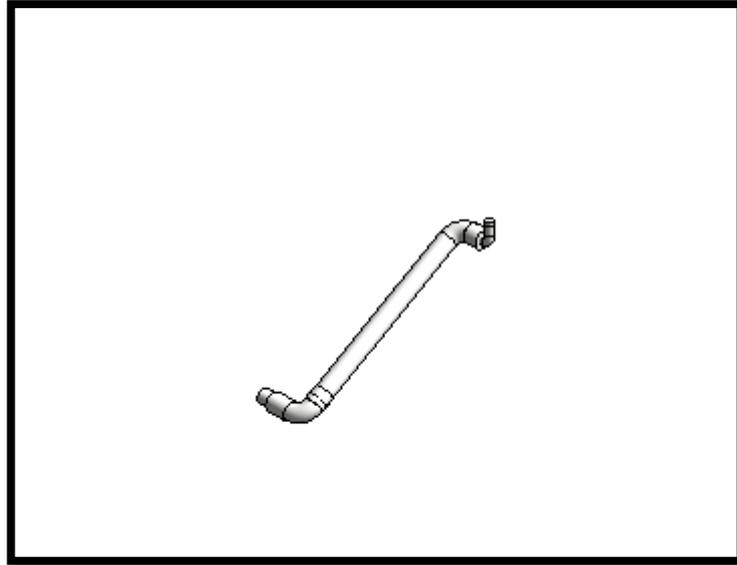
The Articulated Joints Families are positioned vertically on the floor plan. The family will be hosted in relation to the inserted view level. Offsetting may be done using the elevation from level parameters within REVIT.

Floor plan view:

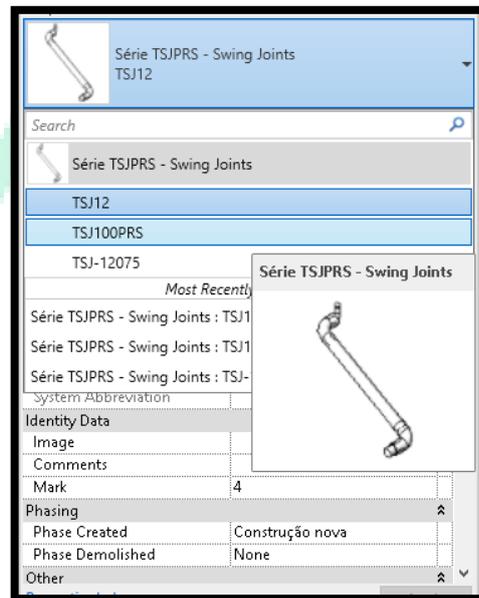


Section view:



3D view:**On Properties:**

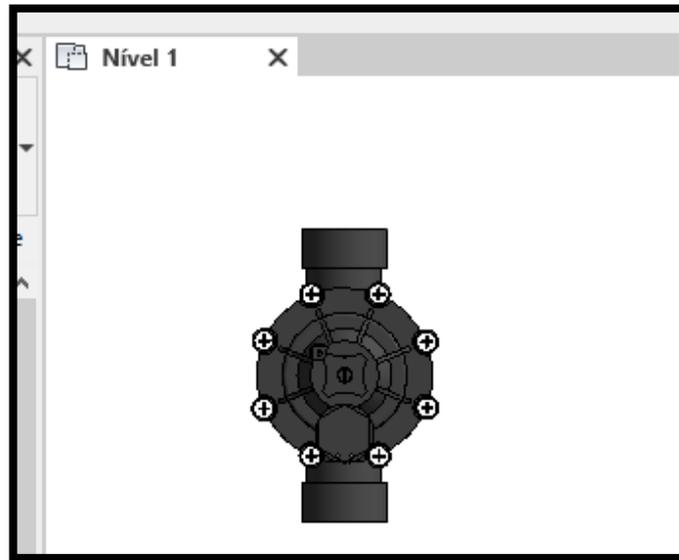
- changes to the type of Valve can be made as illustrated below:



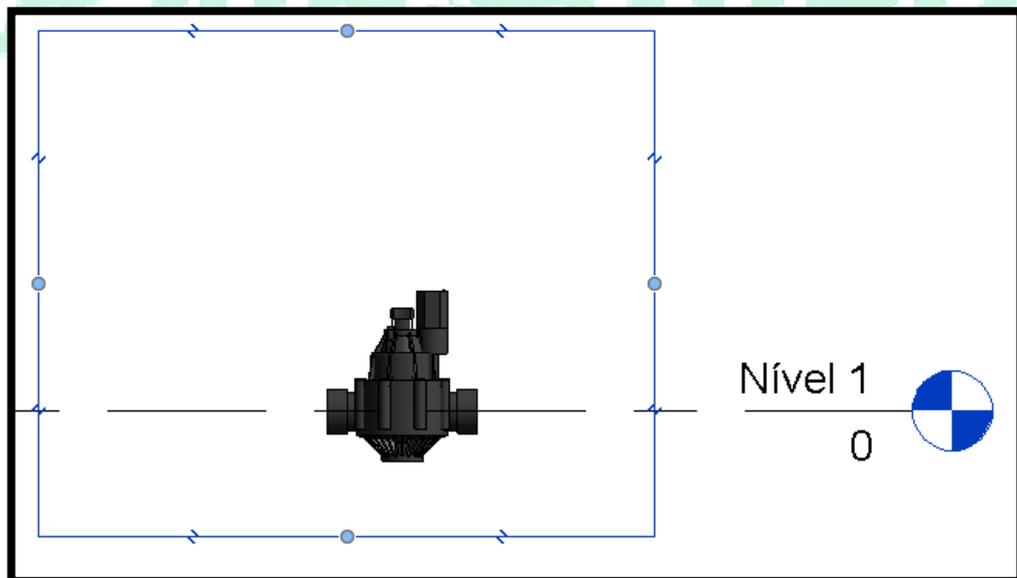
5. Valves

The Valves Families are positioned vertically on the floor plan. The family will be hosted in relation to the inserted view level. Offsetting may be done using the elevation from level parameters within REVIT.

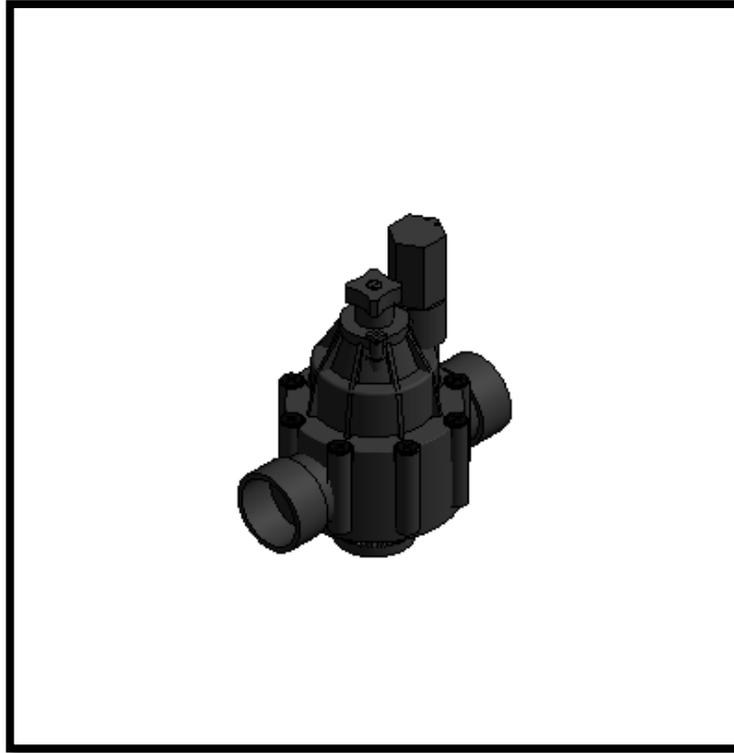
Floor plan view:



Section view:

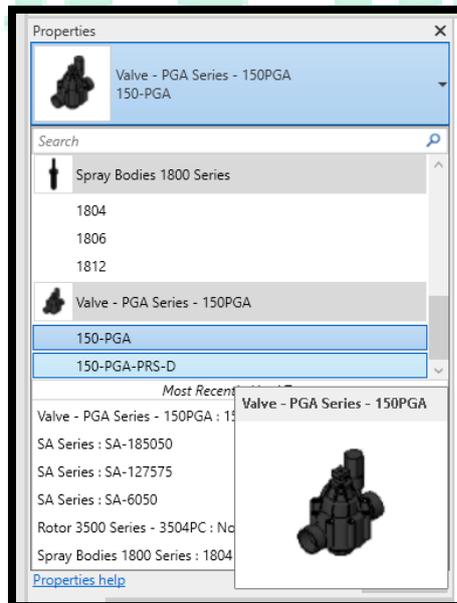


3D view:



On Properties:

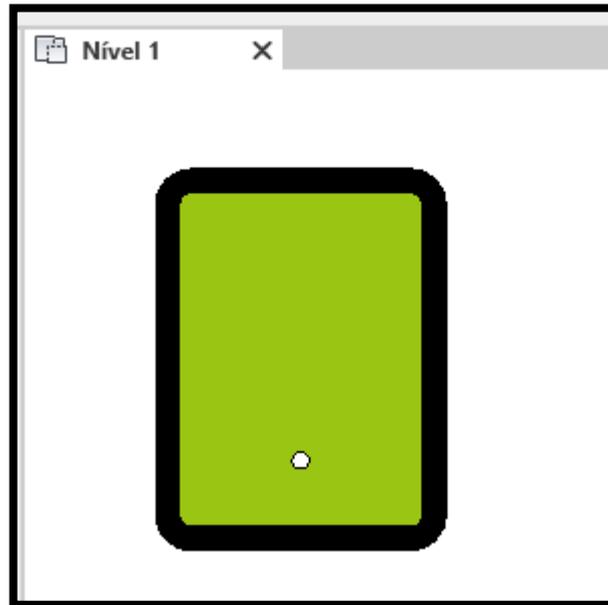
- changes to the type of articulated joints can be made as illustrated below:



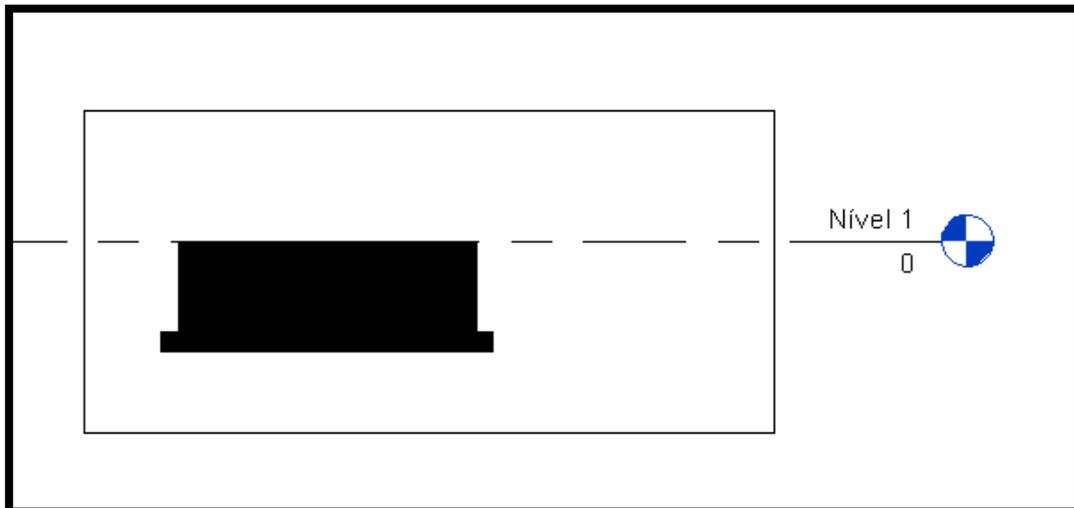
6. Valves Box

The Valves Boxes Families are positioned vertically on the floor plan. The family will be hosted in relation to the inserted view level. Offsetting may be done using the elevation from level parameters within REVIT.

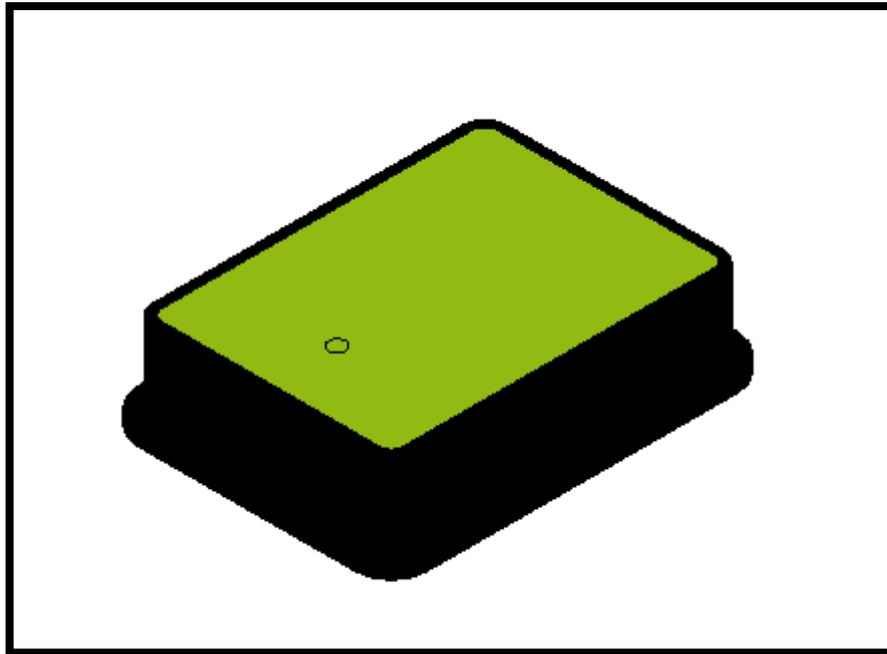
Floor plan view:



Section view:

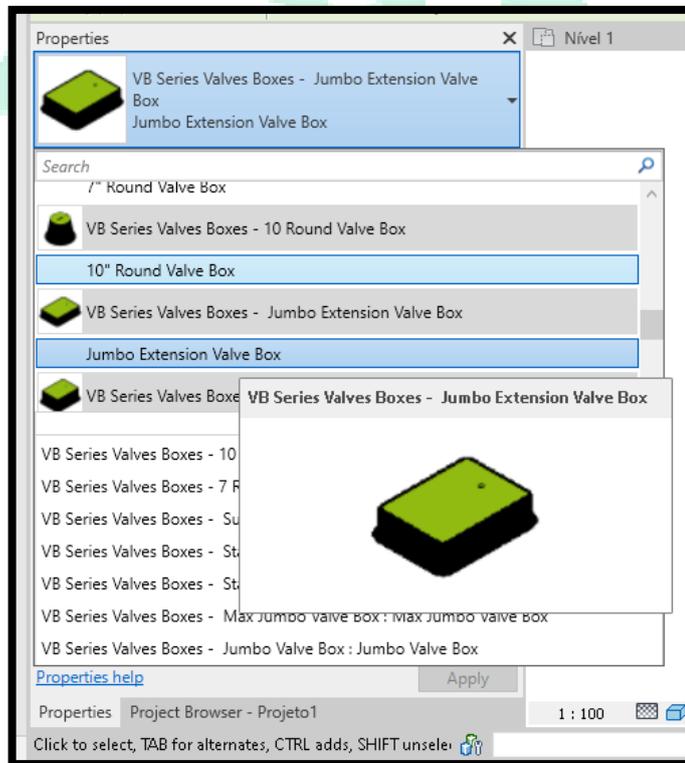


3D view:

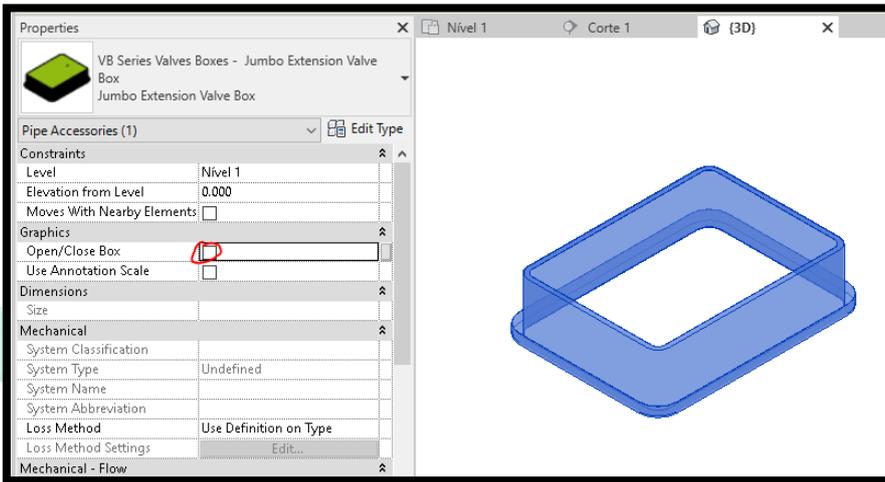
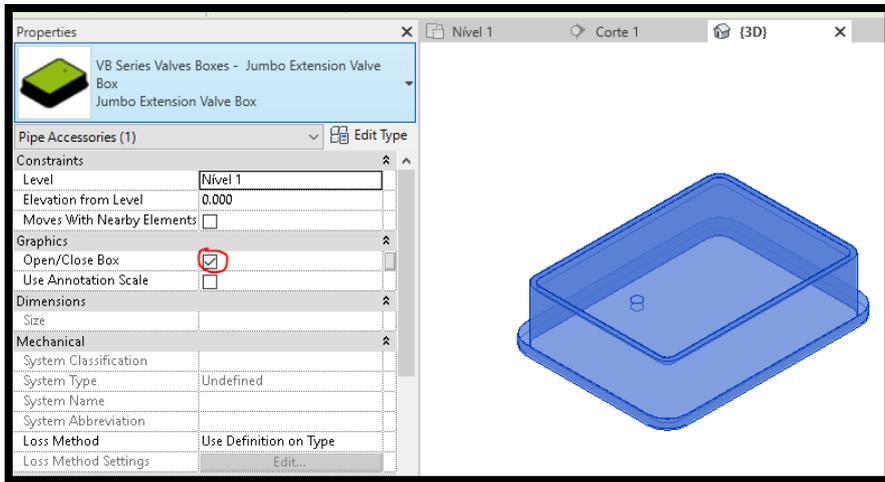


On Properties:

- changes to the type of Valve Boxes can be made as illustrated below:



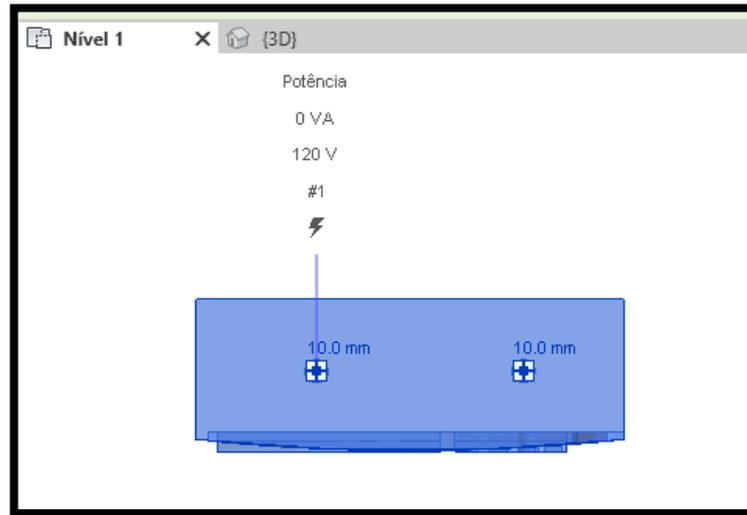
- Under Graphics parameters, there is an option to open or close the box, as seen in the images below:



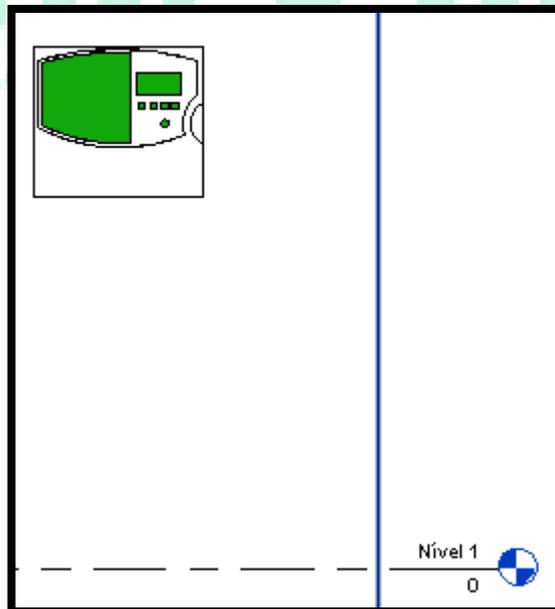
7. Controllers/ Boxes and Pedestals

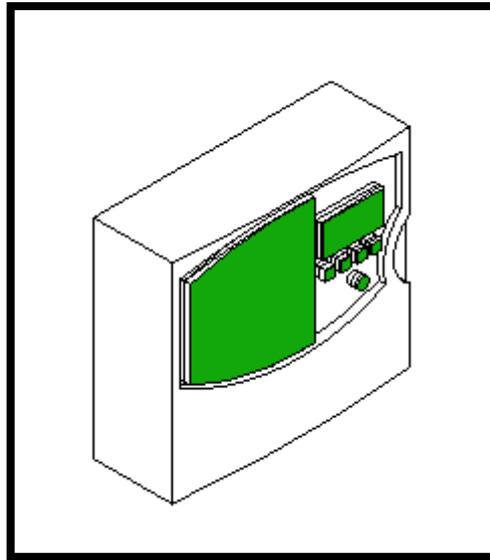
The Controllers Families are positioned vertically on the floor plan. The family will be hosted in relation to the inserted view level. Offsetting may be done using the elevation from level parameters within REVIT.

Floor plan view:



Section view:



3D view:**On Properties:**

- Under Data properties, one can insert the number of modules by module type, the total number of exits calculated according to the amounts of modules. Illustrated by the image below:

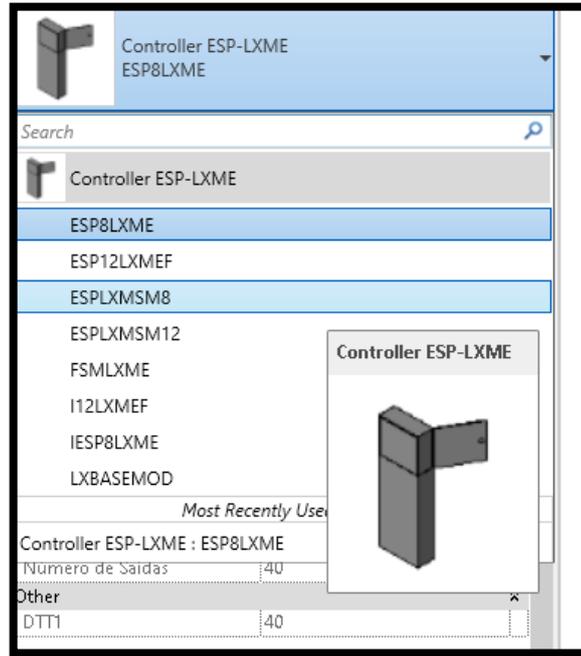
Properties

Controller ESP-LXME
ESP8LXME

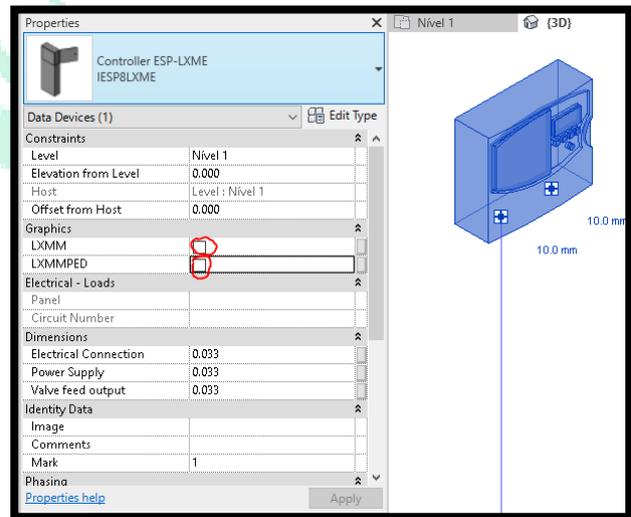
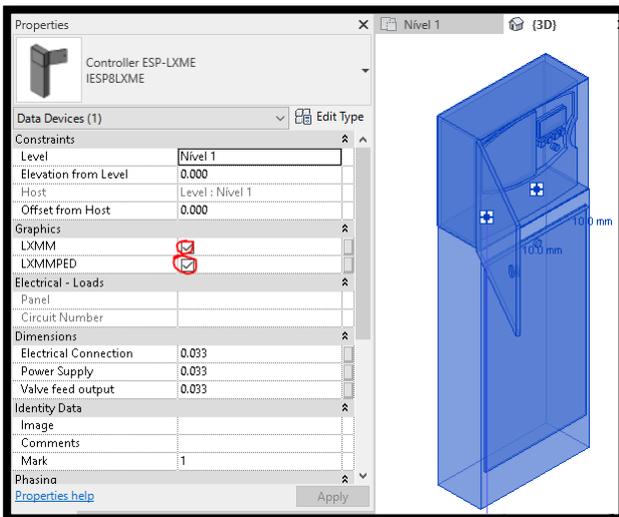
Data Devices (1) Edit Type

Electrical Connection	0.033
Power Supply	0.033
Valve feed output	0.033
Identity Data	
Image	
Comments	
Mark	1
Phasing	
Phase Created	Construção nova
Phase Demolished	None
Electrical - Circuiting	
Electrical Data	120 V/1-0 VA
Data	
Number for ESPLXMSM8	2
Number for ESPLXMSm12	2
Número de Saídas	40
Other	
DTT1	40

- changes to the type of controllers can be made as illustrated below:



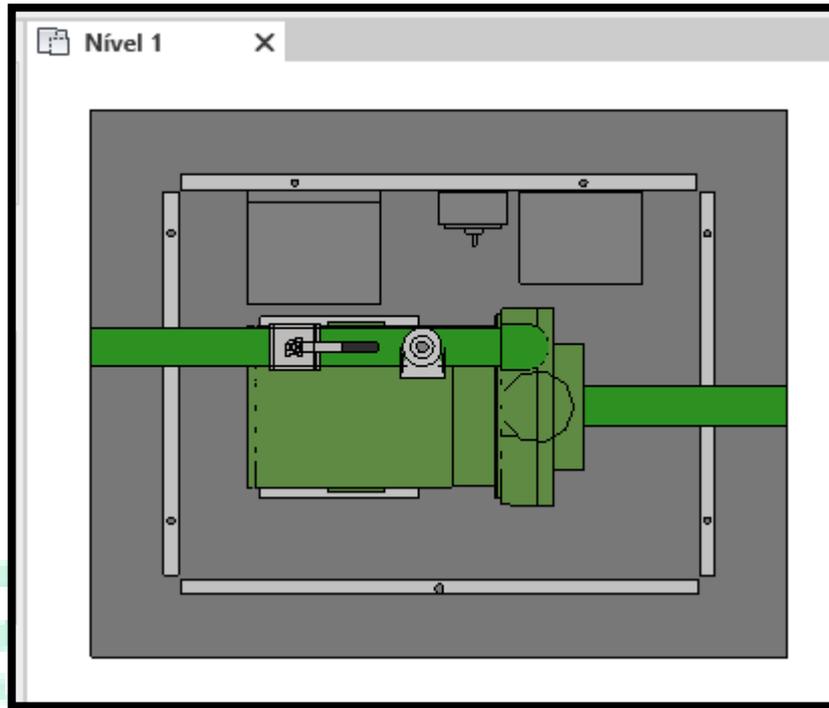
- on the controller types that accept the boxes and pedestals complements, under Graphics parameters, there is an option to insert them, as seen in the images below:



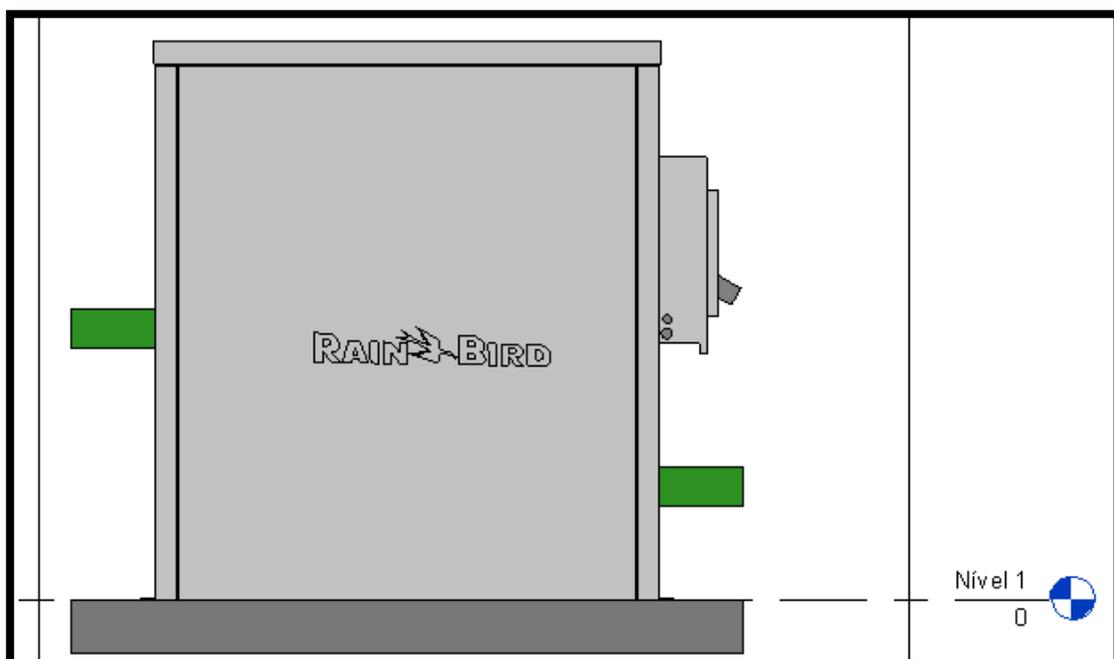
8. Pump Stations

The Pump Station Families are positioned vertically on the floor plan. The family will be hosted in relation to the inserted view level. Offsetting may be done with the elevation from level parameters within REVIT.

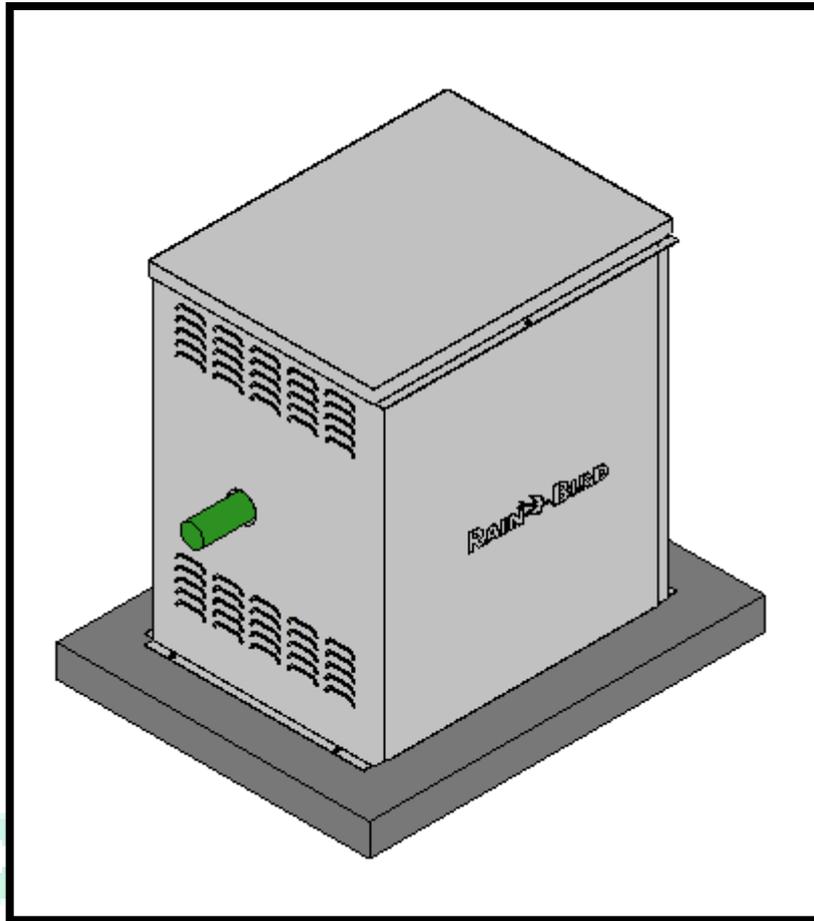
Floor plan view:



Section view:

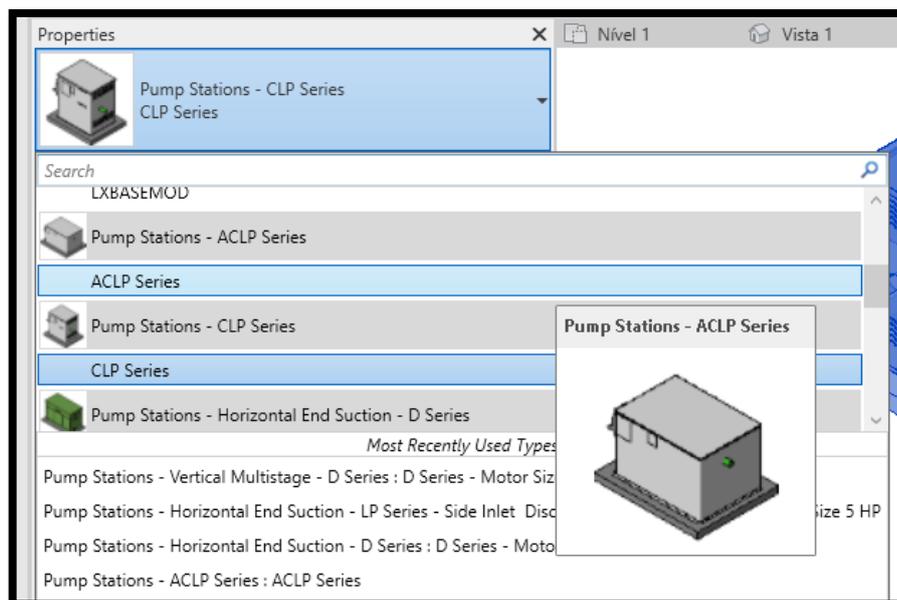


3D view:

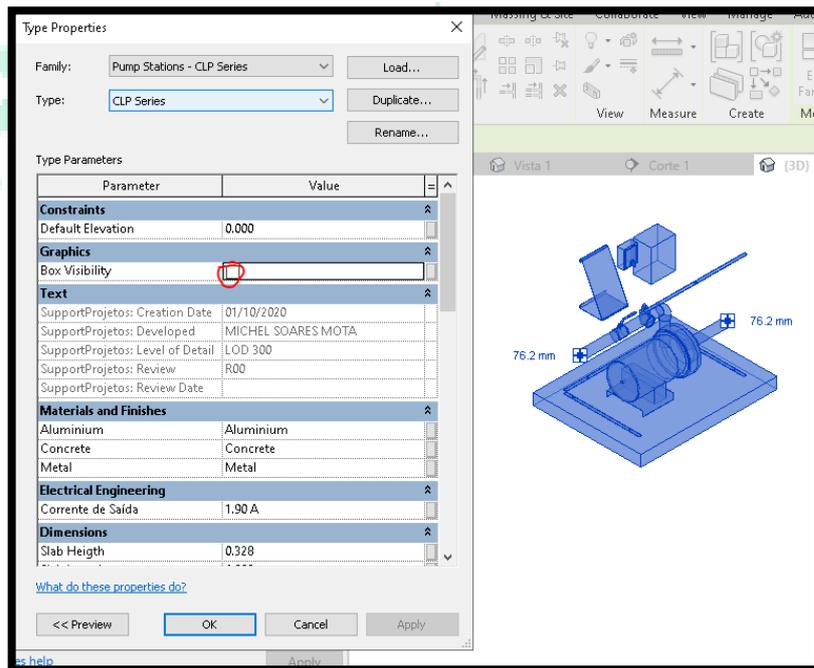
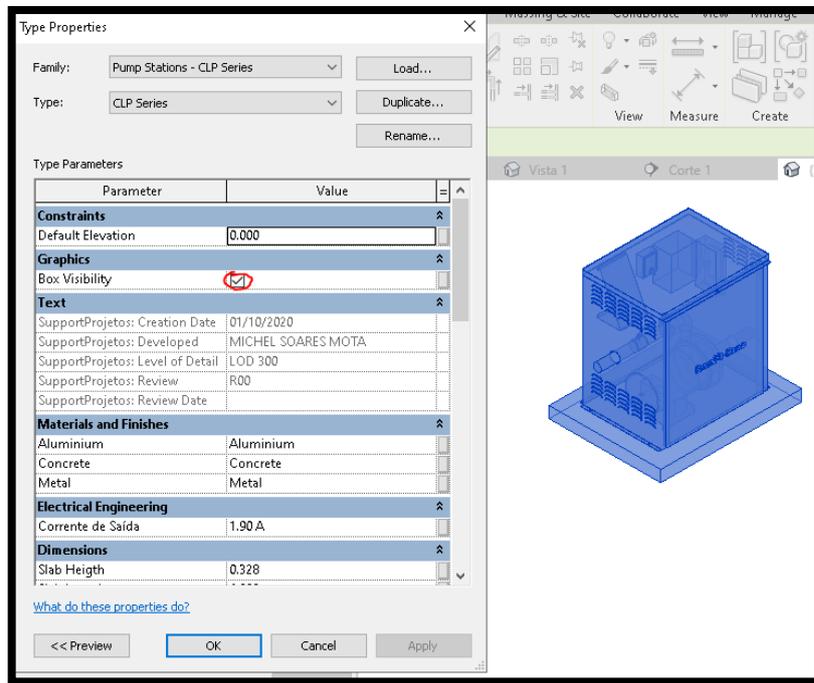


On Properties:

- changes to the type of Pump Stations can be made as illustrated below:



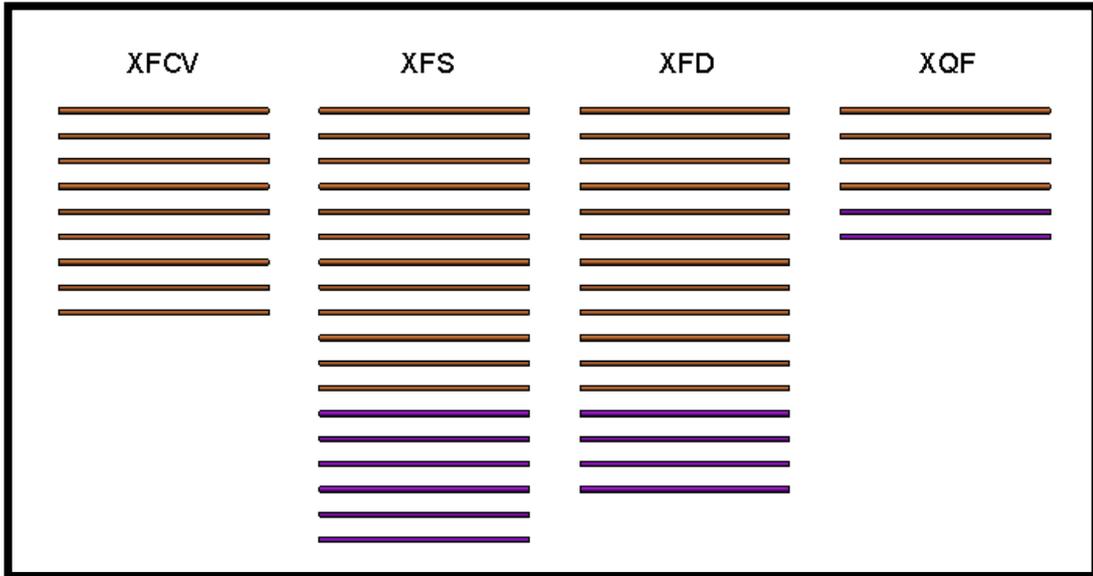
- Under Type Properties > Graphics parameters, there is an option to toggle the visibility of the box, as seen in the images below:



9. Piping

The Drip Piping Families were set up in a specific Template on REVIT, from which the inserted information may be copied onto other projects.

Types of piping:



Drip connections:

- The connectors are inserted in the project on the piping settings (Elbows, Reductions, Tees, Fittings).

