BIM User Guide: March 2022

**ACO Civictop Manhole Cover**

**User Guide for Autodesk Revit files**

**ACO Civictop manhole cover Package**

Civictop manhole cover is incorporated in a single Revit template along with its accessories. This template includes two families based on load class D 400 and material as shown below;

1. PF\_CI\_WPB\_frame Bituplan\_cover cast iron\_D 400
2. PF\_CI\_WPB\_frame BEGU\_cover cast iron\_D 400



 The family types are further classified based on clear opening, material and height as shown;



**Loading ACO Civictop manhole cover** **into the project:**

1. Download the Civictop manhole cover project file and save it to a suitable location
2. Select any one of the family from Civictop manhole and

 load to your project

1. Navigate to the “Insert” icon on the Revit ribbon and click “Load Family”
2. 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**

1. Click on the model – At properties tool bar, it will display family name and types.
2. It consists of two families and its family type, the user has to select the family type from the “Properties” drop down menu.

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1. **PF\_CI\_WPB\_frame Bituplan\_cover cast iron\_D 400**

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* **Selection of Ventilation**

The family is available with ventilation and without ventilation. The user has to select required option from the properties🡪Constraints tab

1. **PF\_CI\_WPB\_frame BEGU\_cover cast iron\_D 400**

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* **Selection of Ventilation**

The family is available with ventilation and without ventilation. The user has to select required option from the properties🡪Constraints tab

* **Selection Variable Height of frame**

The family is available with adjustable height where;

Minimum Hight 🡪150mm

Maximum Height🡪190mm

* Suppose if the user selects the height within the specified limit then the family will work as per entered height.
* Suppose if the user selects the height greater than the maximum value then by default irrespective of height entered it will be locked to maximum limit of height.
* Suppose if the user selects the height lesser than the minimum value then by default irrespective of height entered it will be locked to minimum limit of height.

**Workplane Based Families**

The families are work plane-based families so they can be placed in uniform and sloped surface of road as shown below



**Selection of Accessories:**

Click on the model – At properties tool bar, it will display list of accessories such as access aid, installation frame work. User can select by click the list as shown below

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**Material Library:**

 The ACO Civictop manhole cover file contains materials that are already pre-loaded into the components. When loading the ACO Civictop manhole cover file into your project the pre-loaded materials will automatically transfer through.

**Schedules and quantities:**

The information such as article number, GTIN data, weight, installation guidelines within the parameters is stored as “Shared Parameters” with LOD 400 so it can easily appear when creating a schedule and quantities in the project environment as follows

