

Ehituse ühtse klassifitseerimissüsteemi CCI praktiline veebikoolitus (16.12.2021)

**TAL  
TECH**

# **CCI / CCI-EE TÖÖVÕTTED KOODI LIHTSAMAKS LISAMISEKS**

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# SAFE HARBOR

- Ettekanne sisaldab näiteid, mis ei ole kuidagi fikseeritud/kinnitatud ja ainsad viisid CCI või CCI-EE koodidega opereerimisel. Need pannakse paika vastastikusel kokkuleppel, mis organisatsiooni tasandil ühilduvad näiteks tellija nõuetega või on projekti tasandil määratud BIM rakenduskavas.
- Siin esitatud tarkvarade näited on vaid näidisvalik ning ei esita kuidagi lõpliku nimekirja, kuid tarkvarast sõltuvana võib juhtuda, et kõik tarkvarad ei toeta klassifitseerimissüsteemi kaasamist ja/või omaduste lisamist ehitusinfo mudelite kontekstis.

# SISSEJUHATUS

<https://flowbim.ee/the-use-of-cci-and-cci-ee-in-construction-related-tasks/>

## The use of CCI and CCI-EE in construction related...

September 29, 2021 | by Raido Puust

**C**CI stands for Construction Classification International (CCI) system for the whole building lifecycle. The CCI classification tables are divided into two key groups: (a) CCI core tables (Built space, Construction element: Functional system, Technical system, Component). Therefore CCI-EE represents CCI core tables + localized tables from construction resource. CCI core tables are based on IEC/ISO 8134 standards, guidelines which partly have been used before the CCI from <https://cci-collaboration.org/> and CCI-EE tables (also with <https://ehituskeskus.ee/kasulikku/cci/>).

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16.12.2021

Autodesk AutoCAD  
Autodesk AutoCAD Architecture / MEP  
Autodesk Civil 3D  
Autodesk Revit

## Templates (draft)

### In English

- Autodesk AutoCAD Architecture: [CCI-template-ENG-ACA\\_CCI-EE-2021.06.0.1.dwt](#)
- Autodesk AutoCAD MEP: [CCI-template-ENG-AMEP\\_CCI-EE-2021.06.0.1.dwt](#)
- Autodesk Civil 3D: [CCI-template-ENG-C3D\\_CCI-EE-2021.06.0.1.dwt](#)
- Autodesk Revit: [CCI-template-ENG-Revit-BIT\\_CCI-EE-2021.06.0.1.xlsx \(SP\\_ClassificationManager.txt\)](#)

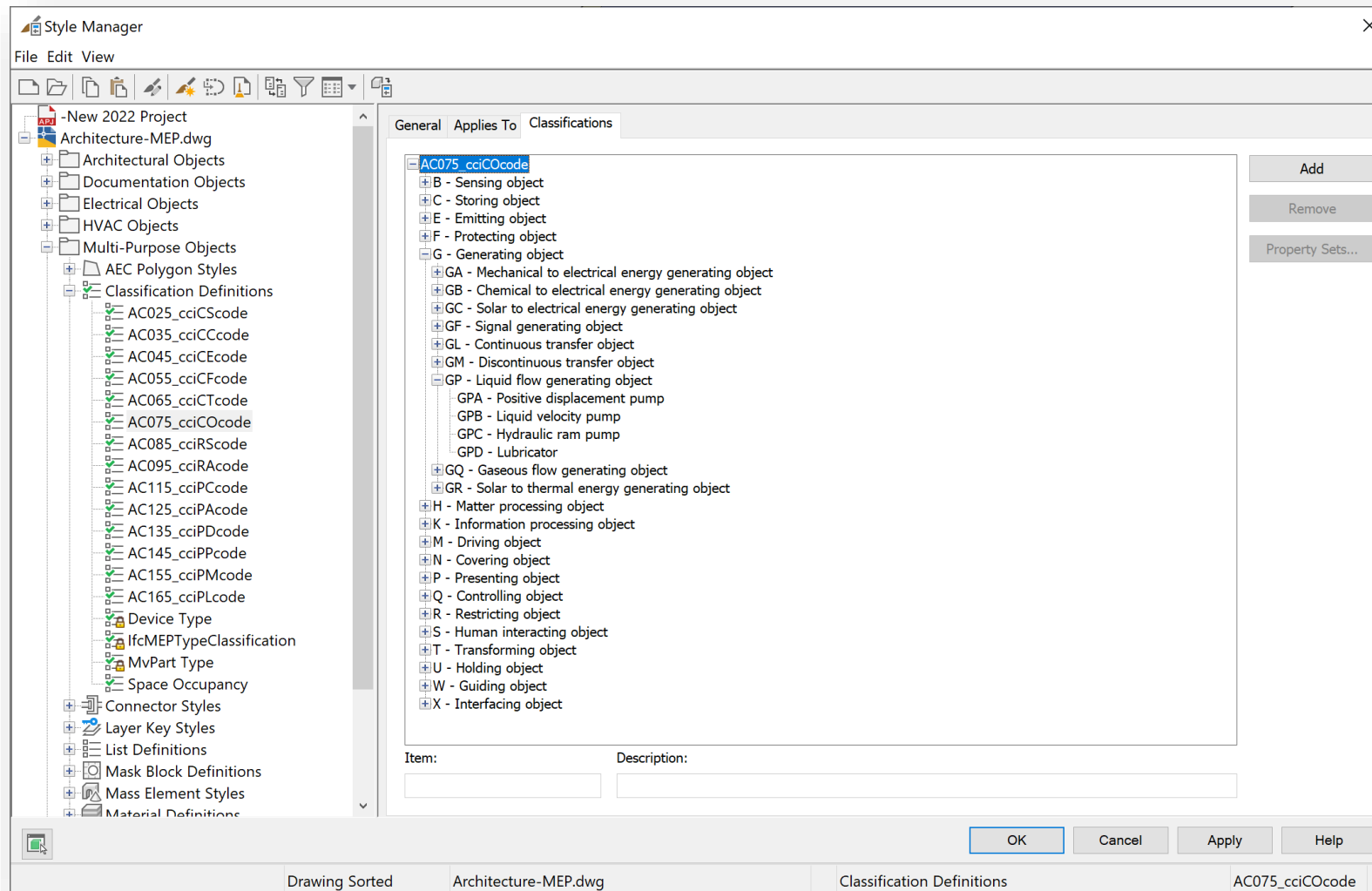
### In Estonian

- Autodesk AutoCAD Architecture: [CCI-template-EST-ACA\\_CCI-EE-2021.06.0.1.dwt](#)
- Autodesk AutoCAD MEP: [CCI-template-EST-AMEP\\_CCI-EE-2021.06.0.1.dwt](#)
- Autodesk Civil 3D: [CCI-template-EST-C3D\\_CCI-EE-2021.06.0.1.dwt](#)
- Autodesk Revit: [CCI-template-EST-Revit-BIT\\_CCI-EE-2021.06.0.1.xlsx](#)

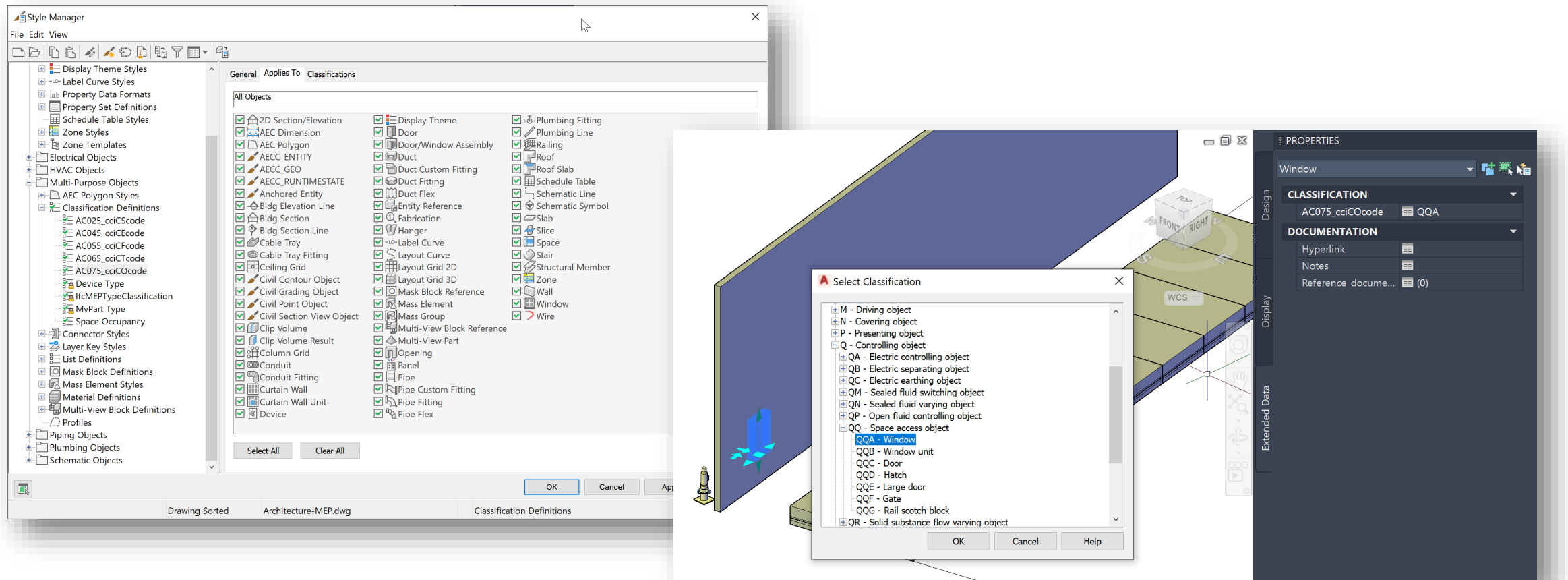
# TARKVARA #1 – AUTOCAD (2D/3D)



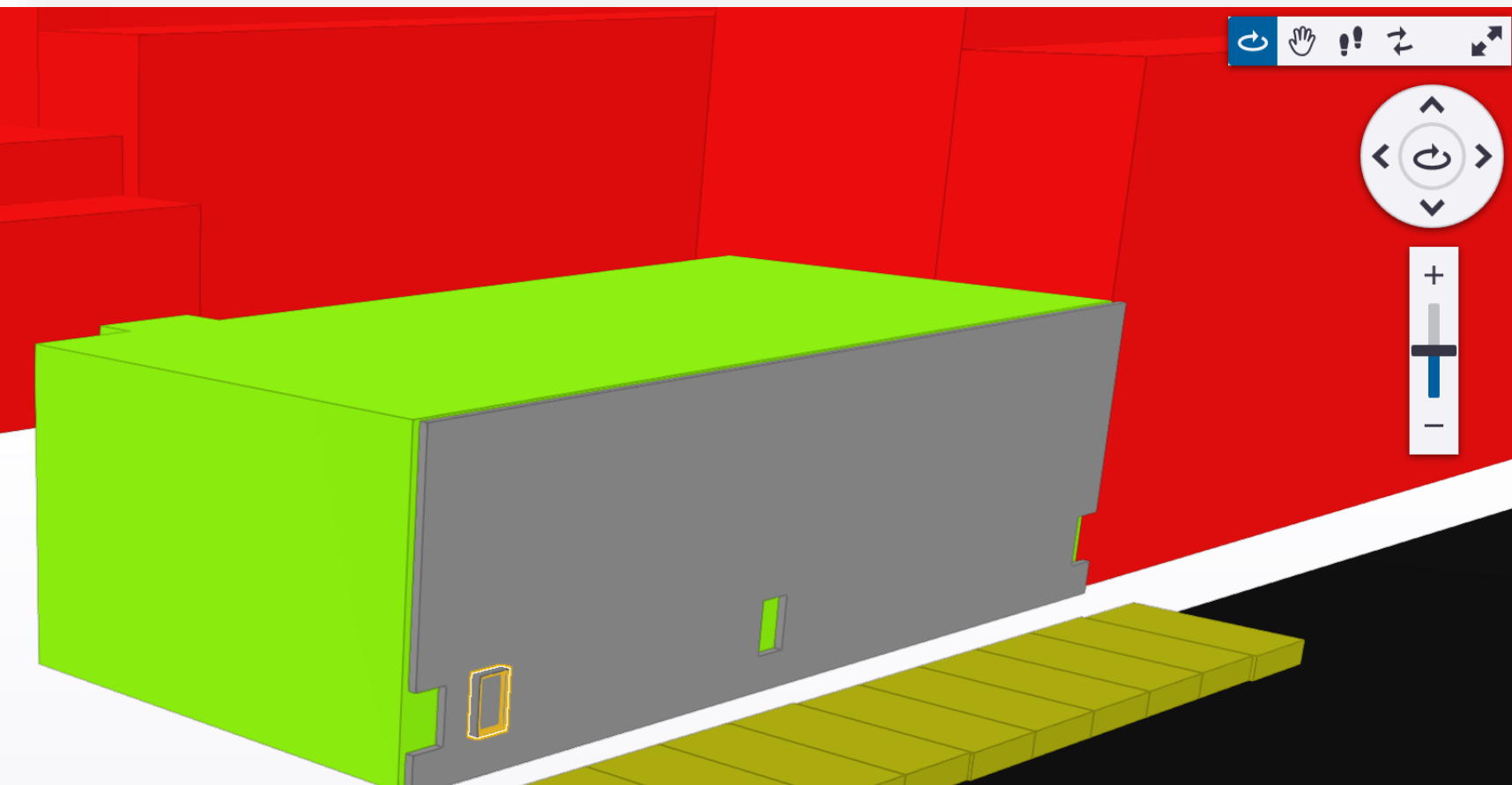
# TARKVARA #2,#3 – AutoCAD Architecture / MEP



# TARKVARA #2,#3 – AutoCAD Architecture / MEP



# TARKVARA #2,#3 – AutoCAD Architecture / MEP



Zoom to Object

Select Object

## WINDOW | WindowMetric(1)

### CalculatedGeometryValues

Volume:	0.2 m3
Area:	11.76 m2
CenterOfGravityX:	538189104 mm
CenterOfGravityY:	6584194869 mm
CenterOfGravityZ:	26650 mm
IsSolid:	True

### IfcClassificationReference

Location:	
ItemReference:	QQA
Name:	Window
RelatingClassification.Source:	Not Defined
RelatingClassification.Edition:	Not Defined
RelatingClassification.Name:	AC075_cciCOcode

# TARKVARA #2,#3 – AutoCAD Architecture / MEP

Style Manager

File Edit View

-New 2022 Project

- Architecture-MEP.dwg
  - Architectural Objects
  - Documentation Objects
  - 2D Section/Elevation Styles
  - AEC Dimension Styles
  - Calculation Modifier Styles
  - Display Theme Styles
  - LC- Label Curve Styles
  - lab Property Data Formats
  - Property Set Definitions
    - AC01\_RDS(component)
    - AC10\_RDS(entity)
    - AN01\_Name
    - DA01\_Performance**

General Applies To Definition

Name	Description	Type
DA198_Flowrate	DA198_Flowrate	Text
DA352_MechanicalEffici...	DA352_MechanicalEfficiency	Text
DA468_Pressure	DA468_Pressure	Text

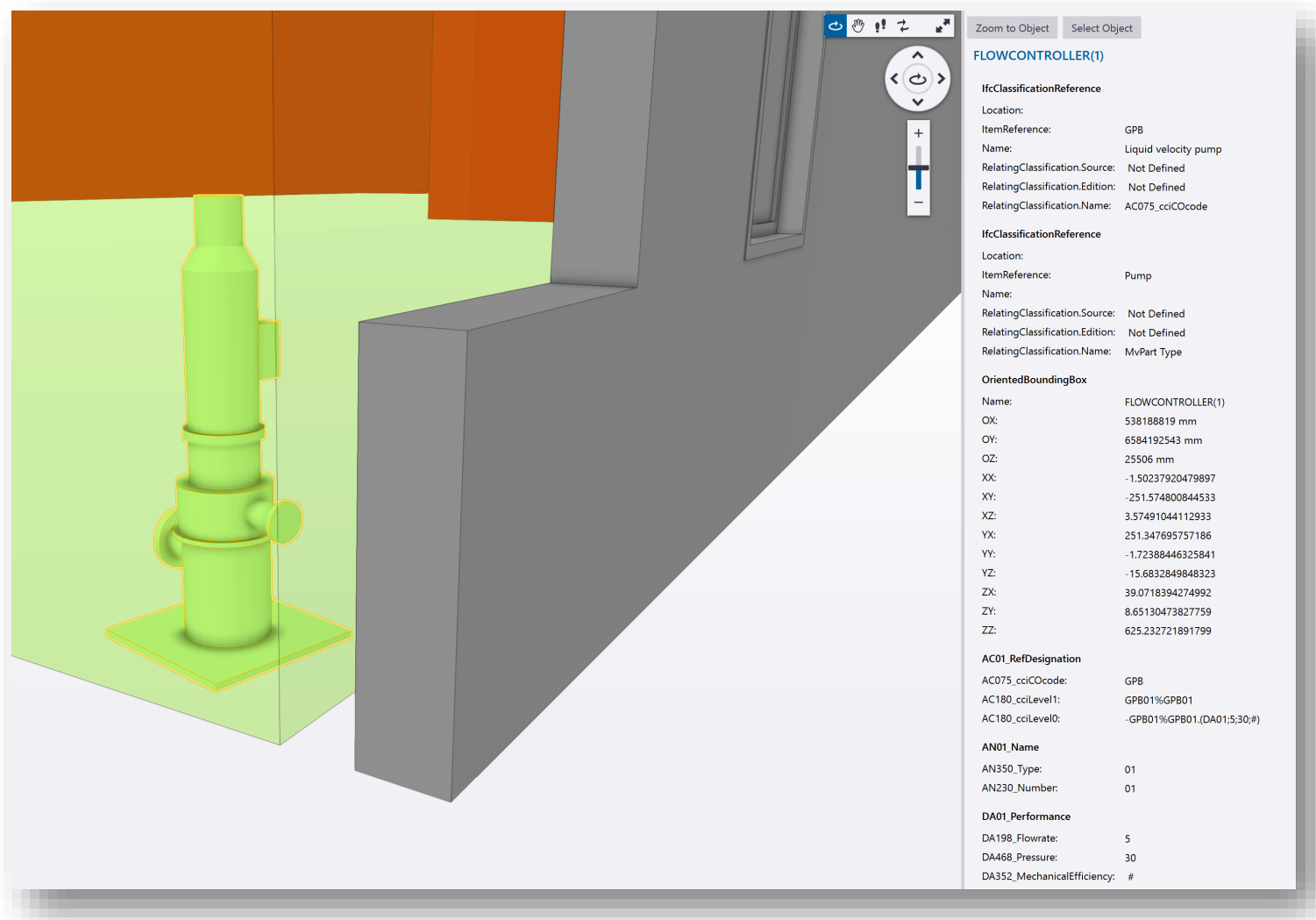


# TARKVARA #2,#3 – AutoCAD Architecture / MEP

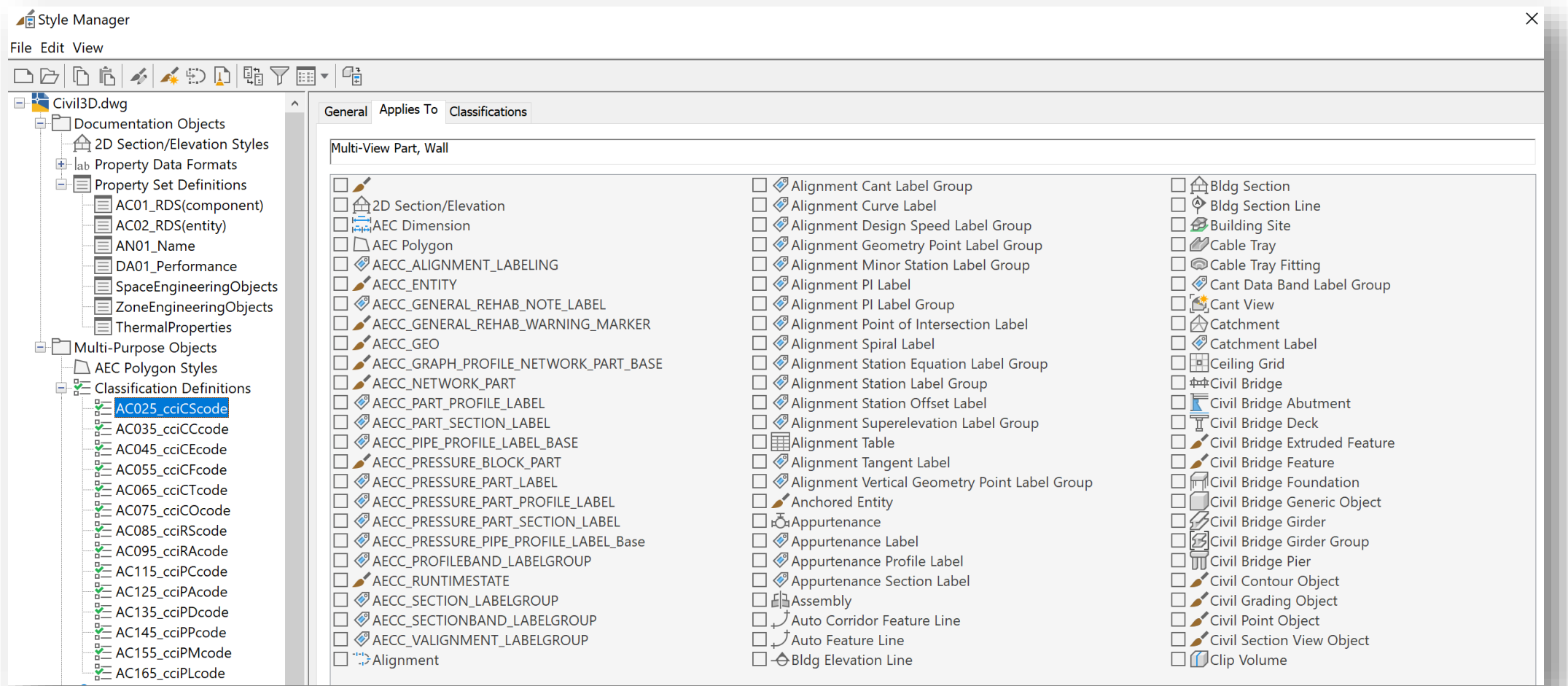
The screenshot displays the AutoCAD Architecture interface. On the left, a 3D model of a mechanical component is shown in a blue wireframe view. The main workspace shows a perspective view of a room with a window and a door. The Properties palette is open, showing the 'Multi-View Part' and 'CLASSIFICATION' sections. The 'PROPERTY SETS' section is expanded to show the 'AC01\_RDS(component)' set. The 'Extended Data' section is also expanded, showing a list of property sets and their values.

PROPERTY SETS	
<b>AC01_RDS(component)</b>	
AC025_cciCScode	###
AC035_cciCCcode	##
AC045_cciCEcode	NA
AC045_cciCEcodeList	###
AC055_cciCFcode	#
AC065_cciCTcode	##
AC085_cciRScode	##
AC095_cciRAcode	###
AC115_cciPCcode	#
AC125_cciPAcode	###
AC135_cciPDcode	###
AC145_cciPPcode	##
AC155_cciPMcode	###
AC165_cciPLcode	###
AC180_cciLevel0	-GPB01%GPB01.(DA01;5;30;#)
AC181_cciLevel1	GPB01%GPB01
AC187_cciLevel7	<PP>##+###.##.###-#.##.GPB
<b>AN01_Name</b>	
AN100_DA01	DA01
AN230_Number	01
AN350_Type	01
<b>DA01_Performance</b>	
DA198_Flowrate	5
DA352_MechanicalEfficiency	#
DA468_Pressure	30

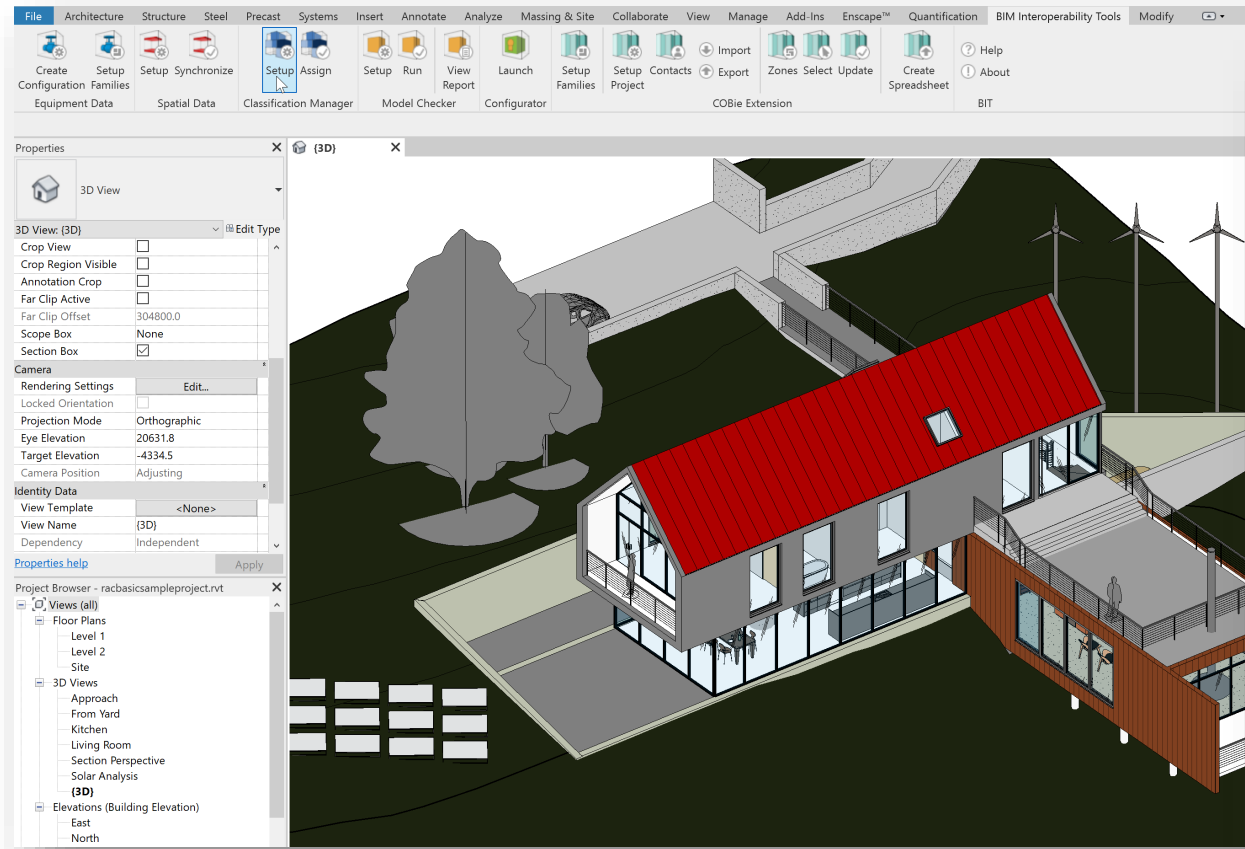
# TARKVARA #2,#3 – AutoCAD Architecture / MEP



# TARKVARA #4 –Autodesk Civil 3D



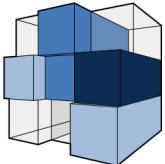
# TARKVARA #5 – Autodesk Revit



Autodesk BIM Interoperability Tools | Classification Manager

## AUTODESK CLASSIFICATION MANAGER FOR REVIT

### Select Database

	<b>Title</b>	CCI-template-ENG-Revit-BIT_CCI-EE-2021.06.0.1
	<b>Date</b>	Tuesday, June 8, 2021
	<b>Author</b>	<Unknown>
	<b>Description</b>	The classification DB loaded from C:\01-taltech\30_Projects\CCI-EE\templates\classification-manager\CCI-template-ENG-Revit-BIT_CCI-EE-2021.06.0.1.xlsx


**Browse**

C:\01-taltech\30\_Projects\CCI-EE\templates\classification-manager\CCI-template-ENG-Revit-BIT\_CCI-EE

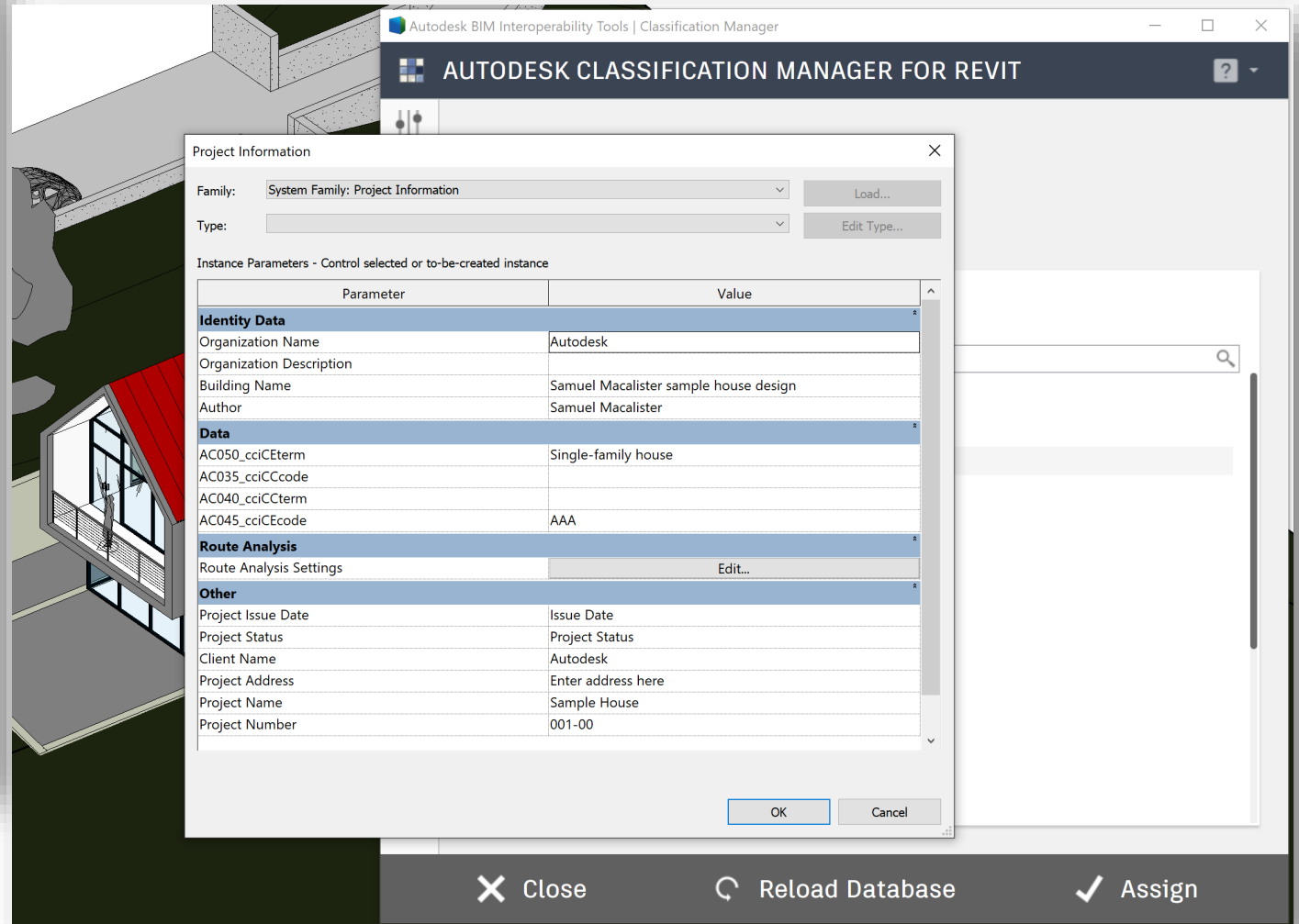
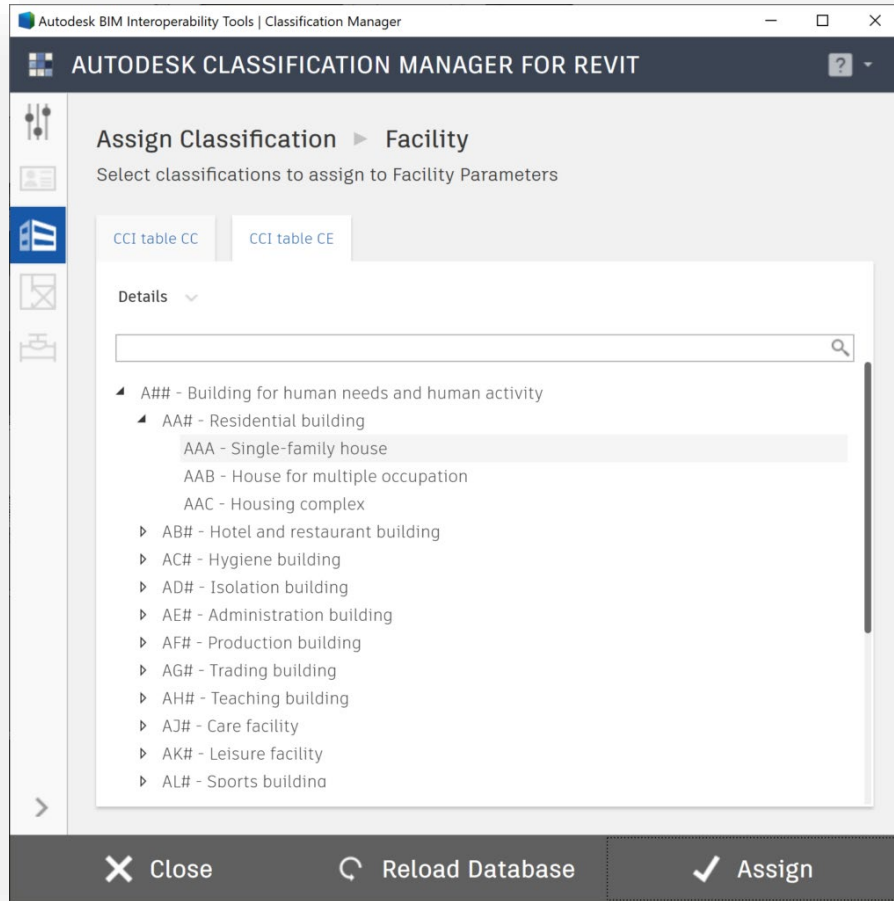
**Recent**

- CCI-template-EST-Revit-BIT\_CCI-EE-2021.06.0.1
- CCI-template-ENG-Revit-BIT\_CCI-EE-2021.06.0.1
- CCI-template-Revit-BIT\_CCI-EE-2021.06.0.1
- Classification Manager Database Custom 2022
- Classification Manager Database Custom

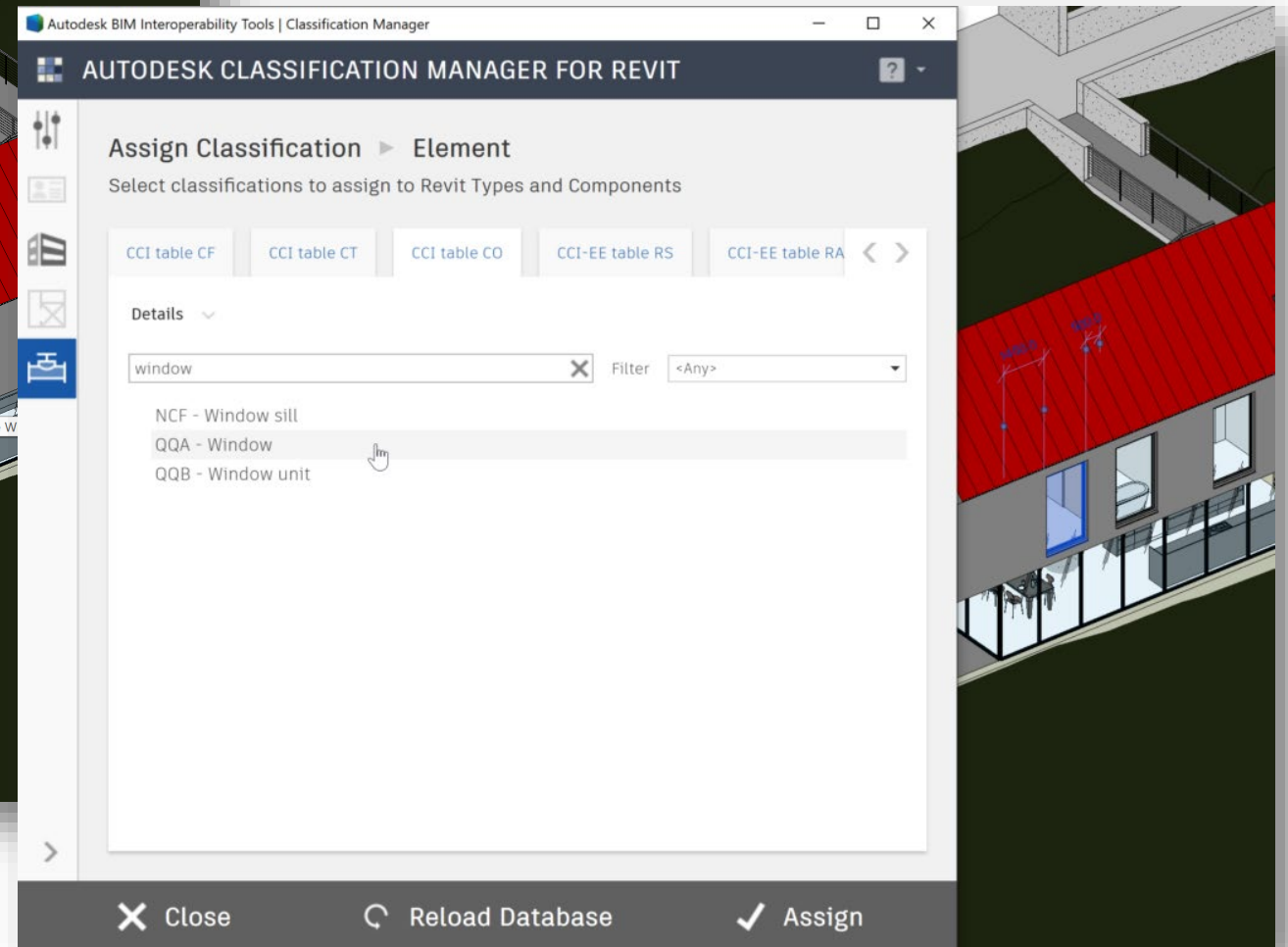
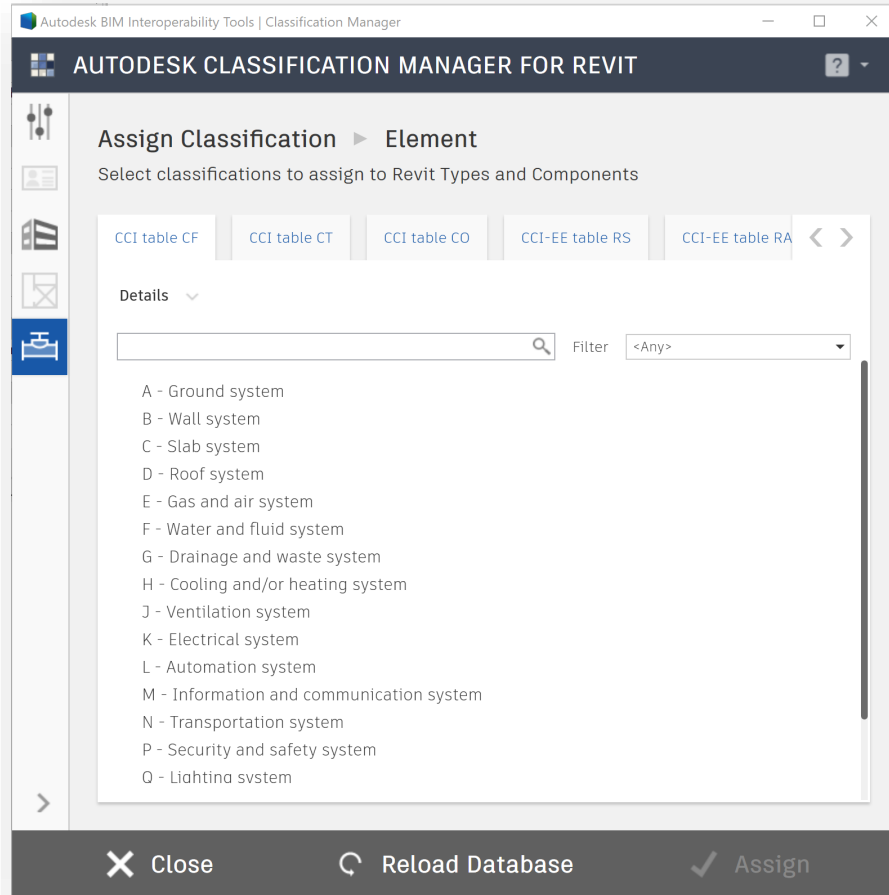
Public Library  **Cancel**  **Finish**

 Uniclass 2015 Database

# TARKVARA #5 – Autodesk Revit



# TARKVARA #5 – Autodesk Revit



# TARKVARA #5 – Autodesk Revit

The screenshot displays the Autodesk Revit interface. On the left, the Properties panel shows the 'Single Window Standard' type with various parameters like dimensions and identity data. The Project Browser on the bottom left shows a tree view of the project structure, including '3D Views' and 'Elevations (Building Elevation)'. The main 3D view shows a house with a red roof and a window. A 'Type Properties' dialog box is open in the center, displaying a list of parameters and their values.

**Properties Panel:**

- Single Window Standard
- Windows (1) Edit Type
- Casement: SH\_Aluminum, Anod...
- Window Cill Interior: Wood\_Walnut black
- Window Cill Exterior: SH\_Aluminum, Anod...
- Dimensions: Rough Width: 1500.0, Rough Height: 2700.0, Height: 2700.0, Width: 1500.0
- Identity Data: Image, Comments, Mark: 18
- Phasing: Phase Created: Working Drawings, Phase Demolished: None
- Other: Head Height: 2700.0

**Type Properties Dialog:**

Parameter	Value
<b>Data</b>	
AC140_cciPDterm	
AC145_cciPPcode	
AC170_cciPLterm	
AC115_cciPCcode	
AC075_cciCOcode	QQA
AC135_cciPDcode	
AC085_cciRScode	
AC100_cciRAterm	
AC095_cciRAcode	
AC090_cciRSterm	
AC125_cciPAcode	
AC065_cciCTcode	
AC080_cciCOterm	Window
AC060_cciCFterm	
AC070_cciCTterm	
AC120_cciPCterm	
AC155_cciPMcode	
AC160_cciPMterm	
AC130_cciPAterm	
AC150_cciPPterm	
AC055_cciCFcode	
AC165_cciPLcode	

# TARKVARA #5 – Autodesk Revit

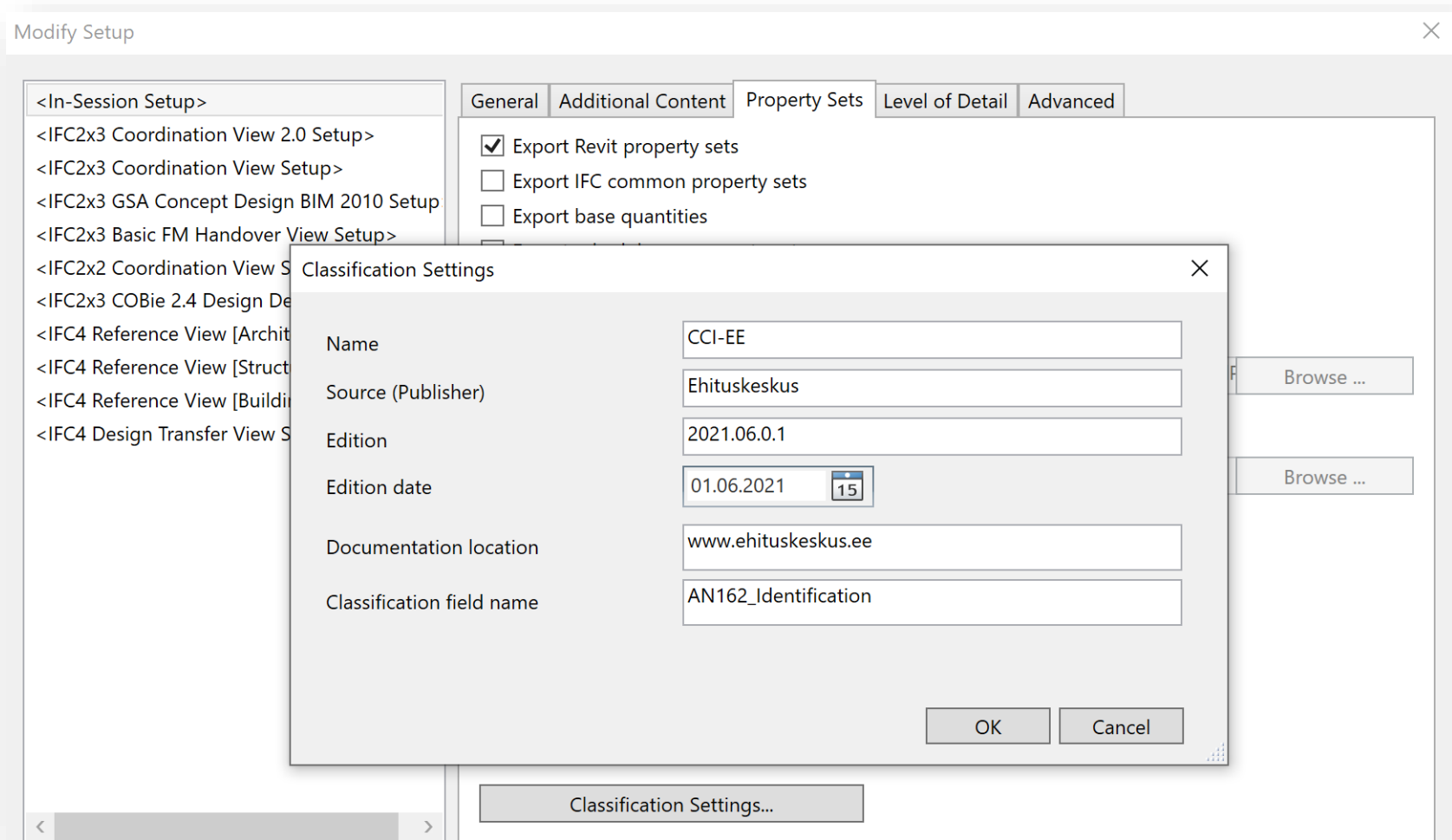
The image shows three overlapping dialog boxes in Autodesk Revit:

- Project Parameters:** A list of 29 parameters is shown, with 'AN162\_Identification' selected. Buttons for 'Add...', 'Modify...', and 'Remove' are visible.
- Parameter Properties:** Shows 'Parameter Type' set to 'Project parameter' and 'Parameter Data' with 'Name' as 'AN162\_Identification' and 'Discipline' as 'Common'. The 'Type of Parameter' is 'Text' and it is grouped under 'IFC Parameters'.
- Type Properties:** Shows 'Family' as 'Single Window' and 'Type' as 'Standard'. The 'Type Parameters' table is as follows:

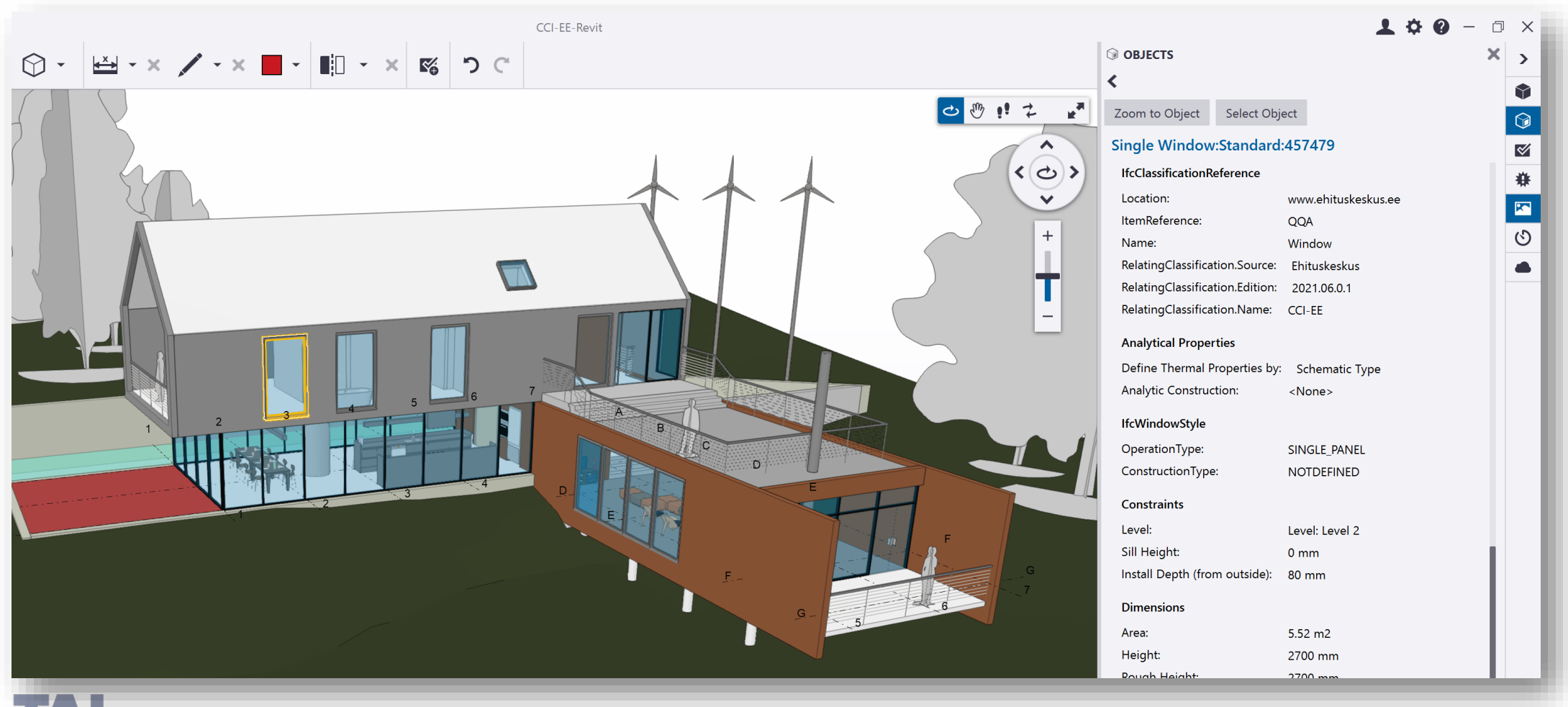
Parameter	Value
<b>IFC Parameters</b>	
Operation	SinglePanel
AN162_Identification	QQA: Window



# TARKVARA #5 – Autodesk Revit



# TARKVARA #5 – Autodesk Revit (IFC > Trimble Connect)



# TARKVARA #5 – Autodesk Revit (IFC > BIMcollab)

The screenshot displays the Autodesk Revit interface. On the left, the 'Window' properties panel is open, showing the following data:

Property	Value
Model	racbasicssampleproject-v14-IFC...
Prefix	
Name	Single Window:Standard:457479
Phase	Project Status
Type	Single Window:Standard
Style Name	Single Window:Standard
Description	
Material Name	Glass, SH_Aluminum, Anodized...
Layer	A-GLAZ-____-OTLN
Is External	
Fire Rating	
CCI-EE Classification	QQA, Window
IFC Element	IfcWindow
Predefined Type	
Operation Type	SINGLE_PANEL
Tag	457479
GUID	1ikhyTwD17yAnDcdaZ57Om
Overall Height	2 699 mm
Overall Width	1 500 mm

Below the main properties panel, a smaller table shows a summary of the element's classification and properties:

CCI-EE Classification	QQA, Window
IFC Element	IfcWindow
Predefined Type	
Operation Type	SINGLE_PANEL
Tag	457479
GUID	1ikhyTwD17yAnDcdaZ57Om
Overall Height	2 699 mm
Overall Width	1 500 mm

# TARKVARA #5 – Autodesk Revit (IFC > Solibri Anywhere)

The screenshot displays the Autodesk Revit interface. The top ribbon includes 'FILE', 'MODEL', 'CHECKING', 'COMMUNICATION', 'INFORMATION TAKEOFF', and 'BCF LIVE CONNECTOR'. The main view shows a 3D model of a house with a red roof and a green window. Two overlapping 'INFO' panels are shown, both displaying the same data for 'Window.24'.

Ifc Dimensions		Materials and Finishes		Other	Phasing
Data	Dimensions	Graphics		Identity Data	
Hyperlinks	Analytical Properties		Constraints	Construction	
Identification	Location	Quantities	Material	Relations	Classification
Classification		Source	Reference	Name	
CCI-EE Classification (Locked)		From IFC	QQA	Window	

# TARKVARA #5 – Autodesk Revit (IFC > BIMvision)

Properties	Location	Classification	Relations
Name	Value		
<b>CCI-EE</b>	QQA Window		
Name	CCI-EE		
Source	Ehituskeskus		
Edition	2021.06.0.1		
<b>Reference</b>	QQA Window		
Identification	QQA		
Name	Window		
Location	www.ehituskeskus.ee		

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