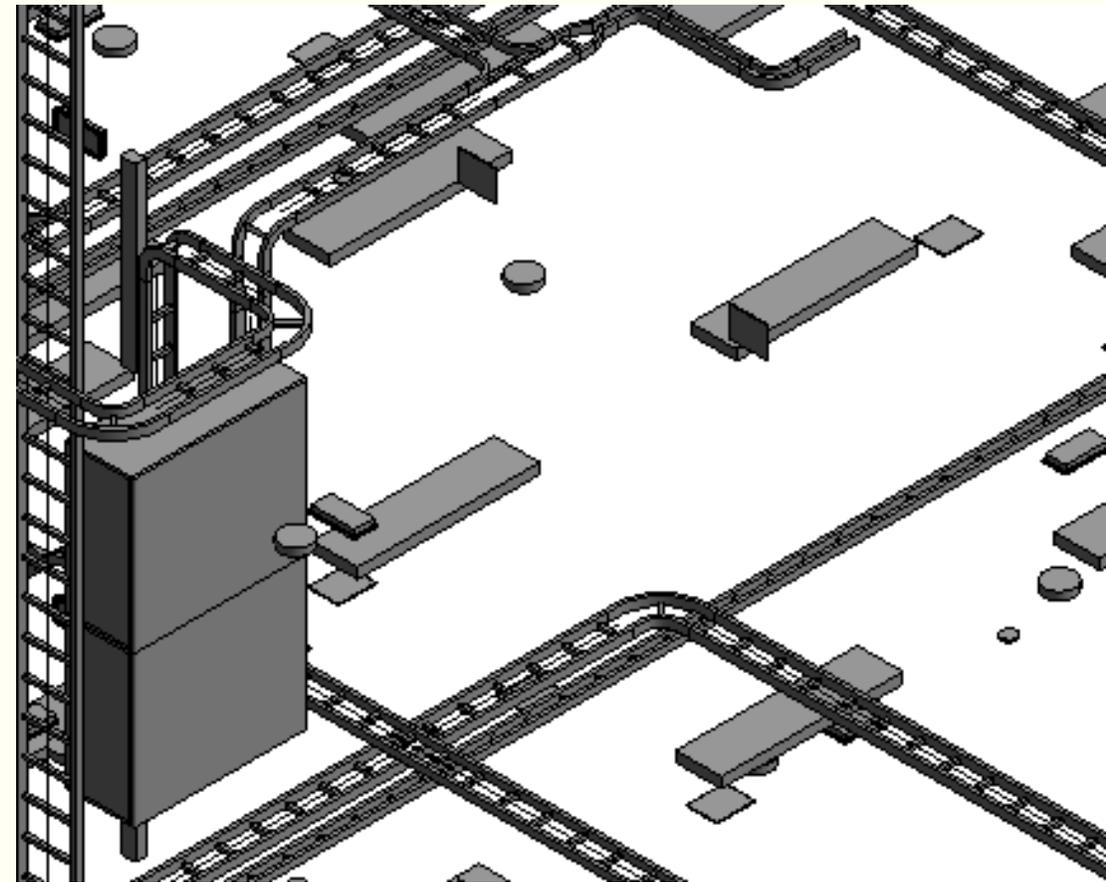




ASAS PENGGUNAAN BIM DALAM PELAKSANAAN PROJEK ELEKTRIK

1 - 3 NOVEMBER 2021



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2. CREATING NEW ELECTRICAL PROJECT

- a. Using JKR Template
- b. Linking Revit Models
- c. Copying and Monitoring Linked Files
- d. Define Level
- e. Displaying Room Name

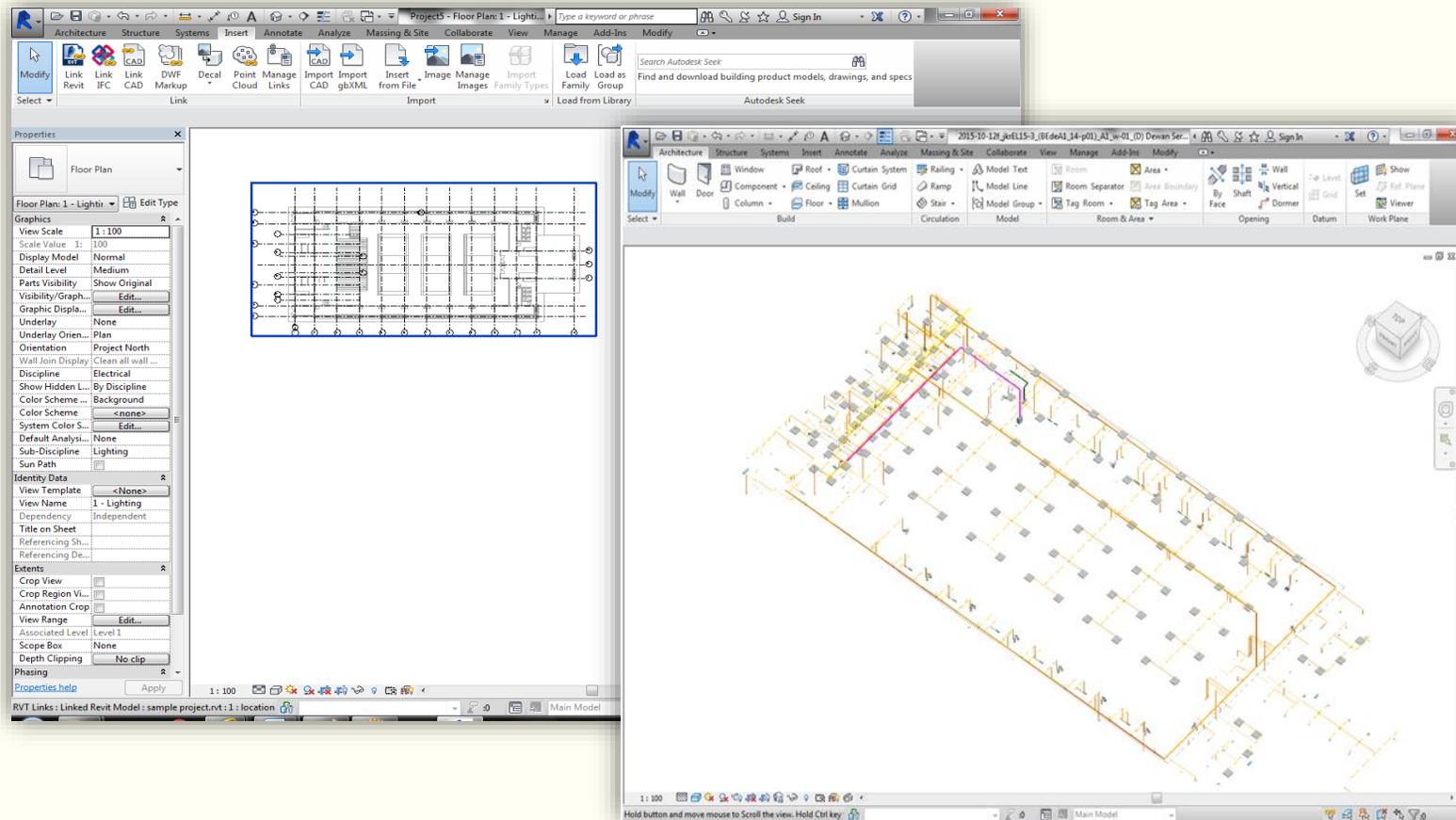
CREATING NEW ELECTRICAL PROJECT

Revit program uses three main file types. To create new file, it starts from a **Template File**. Once this new file is created, it is called a **Project File** that can be saved, opened and modified. The items that are added to the project files are elements and **family files**.

- a) **Project files** (.RVT): primary drawing files. This is where you do the majority of your work in the building model with views and sheets. They are initially based on template files
- b) **Family files** (.RFA): component types that can be created for Revit Program. For example, lighting fixtures can be recessed or surfaced, and can be 14W or 28W. Title block and annotation symbol are special types of family files
- c) **Template files** (.RTE): designed to hold standard information and settings for creating new project files. Revit software includes several templates for electrical, mechanical and systems projects. You can also create custom templates to address specific needs or to ensure adherence to office standards. Project templates use the file extension RTE

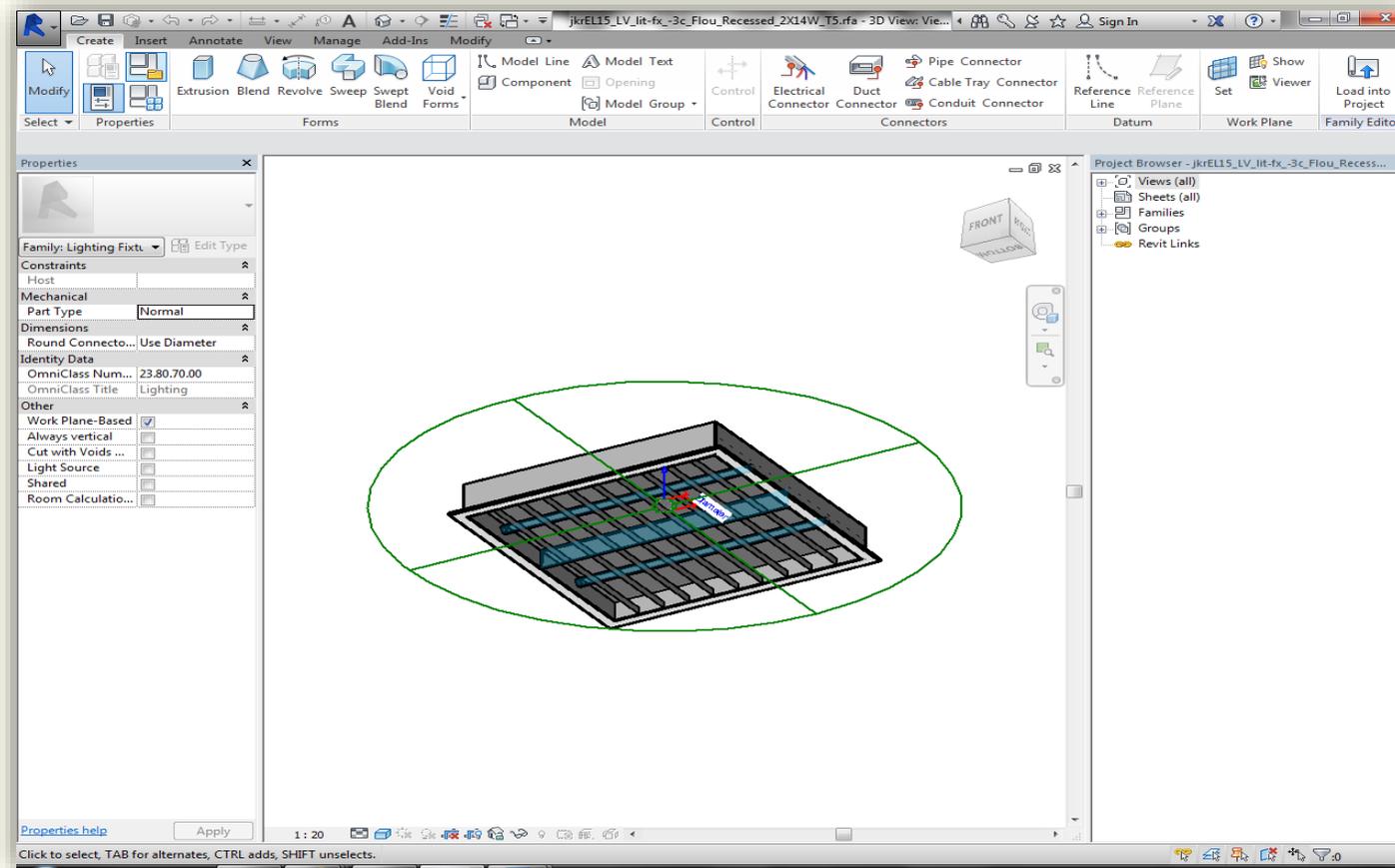
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Project files (.RVT):



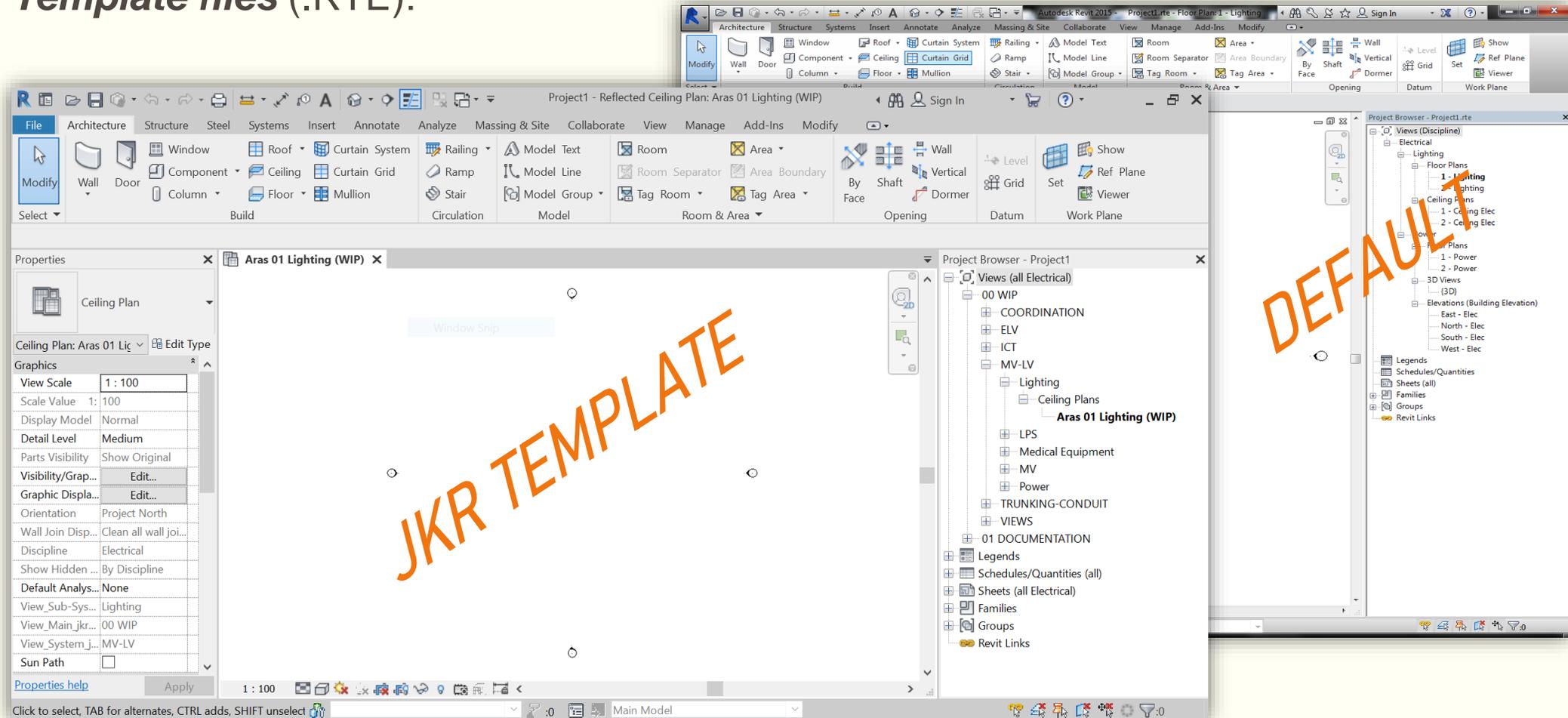
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Family files (.RFA):



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Template files (.RTE):



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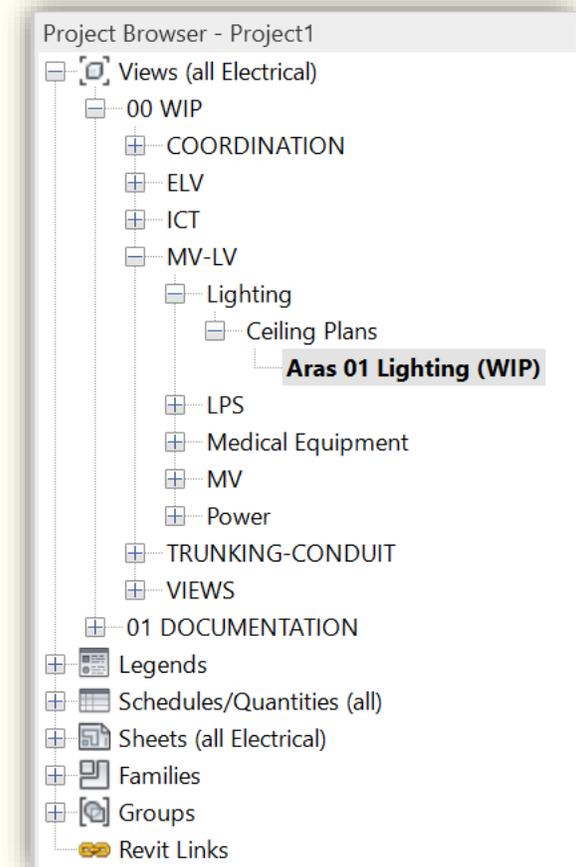
These are workflows to get started with a new project:

- a) Using JKR Electrical Template
- a) Linking Revit Models
- b) Copying and Monitoring Linked Files
- c) Define Level
- d) Displaying Room Name

CREATING NEW ELECTRICAL PROJECT

a) Using JKR Electrical Template

1. On the Home page, click File tab > New >  (Project)
2. In the New Project dialog, under Template file, browse a template from the list
3. In the choose template dialog box, select the **200901_jkrEL20-00 Templat Elektrik** template, click Open button and then click OK button
4. The views available in the project browser



CREATING NEW ELECTRICAL PROJECT

b) Linking Revit Models

- When working with Revit, typically link a Revit Architecture model into a Revit project. The linked Revit files path is saved in the Revit Project file

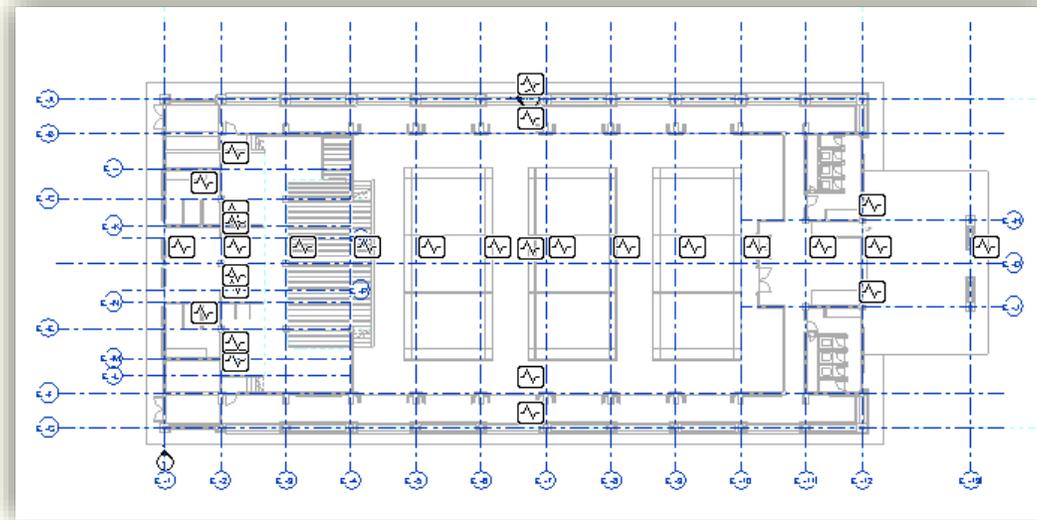
To link Revit Architecture Model

1. In the Insert tab > Link panel, click  (Link Revit)
2. In the Import/Link RVT dialog box, select the required file
3. Specify the Positioning: **Auto Origin to Origin** and Click OK button
4. The new building displays in the active view and is linked into the new Revit Project

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b) Copying and Monitoring Linked Files

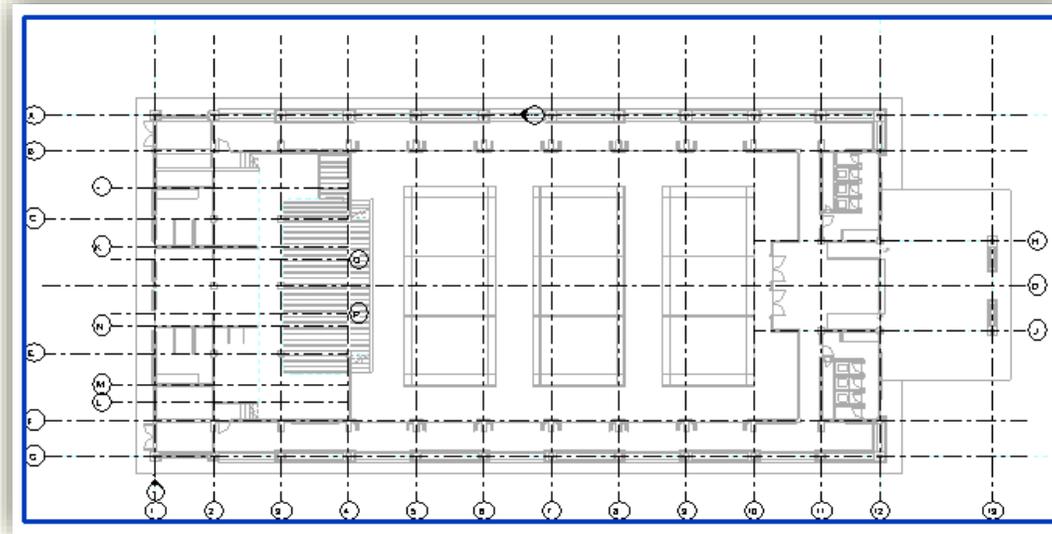
Use Copy/Monitor to recognize when changes occur in the linked model. Once a linked model is in place, the next step is copying elements such as level and grids from the link and using a monitoring system that keep tracks of the copied elements



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To Copy and Monitor from a Linked File

1. Open Electrical > Elevations (Building Elevations) > East-Elec view in the Project Browser
2. Hover your cursor over the link. A frame displays around the linked model and tooltip also displays. When they are displayed, select the link



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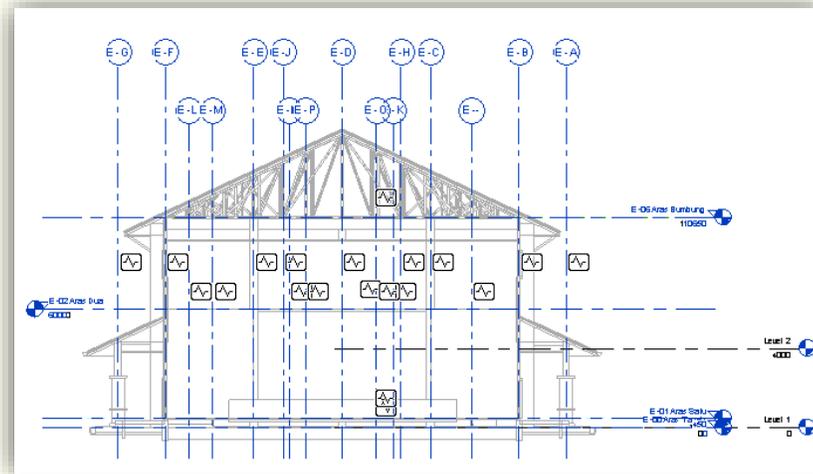
To Copy and Monitor from a Linked File (cont')

3. In the Collaborate tab > Coordinate panel, expand  (Copy/Monitor) and click  (Select Link)
4. In the Copy/Monitor tab > Tool panel, click  (Copy)
5. Select each of the elements you want copied into current project. As you select, each one is copied
6. If you want to select more than one element together, in the Option Bar, select the **Multiple** option
7. Hold down <Ctrl> and select all of the elements that you want to copy into your model until  (Filter Selection) icon active
8. Select **Grids** and **Levels** in the Filter dialog box. Click Apply and OK button

CREATING NEW ELECTRICAL PROJECT

To Copy and Monitor from a Linked File (cont')

9. In the Option Bar, click Finish button. The elements are physically copied into your model. The button displays to indicate that the elements are being actively monitored

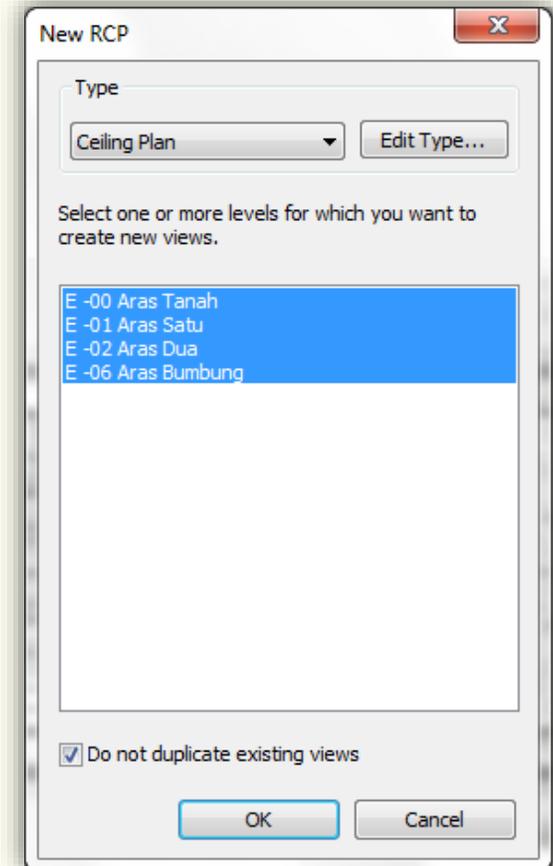
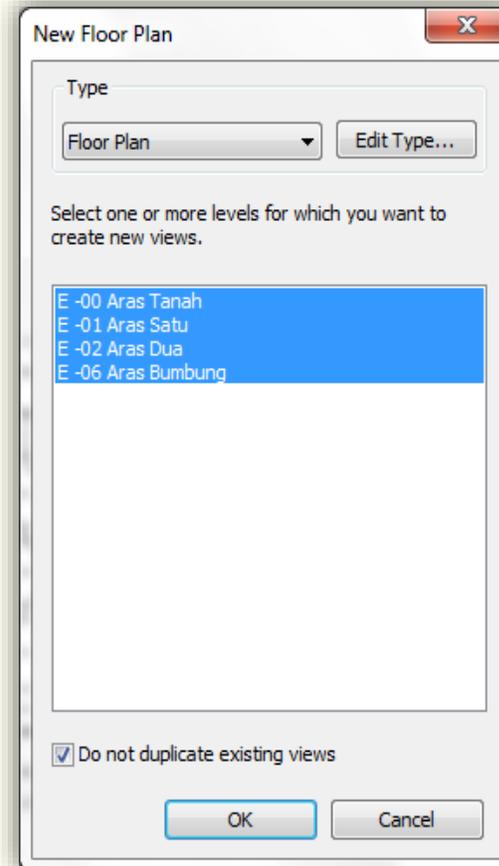


10. Click  (Finish) to end the session of Copy/Monitor

CREATING NEW ELECTRICAL PROJECT

d) Define Level

- Levels are often the first thing you need to copy and monitor into a Revit project from the linked architecture file
- Add levels in the host project that correspond to the levels in the linked model. These levels include Floor Plans, and Reflected Ceiling Plans (RCP)



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Floor Plan

View all floor plan from Architecture Model by applying Plan Views tab

1. In the View tab > Create panel, expand  (Plan View) and click  (Floor Plan)
2. In the Floor Plan box select all levels, select the required levels (by Press Shift button)
3. Click Edit type button. Go to View Template
4. Under Names, select jkrEL_WIP_MV-LV_Power_(FP), click OK button
5. Click Apply and OK button
6. Expand 00WIP > MV-LV > Power
7. All Floor Plan views placed automatically in Power > Floor Plan views in Project Browser

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Reflected Ceiling Plan (RCP)

View all ceiling plan from Architecture Model by applying Plan Views tab

1. In the View tab > Create panel, expand  (Plan View) and click  (Reflected Ceiling Plan)
2. In the New RCP box select all levels, select the required levels (by Press Shift button)
3. Click Edit type button. Go to View Template
4. Under Names, select jkrEL_WIP_MV-LV_Lighting_(CP), click OK button
5. Click Apply and OK button
6. Expand 00WIP > MV-LV > Lighting
7. All RCP Plan views placed automatically in Lighting > Ceiling Plan views in Project Browser

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Rename View Level at Project Browser

1. In the Project Browser, right-click the view name and click Rename
2. In the Rename View dialog, enter a new name for the view, and click OK button
3. If a level and other plan views have the exact same name as the view, a dialog displays (if you want to rename the corresponding level and views, yes or no)
4. Click NO button
5. Click OK button

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e) Displaying Room Name

Room Name is the combination of the room name and room number.

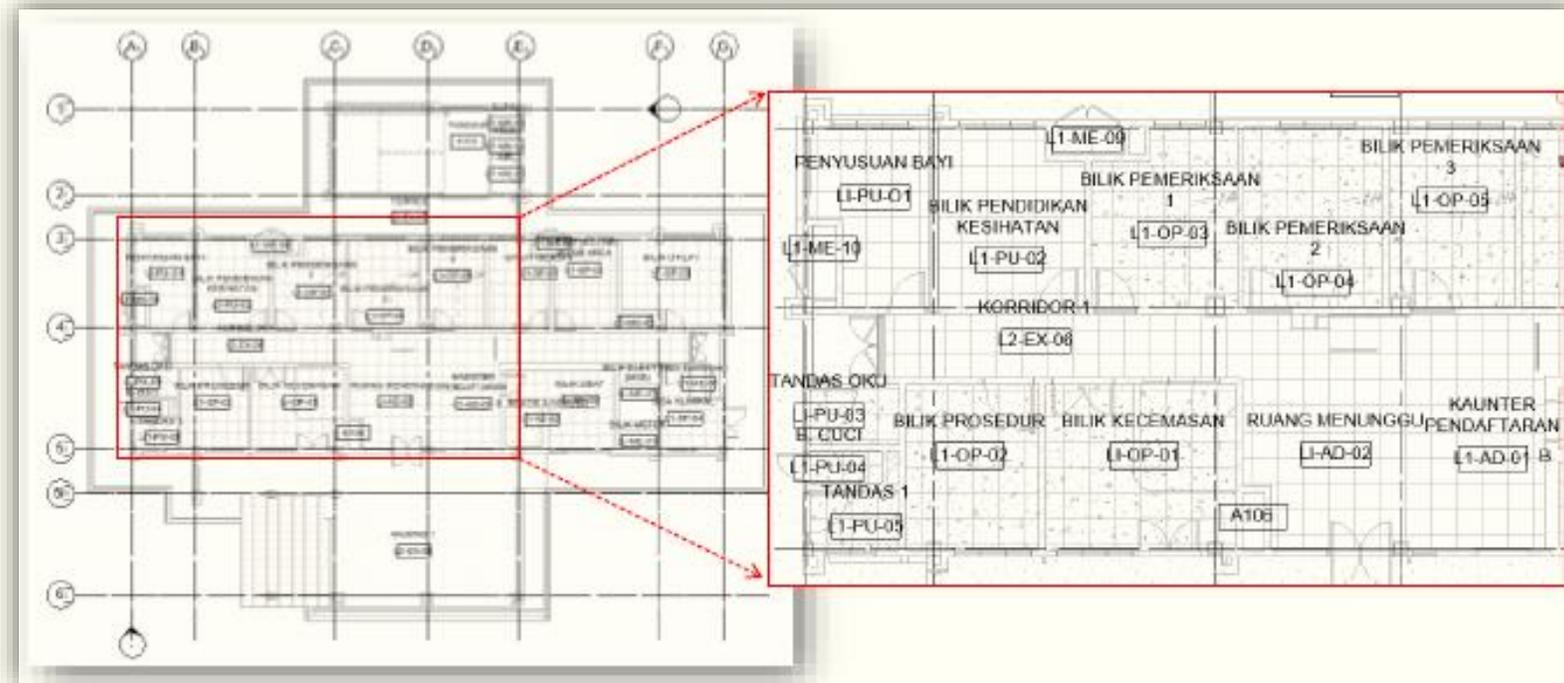
To display a room tag with the room

1. In the project browser, open any floor plan or reflected ceiling plan
2. In the Annotate tab > Tag panel, click  (Tag All)
3. In the Tag All not Tagged dialog box (tick) includes elements from the linked files
4. Select Room Tags Category: M_Room Tag: Room Tag
5. Click Apply button

CREATING NEW ELECTRICAL PROJECT

To display a room tag with the room (cont')

All room names have been tagged



CREATING NEW ELECTRICAL PROJECT

To Modify Room Tag

1. In the project browser, open any floor plan or reflected ceiling plan
2. Click any room name in the layout
3. Go to Properties Palette, click  (Edit Type), and click Duplicate button
4. In the Name dialog box, edit the name to **Room Tag Only**. Click OK button. Untick Show Room Number in the type parameters, click OK button
5. Click other room name in the layout and right-click the room
6. Click Select All Instances, and then click Visible in View or In Entire Project
7. There is room tag only available for all rooms in View or In Entire Project



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