BIM.archiproducts®

LUCE PLAN

LUCEPLAN BIM PRODUCTS - CONTENTS AND USER MANUAL

Authoring Software Autodesk Revit 2018

This document provides information on the contents and the correct use of the BIM files in Revit format produced by LUCEPLAN.

File name and definition

The BIM product is contained in the .rfa format file "LUCEPLAN_Product Name"; the native file is created with the BIM authoring software Autodesk Revit 2018.

In addition to the object file, the company's information sheet (schedule) is provided. The information sheet, in .rvt format, contains information regarding the LUCEPLAN product. This can be used to calculate the quantities and verify the characteristics of the product with regard to aesthetics, dimensions, physical appearance and performance.

The information sheet has been divided into different categories: **Identity data Dimensions, Materials and finishes, Photometrics and electrical.**
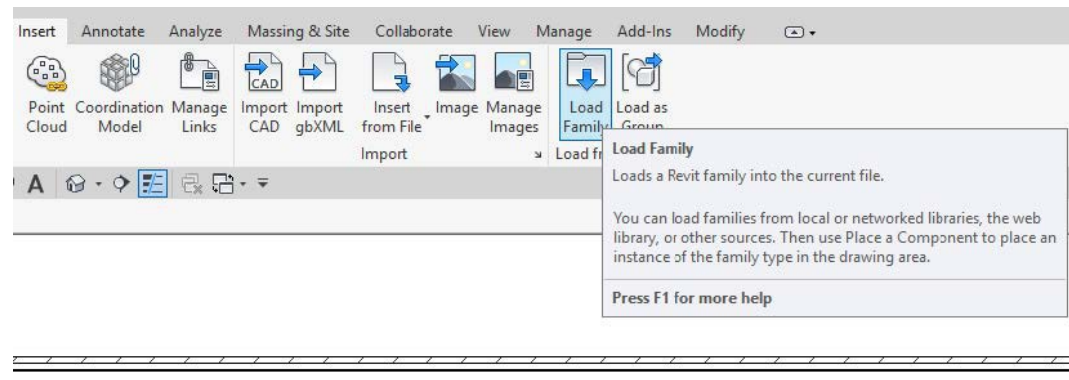
Other alphanumeric information about the product can be found in the object's properties sheet.

The designer/manufacturer who uses the LUCEPLAN BIM content can calculate the quantities of the products used in his/her project, manage the quantities for the purchase order and transfer the information relating to the product used to those carrying out the work.

How to use LUCEPLAN BIM content

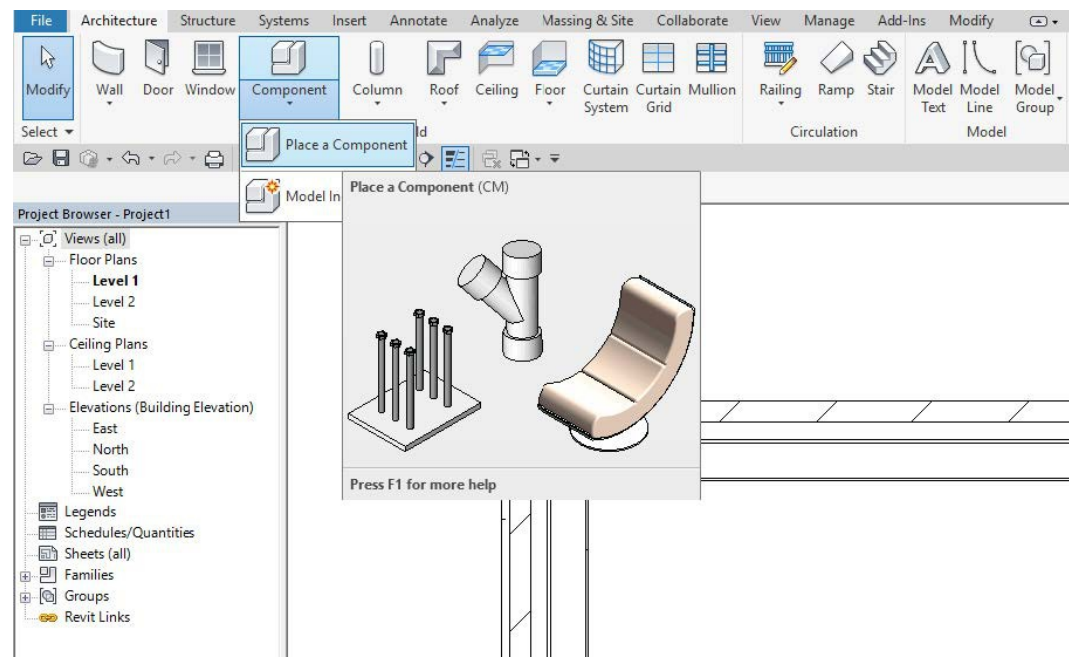Download and save the LUCEPLAN .rfa objects in your personal library, then upload the BIM family to your project.

Component positioning

Open any plan view and insert the desired LUCEPLAN product using the **Component** command -> **Place a component** and positioning it within the project.

If you find a .txt file in the download file, archive it in the same location as the .rfa file.

The .txt file contains the parameters and the respective values used to create the different types of a given family.

The .txt file includes the type catalogue. By using the type catalogue, it is possible to select and load only the desired types for your personal project, thus slimming down the project file.

Type catalogue

Refer to the technical parameters sheet for assistance in choosing the correct product.

Material Library

For a storage and backup purpose there is a material library named **LUCEPLAN_MATERIAL_LIBRARY.adsklib** which contain all used material and texture maps. For properly display of graphic assets please download and unzip **LUCEPLAN_MATERIAL_LIBRARY**.zip archive.
If the texture mapping should be missing, it can be linked again via the Appearance tab. In the Generic menu, load the diffuse image and/or bump file.

Particular use

Referring to some of LUCEPLAN pendant light there is a CORD_LENGHT parameter to set the cord length; this kind of parameter has a minimum/maximum length that correct the eventual oversize.

Is some cases there is a selection of illumination photometric .ies curve that can be used. For more information please refer to technical sheet.

Photometrics	
LIGHTING SPECIFICATION	LED 32W 2700K - CRI 90+
Color Filter	White
Dimming Lamp Color Temperature Shift	<None>
Emit Shape Visible in Rendering	☐
Emit from Circle Diameter	0.6096
Initial Color	2700 K
Initial Intensity	15.00 W @ 148.54 lm/W
Light Loss Factor	1
Photometric Web File	Farel D96_Diffuser White.ies
Tilt Angle	-90.00°
COLOR RENDERING INDEX	>90
Light Source Definition (family)	Circle+Photometric Web
Other	

Level Of Geometry (LOG)

The object was created with three levels of geometric development visible in plan, elevation and section. In the **Coarse** level view, a simple 2D shape can be seen; the **Medium** level shows the overall geometric footprint; the **Fine** level shows the simplified shape of the product with fewer details.
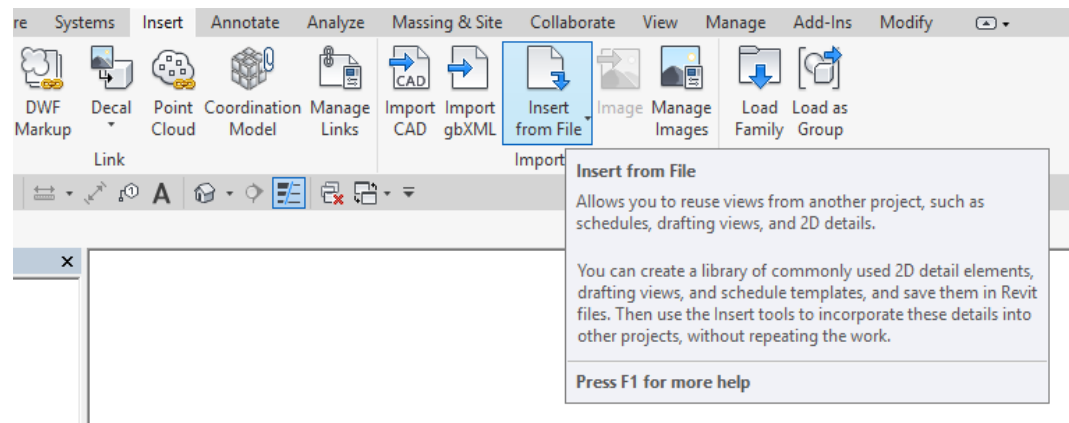
LOG representation

Schedule entry

In addition to the object file, the company's information sheet (schedule) is named **LUCEPLAN_Lighting_Fixture_Schedule.rvt**. The information sheet contains information in .rvt format about the products, including the identity, dimensional and technical parameters, which can be used to calculate the quantities and verify the product's physical and performance characteristics.

The designer/manufacturer who uses the BIM content can calculate the quantities of the products used in his/her project, manage the quantities for the purchase order and transfer the information relating to the product used to those carrying out the work.
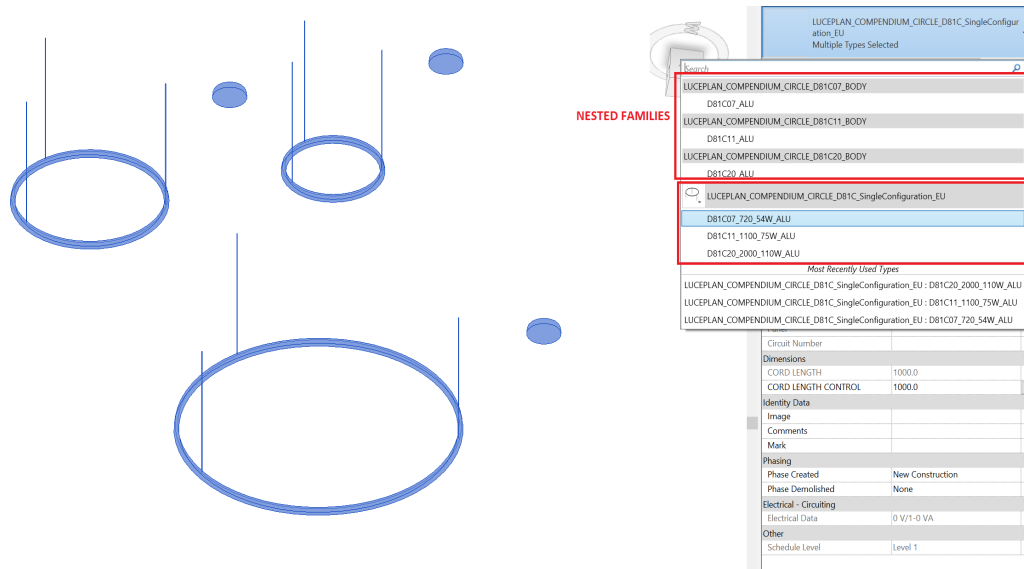
Load schedule

COMPENDIUM CIRCLE CONFIGURATIONS

This LUCEPLAN product is highly configurable and for greater understanding we recommend reading the relative technical data sheet.

Compendium Circle has various types of configurations.

We have developed the "**single configuration**" version which contains the three dimensional variants in the choice of types.
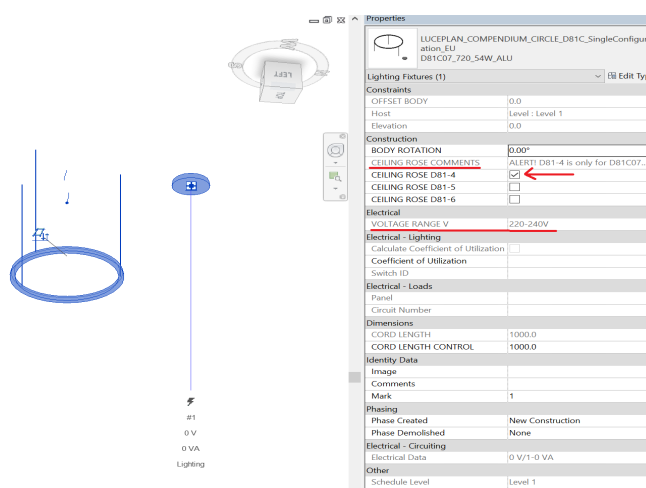

In one single file you can choose the best diameter for your project.

Note that the "bodies" have been set with shared nested families to give you all the data about them.

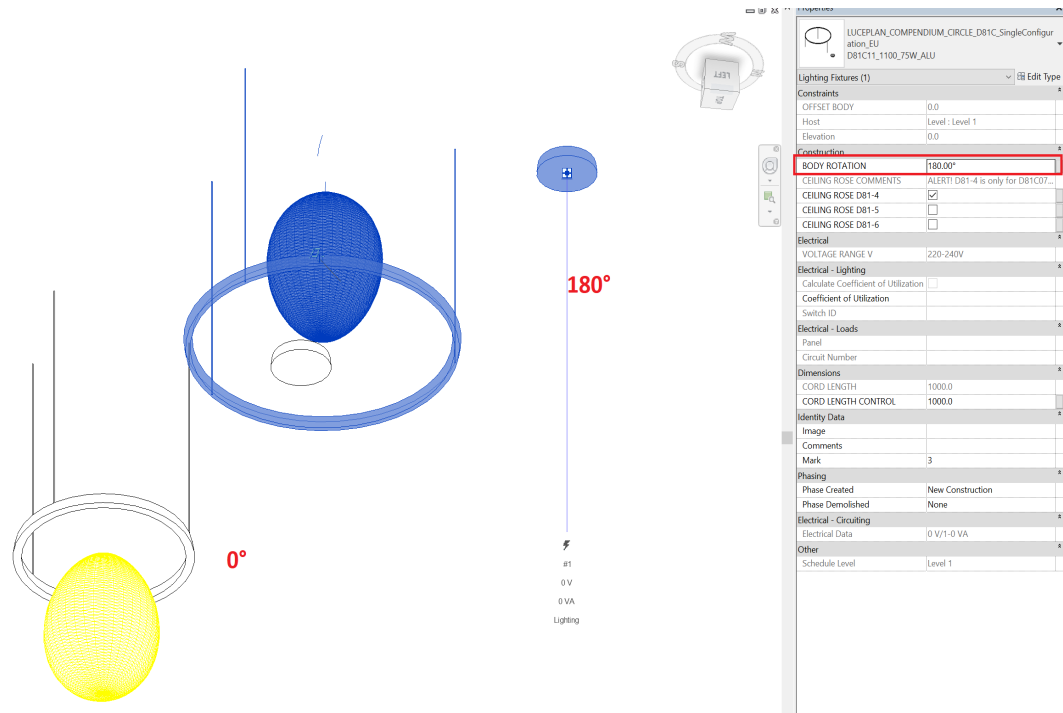A Photometric Curve (.IES File) is included in the nested family per each body.

This particular configuration with one single fixture has got all the needed formulas to have automatically updated data (VOLTAGE RANGE) to each different model size. In the properties palette you can find out CEILING ROSE instance parameter. The CEILING ROSE is checked by default but you can uncheck - if you

want - and voltage values will be automatically updated.

The bodies present an instance ROTATION parameter that you can use to change the default position (direct light) into an upward position (indirect light):

just set the angle at 180° to have indirect light or 0° to have direct light.

In the single fixture configuration you can also have other angle rotations (45° for example) but to do that you need to edit in the CORD elements in the editing family, adjusting the extrusion of the cords case by case.
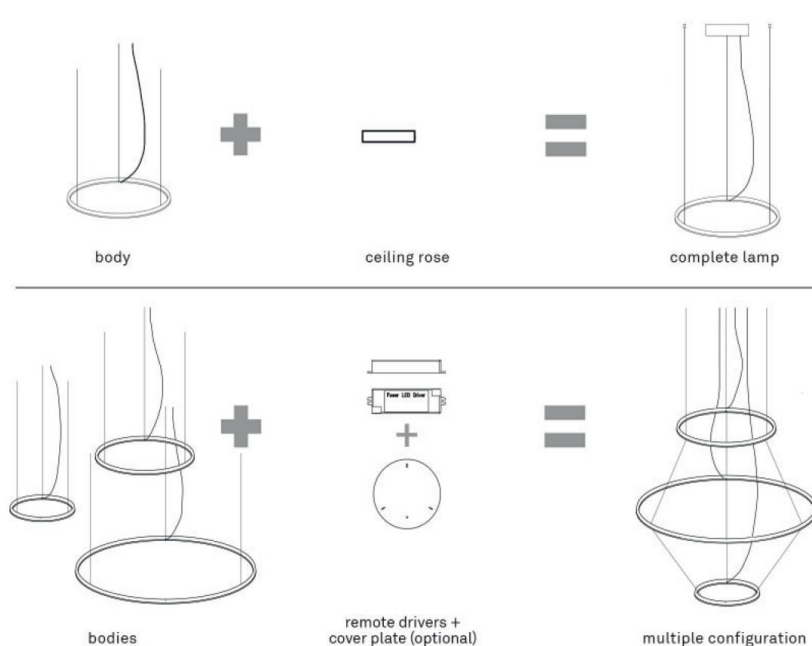
For COMPENDIUM CIRCLE it's also possible to combine up to three rings of different diameters to give rise to different configurations and luminous scenarios of great visual impact.

If you want to start editing your own configuration we have created three BIM files for this purpose.

LUCEPLAN_COMPENDIUM_CIRCLE_D81C_MultipleConfiguration_EU

The file contains a default configuration starting from the composition of 1xSMALL RING + 1xMEDIUM RING + 1xLARGE RING.

The MULTIPLE configurations explained in the picture below works with the combination of each ring that included their own remote driver. For further info please refer to the TECHNICAL SHEET linked in .rfa files.
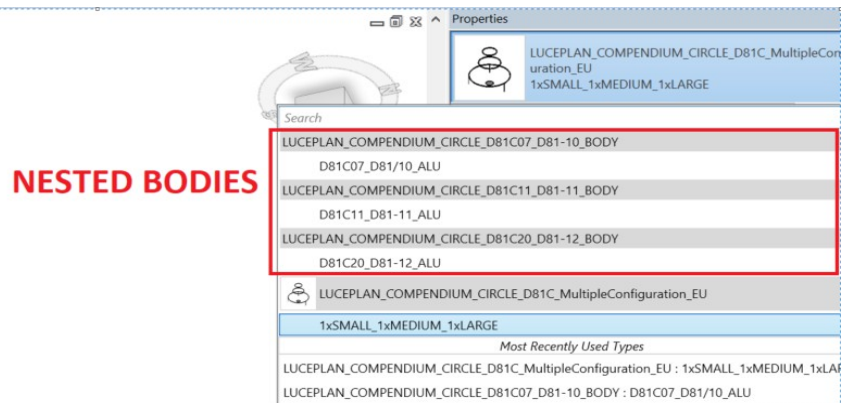

body   ceiling rose   complete lamp

bodies   remote drivers +   multiple configuration
                cover plate (optional)

Remote drivers
for D81C07   **D81/10**   1D810/100000
for D81C11   **D81/11**   1D810/110000
for D81C20   **D81/12**   1D810/120000

Cover   **D81/8**   1D810/800002

The family contains the nested bodies (they includes the driver info) that you can use to create your composition. The nested cover plate for ceiling rose is in the Generic Model Category.
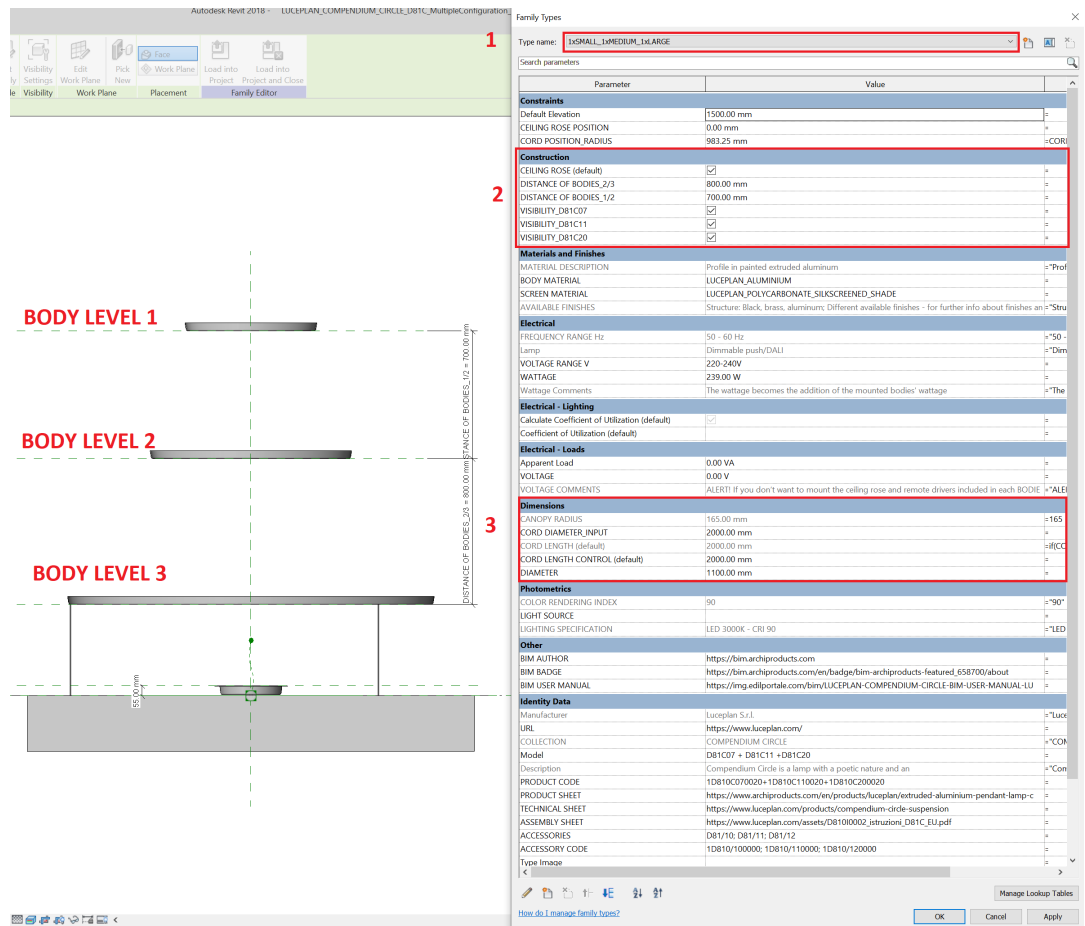

You can choose your disposition basing on the ref. planes and and than **save as** your family.

In the picture below you will find in red all the relevant parameters needed to adjust and compose your own configuration.

1. "Type" is to give a recognizable naming to each variant.

2. The CONSTRUCTION parameter group has got the visibility parameters if you need them, and dimensional parameters for the distance between bodies that you can check in the technical sheet where there are the suggested ones.

3. DIAMETER is the larger diameter of the three bodies. CORD DIAMETER_INPUT is important to give the right position of the cords. Available diameters: 72cm (28.3''), 110cm(43.3''), 200cm (78.7'').

The CORD are parametrically created and follow that larger diameter. The other cords have been deleted to simplify geometry that unfortunately is already large in terms of file size. If you need more details we suggest to model the cords by yourself.
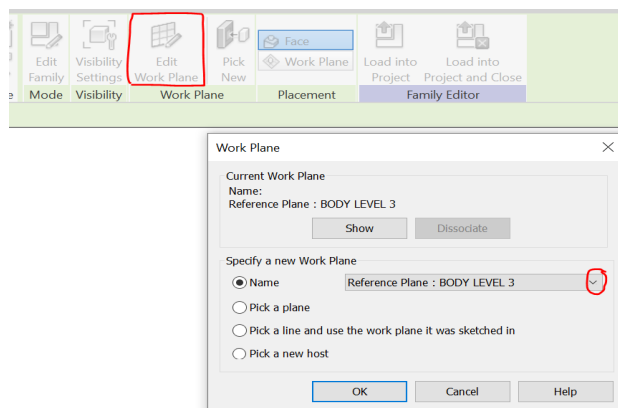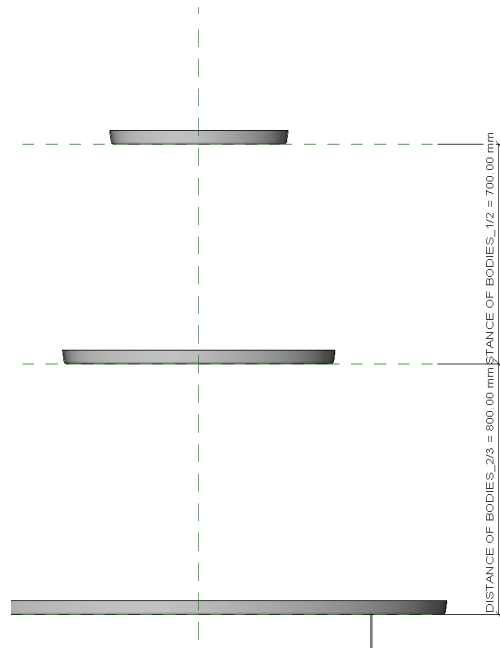
The family presents three reference planes:

BODY LEVEL 1, 2 and 3.

These reference planes host the bodies.

So, for example, if you want to change the position of D81C20 (the larger ring available) from the BODY LEVEL 3 to BODY LEVEL 1, you just have to change the work plane of the nested body, following the steps in the picture below:
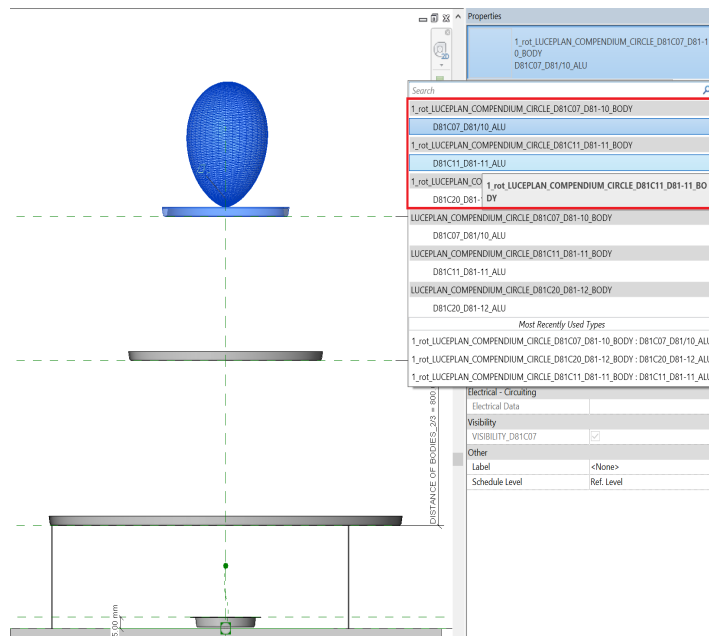
Of course, when you edit work planes you could find out that you don't really need some bodies. You have two options: deleting it to lighten the file size or checking the visibility parameter.

BIM.**archiproducts**

Construction	
CEILING ROSE (default)	☑
DISTANCE OF BODIES_2/3	800.00 mm
DISTANCE OF BODIES_1/2	700.00 mm
VISIBILITY_D81C07	☑
VISIBILITY_D81C11	☑
VISIBILITY_D81C20	☑
Materials and Finishes	
MATERIAL DESCRIPTION	Profile in painted extruded aluminum
BODY MATERIAL	LUCEPLAN_ALUMINIUM
SCREEN MATERIAL	LUCEPLAN_POLYCARBONATE_SILKSCREENED_SH
AVAILABLE FINISHES	Structure: Black, brass, aluminum; Different available
Electrical	
FREQUENCY RANGE Hz	50 - 60 Hz
Lamp	Dimmable push/DALI
VOLTAGE RANGE V	220-240V
WATTAGE	239.00 W
Wattage Comments	The wattage becomes the addition of the mounted
Electrical - Lighting	
Calculate Coefficient of Utilization (default)	☑
Coefficient of Utilization (default)	
Electrical - Loads	
Apparent Load	0.00 VA
VOLTAGE	0.00 V
VOLTAGE COMMENTS	ALERT! If you don't want to mount the ceiling rose
Dimensions	
CANOPY RADIUS	165.00 mm
CORD DIAMETER_INPUT	2000.00 mm
CORD LENGTH (default)	2000.00 mm
CORD LENGTH CONTROL (default)	2000.00 mm
DIAMETER	1100.00 mm
Photometrics	
COLOR RENDERING INDEX	90
LIGHT SOURCE	

Another easier method to change bodies without editing work planes is to click on it and choose the right body from the properties palette taking the 1_rot_modelname highlighted in red in the picture below.

In the end, each body has got the rotation parameter that you can use to have indirect lights or direct lights, with the upward/downward positioning (0° or 180°).

NESTED FAMILIES

As the single fixture configuration, even these multiple configurations families have got all the needed formulas to have automatically updated data to each different model size.

In the properties palette you can find out CEILING ROSE instance parameter. The CEILING ROSE is checked by default but you can uncheck - if you want - read the VOLTAGE COMMENTS:

"ALERT! If you don't want to mount the ceiling rose and remote drivers included in each BODIES, you need to remember to update the voltage value: it will no longer be 220-240V but 24 V, the value of the installed bodies. You will also need to re-assign the electrical connector by yourself".

All the nested familes have got the right technical data, product codes and they are shared nested families so you will always have in schedules the right product info inserted in the used configuration.

Electrical		
FREQUENCY RANGE Hz	50 - 60 Hz	="50 - 60 Hz"
Lamp	Dimmable push/DALI	="Dimmable push/DALI"
VOLTAGE RANGE V	220-240V	=
WATTAGE	239.00 W	=
Wattage Comments	The wattage becomes the addition of the mounted	="The wattage becomes the additio
Electrical - Lighting		
Calculate Coefficient of Utilization (default)	☑	=
Coefficient of Utilization (default)		=
Electrical - Loads		
Apparent Load	0.00 VA	=
VOLTAGE	0.00 V	=
VOLTAGE COMMENTS	ALERT! If you don't want to mount the ceiling rose	="ALERT! If you don't want to mou
Dimensions		
CANOPY RADIUS	165.00 mm	
CORD DIAMETER_INPUT	2000.00 mm	
CORD LENGTH (default)	2000.00 mm	
CORD LENGTH CONTROL (default)	2000.00 mm	
DIAMETER	1100.00 mm	=
Photometrics		
COLOR RENDERING INDEX	90	="90"
LIGHT SOURCE		=
LIGHTING SPECIFICATION	LED 3000K - CRI 90	="LED 3000K - CRI 90"
Other		
BIM AUTHOR	https://bim.archiproducts.com	=
BIM BADGE	https://bim.archiproducts.com/en/badge/bim-ar	=
BIM USER MANUAL	https://img.edilportale.com/bim/LUCEPLAN-CO	=

ALERT! If you don't want to mount the ceiling rose and remote drivers included in each BODIES, you need to remember to update the voltage value: it will no longer be 220-240V but 24 V, the value of the installed bodies. You will also need to re-assign the electrical connector by yourself

CODES - IMPORTANT NOTE

AVAILABLE FINISHES - Structure: Black, brass, aluminum; Different available finishes - for further info about finishes and codes, please refer to the TECHNICAL SHEET

ALERT! A direct and an indirect light installations are available depending on body rotation: for further info about possible angles, please refer to the BIM USER MANUAL and the TECHNICAL SHEET.
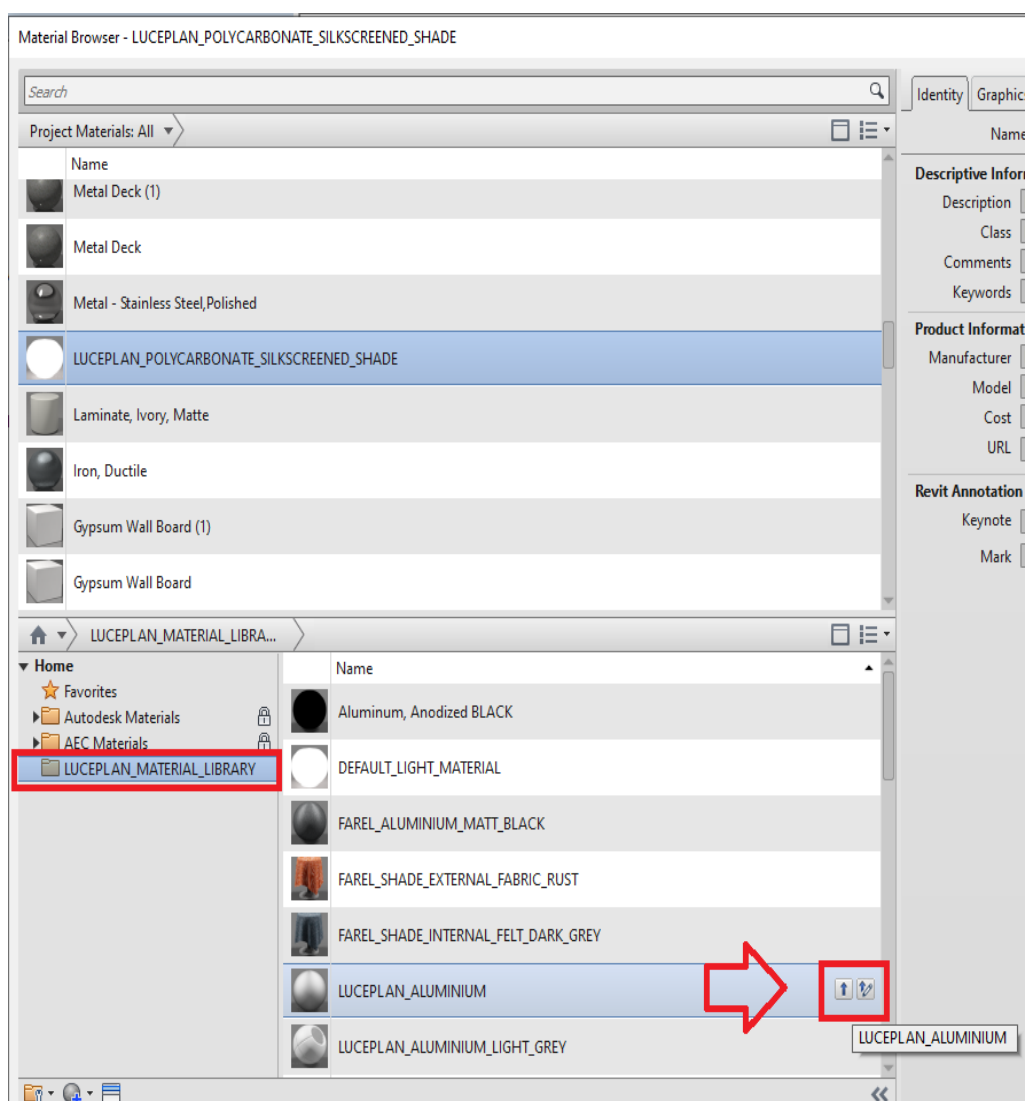
Load Material Library (.adsklib file)

Usually, if there are more than two finishes you will find the .adsklib file that allows you to have all the LUCEPLAN Material Library in one file.

To load a material library, your computer must be able to locate and access the *.adsklib file that defines the library.

1.Click Manage tab ➤ Settings panel ➤ 🔘 Materials.

2.In the Material Browser dialog, on the browser toolbar, click on the 🖼️ drop-down menu ➤ Open Existing Library.

3.Browse to and select the material library file (*.adsklib), and click Open.

4.The selected material library is shown in the library list. Now you can copy materials from that library into your projects or into other user libraries.

How to add Materials from the library

Click on the arrow to **add material** from the LUCEPLAN library to the document.

IMPORTANT NOTE |Textures entry

When opening or loading a family, the user might find an issue similar to the one in the picture below with **a yellow exclamation** in the Materials browser > Appearance Tab where the image should be in Revit.
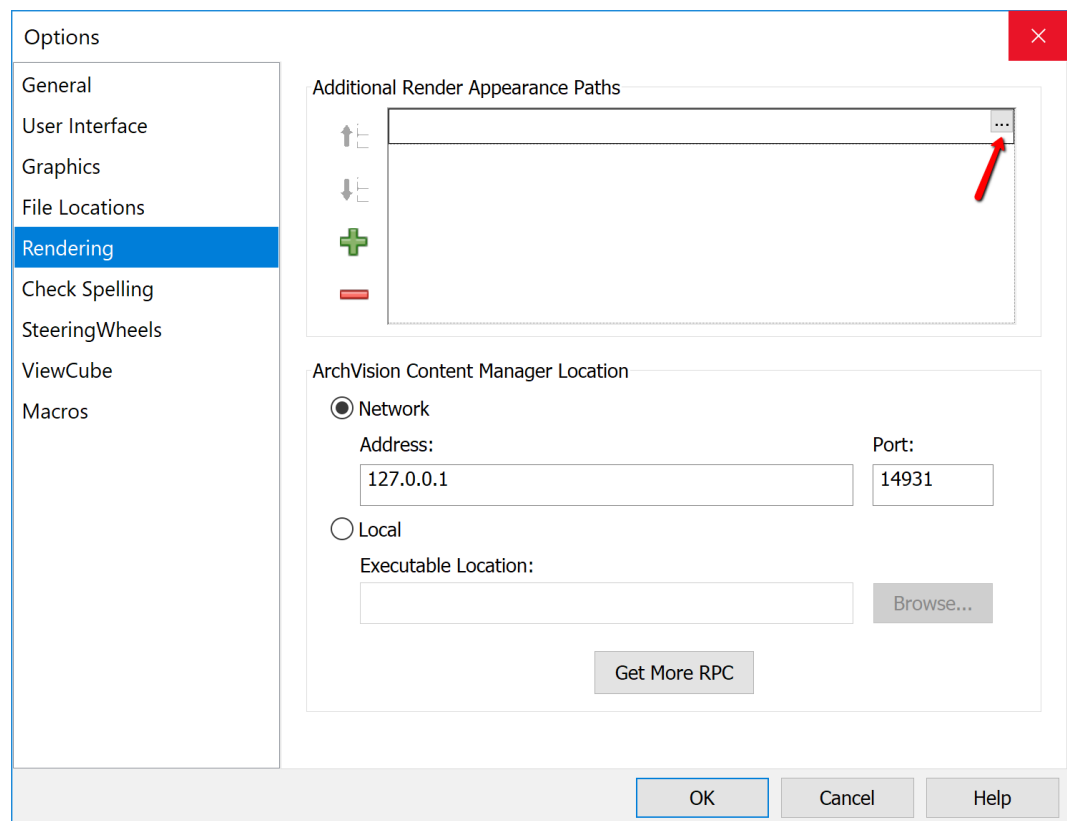
This is because Rendering/file path isn't set correctly.

SOLUTION:

To add texture and material files to project go to **Revit > Options > Rendering >** and under **'Additional render appearance path'** add a path to the folder containing those files (.jpg, .png, etc.) - downloadable on the product sheet in **bim.archiproducts.com.**

You might have to *change the visual style* from realistic to another and back for the textures to be reloaded.

**Write us at infobim@archiproducts.com
or call at +39 080-2460421**

bim.archiproducts.com