



BIM LIBRARY MANUAL - ELEMENTS

JULY 2024
Version 00

Strat**BIM**[®]

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DOCUMENT VERSIONS

V.00	29/07/2024	First published version.
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BIM LIBRARY MANUAL

01. Introduction

This BIM Library Manual aims to support the installation and use of BIM Objects related to products developed and marketed by **REVIGRÉS**, seeking to help AEC Industry - Architecture, Engineering and Construction technicians in their decision process.

02. Library Description

The presented library was developed for **AUTODESK®2021** version or newer and refers to **ELEMENTS** collection marketed by **REVIGRÉS**.

Included in this library are all the typologies of the mentioned collection in the colors, finishes and commercialised formats, namely:

- **BASE;**
- **DG;**
- **DGCF;**
- **DGCFCANTO (right and left);**
- **DGCFSS;**
- **STRATUS36;**
- **RB.**

03. Compatible Versions

The library is compatible with the **AUTODESK REVIT®2021** version or newer.

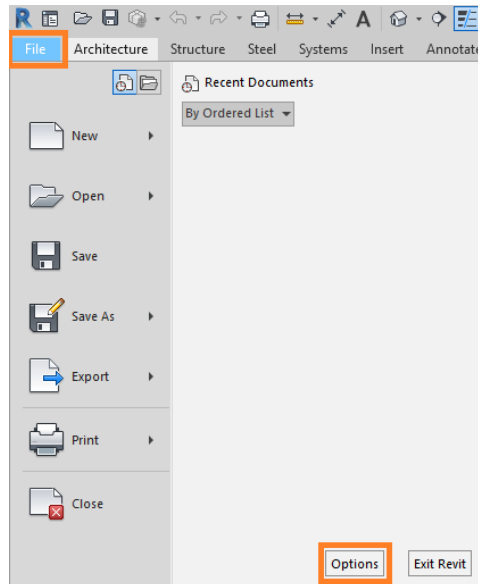
04. Objects Characteristics

The objects are created in the respective categories, so that they can be used according to their actual application. This way, all objects relating to floor and wall coverings are created in the category *Floor* and *Wall* objects - *system families*. Only the DGCF, DGCFSS and DGCFCANTO are created as *loadable families*. For the development of step objects, it is possible to create them with *Floor* objects as well as *Stairs* objects.

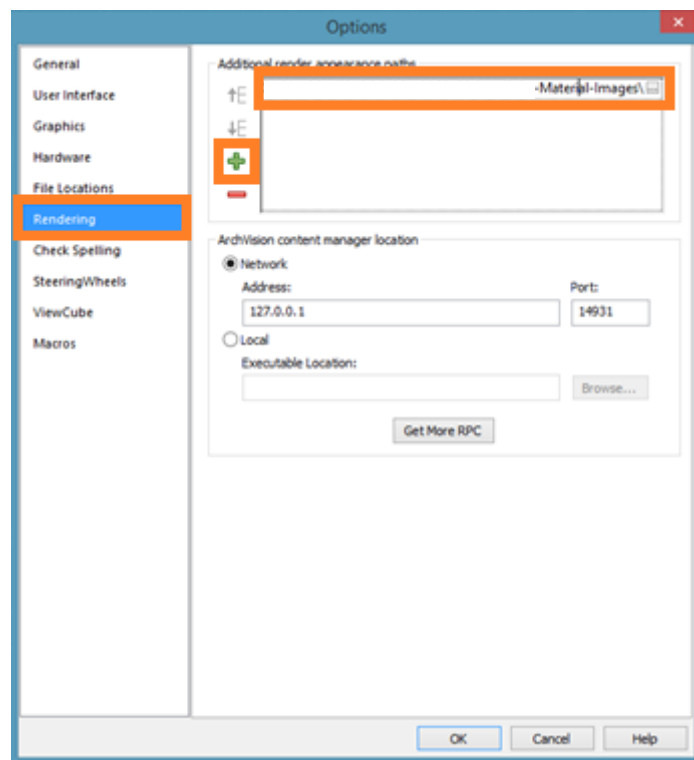
The objects are shown identified with their actual measurements, adding 2mm to this measurement for accounting of the joint.

05. Inserting the material library

The created objects have associated materials, which, for the purpose of representation, have images that give it its characteristics with respect to colour, shape and finish. In order to the program map it correctly, all images must be unzipped from the file **REVIGRES-ELEMENTS-Material-Images.zip**. The user will then need to include the path to that folder in the list of paths to map material textures. To do this, go to **FILE / OPTIONS**:



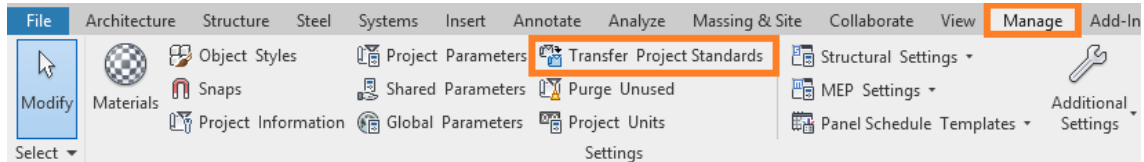
Then, in the **RENDERING** section, add the path to the list of additional paths:



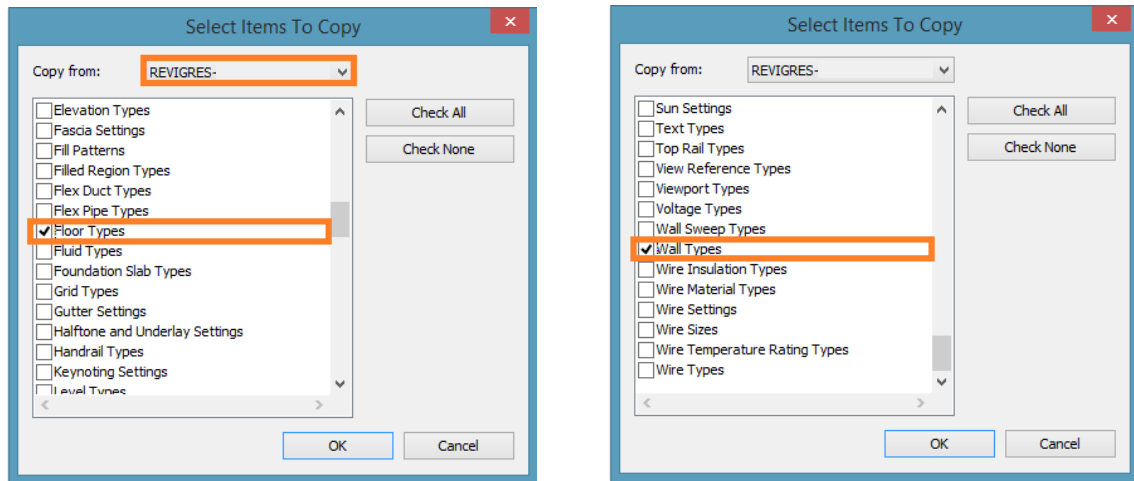
This way, we ensure that all the necessary images of the materials and objects are properly mapped for during the rendering process.

06. Insertion of Families

In the case of objects belonging to *System families*, namely those relating to wall and floor coverings, they must be loaded from one project file (RVT) to another. Thus, to transfer the elements of the Wall or Floor category, you must open the REVIGRES file with the desired ELEMENTS typology, as well as the project file that you want to transfer the REVIGRES objects, and go to **MANAGE / TRANSFER PROJECT STANDARDS**:

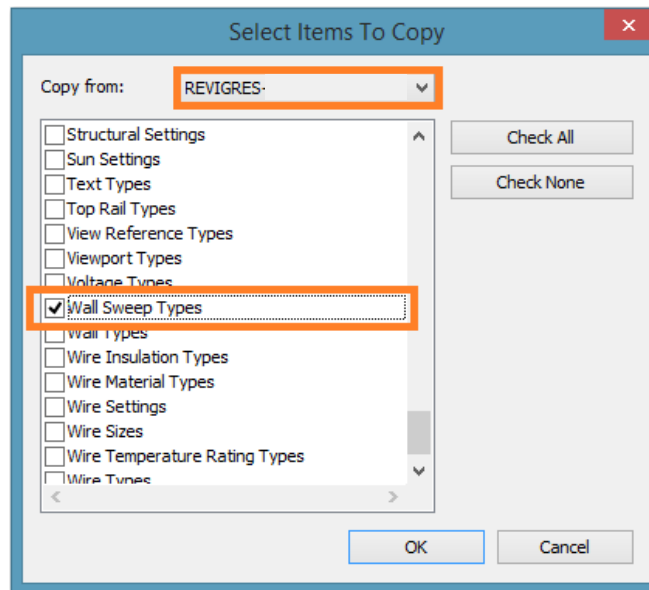


You must then activate the object type that you want to transfer. In the case of floors, the **Floor Types** option must be chosen, in the case of wall coverings, the **Wall Types** option:



This method applies to the transfer of elements of the typology: **BASE, DG, DECOR and TC**.

The footer objects, referring to the **RB** typologies of the REVIGRÉS ELEMENTS series, are developed as *Wall Sweep* category. Therefore, in order to load these objects for a project, the file **REVIGRES-ELEMENTS-RB-R21-v00.rvt** must be opened first. You can then take the needed objects from the file, to do this go back to **MANAGE / TRANSFER PROJECT STANDARDS**, as mentioned above. Then choose the *Wall Sweep* Types option:



In order to be applied, simply activate the specific command to place *Wall Sweeps* in **ARCHITECTURE / WALL / WALL: SWEEP:**

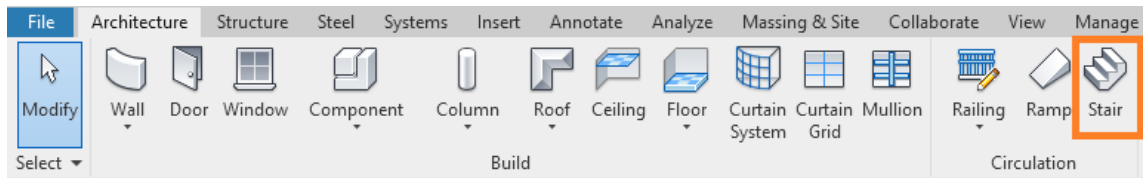


The **DG** objects are made in the *Floor* category so that they can be applied together as a floor. However, they are also prepared to be applied directly to **Stair** type objects. To use this typology as a floor, the way to load objects is like the one explained for the Base, BR and similar series, through the **MANAGE / TRANSFER PROJECT STANDARDS** tab and choosing the **Floor Types** option.

To use directly on Stair objects, you must go to **MANAGE / TRANSFER PROJECT STANDARDS** and activate the options:

- **Materials**
- **Stair Types**

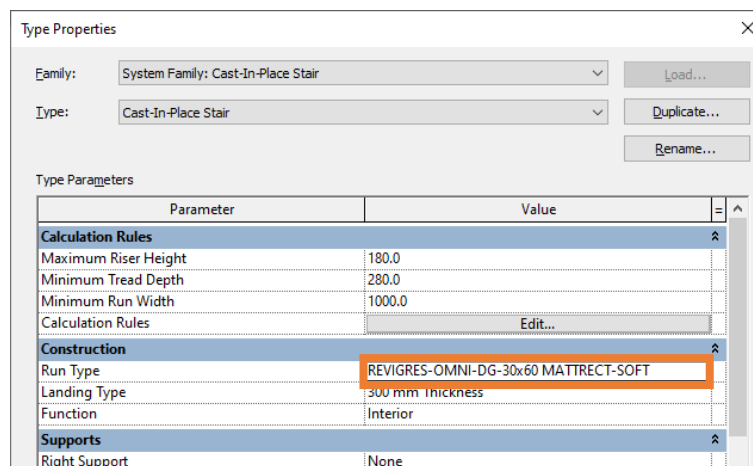
After the information regarding the materials and the type of stairs being loaded in the design, a staircase with the characteristics of the objects of the DG typology can be created. To do this, you must activate the **ARCHITECTURE / STAIR** command:



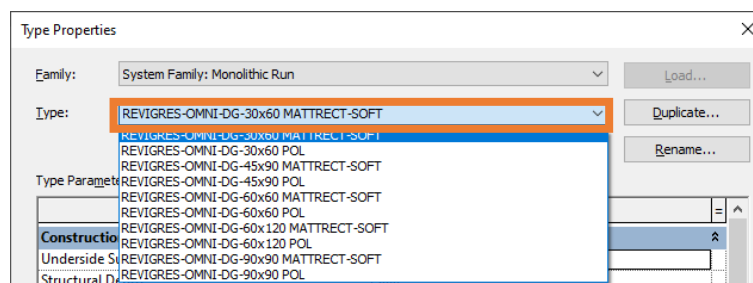
After choosing the family and type of stairs you want, press **EDIT TYPE** in the properties dialog box:



In the **Construction** section, click the value displayed in the **Run Type** parameter:



Next, you will be able to choose the type of **Run Type** you want, within the depths of the blanket that the DG type of the ELEMENTS series allows:

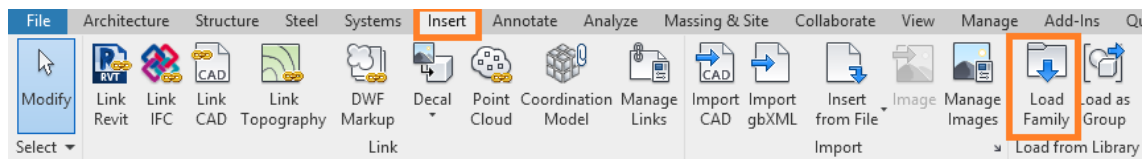


After choosing the type of object of the **DG** typology, it is necessary to change the material for the step itself will be chosen in the **Materials and Finishes** section in the parameter **Tread Material**:

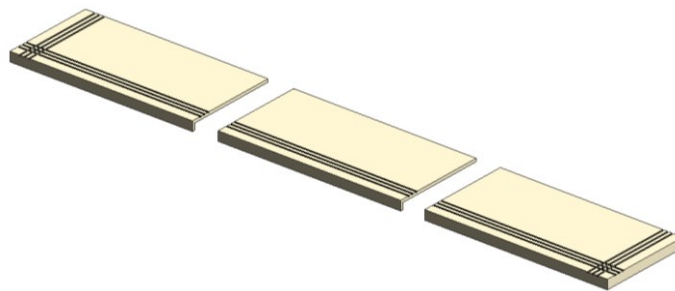


In the stair definition, must be confirmed that the tread depth is matching with the chosen DG piece.

Step objects **DGCF** and **DGCFCANTO** are loadable families, so they must be loaded through the tab **INSERT / LOAD FAMILY**:



These can be found as *Face Based* objects, so you will need an object surface to be able to place it in the project.



07. Properties of objects

The objects have been developed in-depth and extensively. Thus, all objects have information concerning the manufacturer with respect to applicable international standards, namely:

- Anti Slip resistance_ DIN 51130;
- PTV classification_ BS7976-2:2002;
- Slip resistance value through the pendulum method_ UNE-ENV 12633: 2003;
- Types of use_1-5;
- UPEC classification;
- Variations in Hue_1-3.

Data	
AntiSlipResistance	R9
PTV	PTV 36+
SlipResistanceValuePendulumMethod	Class1
TypesOfUse	5
UPEC	U4P4E3C2
VariationInHue	V1

All objects also have the manufacturer's reference, so that it can be easily referenced, as well as other relevant information:

Identity Data	
BIM Modeler	StratBIM
BIM Modeler URL	www.stratbim.com
CE marking	YES
Manufacturer URL	www.revigres.pt
Publication date	07/2024
Reference	332DD540V1
Region Africa	ALL
Region Antarctica	ALL
Region Asia	ALL
Region Europe	ALL
Region Middle East	ALL
Region North America	ALL
Region Oceania	ALL
Region South America	ALL

The objects are also classified according to the international classification systems most commonly used in the AEC industry.

IFC Parameters	
CSI Masterformat 2014 Code	09 30 13
CSI Masterformat 2014 Title	Ceramic Tiling
CSI Unifomat II Code	C3010
CSI Unifomat II Title	Wall Finishes
IfcExportAs	IfcCoveringType
IfcExportType	CLADDING
NBS Reference Code	80-96-19
NBS Reference Description	Ceramic Tiles
UNSPSC Code	30131704
UNSPSC Description	Ceramic Tiles or Flagstones
Uniclass 1.4 Code	L533
Uniclass 1.4 Description	Tiles and blocks (rigid)
Uniclass 2.0 Code	PR-80-96-19
Uniclass 2.0 Description	Ceramic Tiles
Uniclass 2015 Code	Pr_35_93_96_19
Uniclass 2015 Description	Ceramic Tiles

08. Quantification of materials

All the files related to the various typologies of the ELEMENTS collection have pre-configured tables with the parameters related to the coating, its respective manufacturer's reference, parameters related to the applicable standards, as well as quantification parameters of the applied coating and the number of pieces applicable. The number of pieces is calculated by dividing the area of coating by the area of a piece, so that, depending on the geometry of the area to be coated, an increase of about 10% should be considered for breaks and cuts.

09. Final Considerations

Future revisions to the current version of the library will be made available on the REVIGRÉS website. Any question regarding them should be reported by email to bimsupport@revigres.pt.



Founded in 1977, Revigrés is a world reference in ceramics, specialized in the production of wall and floor tiles.

Revigrés headquarters is located in Barrô (Águeda) and its commercial building – opened in 1997 -, is a project by Architect Álvaro Siza Vieira, the first winner of the Pritzker Prize in Portugal. In addition to the showroom at headquarters, Revigrés also has a showroom in Lisbon (Saldanha).

It is present in more than 50 countries and maintains a close relationship and collaboration with professionals in the national and international market, being frequently selected to be associated with works of great impact, to carry out special, personalized and exclusive projects.

Revigrés is the only Portuguese company in the subsector of ceramic wall and floor tiles with a four-time certification of its integrated management systems (SGI), in the following references: Quality; Environment; Social Accountability; Research; Development and Innovation.

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