

revigres®

BIM LIBRARY MANUAL PRO SYSTEM

JULY 2024
Version 00

StratBIM®

TABLE OF CONTENTS

DOCUMENT VERSIONS	3
BIM LIBRARY MANUAL	4
01. Introduction	4
02. Library Description	4
03. Compatible Versions	4
04. Objects Characteristics	4
05. Inserting the material library	4
06. Insertion of Families	6
07. Properties of objects	10
08. Quantification of materials	11
09. Final Considerations	11

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 REVIT®** and refers to **PRO SYSTEM** collection marketed by **REVIGRÉS**.

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

- **NORDIK PRO;**
- **DECK PRO**

03. Compatible Versions

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

04. Objects Characteristics

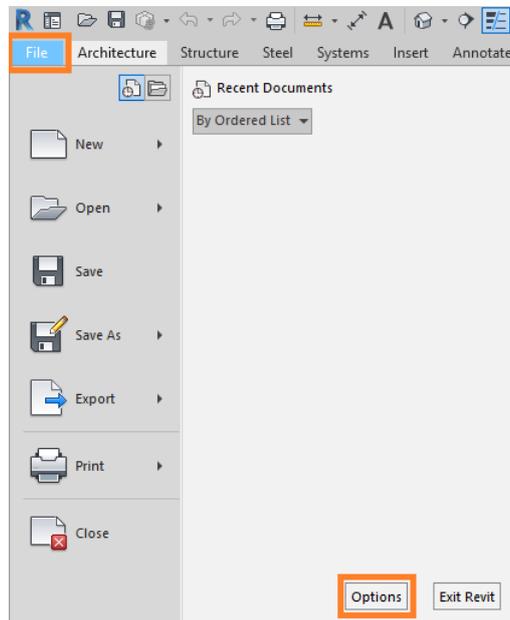
The objects are created as *loadable families (.rfa)*, belonging to the Revit category "Generic Model".

The objects are shown identified with their actual measurements; ensure a 5mm joint when placing the cladding pieces.

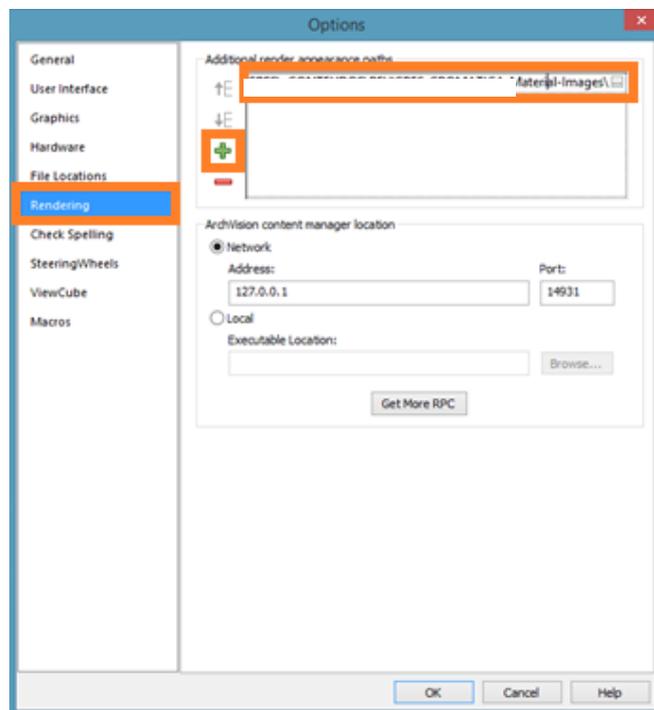
05. Inserting the material library

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-PROSYSTEM-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**:



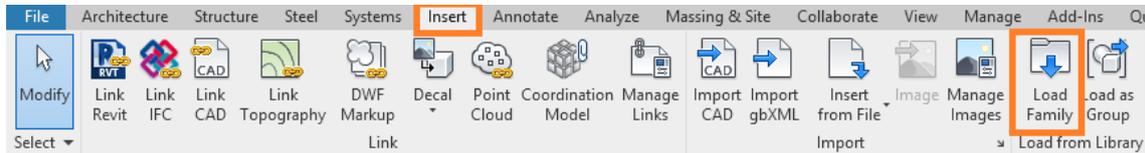
Then, in the **RENDERING** section, add the path to the list of additional paths:



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

The objects are loadable families in (.rfa) format, so they must be loaded through the tab **INSERT / LOAD FAMILY**:

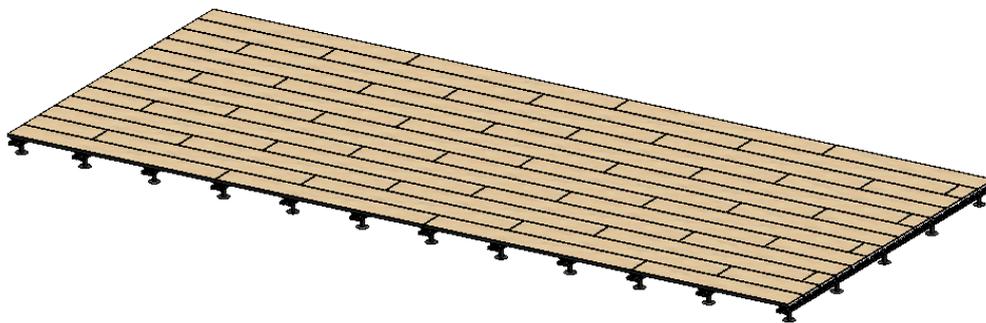


These can be found as *Face Based* objects, so you will need an object surface to be able to place it in the project.

06.01. Application on Rectangular Surface:

The *REVIGRÉS-PROSYSTEM-Angular_Application-R21-v00* and *REVIGRÉS-PROSYSTEM-Parallel_Application-R21-v00* families comprises the necessary elements for the assembly and installation of the system. These elements are:

- **Rail:** Aluminium stringer - Element subdivided into Flat Rail and Top Rail, according to the final height requirement of the pavement;
- **Clip Grip:** Mounting clips to apply directly to the support structure;
- **Pedestals:** Adjustable pedestals used on the *Top Rail* aluminium stringer;
- **Ceramic Tile:** Ceramic tile encapsulated in PVC ribbing.



Each family comprises 5 different types, with three belonging to the DECKPRO series and two to the NORDIKPRO series. The main difference between the two families lies in the type of ceramic tile application:

REVIGRÉS-PROSYSTEM-Parallel_Application-R21-v00: Intended for parallel application, where the ceramic tiles are arranged in straight lines.

REVIGRÉS-PROSYSTEM-Angular_Application-R21-v00: Designed for angular application, where the ceramic tiles are installed with a 1/3 offset, creating a pattern in which the joints are staggered by one-third of the tile's length.

 REVIGRÉS-PROSYSTEM-Parallel_Application-R21-v00

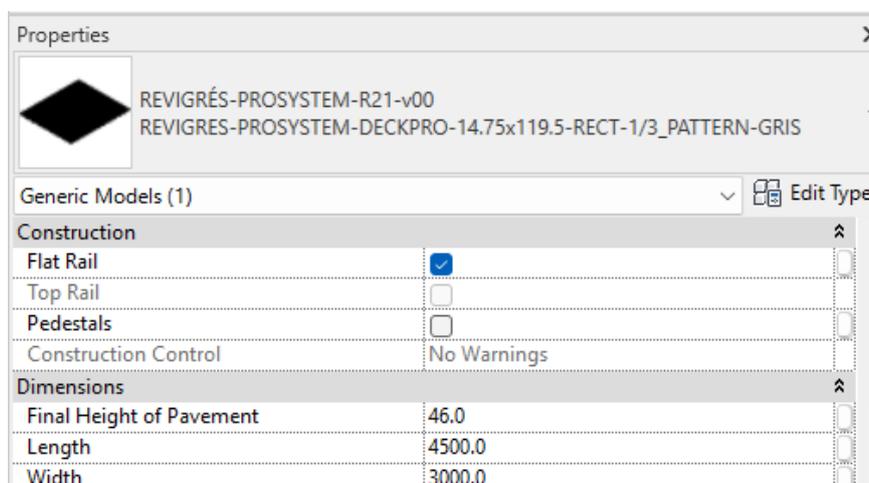
- REVIGRES-PROSYSTEM-DECKPRO-14.75x119.5-RECT-PARALLEL_PATTERN-GRIS
- REVIGRES-PROSYSTEM-DECKPRO-14.75x119.5-RECT-PARALLEL_PATTERN-IPE
- REVIGRES-PROSYSTEM-DECKPRO-14.75x119.5-RECT-PARALLEL_PATTERN-TECA
- REVIGRES-PROSYSTEM-NORDIKPRO-14.75x119.5-ANTISLIPRECT-PARALLEL_PATTERN-ALMOND
- REVIGRES-PROSYSTEM-NORDIKPRO-14.75x119.5-ANTISLIPRECT-PARALLEL_PATTERN-CHERRY

 REVIGRÉS-PROSYSTEM-Angular_Application-R21-v00

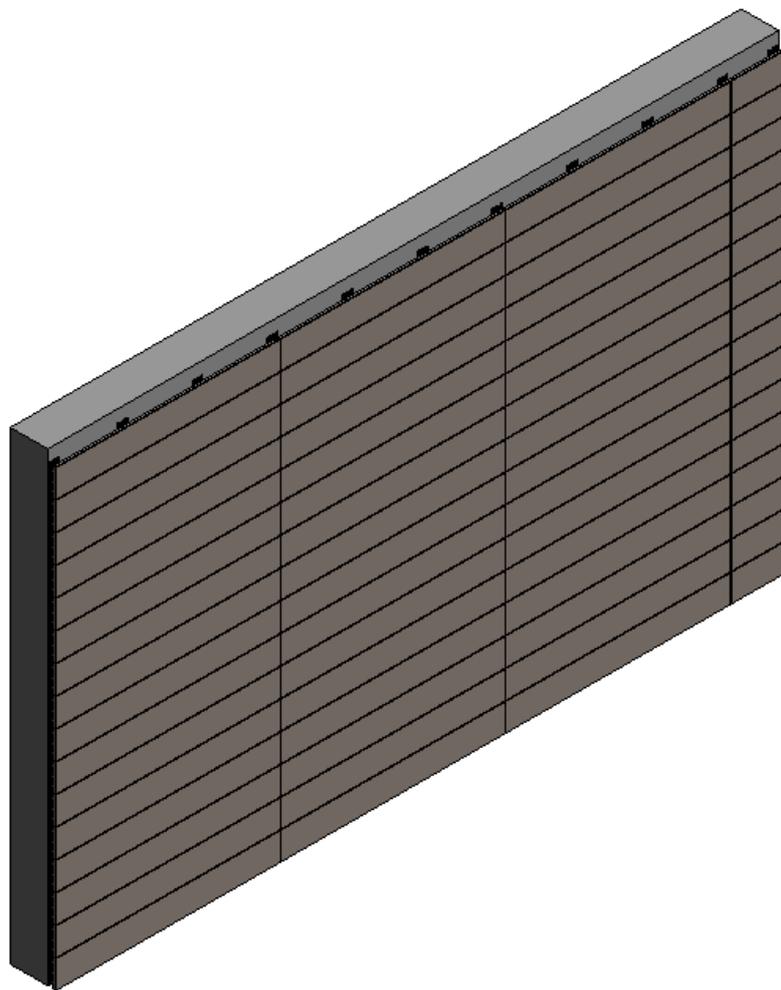
- REVIGRES-PROSYSTEM-DECKPRO-14.75x119.5-RECT-1/3_PATTERN-GRIS
- REVIGRES-PROSYSTEM-DECKPRO-14.75x119.5-RECT-1/3_PATTERN-IPE
- REVIGRES-PROSYSTEM-DECKPRO-14.75x119.5-RECT-1/3_PATTERN-TECA
- REVIGRES-PROSYSTEM-NORDIKPRO-14.75x119.5-ANTISLIPRECT-1/3_PATTERN-ALMOND
- REVIGRES-PROSYSTEM-NORDIKPRO-14.75x119.5-ANTISLIPRECT-1/3_PATTERN-CHERRY

When loading the object into the model, the user must input the specific dimensions, filling in the dimensions for **Length**, **Width**, and **Final Height of Pavement** parameters, as well as defining which type of Rail will be used (Flat Rail or Top Rail) and whether Pedestals will be utilized.

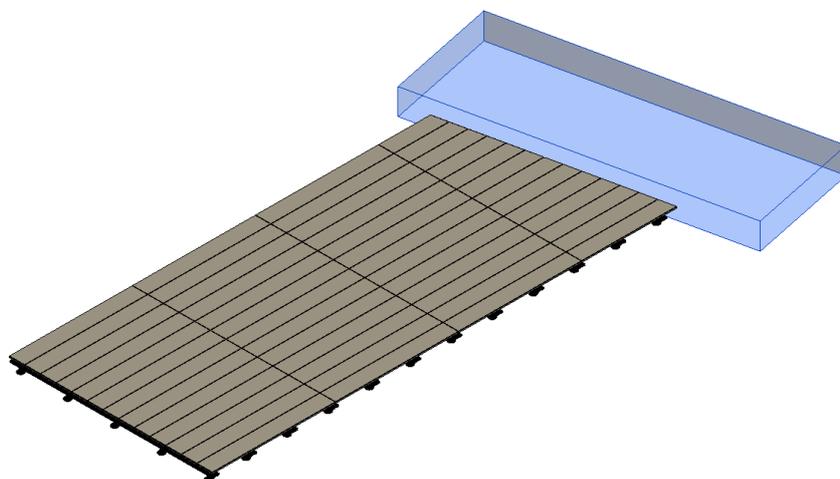
The "**Construction Control**" parameter will indicate if any dimension does not comply with the construction of the selected structure.



These families can also be applied to facades, i.e., applied vertically. To do this, the Pedestals option should be turned off, and the "Place on Face" option should be used, with the chosen wall as the host.



In the case of areas with angular boundaries, where the angles are not right angles, it is necessary to use the REVIGRÉS-PROSYSTEM-VOID-R21-v00 (.rfa) family to cut the objects that exceed the boundaries of the application surface.



06.02. Application on Rectangular Surface:

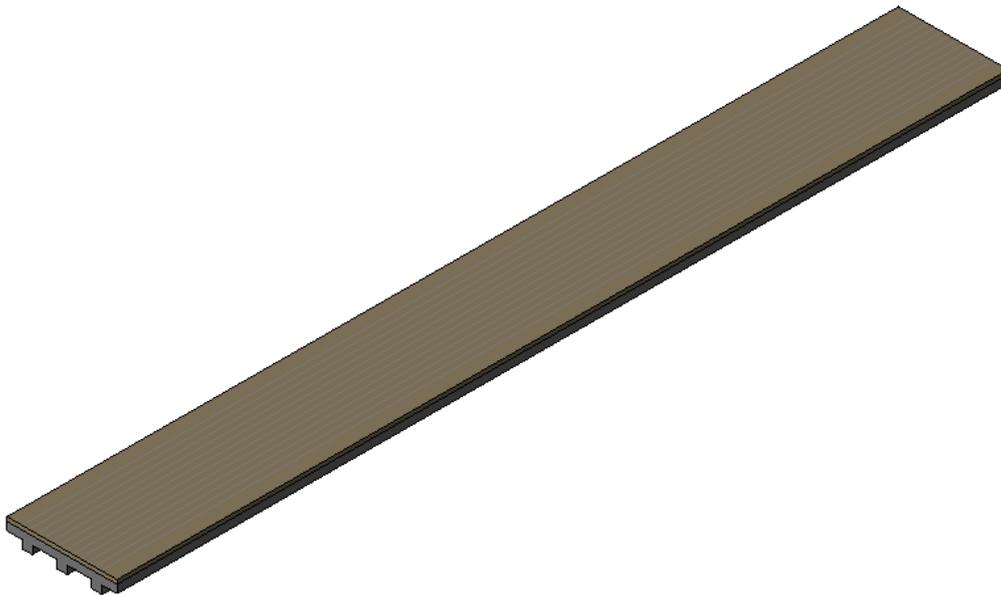
As an alternative to the method described in section 06.01, the pieces can be placed separately, providing freedom to the user.

First, the REVIGRÉS-PROSYSTEM-Structure-R21-v00 family should be loaded, and the data for Length, Width, and Final Height of Pavement should be filled in.

This family contains only the components that support the ceramic pavement. The base structure is formed by the Rail elements, which are divided into Flat Rail and Top Rail, the Clip Grip, and the Pedestals.



Then, insert the *REVIGRÉS-PROSYSTEM-Ceramic_Tile-R21-v00* family, using the **ARRAY** command with the desired configuration.



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;
- Variations in Hue_1-3.

Data		
AntiSlipResistance	R11	=
PTV	36+	=
SlipResistanceValuePendulumMethod	Class 3	=
VariationInHue	2	=

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

To quantify the installed cladding pieces, create a table for this purpose according to the category in which they are developed—Generic Models.

The pieces integrated into the complete family are shared, so they should also be referenced in the table created as per the previous point.

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.

revigres®

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.

Developed by

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