pCon.planner 8.12

New Features

pCon.planner 8.12 - New Features

Content

1 Experience materials in a new way: new Dialog and Extended Parameters

1.1 New Material Parameters

pCon.planner 8.12 offers more variety in the creation of materials. This is a result of the revision of the OMATS material concept.

OMATS 2.2 provides a smart combination of selected parameters and their respective settings: Create impressive and realistic materials based on textures or colors, making use of the additional material settings – even easier than in the previous versions.

The new parameters *Sheen* and *Clear Coat* enhance the lifelike appearance of your materials. Textures and images can be defined for light emitting materials, thus expanding your design options and the realistic appearance of light sources in renderings. A *Transparency* setting rounds off your options.

Note: for consistently improved display quality, the new material concept is supported in photorealistic rendering and real-time display.

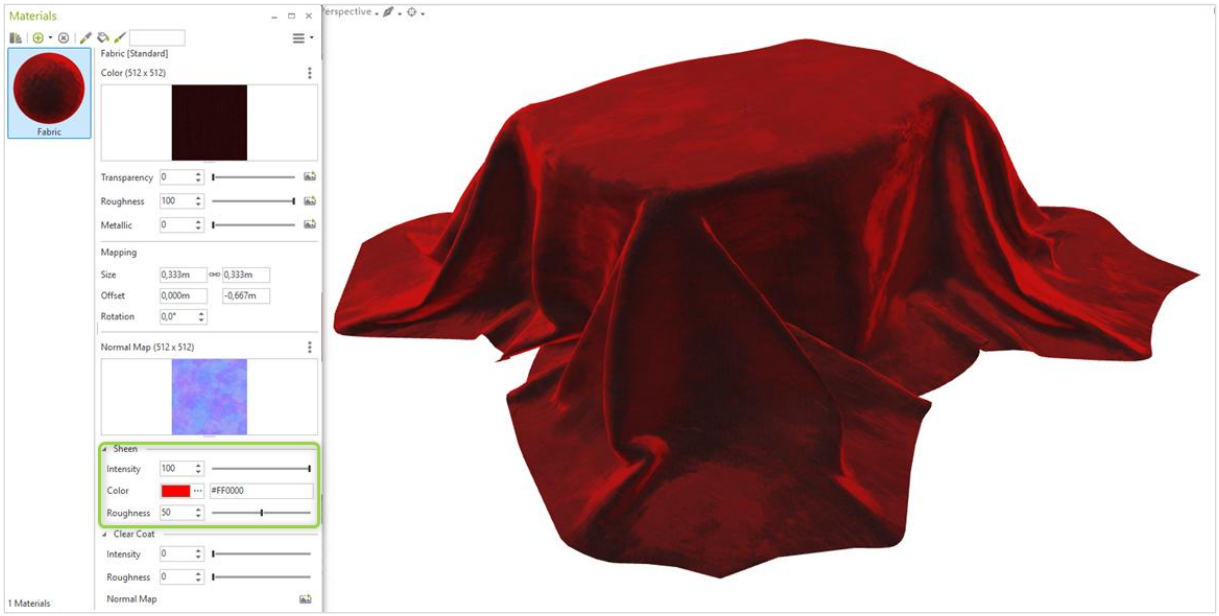

Figure 1: Creation of a velvet material using sheen parameters

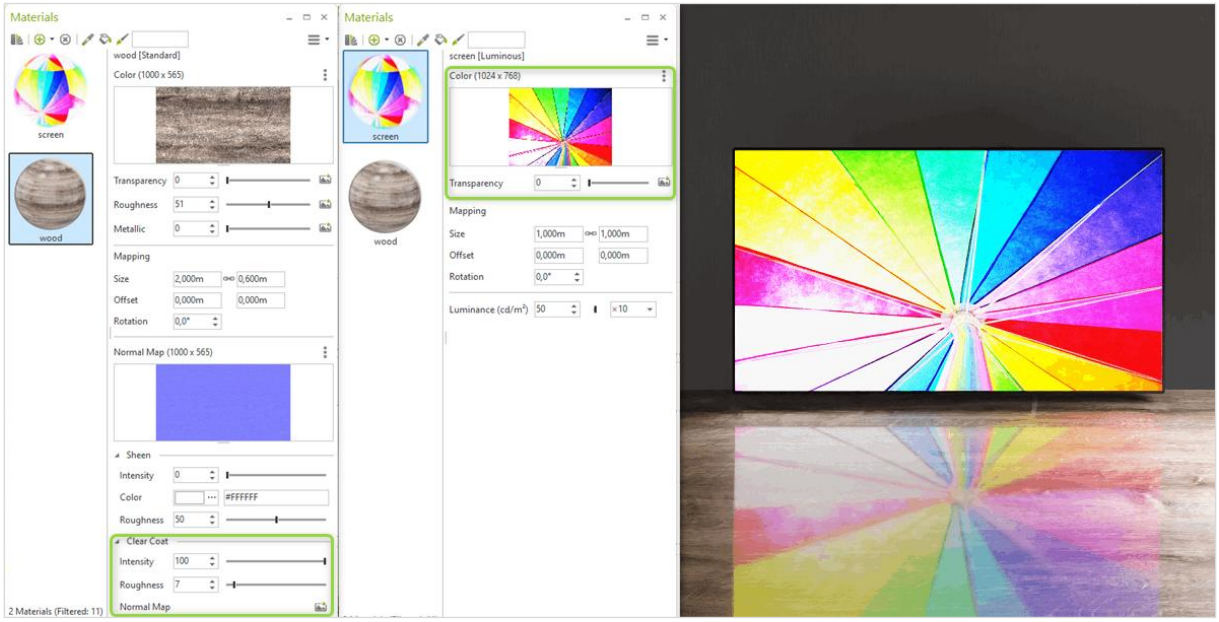

Figure 2: Illustration of a lacquered table top and a self-luminous screen

1.2 Reworked Material Dialog

Better overview and quicker material creation due to new dialog layout:

- Enhanced Drag&Drop for textures, images or Normal Maps to the texture creation categories
- Enhanced Copy/Paste options: copy textures into empty channels
- Clear layout including the option to hide or show material editor
- Easier access to materials in pCon.catalog: The current material page is retained when the catalog window is closed

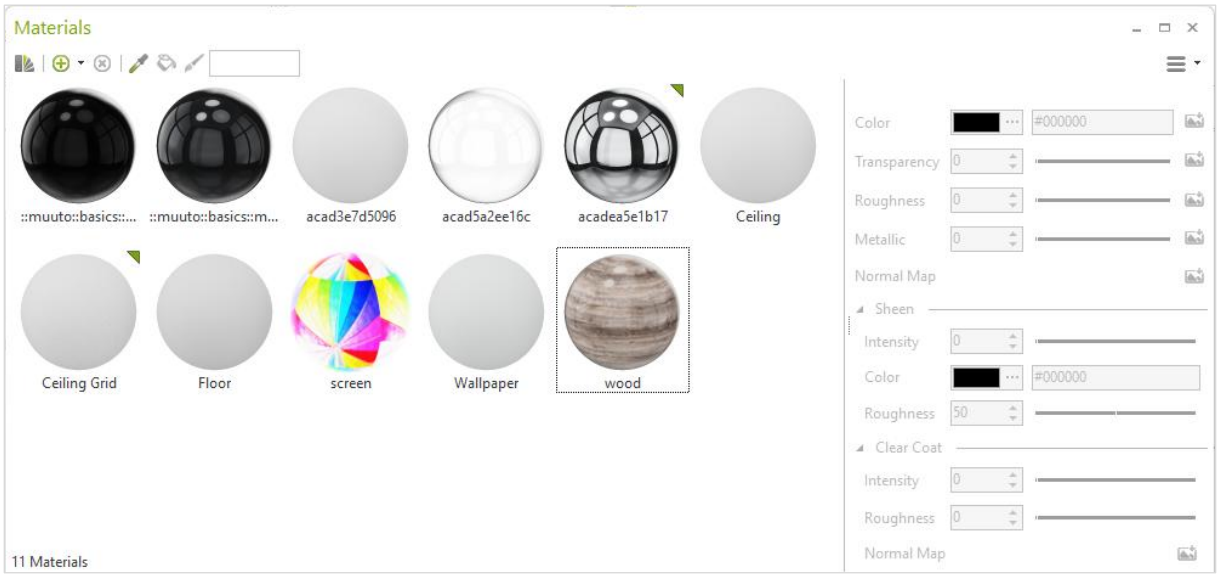

Figure 3: New Materials dialog

2 Working with Models

2.1 What are Models?

The newly introduced model concept gives you access to furnishing and equipment not included in your locally installed OFML manufacturer data. Models are geometries from pCon.catalog that contain some product information.

Note: Models are not included into Article Lists, commercial processes or commercial exports.

Unlike articles, models never contain pricing information.

Models are downloaded into your drawings directly from pCon.catalog. As an alternative option, you can also import them as PEC or PBOX files or as DWG. In contrast to conventional geometries, the *Product Information* window will contain information on the selected model.

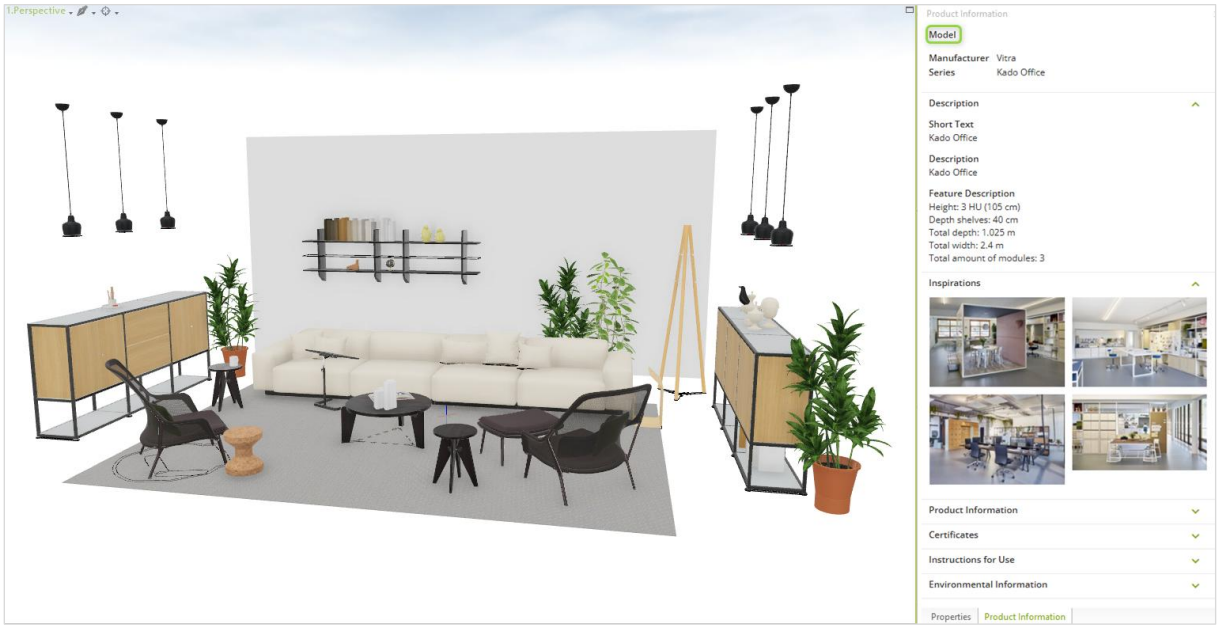

Figure 4: Model from pCon.catalog with product information

2.2 How to Edit Models

- Models can be configured exclusively online via pCon.catalog. The configuration options are thus always based on the status of the data in pCon.catalog. Whether a model can be configured is determined by how it is provided in pCon.catalog.
- Configuration via pCon.catalog requires Internet connection.
- Models can be manually converted into regular articles. If the corresponding OFML data is available on your system, the articles will be updated automatically.
- Models can always be converted into manual articles.
- Model properties are retained when exported to DWGs and PEC files. In other exports, models are converted into simple geometries.

2.3 Distinguish Models from Articles

- Models are marked separately in the product information window.
- Models are always located on a layer with the description _MODEL.
- The hamburger menu in the *Article Selection* dialog contains an option to include models in the selection.

2.4 Changes for pCon.catalog

The points mentioned above are accompanied by changes regarding pCon.catalog: With pCon.planner 8.12, all geometries downloaded from there are treated as models.

The downloads contain the information provided via pCon.catalog. This can be viewed via the *Product Information* window. For lean files, fast downloads and to stay consistent with other pCon applications, PEC files are preferably provided instead of DWGs.

Note: Models use meshes instead of solids. In order to provide smaller files, the resolution of the textures used with models is reduced. At the moment, models do not support acoustic information.

We have also improved the handling of download processes, error handling as well as logs.

If you reopen the closed catalog window (*Start* tab or *Toolbar*) or switch between the tabs in pCon.catalog, you will be taken directly to the content last opened. This is the case for models as well as materials. This option is not available in the integrated browser.

3 Areas and Dimensions (pCon.planner PRO)

The dimensions of selected

- Walls
- Floors
- Ceilings
- Roof pitches

can be viewed in the *Properties Editor*. The *Information* area gives you a comfortable way of using the calculated areas to roughly determine your requirements for wall paints, for example.

For walls, this new feature distinguishes between the inner and the outer wall side. If there are wall elements in the wall, the area dimensions are displayed in total (value in brackets) and minus the wall elements (first value).

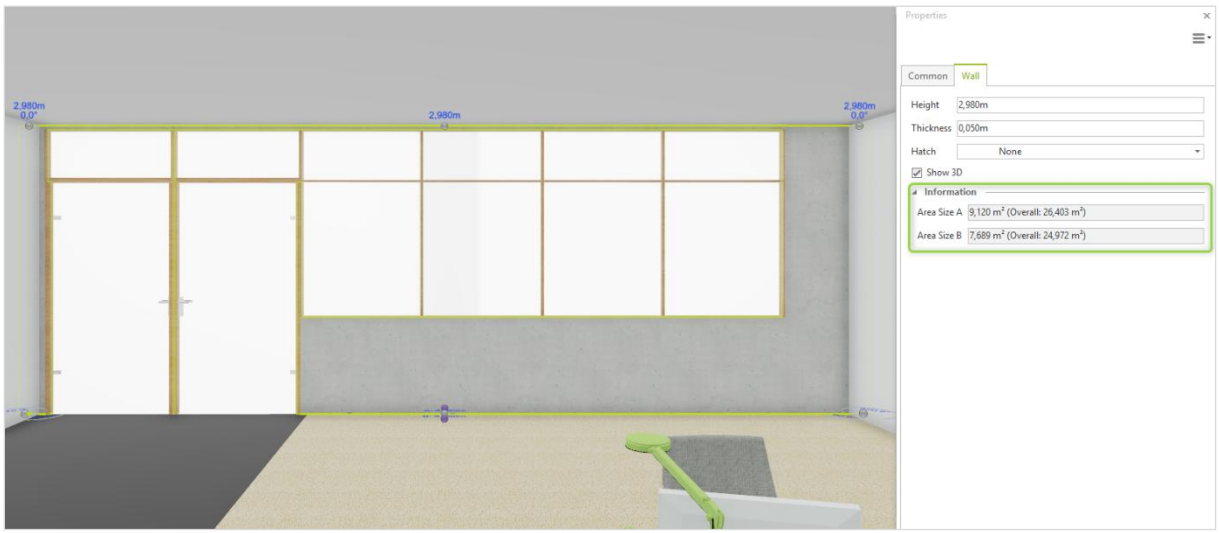

Figure 5: Wall surface display in the property editor

The dimensions of 2D drawing elements are also displayed. This includes polylines, rectangles, regions, hatched 2D elements and more. The area size and perimeter are displayed for closed 2D drawing elements. The length is displayed for open drawing elements.

This allows you to use drawing shapes as an aid for determining area and perimeter.

Note: If the lines of a shape intersect, the size of the area cannot be calculated.

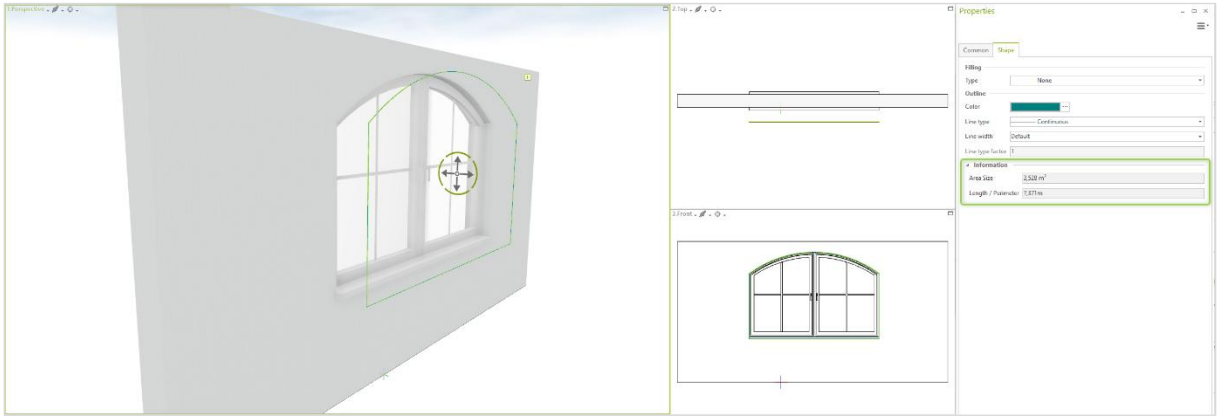

Figure 6: Area display of a drawing element in the property editor

4 Enhanced Features for Point Clouds (pCon.planner PRO)

pCon.planner 8.12 allows you to import point clouds in PLY format. In addition, the loading process for point clouds is more stable. The point size is adjusted when zooming. The point size can also be changed individually for each point cloud via the *Properties Editor*.

The new *Point Cloud* group on the *Start* tab provides you with the following tools:

- *Insert*: Opens dialog for importing a point cloud.
- *Crop*: Crop selected point cloud, analogous to the *Clippings* features.
- *Floor Plan*: Creates an image of a floor plan based on the point cloud. This can be used as the base for drawing walls.

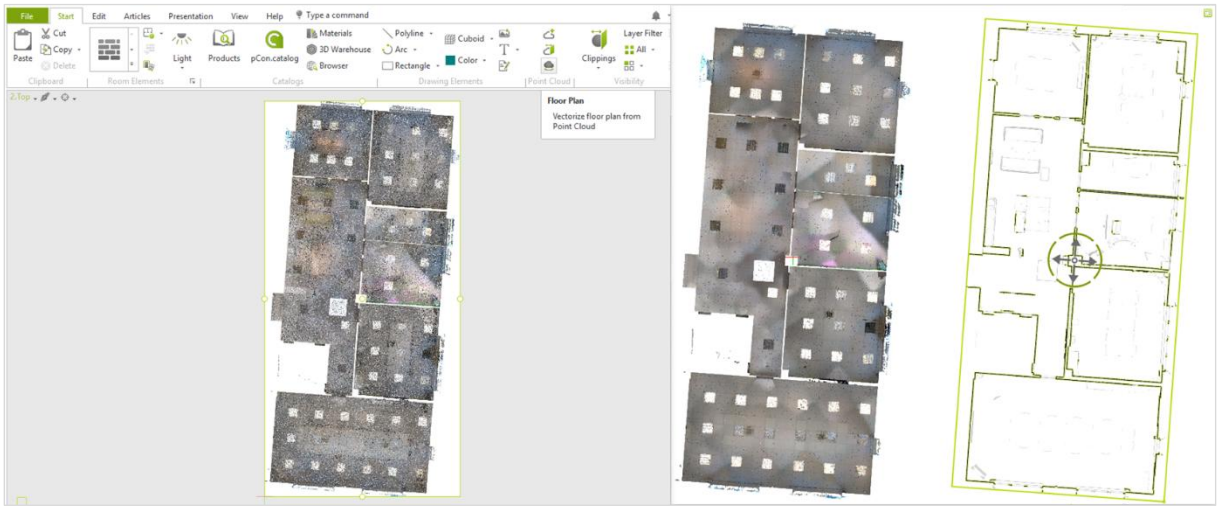

Figure 7: Floor plan generation from a point cloud

5 Improved Creation of Ceilings

5.1 New Features for Ceiling Grids

Enhanced settings for ceiling grids can now be accessed via the *Properties Editor*. This is where you can choose between a variety of default sizes or define custom values for a ceiling grid. Settings for joints, the diameter of spot lights as well as offset options give you more creative freedom. This provides you with the opportunity to design ceiling panels, for example.

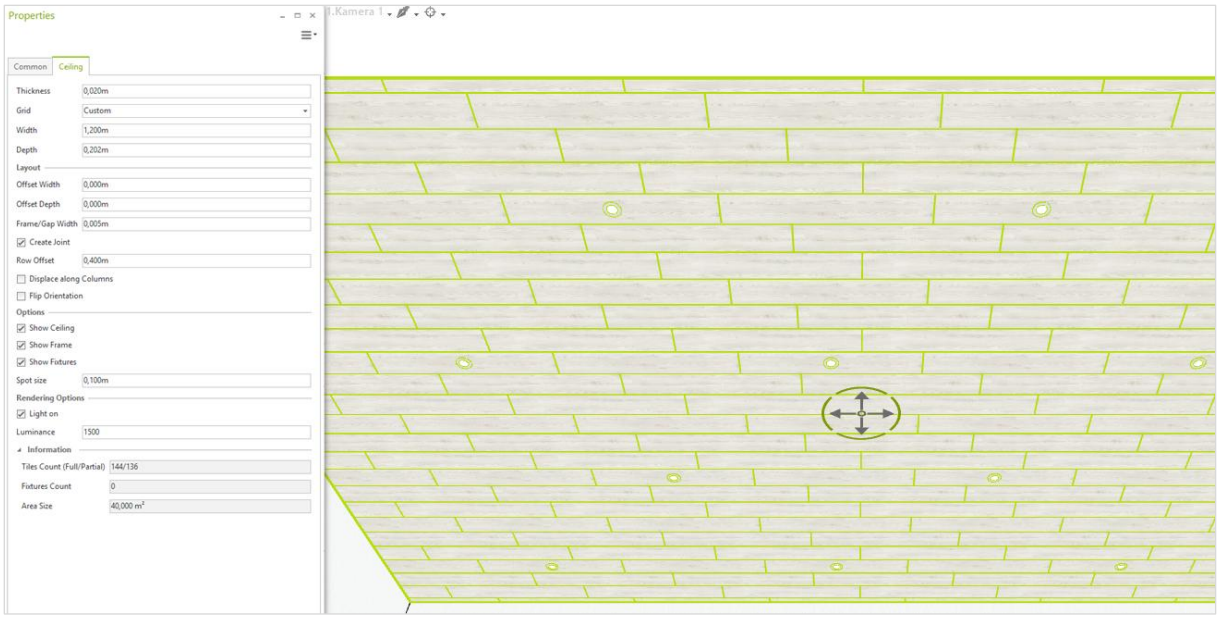

Figure 8: New properties for grid ceiling

A new dynamic tab is where you can integrate different types of *Ceiling Elements* into your ceiling. Multiple types of elements can be added to one ceiling. These are available:

- LED Panel
- Spot Light
- Reflector
- Absorber
- Ventilation
- Cut-out

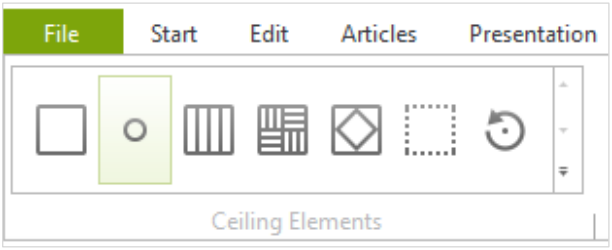

Figure 9: Dynamic register for elements of the grid ceiling

5.2 Working with Ceilings

To make it easier to edit ceiling grids, they are now also displayed in the top view. To get the grid view, double-click on your ceiling. Ceiling grids and ceiling elements are also assigned 2D elements on a separate layer.

The size of a ceiling itself can be changed using the scaling function.

In pCon.planner PRO, the number of complete and partial tiles for a selected ceiling grid is displayed in the *Properties Editor*. The number of ceiling fixtures is also listed.

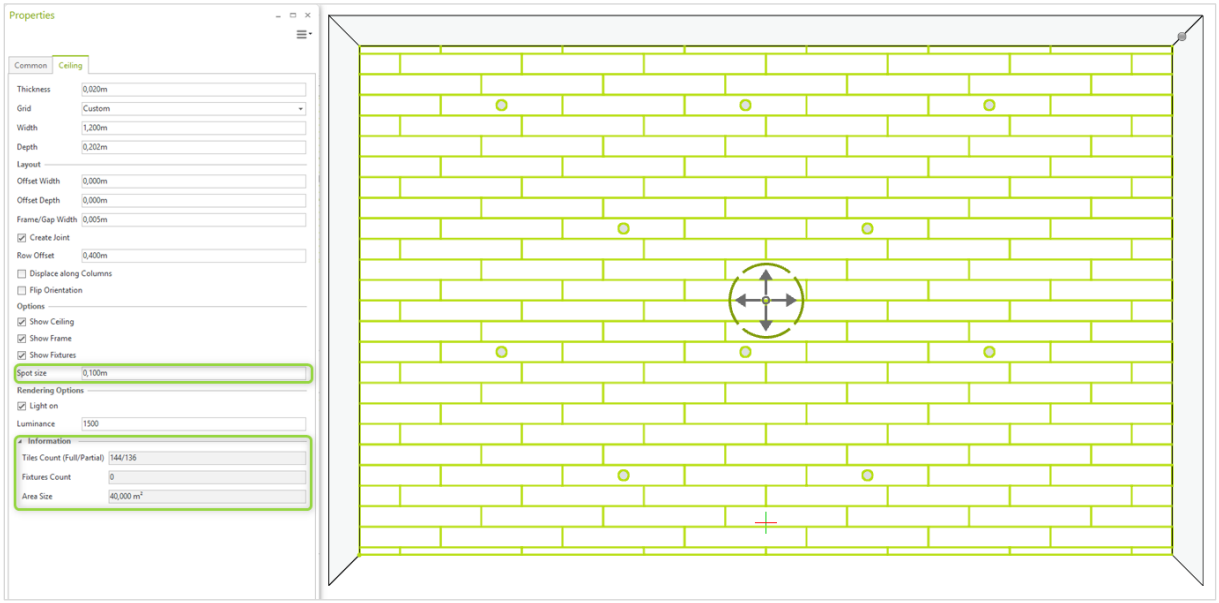

Figure 10: Settings and information on elements of the grid ceiling

6 Impress: Facilitated Sharing

You can now share content for Impress using just one button. Regardless of whether you want to provide a 3D model or content for AR, generate your link using the *Share* button.

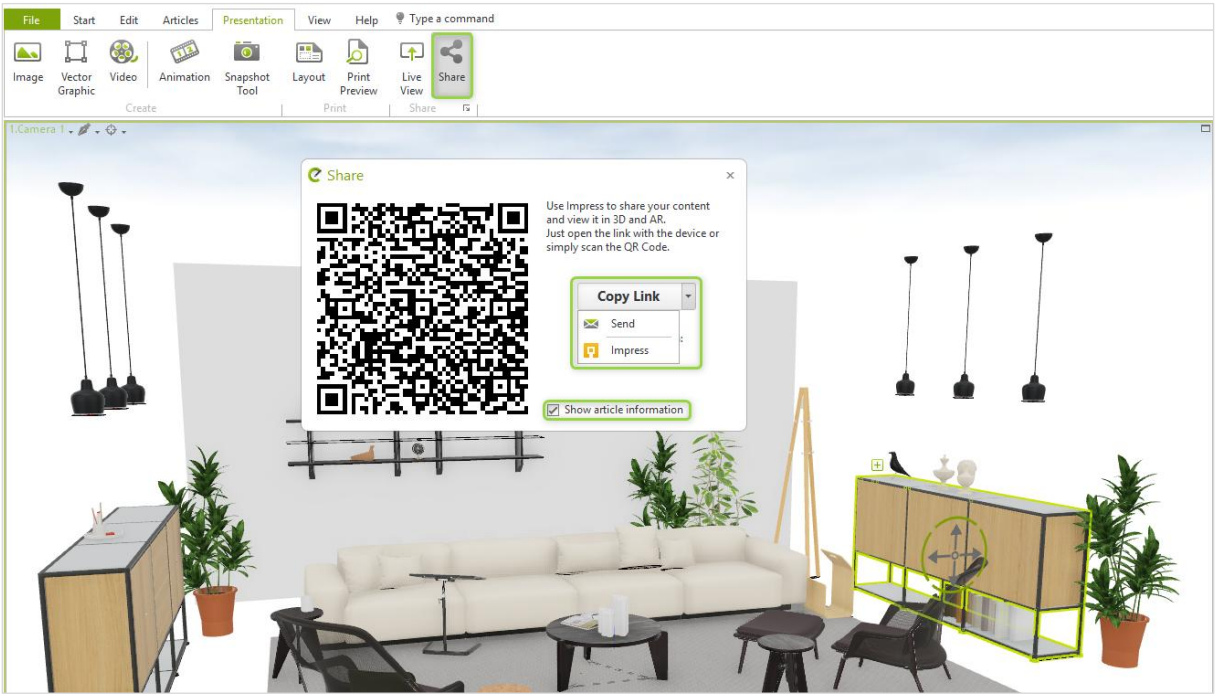

Figure 11: New share dialog

If desired, Impress can also display the product information for the displayed objects. For this, use the new option *Show article information* in the *Share* dialog. In addition, the viewing angle on the drawing defined in pCon.planner is retained when the link is opened in Impress.

Furthermore, PEC files now replace Impress exports in GLB and IAR format.

7 Performance of Photorealistic Rendering Improved

On average, your photorealistic images are created twice as fast as in former versions of pCon.planner. For realistic renderings, you can use as many light-emitting objects as you want in pCon.planner 8.12.

The changes also apply to the local BatchRendering and the EGR-BatchRenderingService.

Figure 12: FullHD rendering from pCon.planner 8.12

8 Additional Changes

8.1 Properties Editor

For more consistency with the other pCon applications, we have improved the material display in the *Properties Editor*.

Figure 13: Comparison of the material preview of pCon.planner 8.11 and 8.12

Properties that do not allow empty values are automatically reset to the previous value when the input is deleted. Invalid input is signaled by a new hint that does not interrupt your workflow.

8.2 Changes in Import

- PEC: Support for a new, light weighted variant that does not require an integrated DWG file. The new material concept is also supported.
- PBox: Support for the new material concept.
- GLTF: Supports light-emitting textures, the *Shimmer* effect and the *Clear Coat* effect for materials.
- FBX, DAE and OBJ: Support for Normal Maps.

8.3 Changes in Export

- PEC: Support for the new material concept.
- FBX: Completely reworked. Structure, material and texture names are retained in a better way and Normal Maps are supported. A new scaling feature in the export dialog is also provided.
- 3DS, DAE und OBJ: New ZIP archive option for external textures.
- RGFX: Uses DWG 2013.
- Excel: Supports additional texts for folders.

8.4 Program Settings

The *Miscellaneous* tab does no longer exist in pCon.planner 8.12. The options from this tab are relocated as follows:

- *Texture Search Folder*: *Load* tab
- *Render Job Folder*: *Save* tab
- *Level of Detail*: *Edit* tab

8.5 Layer Dialog

The toolbar in the *Layers* dialog has been reduced to a few essential functions. All other options can be found in the hamburger menu on the right of the dialog. This menu also includes a *Purge* function for unused layers.

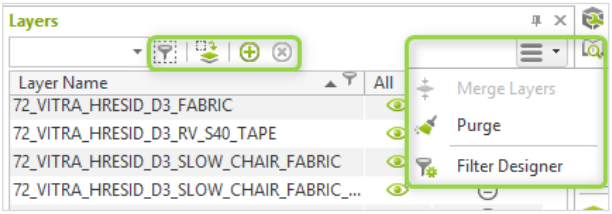

Figure 14: redesigned layer dialog

9 Breaking Changes

Export to IAR is no longer supported.

OMATS: Support discontinued for features that have become obsolete with to the new OMATS 2.2 material model.

XCF catalogs: Support discontinued for features that have become obsolete due to the new support for XCF 2.11.

Legal remarks