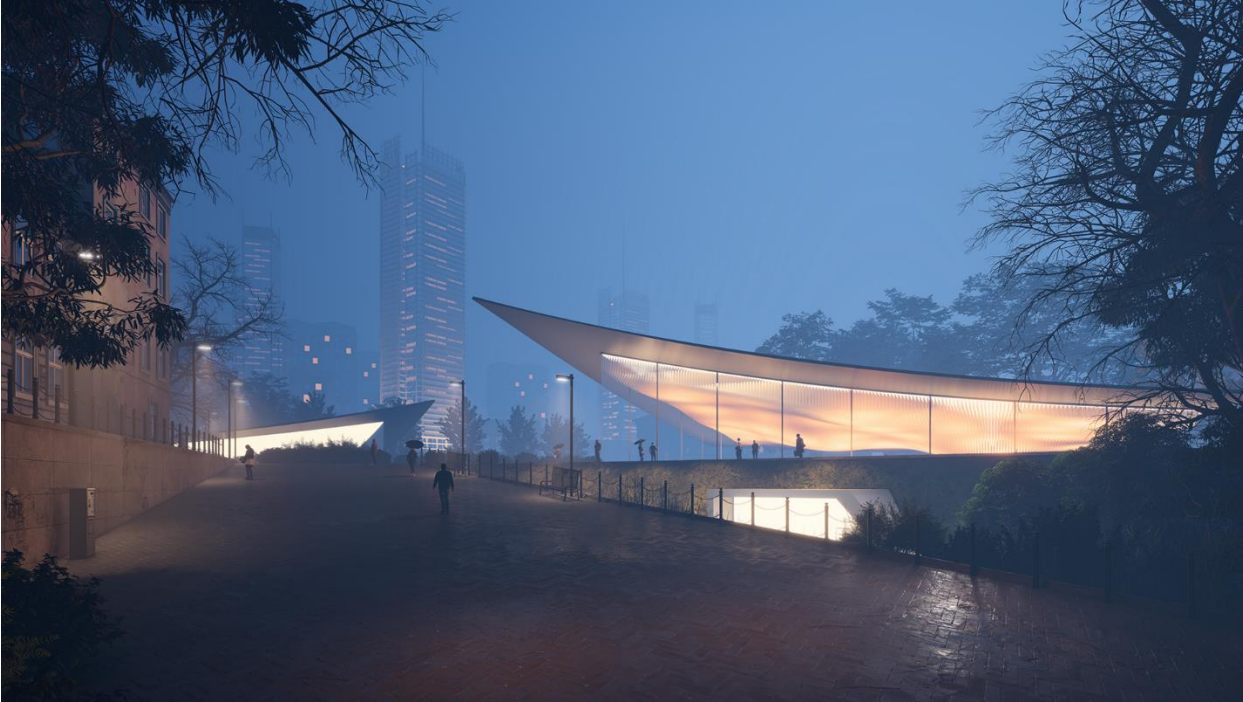




Lumion 2023.0: Release Notes



Introducing Lumion 2023

With every new release, we aim to make 3D rendering more accessible to every architect and designer, no matter their experience using visualization software. With a visualization tool you can depend on, it is easier to tell your design's story, express its personality, and evoke emotion from those who experience it. This messaging document intends to introduce the new Lumion brand and the latest version of our product - Lumion 2023 - its features, benefits, and how best to communicate them to our existing and potential customers.

For creators who want to see their vision come to life, only Lumion keeps you in your flow because we remove unnecessary hurdles and hesitations by placing experience, speed, and stability first.

Ultimately, it's not about the technology itself, it's about how it's being applied to serve a higher purpose. Whether it's developing a design, exploring ideas, or showcasing your vision of the future, that purpose is entirely up to you.

Lumion 2023.0: Release Notes

13 March 2023

Compatibility

- Please note that *Projects* and models saved in version 2023.0 **cannot** be opened in older versions of *Lumion*.
- Please click on the following link to see how to transfer settings, models, and *Projects* from older versions of *Lumion*:
 - **Knowledge Base:** [Lumion 2023.0: Everything you need to know](#)

Features, models, and materials with the asterisk (*) character are only available in **Lumion 2023.0 Pro**.

Refer also to the *Compare versions table - Comparison* tab:

- **Lumion website:** [Lumion 2023.0 Features](#)

1. New feature highlights

1.1: The Ray Tracing Effect (v0.9):

Powered by a fully reworked hybrid rendering engine, Lumion 2023 merges the previous rasterization technology with the brand-new *Ray Tracing* technique. Located under the *Lighting* category, the *Ray Tracing Effect* accurately emulates light behaviour and delivers a significant lift in rendering quality at the push of a button.

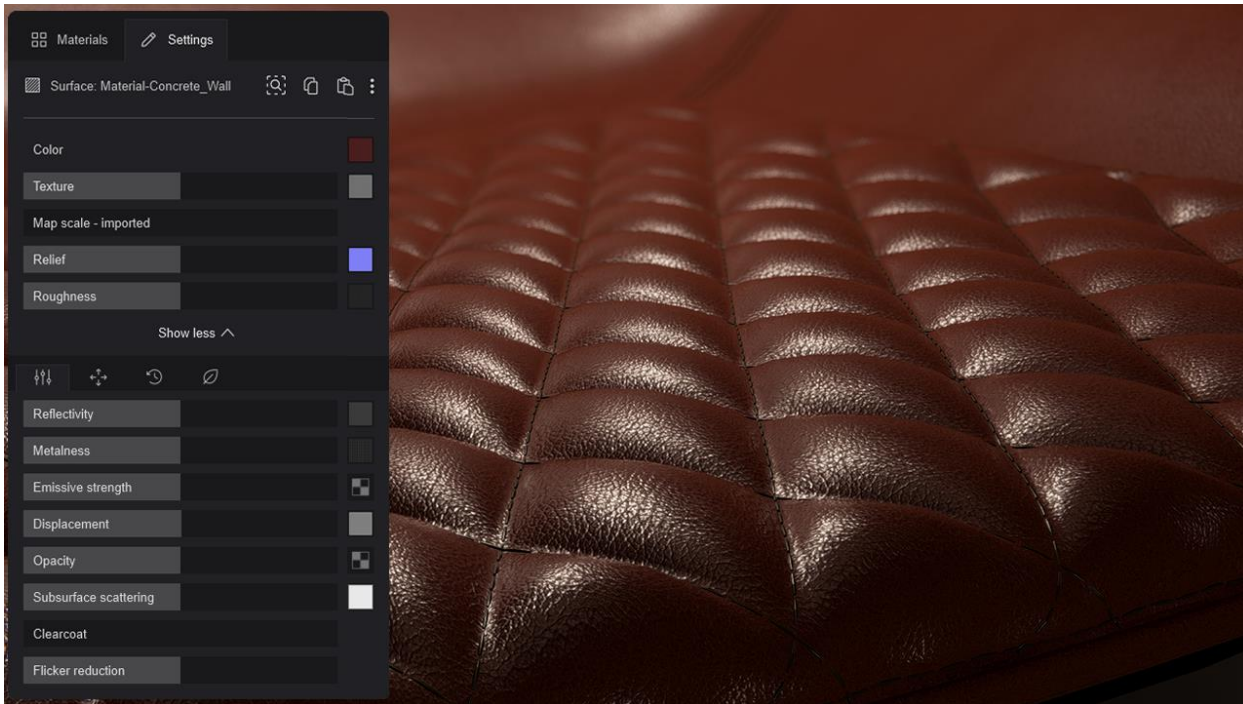
With the new version of Lumion, it is now considerably easier to get perfect results allowing you and your clients to see the future of your project more clearly than ever. Because the more realistic your rendering, the easier it is to imagine the end result.

The capabilities and interactions of the *Ray Tracing Effect* will be expanded and improved during upcoming releases of Lumion through the new *Updater*. Certain limitations are currently applicable described in **section 3.10**. More information on the *Ray Tracing Effect* can be found below:

- **Knowledge Base:** [How do you use the new Ray Tracing Effect?](#)
- **Lumion Tutorial:** [Lumion 2023: The Raytracing Effect](#)

1.2: Full PBR workflow:

The *Material* workflow has been converted to full Physically Based Rendering taking advantage of 8 *Maps* that bring your design choices closer to reality. The result will render more natural physical properties through the accurate calculation of light conditions and a higher degree of control over the *Material Settings*:



1.2.1 New Settings and Map Slots:

- ***Metalness***: Controls how strong the metallic attributes of a surface are. A *Metalness Map* can be loaded to isolate the metallic areas of the surface from the non-me
- ***Emissive Strength*, *Reflectivity*, and *Opacity***: can now be individually controlled from their own sliders or by assigning their own *Map* in each slot.

1.2.2 New Material Properties:

- ***Subsurface Scattering (SSS)***: increasing the slider value will give an object/surface a translucent effect, allowing light to penetrate and be scattered by the material. Assigning a color other than white (#FFFFFF) will affect the tint of the light scattered by the *Material*.

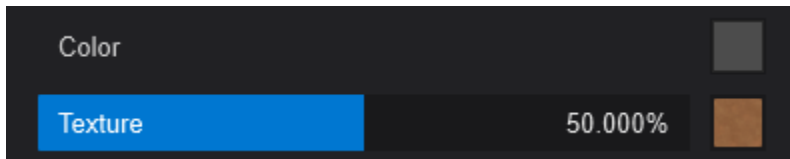


- ****Clearcoat***: this value adds a layer of colorless, resin-like finish to a surface.

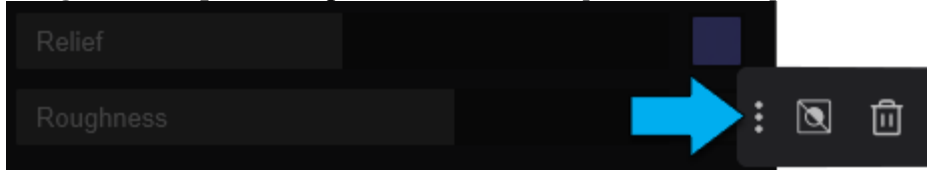


1.2.3 Changes

- **Texture Map:** now replaces the old *Color Map*. Lowering the *Texture Map* value will increase the effect that the *Color* has on a surface. By default, the *Texture* should be set at 50% when applying a *Standard Material*.



- **Roughness Map:** now replaces the *Gloss Map*. A *Gloss Map* can still be used and inverted:



- **Mapping scale:** is set to real-world scale and coordinates.
- **Opacity:** The *Opacity Slider* controls how see-through a surface is and replaces the *Transparency* from Lumion 12.5 and older versions. Loading an *Opacity Map* will allow the slider to control only areas of the surface that are not completely black.

1.2.4 Improvements:

- **Map Slots:** when a *Map Slot* is empty, Lumion will interpret the *Map* as being fully white, affecting the entire surface.
- **Map Slots:** can also be deleted as needed.
- **Textures** with an alpha channel (Example: .PNG, .TGA) that were embedded in the *Imported Material*, will now get the alpha channel assigned to the *Opacity Mask* slot.
- **Normal Map:** A *Normal Map* can be autogenerated based on the *Texture* or *Displacement Maps*. When both are loaded in Lumion, the *Normal* will be generated based on the *Displacement Map* as it is generally recommended:



- **Normal Map:** The possibility to invert (flip) the green channel of a *Normal Map* has been added in the context menu:

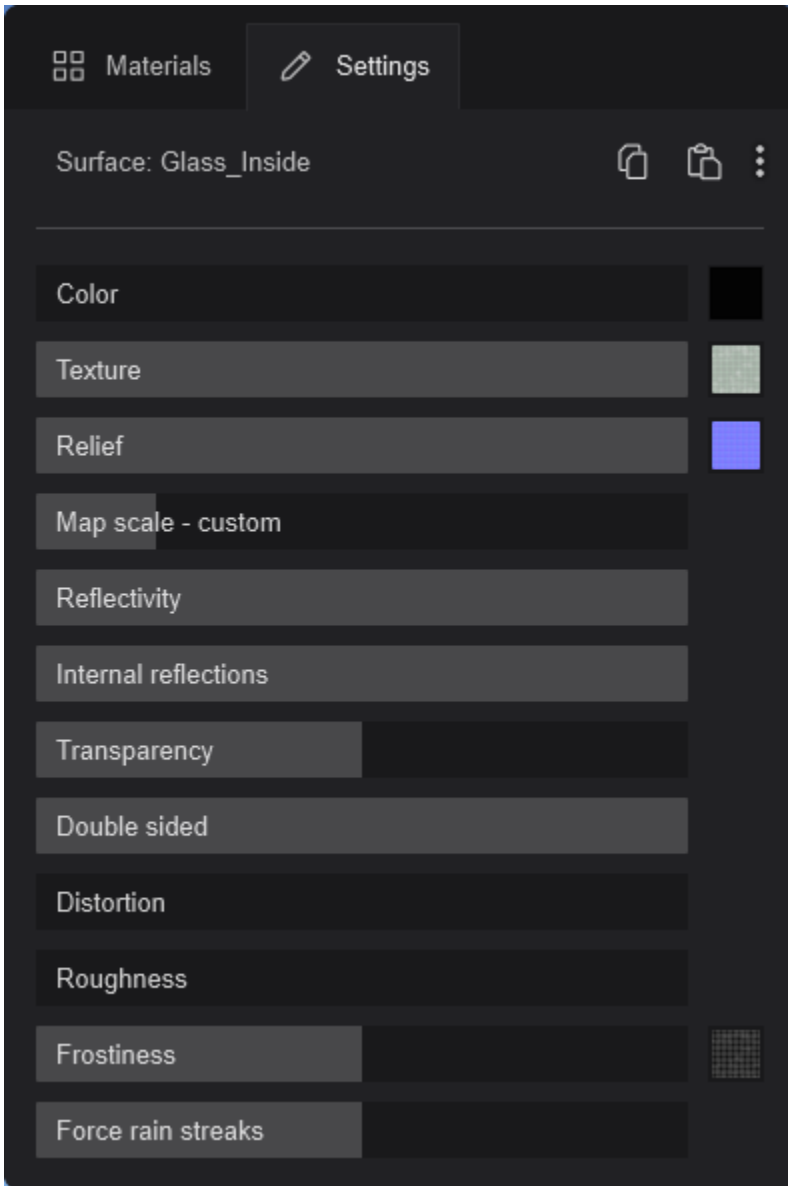


For a detailed walkthrough of the new *PBR Workflow*, follow the tutorial below:

- **Knowledge Base:** [What do the properties of the Standard Material mean in Lumion 2023?](#)
- **Lumion Tutorial:** [Lumion 2023: Full PBR Material Workflow](#)

1.3: New Glass:

The new *Glass Material* merges *PureGlass* and *Standard Glass* and unifies their customizability. *Glass* also features a series of new properties:



The *Glass Material* is not yet converted to the RT pipeline. Use the settings in the article below to configure the *Standard Material* as *Glass* if you are using *RayTracing*:

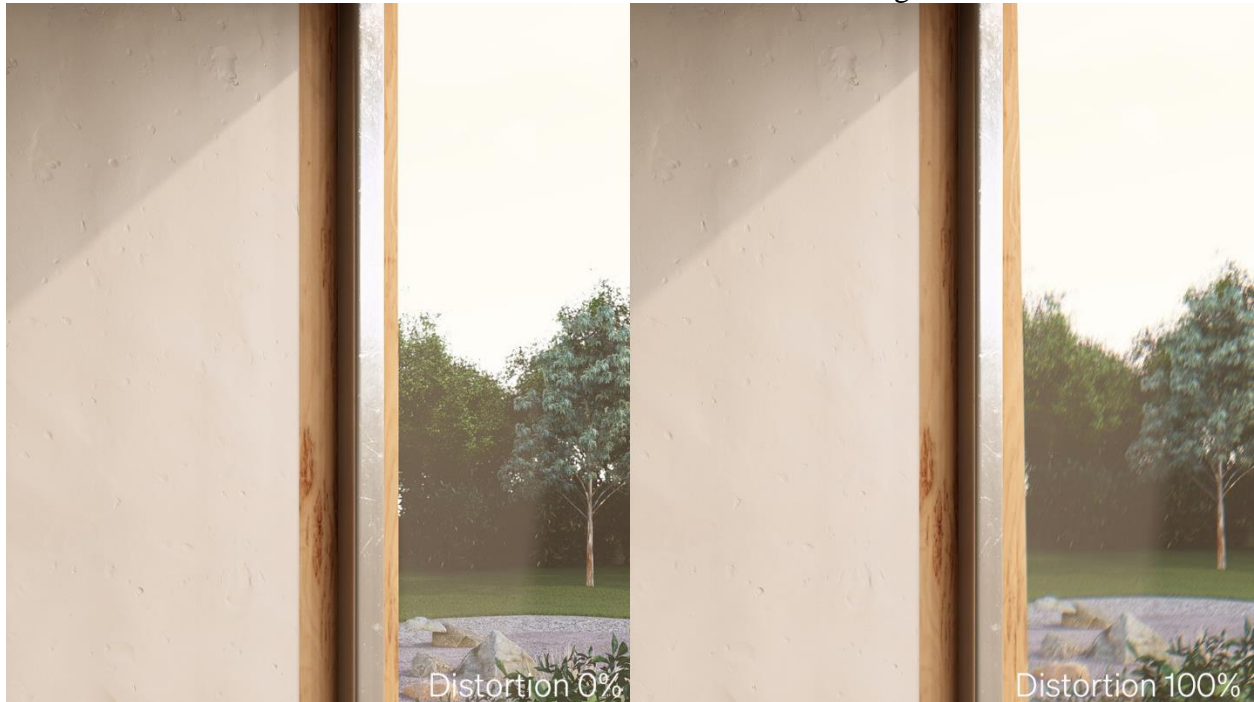
- **Knowledge Base:** [How do you make Glass work in Ray Tracing?](#)

1.3.1: New Settings and Map Slots:

- **Texture:** The slider controls how much influence a texture has over the *Material* assigned to a surface. The *Map Slot* allows a custom texture to be added. Decreasing the *Texture* slider will increase the influence of the *Color*.
- **Relief:** The slider increases the bumps and dents on the surface. Using a *Normal Map* is also possible. The value of the *Relief* slider will make parts of the surface pop out when increased.
- **Frostiness:** The *Frostiness* slider controls the translucency of the surface without affecting the amount of light going through. Using a *Map* will isolate areas affected by the *Frostiness* slider.

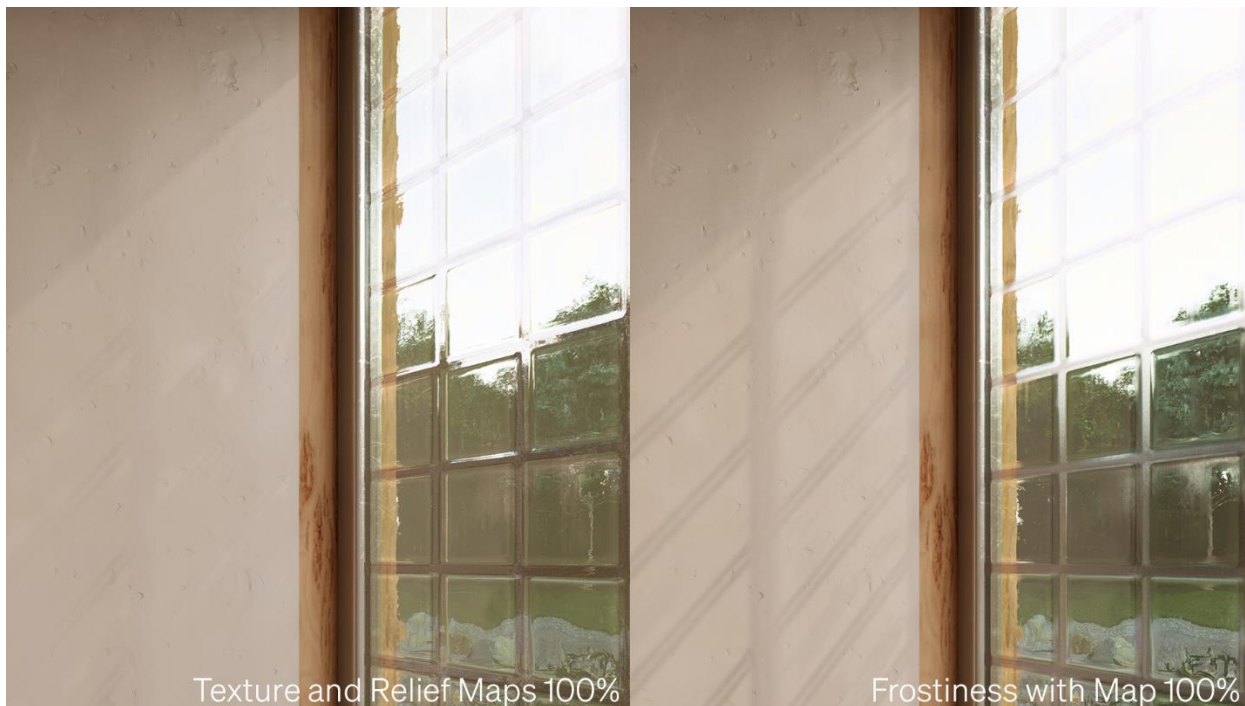
1.3.2: New property:

- *Distortion*: The *Distortion Slider* allows for better control over the degree of refraction.



1.3.3: Changes:

- *Roughness*: is now used instead of *Glossiness*.
- **Improved Glass shadows**: Glass will now cast better, more accurate shadows that take into account the *Color* assigned to the *Glass Material*. The lighter the color, the stronger the shadows.

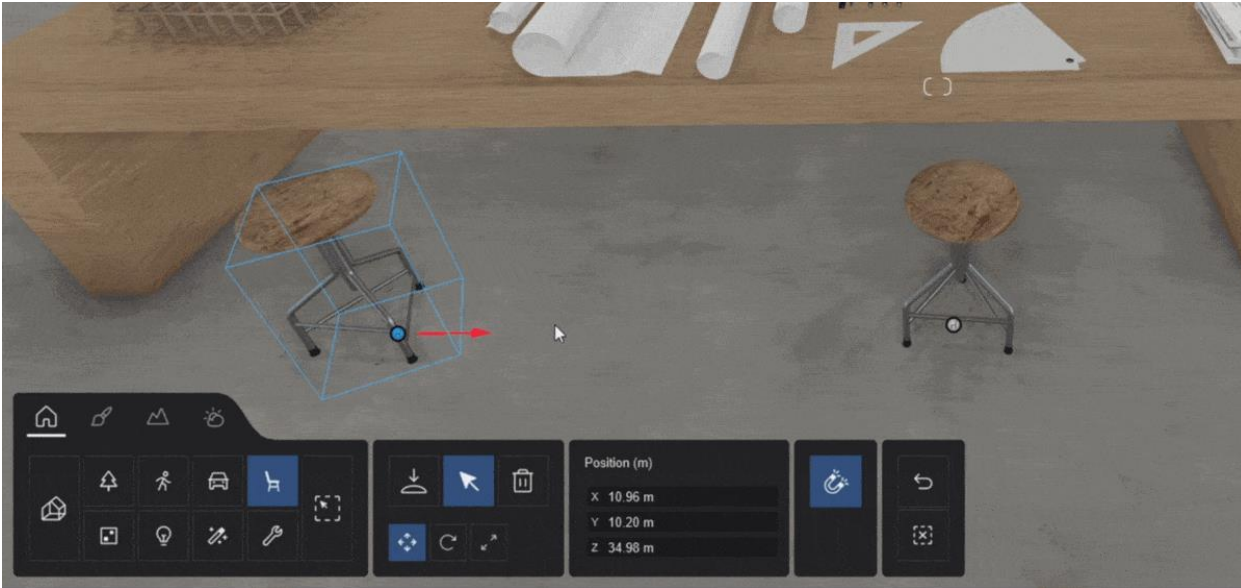


1.4: Improved Scene Building

1.4.1 Gizmo:

The brand-new *transform gizmo* functionality makes positioning your models a breeze. You can now arrange your assets exactly how you want them.

The *Gizmo* is available for *Move* and *Rotate* in *Build Mode* and while editing certain *Effects*. Moving an object can take place on a single axis or a plane (XY, YZ, and XZ) while rotation makes use of the planes associated with *Heading*, *Pitch*, and *Bank*.



Holding the ALT key will duplicate an *Object* when dragging the Gizmo arrows or planes.

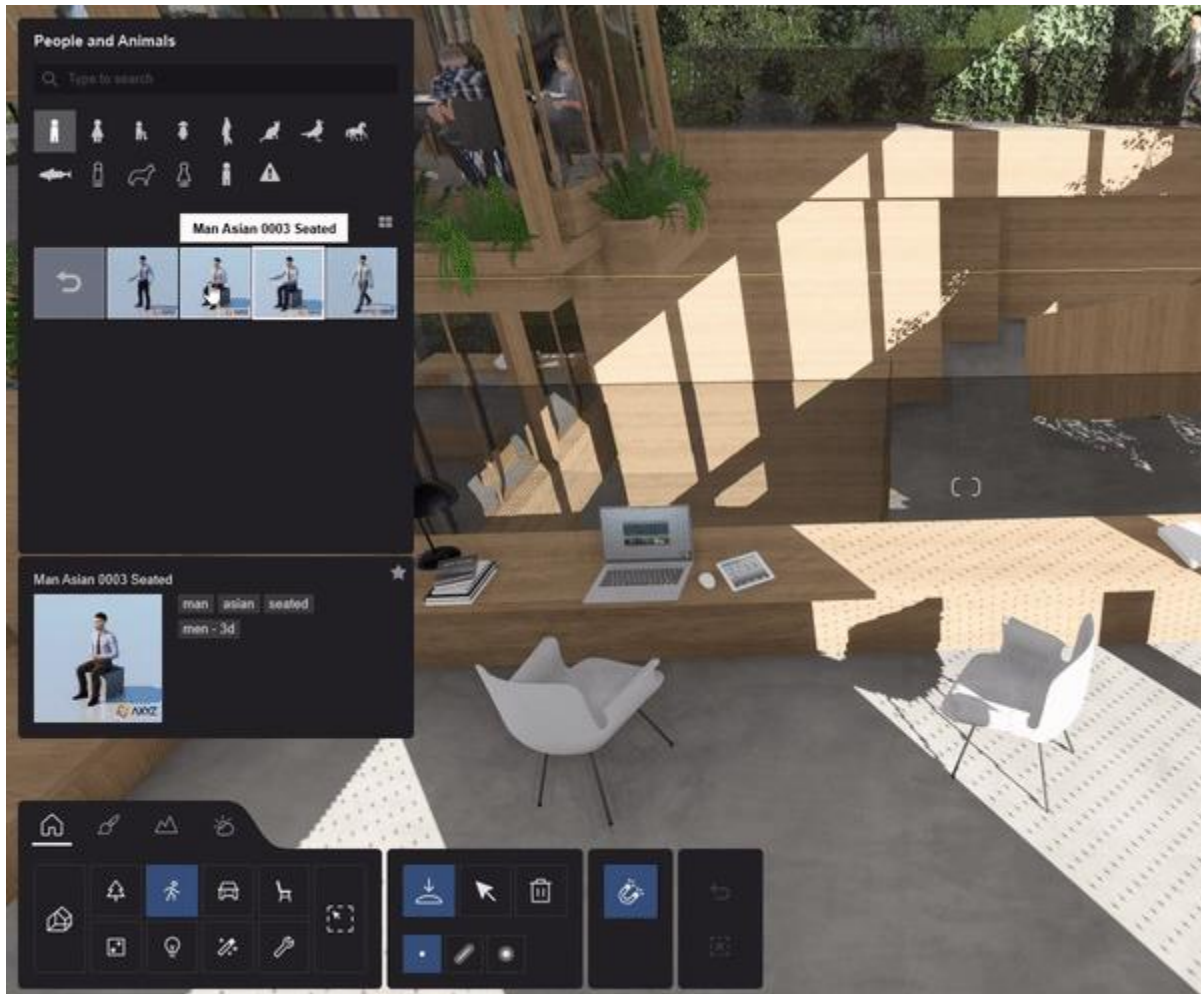
1.4.2: Auto Snap:

Instantly align your objects to the contents of your *Projects* while placing them with the new-and-improved *Auto Snap* feature:

- ***Objects Category***: models from the *Objects Category* snap and align to the surfaces of *Imported Models* depending on their spatial designation (Example: a chair will snap and align to the closest horizontal surface, while a painting will align its orientation to the normal of a vertical surface).

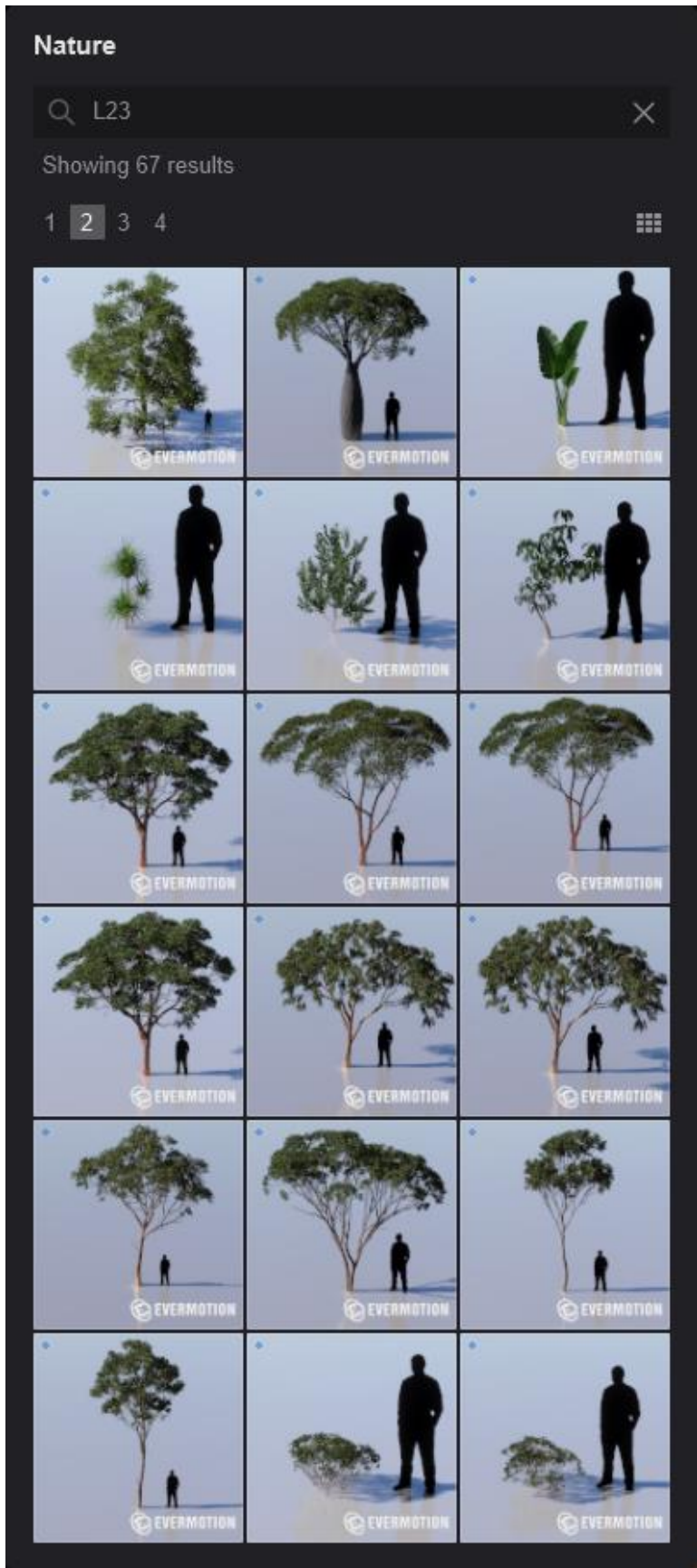


-
- *People and Animals Category: People containing the 'Seated' tag snap and align to the closest seating Object.*

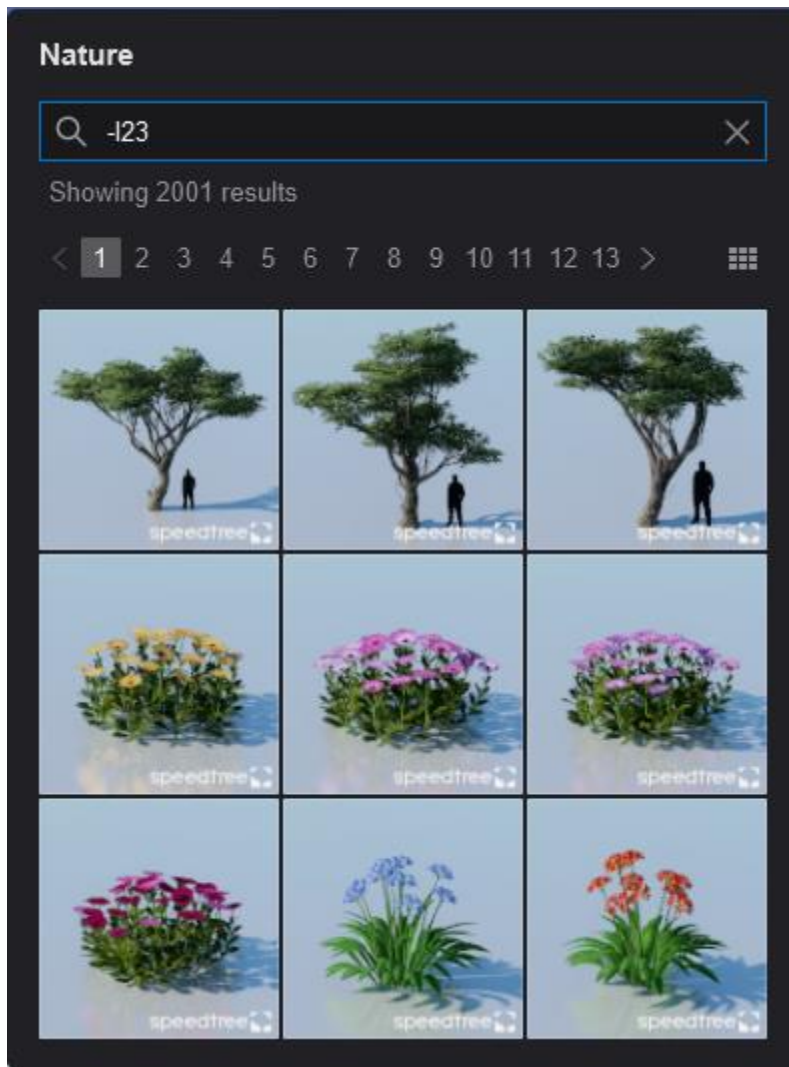


1.4.3: New *Object Tags*:

- **New Content:** Search with the *Object Tag* "L23" to find all new content.
- **New Content:** The thumbnails have a blue dot in the upper left corner.



-
- **New Search function:** Adding '-' in front of a Tag will exclude all *Objects* associated with the tag in question from the search. Example: to exclude all *Library Objects* from Lumion 2023, type in *-L23*:

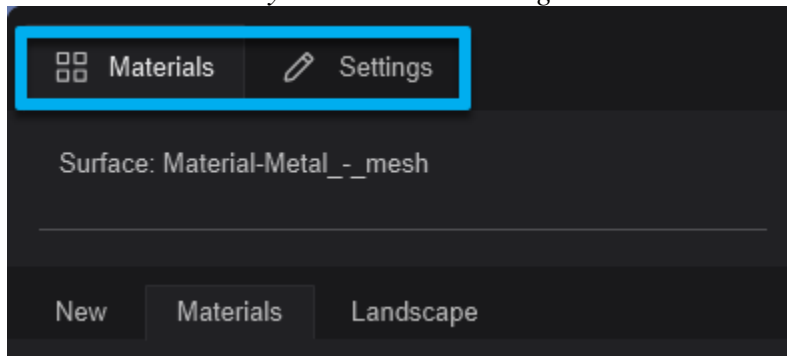


- **Important Note:** *Animated Library Plants/Trees* are rendered in *Ray Tracing* using the Rasterization pipeline. See **section 3.10** for more information.

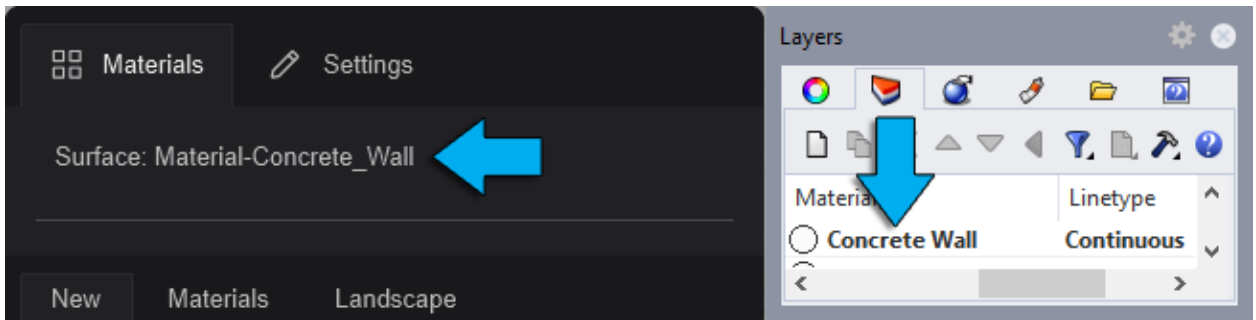
1.4.4: Improved *Material Library* Picker:

Material Mode: All interfaces in *Material Mode* have been updated.

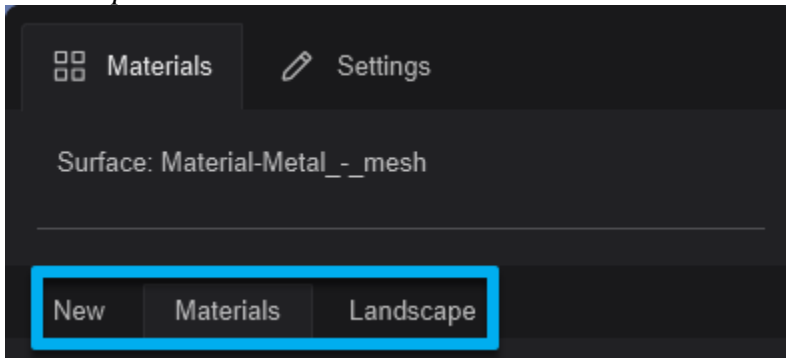
- The *Material Library* and *Material Settings* have been redesigned as tabs:



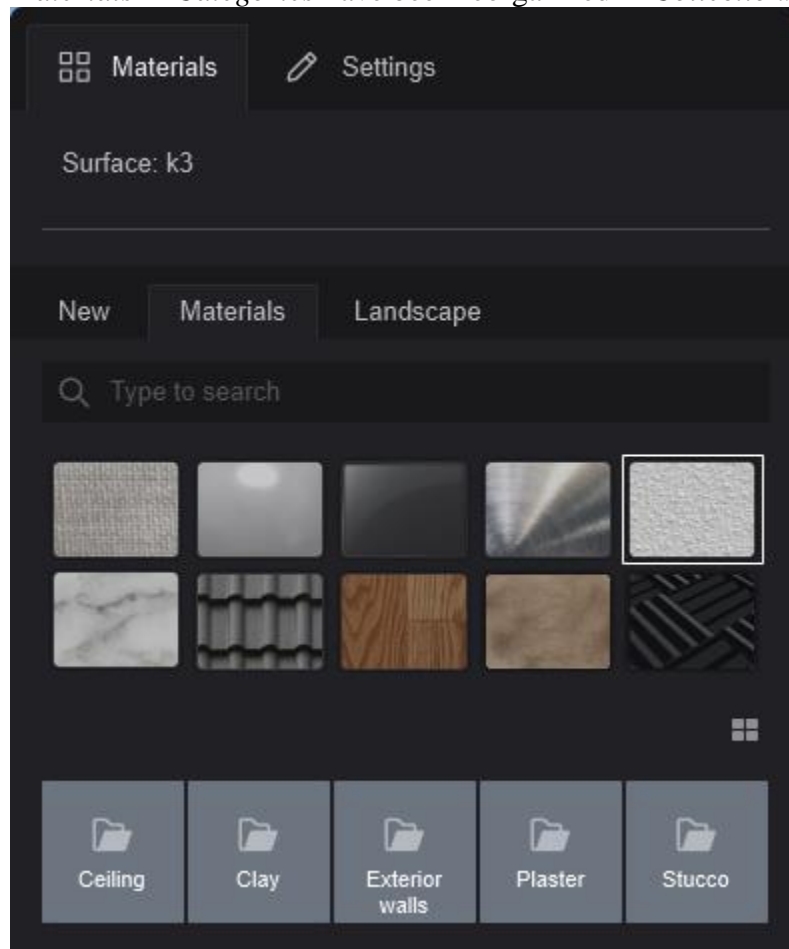
- The name associated with the *Material* assigned to the surface in the 3D modeling software is displayed in *Material Mode* when the surface is selected in Lumion:



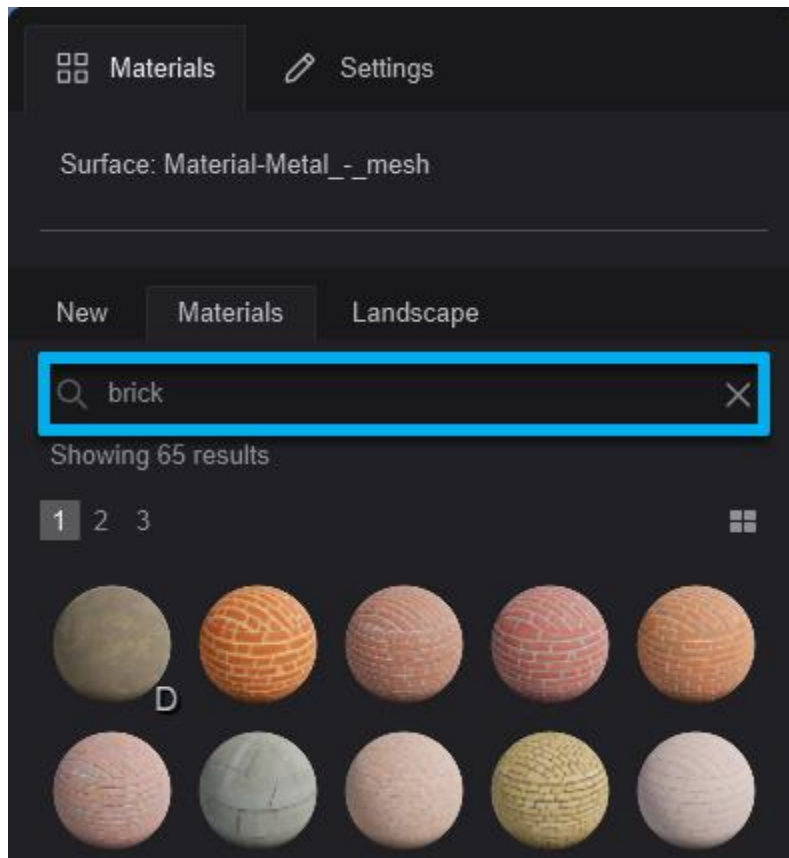
- The *Material Library* has been reorganized into 3 main *Categories*: *New*, *Materials*, and *Landscape*:



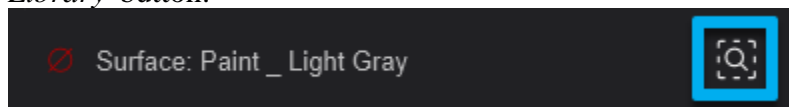
- - The *Indoor* and *Outdoor* categories have been merged into the *Materials Category*.
 - The *Various Category* has been replaced by the *Landscape Category*.
 - *Materials in Categories* have been reorganized in *Collections*:



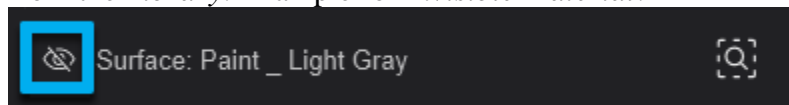
- *Materials* are now searchable using the 'Search' bar in *Material Mode*:



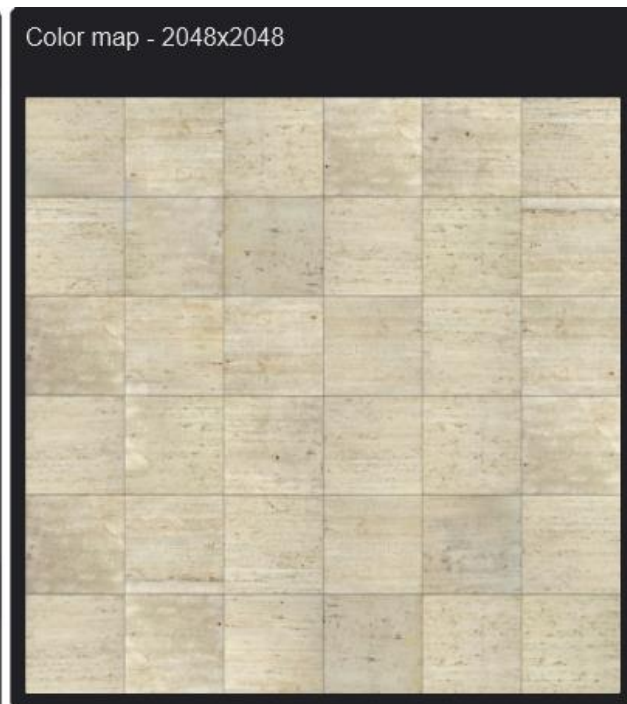
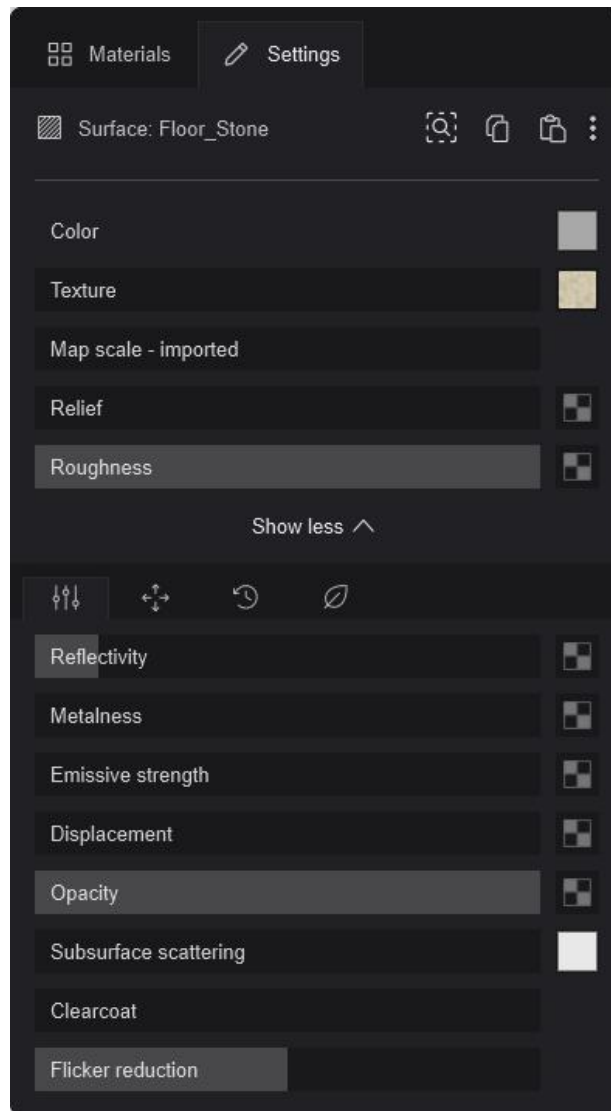
-
- The selected *Material* can now be found in the *Library* using the '*Find Material in Library*' button:



-
- *Material* icons are displayed in Lumion 2023 as indicators of the *Material* type selected from the *Library*. Example for *Invisible Material*:



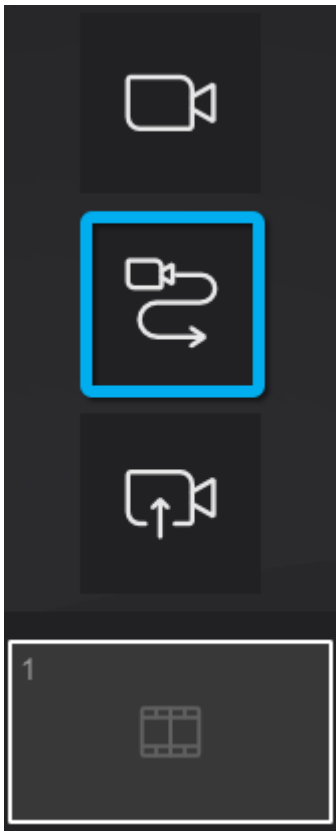
-
- The *Map* pop-up is now larger and provides a better sense of the *Material*.



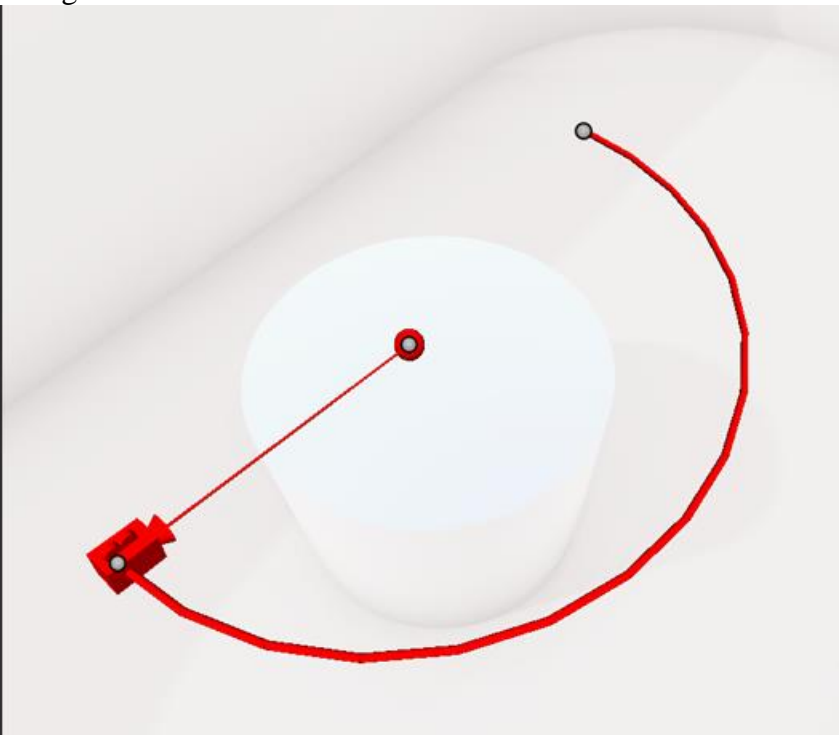
1.5: Camera Paths

1.5.1: Camera Path Presets:

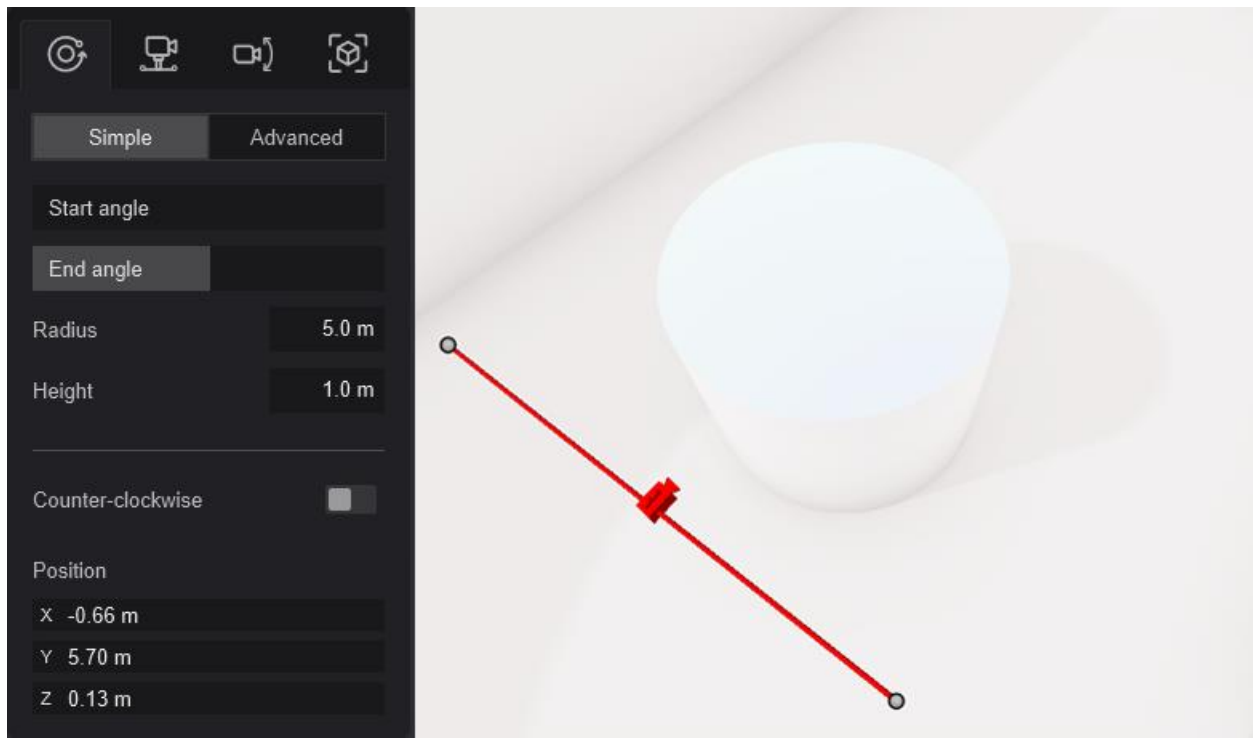
Create animations quicker and easier than ever with a wider range of video camera presets. Enjoy greater control over your camera position and benefit from smoother camera movements with the following new presets. Lumion 2023 contains new presets for camera paths while recording a *Clip*:



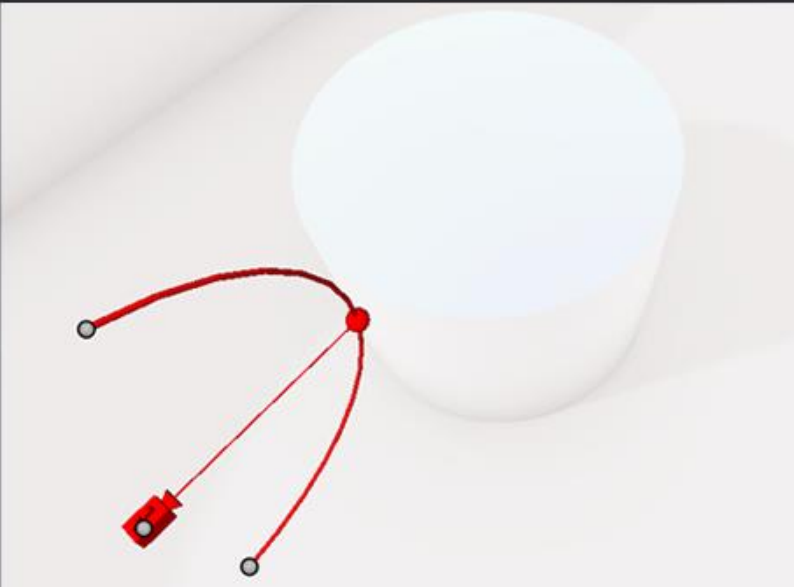
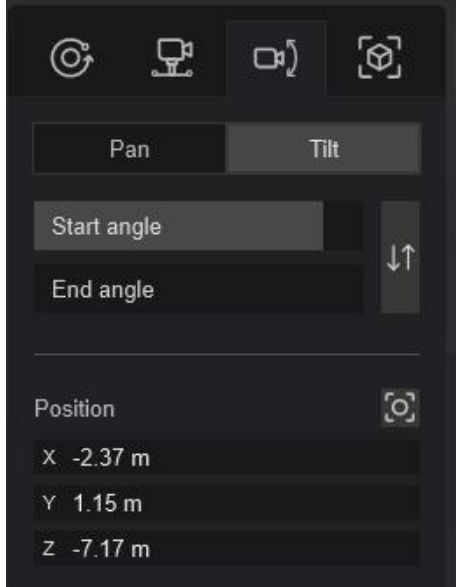
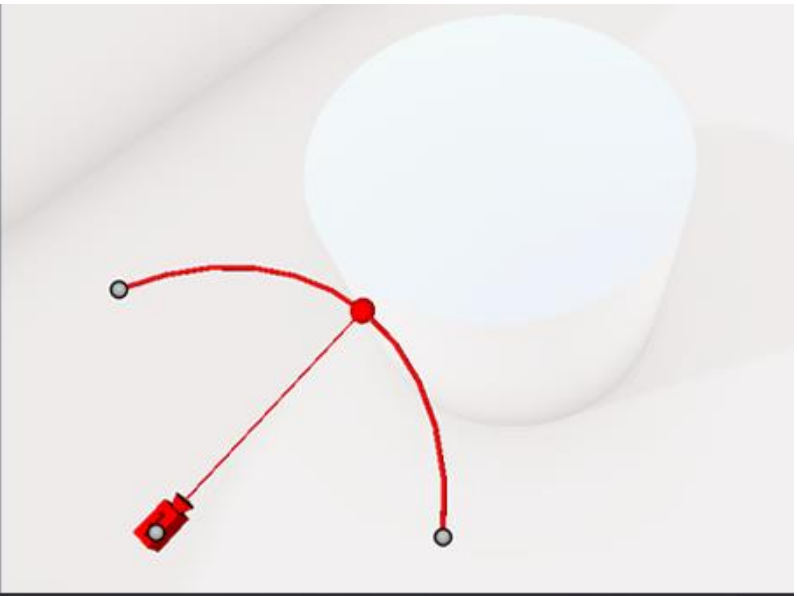
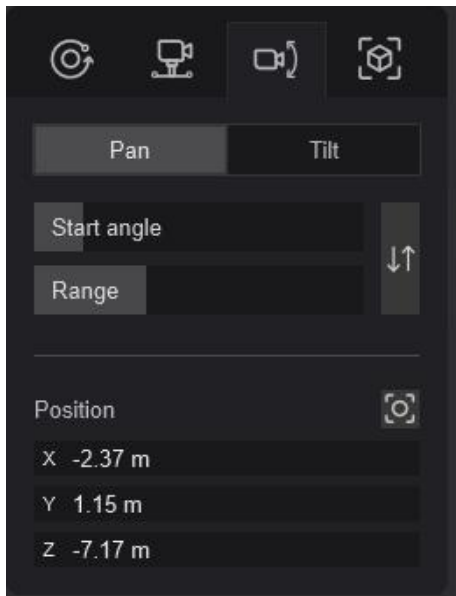
- *Orbit Path*: allows for a cyclical movement around a set point. In *Advance Mode* the path can be altered to orbit multiple times around the target.



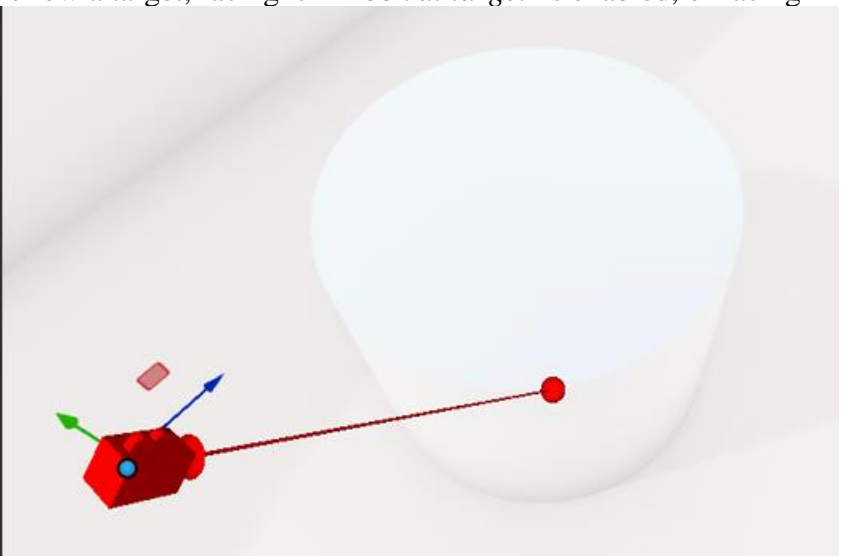
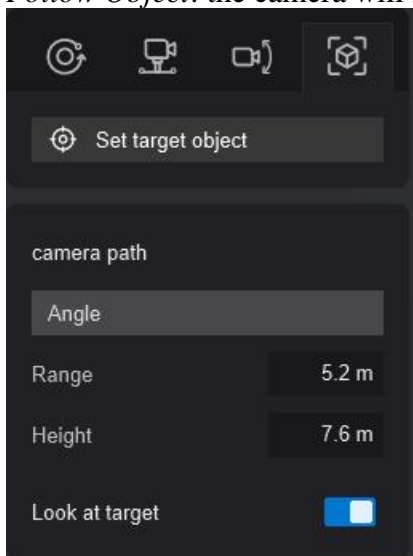
- *Dolly Shot*: allows for linear movement between two points with the camera at a set *Heading* and *Pitch*.



-
- *Pan/Tilt Shot*: enables movement of the camera along an arc, horizontally (*Pan*) or vertically (*Tilt*)



-
- **Follow Object:** the camera will follow a target, facing it if 'Look at target' is enabled, or facing in a set

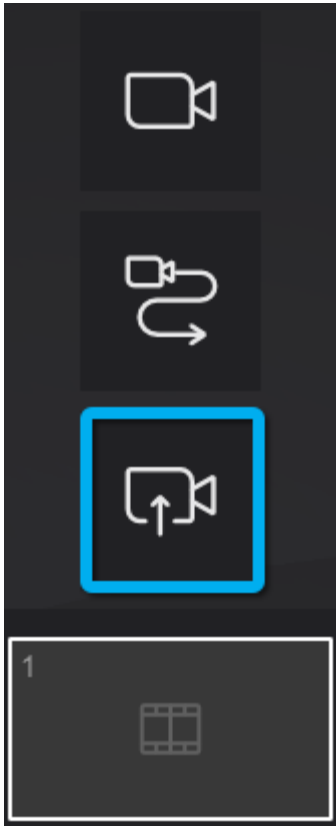


For additional information on *Camera Presets* please see below:

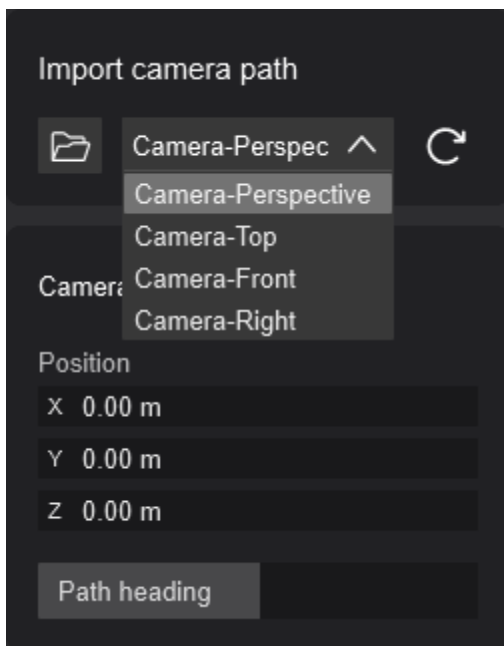
- Knowledge Base: [How do Camera Path presets work?](#)

1.5.2: Custom camera paths:

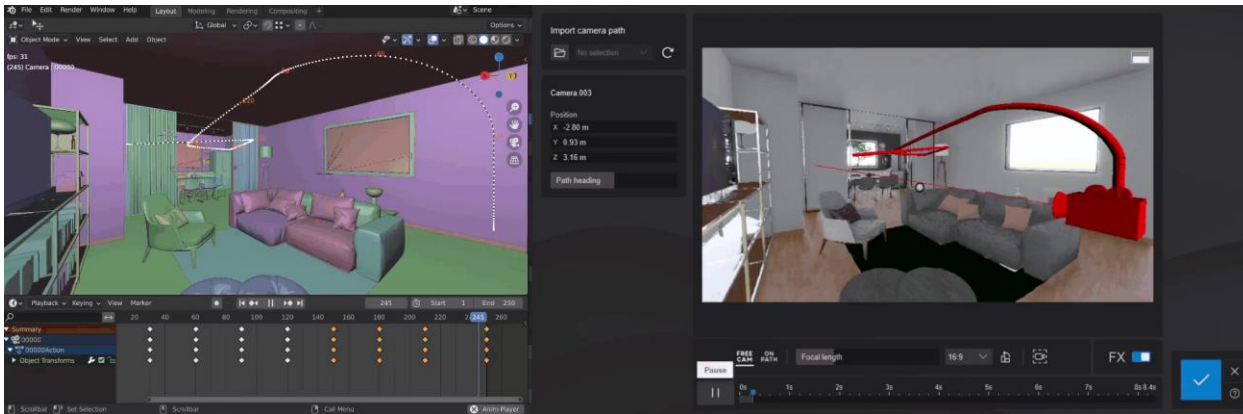
Camera Paths can now be imported to achieve more controlled movement of the camera in .FBX and .DAE formats.



Upon choosing to import a file containing a *Camera Path*, Lumion will display a list of *Camera Paths* available in the saved views of the file:



Example of *Custom Camera Path*:



More information can be found in the article below:

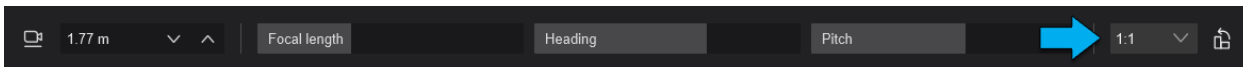
- **Knowledge Base:** [How do you import a camera path into Lumion?](#)

1.6: Rendering Aspect Ratios:

Create the perfect composition for your visualizations by rendering directly in your preferred aspect ratio. Choose from a range of formats and save time cropping your photos and videos post-render.

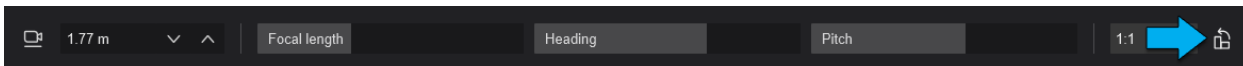
1.6.1: Format:

The format can be selected from the dropdown menu in *Photo* and *Movie Mode*:



1.6.2: Aspect Ratio:

The aspect ratio can be flipped using the `Flip aspect ratio` button:



1.6.3: *Photo Mode*:

The aspect ratio can be chosen for each *Photo*.

1.6.4: *Movie Mode*:

The aspect ratio for a *Clip* can be set/modified when recording the *Clip*. While:

- rendering a single *Clip*: Lumion will render at the *Clip's* aspect ratio.
- rendering an *Entire Movie*: Lumion will render all *Clips* at the aspect ratio of the first *Clip* in the *Set*.

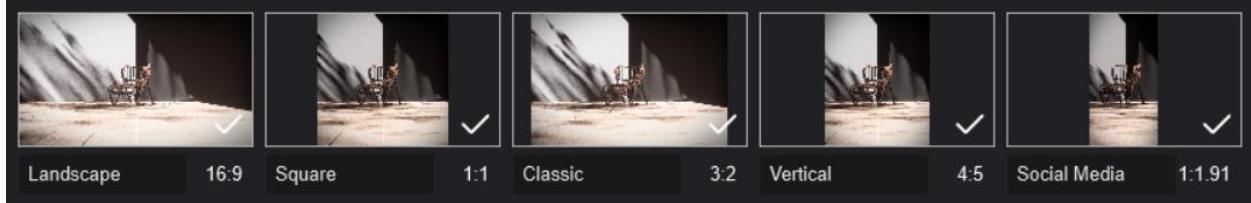
1.6.5: Resolution:

The rendering resolution will associate the longest side with the width of the preset selected for the output resolution. Example:

- a 1:1 ratio in Desktop/Full HD the image resolution will be 1920x1920 pixels
- a 4:5 ratio in Print/Ultra HD the image resolution will be 3072x3840 pixels

1.6.6: Available formats:

- 16:9, 3:2, 5:4, 1:1, 1.91:1 and their inverse counterparts.



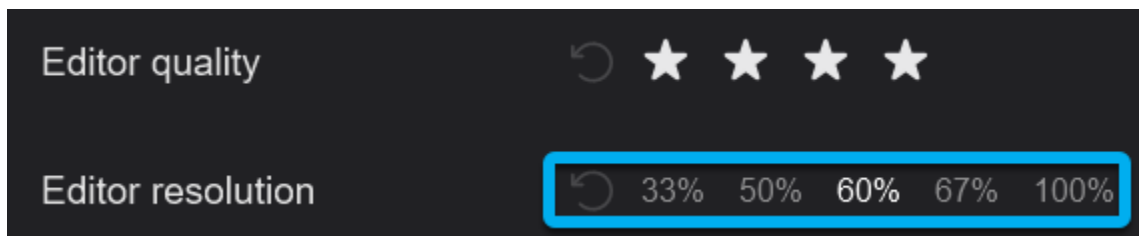
Also, see the article below for detailed information:

- Knowledge Base: [What Aspect Ratios and Resolutions are available in Lumion 2023?](#)

1.7: Settings - Editor Resolution:

Performance for *Build Mode*: Version 12 introduced new real-time GPU upsampling technology that scaled the resolution up from 50%.

Lumion 2023 comes with further big improvements in not only the performance but improving the quality with a cleaner and sharper screen image, even down to a resolution as low as 33%:

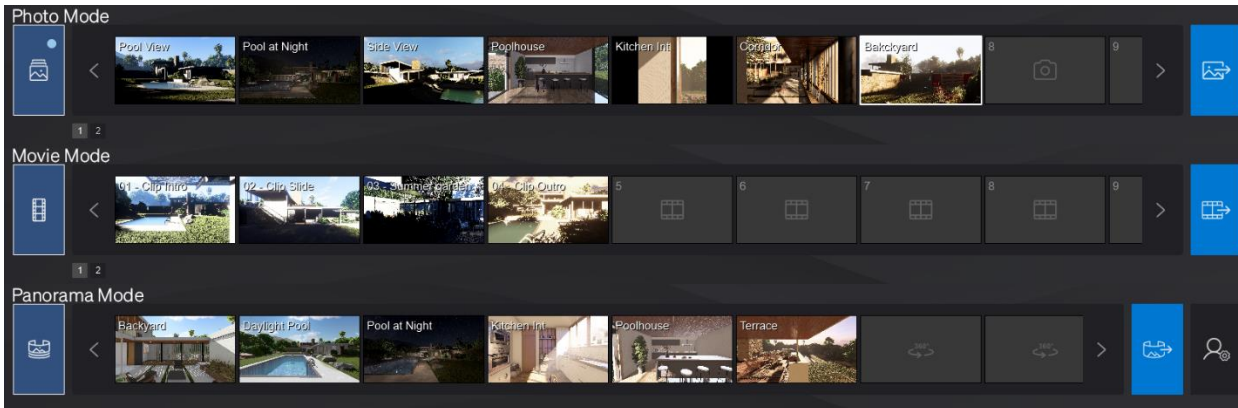


Although this change can greatly improve the responsiveness of Lumion, at low resolutions it will cause some blur or ghosting for some elements.

1.8: Master Effects List:

Photo and Panorama Modes have been fitted with a 'Master Effect List' that applies a series of *Effects* across the entire *Set*, similar to the 'Entire Movie' button from previous versions of Lumion.

This improvement also brings a more unified appearance throughout all the *Output Modes*.



When applying the same *Effect* both in the *Master Effect List* and to the *Photo* or *Panorama* position, the *Photo/Panorama* position settings will take priority.

1.9: New Objects in Library

1.9.1: New objects:

Help your clients immerse themselves in your design, with Lumion's extensive library of lifelike people - including 100 brand-new, true-to-life static characters. Set the scene and show the life in any project, by instantly adding your choice of realistic objects and materials, whether it's a plant in the corner of a room, the cars passing by a building, or the wooden finish of a chair.

A total of 227 *Library Objects* have been added in Lumion 2023, ranging from incredibly detailed *3D Static Characters* to *Nature* and *Furniture*. Capture the full potential of your *Project* using the latest additions:

Fine-detail Nature: 66 9 Plants, 57 Trees	Objects: 51
People and Animals: 100	Transport: 10

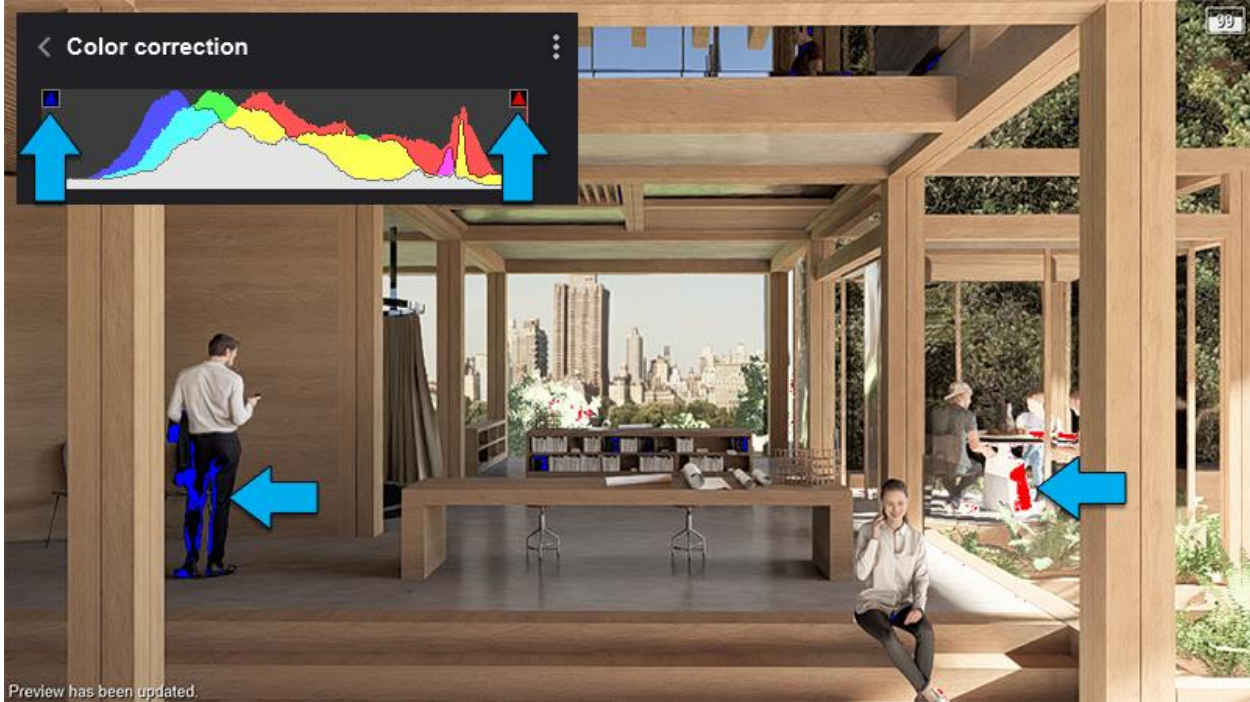
1.9.2: New Materials Library*

Materials:	Landscape:
<ul style="list-style-type: none"> • Wood: 53 • Bricks: 2 • Concrete: 3 • Metal: 10 • Stone: 8 • Plaster: 11 	<ul style="list-style-type: none"> • Soil: 3 • Grass: 6 • Asphalt: 2

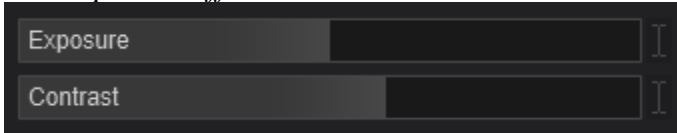
1.10: Updated Color Correction Effect:

The *Color Correction Effect* has been improved. New functionality has also been added:

- A *Histogram* shows the clipped *Highlights* and *Shadows*.



- Preview has been updated.
- The *Exposure Effect* is now included as a slider in *Color Correction*.



- The *Highlights*, *Midtones*, and *Shadows* sliders replaced *Limit Low*, *Limit High* and *Brightness* for increased control.
- An *Auto-Exposure* toggle is added for automatic adjustment of lighting conditions.



- *Sliders* have been grouped based on the modification type they apply to the image:



The article below explains in-depth the benefits of the new *Color Correction Effect*:

- Knowledge Base: [How to use the Color Correction Effect?](#)

1.11: Improved Styrofoam Effect:

The *Styrofoam Effect* received a facelift featuring *Subsurface Scattering* and improved shading.



1.12: Lighting and exposure:

1.12.1: Spotlights and Omni Lights:

- The *Brightness* value has been converted to Lumens to reflect real-world units
- The *Size* slider now controls both the size of the *Light Source* and the sharpness of shadows when using the *Ray Tracing* workflow. The higher the *Size*, the softer the resulting *Shadows*.
- The *Falloff* slider was removed as it does not reflect a real-world value.

1.12.2: Area Lights and Line Lights:

- The *Brightness* value has been converted to Nits to reflect real-world units
- *Area Lights* and *Line Lights* now cast shadows when used in the *Ray Tracing* workflow

1.12.3: Other improvements:

Unified Lighting system:

All light types in Lumion have been unified under the same system: *Sun Light*, *Spotlights*, *Omni Lights*, *Area/Line Lights*, *HDR Skies*, and *Emissive Materials* now work under the same principle.

- **Lights:** *Brightness* values are automatically converted when opening .LS files from older Lumion versions to closest approximated unit - *Lumens* for point-like emitters and *Nits* for surface-like emitters.

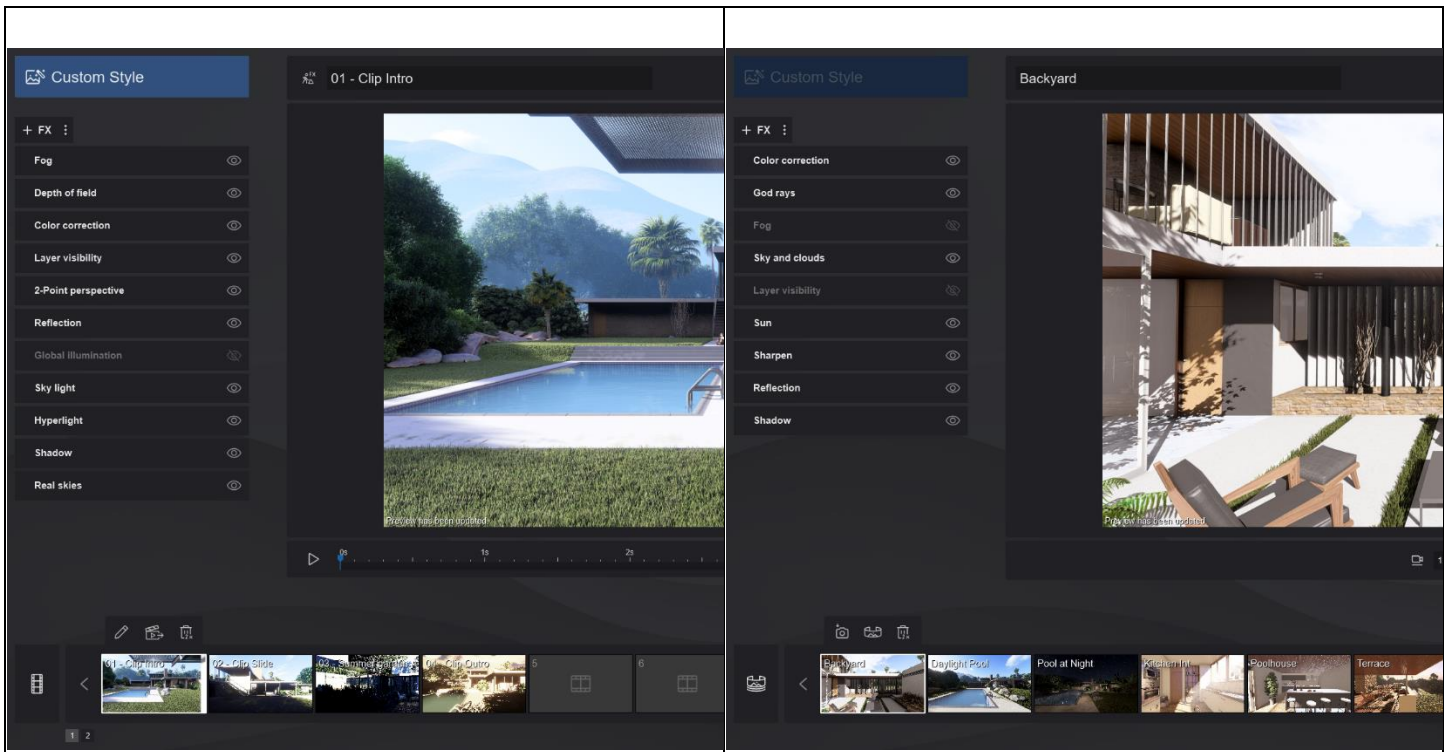


1.13: Updated user interface:

(Build Mode, Photo Mode, Movie Mode, Panorama Mode)

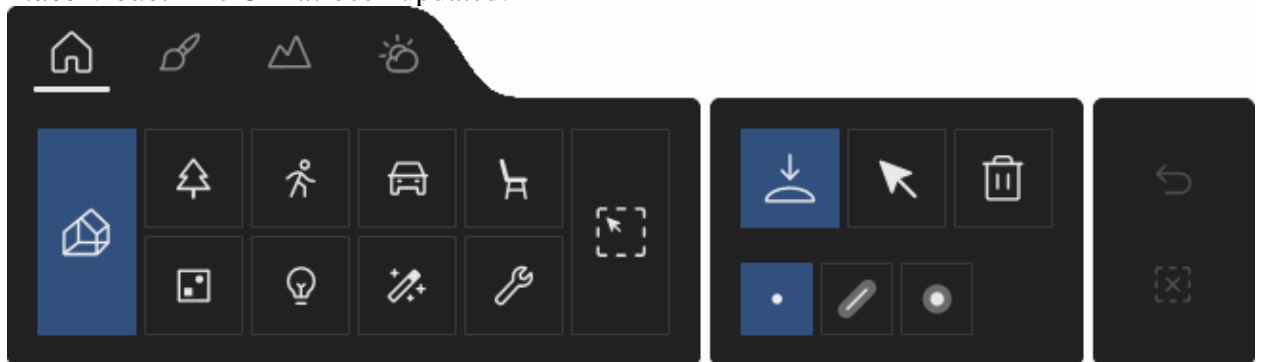
All Lumion *Modes* have received an uplift in User Interface. A darker tone has been adopted for all functional parts of the UI and the icons have been revamped across all areas of Lumion.

<i>Build Mode</i>	<i>Photo Mode</i>
<i>Movie Mode</i>	<i>Panorama Mode</i>

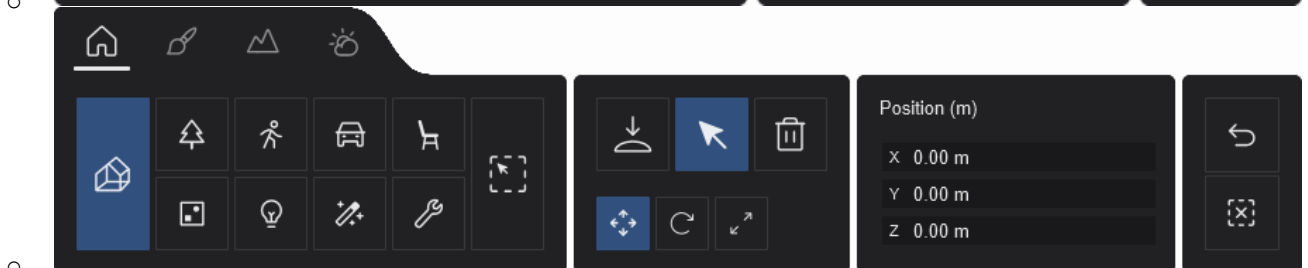
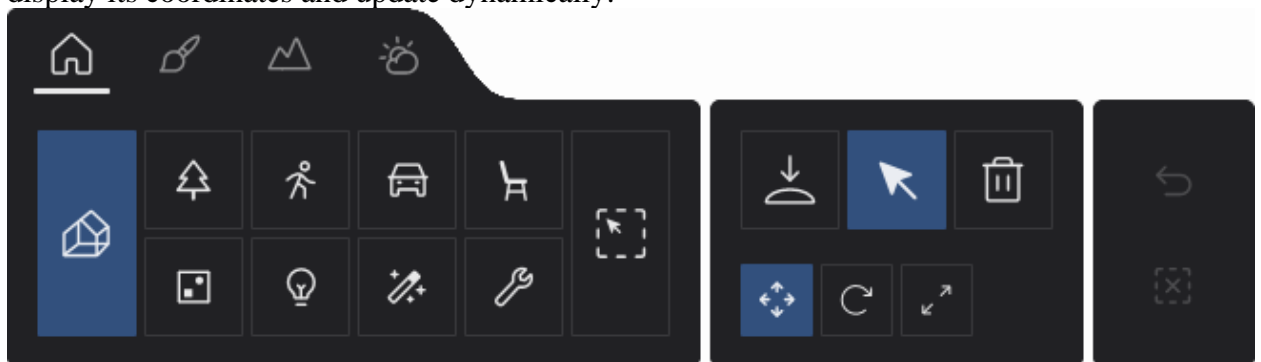


- **Build Mode:**

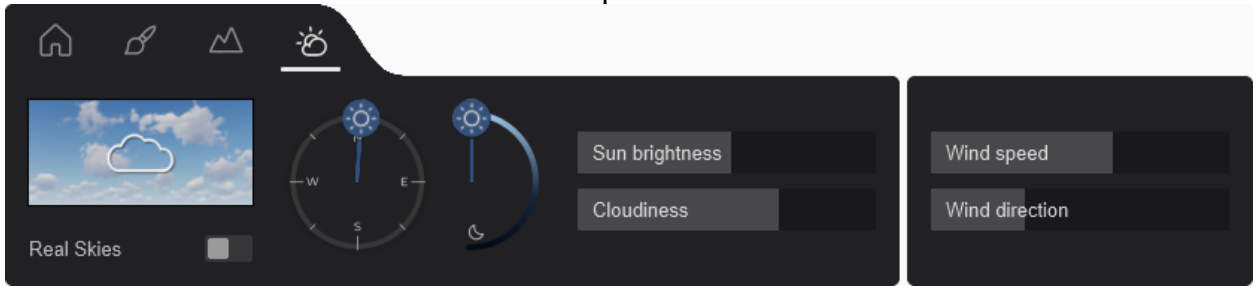
- **Place Mode:** The UI has been updated:



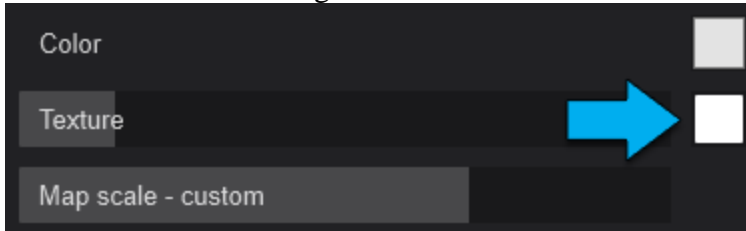
- **Select Mode:** The interface has been update and, when an *Object* is selected, it will always display its coordinates and update dynamically:



- **Weather Mode:** The User Interface has been updated:



- **Material Mode:** Clicking the icon associated with a *Material Map* opens Windows Explorer:



- **Select Mode:** The blue highlight overlay is now disabled for *Transport*, *Nature*, and *Character Objects* when the mouse hovers over the properties window.

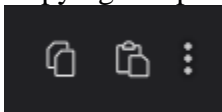
1.14: New Context Menus:

The context menus in Lumion have been improved and replaced by icons and/or a new menu system.

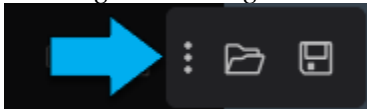
1.14.1: Improvements:

Material Mode:

- Copying and pasting *Materials* can now be done through the two icons.



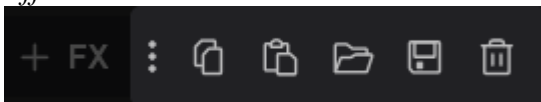
- *Loading and Saving a Material* can be done through the context menu:



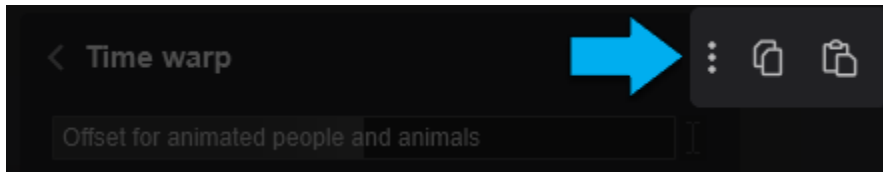
- A *Material* slider with a *Map* slot has different context menus that allow by case to:
 - invert a *Map*
 - delete a *Map*
 - change the coordinates of a *Map* (see **section 1.2.4: Improvements**)

1.14.2: Photo/Movie/Panorama Mode:

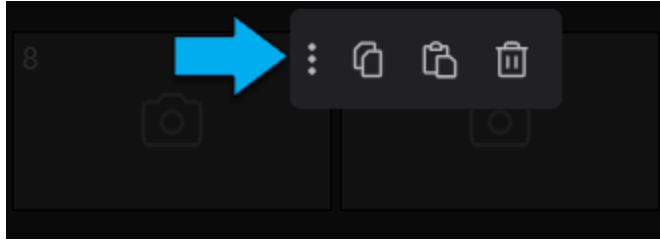
- **Effects:** The UI has been revamped and allows for copying, pasting, loading, saving and emptying an *Effect Stack*:



- **Effects:** Copying *Effect* settings:



- **Photo/Movie/Panorama slots:**



- **Effects Gallery:** icons replace the old *Effects* categories.

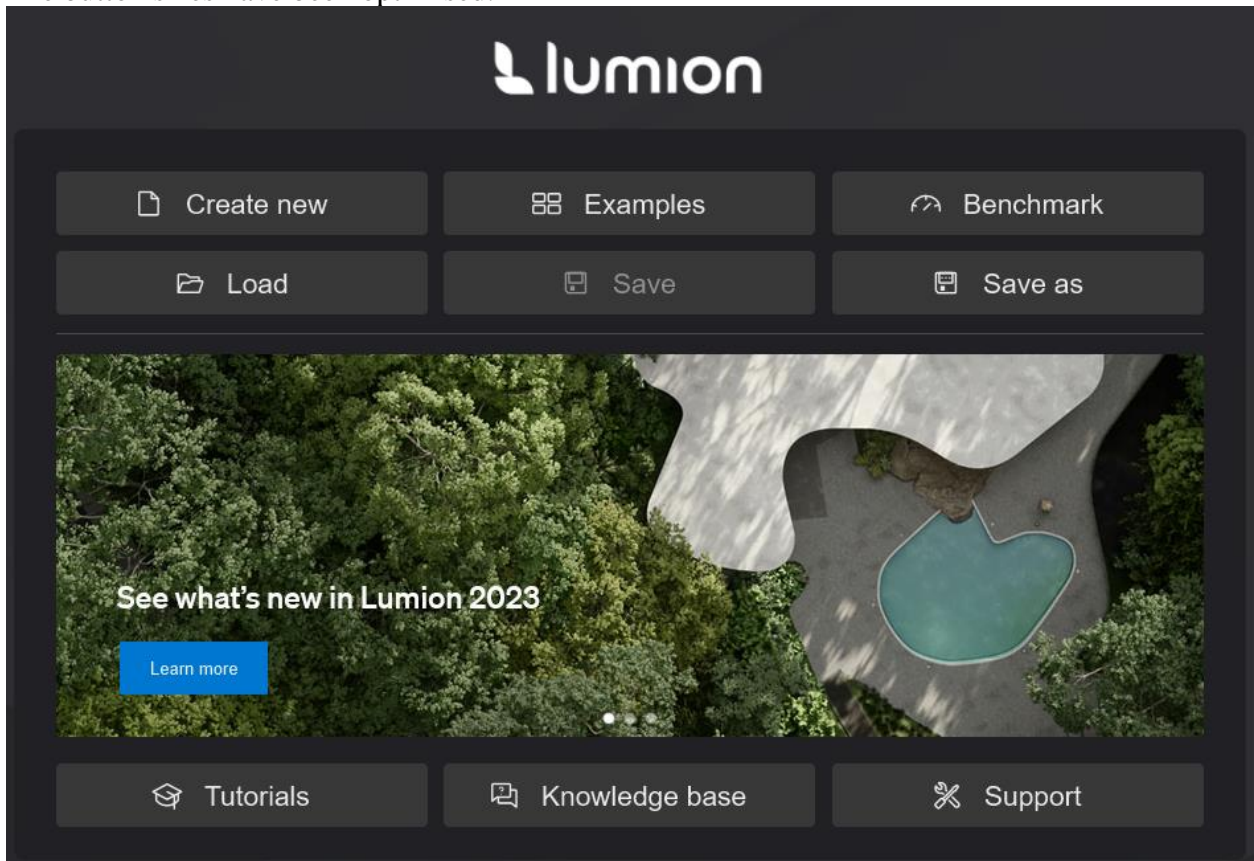


1.14.3: Welcome Screen updates:

(Home Mode)

1.14.3.1: The Welcome Screen contains three major updates for improved accessibility:

- The carousel slideshow changes dynamically based on relevant Lumion-related updates and new content will be added when available.
- The bottom of the Welcome Screen comes with 3 new buttons that direct to resources and the Support Team.
- The button sizes have been optimised.



1.14.3.2: Load: It is now possible to use the `Mouse Wheel` to go through the *Recent Files* pages.

1.15: Lumion LiveSync

Importing a *Model* with *Material* names containing any of the following words in the 3D modelling software will automatically associate a *Material* from the corresponding *Category* in Lumion:

<i>Glass</i>	<i>Water</i>	<i>Concrete</i>	<i>Metal</i>	<i>Wood</i>
<i>Brick</i>	<i>Ceramic</i>	<i>Fabric</i>	<i>Plastic</i>	<i>Stone</i>

1.16: Smooth workflow improvements

Lumion 2023 comes with several workflow improvements to help streamline your rendering projects, including:

1.16.1: Mouse cursor changes: The mouse pointer will change from an arrow to a pointer when hovering over a clickable element.



1.16.2: Groups:

- *Group* Editing: While editing a *Group*, the selected objects will now be highlighted.

1.16.3: Variations:

- The option of adding a *Variation* for two or more *Imported Models* when selected at the same time has been removed.

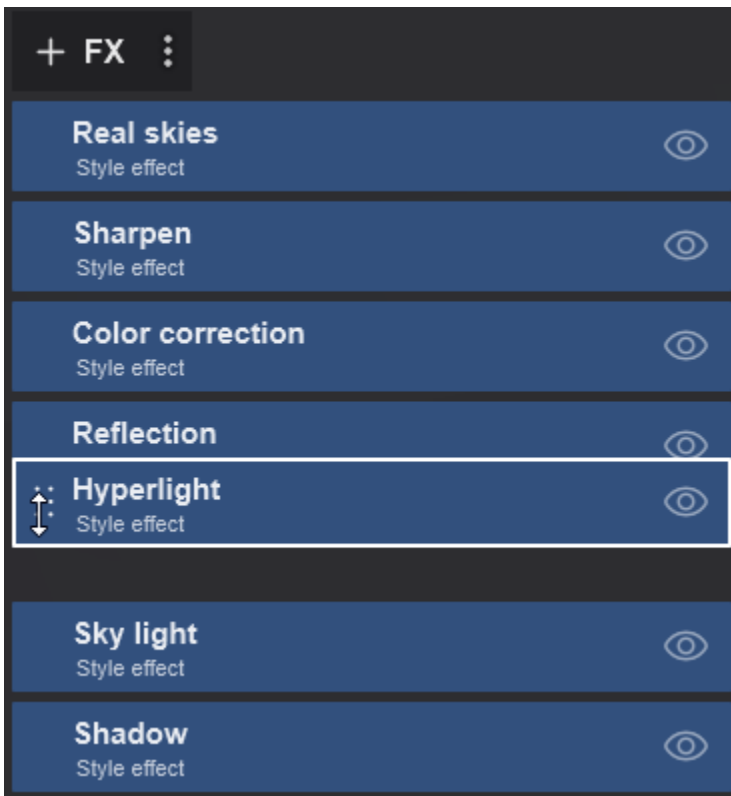
1.16.4: Slider interaction:

The interaction with sliders has been improved:

- Single-clicking a slider will now activate the *Type-in* function.
- Clicking and dragging will move the slider to the desired position.

1.16.5: Effect sliders:

Effects in a stack (with the exception of *Ray Tracing* which is always on top) are now draggable up or down:



1.17: Foundation changes

1.17.1: New Bindless Material rendering

The bindless rendering pipeline serves as the foundation that allows rasterization and ray tracing to use the same resources (models, materials, textures, buffers, etc). This allows Lumion to convert all assets to the PBR workflow as resources are presented the same way. Converted assets from older versions of Lumion will look very close or identical in Lumion 2023, although slight differences may occur.

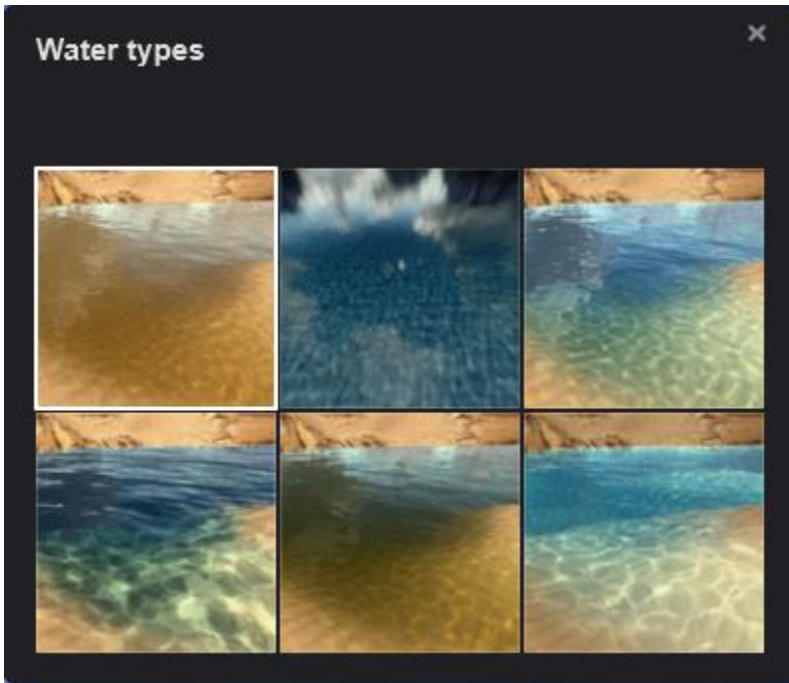
1.17.2: Hybrid engine

We began preparations for this process with the conversion of *Lumion 11* to DirectX12 at a basic level. Those foundational elements have been improved in Lumion 12, only to now scratch the surface of the potential of Lumion 2023. The hybrid engine has been designed with a particular focus on enabling faster improvements in upcoming iterations that allow both Raster and RT to work side by side by opening up the door to the implementation of assets that will work in either one of the flows.

2. Other new features & improvements

Build Mode

2.1: Landscape Mode -> Water: The *Water types* picker has been updated for consistency with the rest of the UI B1.16



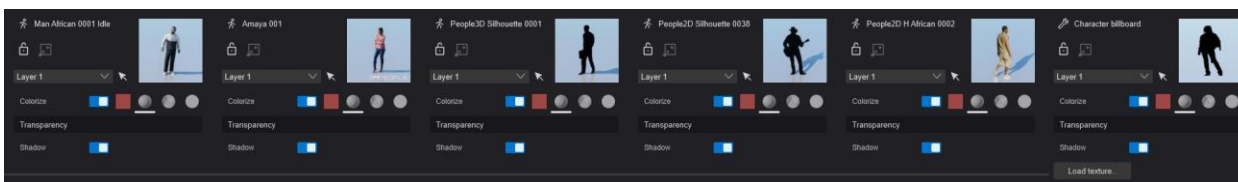
2.2: Unified properties for Characters:

2.2.1: Coloring, Shadow and Transparency of Characters:

The *Animated 3D Characters*, *Static 3D Characters*, *3D/2D People Silhouettes* and *Character Billboard Objects* now share the same values for *Color* and *Transparency*. Changing one of the values for one of the aforementioned *Character* types will apply the same property to all the other types in the *Project*.

2.2.2: UI changes for Characters:

All *Character* types in Lumion will now feature the same Editor UI. The *Character Billboard* also has the option to load a texture.



2.3: *Mass Placement: Paths* now have a minimum width of 1m if the selected *Object* has no width. Example: placing *Groups*.

2.4: *Clouds:* All Lumion *Clouds* (*Sky*, *Volumetric Clouds*, *Sky and Clouds*, *Real Skies*) have been improved for better rendering results:



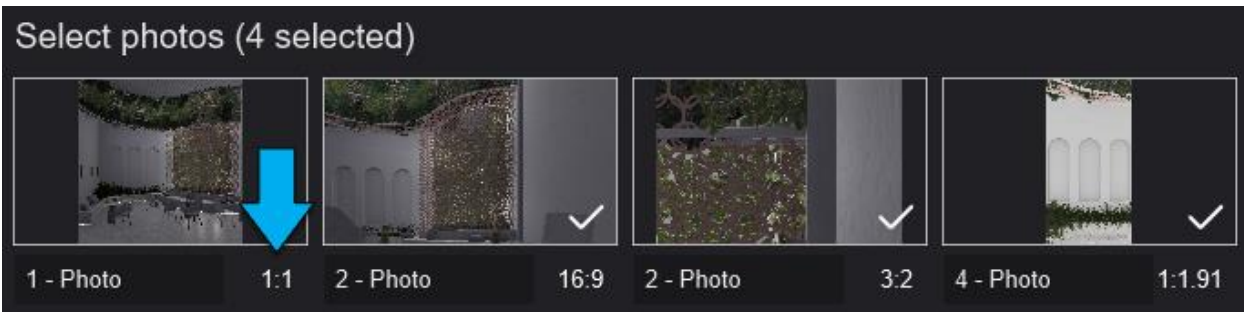
2.5: *Landscape -> Water -> Ice Preset:* is longer Emissive when rendering.

2.6: *Library -> Decals:* Decals now use *Roughness Map* as input instead of *Glossiness*.

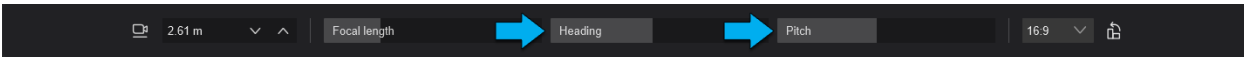
2.7: The *Lumion* camera movements have been improved and are now smoother.

Movie, Photo, and Panorama Mode

2.8: *Aspect Ratios* of *Photos* are displayed for each thumbnail before rendering a *Photo Set*:

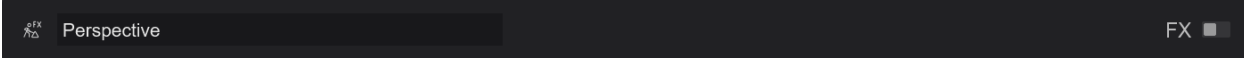


2.9: *Heading* and *Pitch* sliders are added for increased control of the direction of the camera:

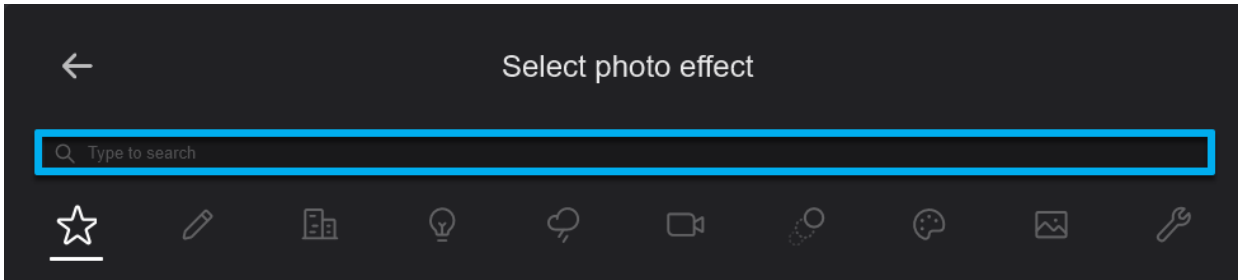


2.10: FX Toggle:

The *Effects Stack* can be toggled on or off per *Mode* from the top-right corner of the screen:

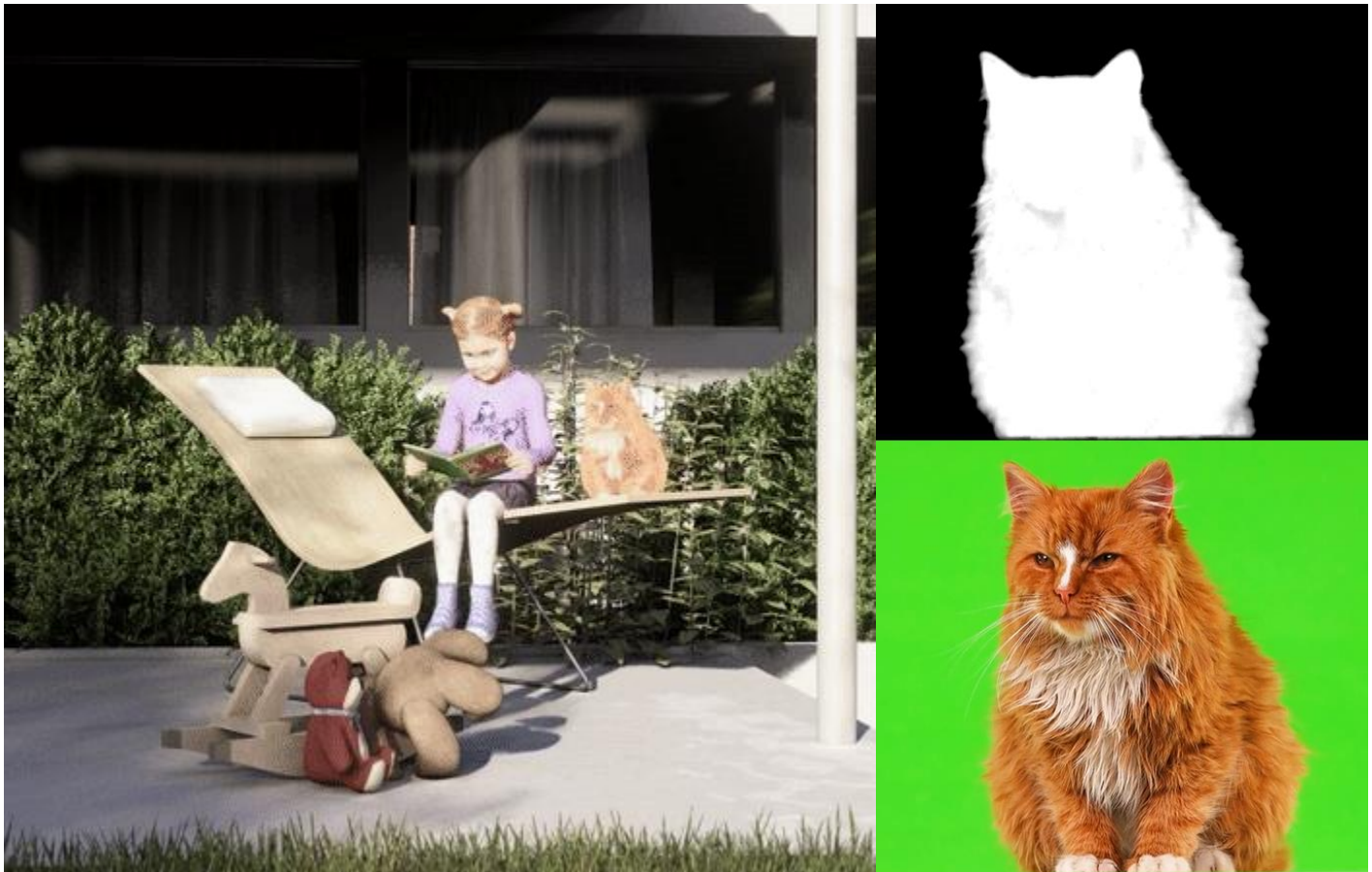


2.11: The *Effects Gallery* has been fitted with a search bar for increased accessibility:



Material Editor

2.12: Standard Material: Support for animated .MP4 textures as *Opacity Maps* has been added:



2.13: The *Fur Material* has been moved to the *Materials Category* instead of *Landscape*.

2.14: Materials -> Maps: The *Alpha Channel* of image files that support it (example: .TGA or .PNG files) will now be stripped and added to *Opacity Map*.

2.15: Automatic Material Conversion: Automatic conversion will only occur if the imported surface does contain an embedded *Texture Map*.

Importing & exporting

2.16: Importer 2.0:

The old *Importer* used for .SKP, .FBX, and .DAE formats is now superseded completely by the new *Importer 2.0*.

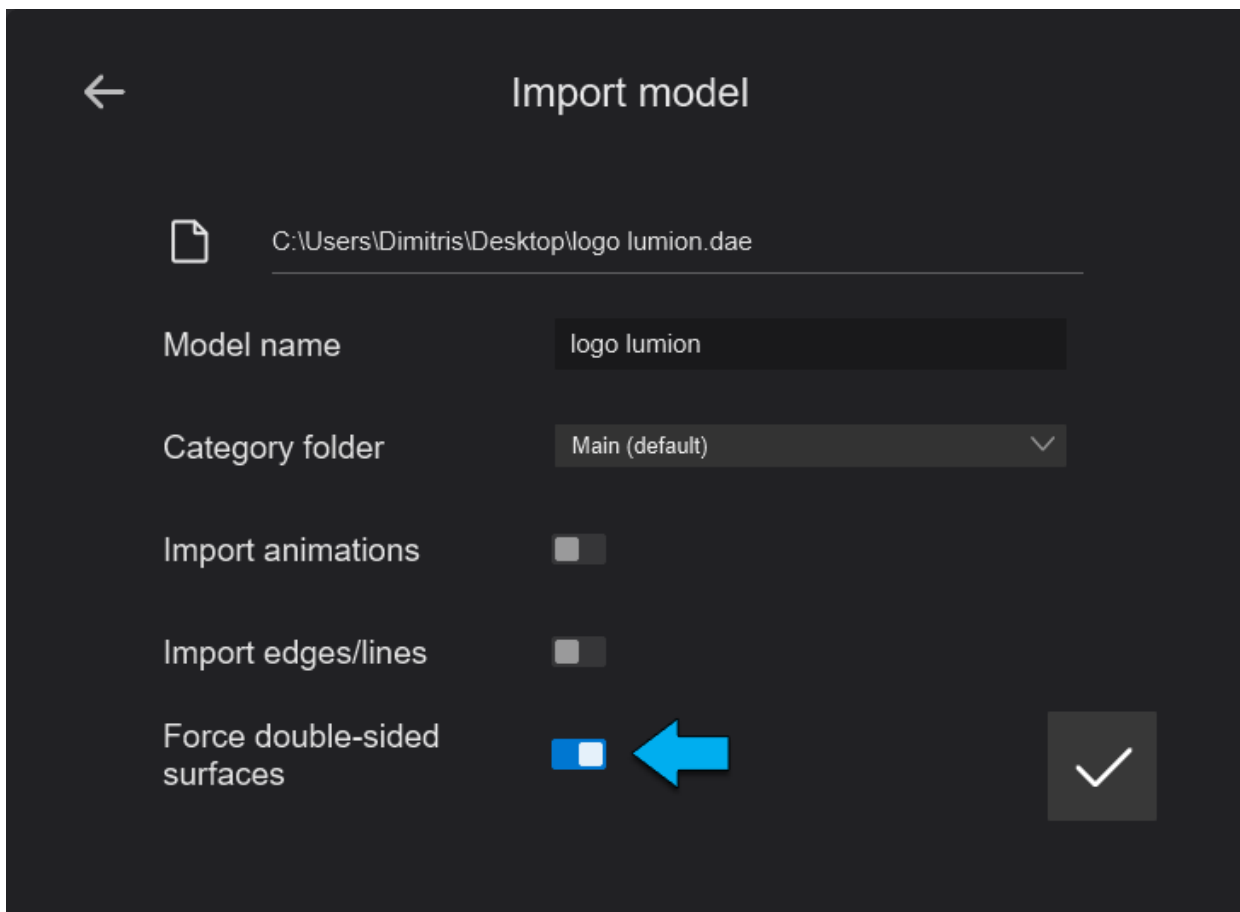
2.17: Imported Models:

2.17.1: Lumion will convert on startup all *Imported Models* in the *Documents* folder to the new PBR pipeline - depending on the number of *Objects*, this may take a long time as they are all converted one by one. Conversion can be skipped by pressing ESC (Escape).

2.17.2 The conversion will resume during the next startup or on the spot when *Loading/Placing* a model that is yet to be converted.

2.18: Import window:

A new toggle has been added for forcing double-sided surfaces: B5.1



2.19: LiveSync:

2.19.1: The connection is now closed when loading a new *Project* to prevent the model from syncing into the newly opened *Project*.

2.19.2: The connection is now closed after deleting the corresponding *Imported Model* in Lumion.

Loading & saving

2.20: Loading .LS files with corrupted .INN information no longer crashes Lumion and instead, the corrupted data is skipped.

2.21: *Lumion Trial:* Loading a *Project* created in *Lumion Pro Trial* is possible is now possible when the *Pro Trial License Key* has been upgraded to the commercial version.

2.22: *Loading:* Loading an .LS file created in a previous version of Lumion will remove all *Effects* and transfer the corresponding value to the *Color Correction Effect*.

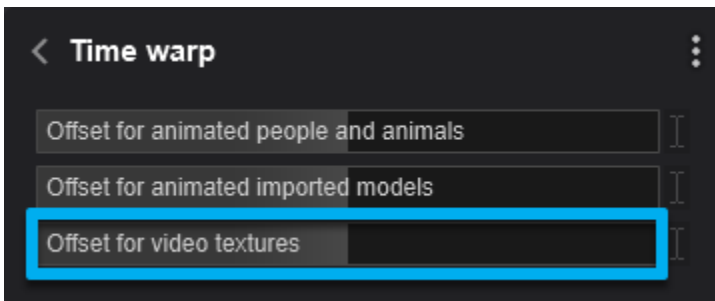
Effects:

2.23: Updated and improved *Effects: Bloom, Depth of Field, and Lens Flare Effects* have been improved.

2.24: Improved *Outline Effect:* this should now be more accurate and result in fewer visual glitches.

2.25 *Advanced Move Effect:* can now jump to *Keyframes* outside the visible *Timeline*.

2.26 *Time Warp Effect:* a slider to offset video textures has been added.



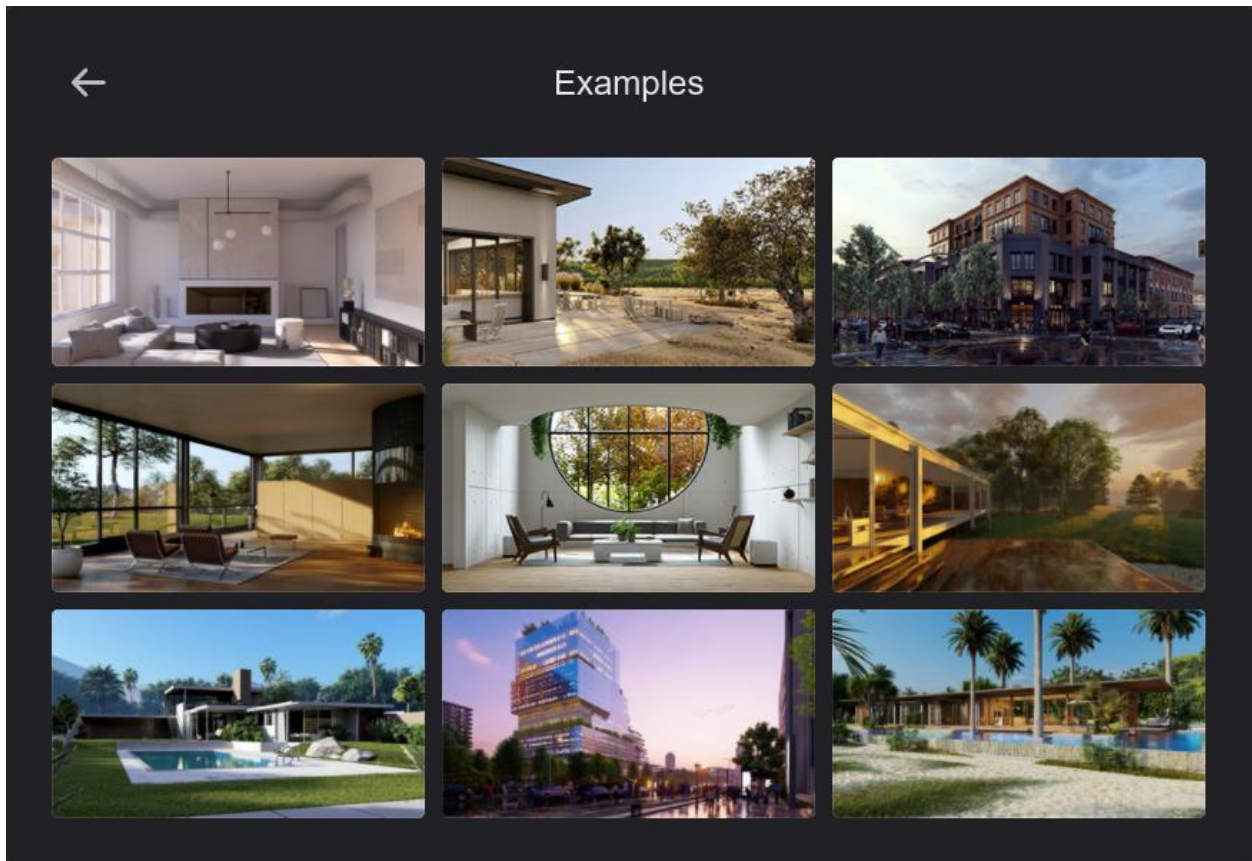
2.27 *Global Illumination Effect:* has been disabled.

New example *Projects* and *Templates*

2.28: *Example Projects:*

Lumion 2023 includes:

- 1 (one) new *Example Project: Minimalistic Interior*.
- 8 (eight) improved *Examples Projects*.

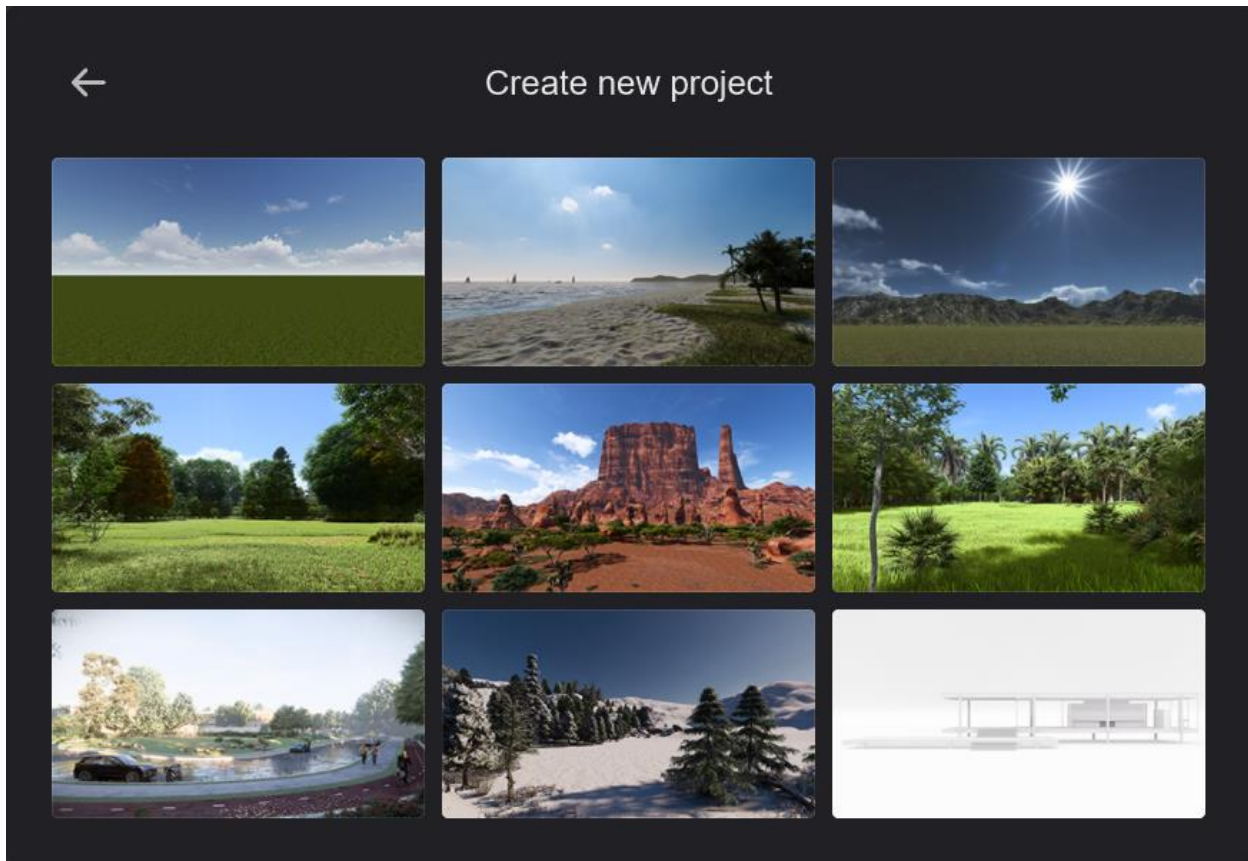


Learn about:

- *Minimalistic Interior:*
 - *Ray Tracing, Aspect Ratios and Preset Camera Paths.*

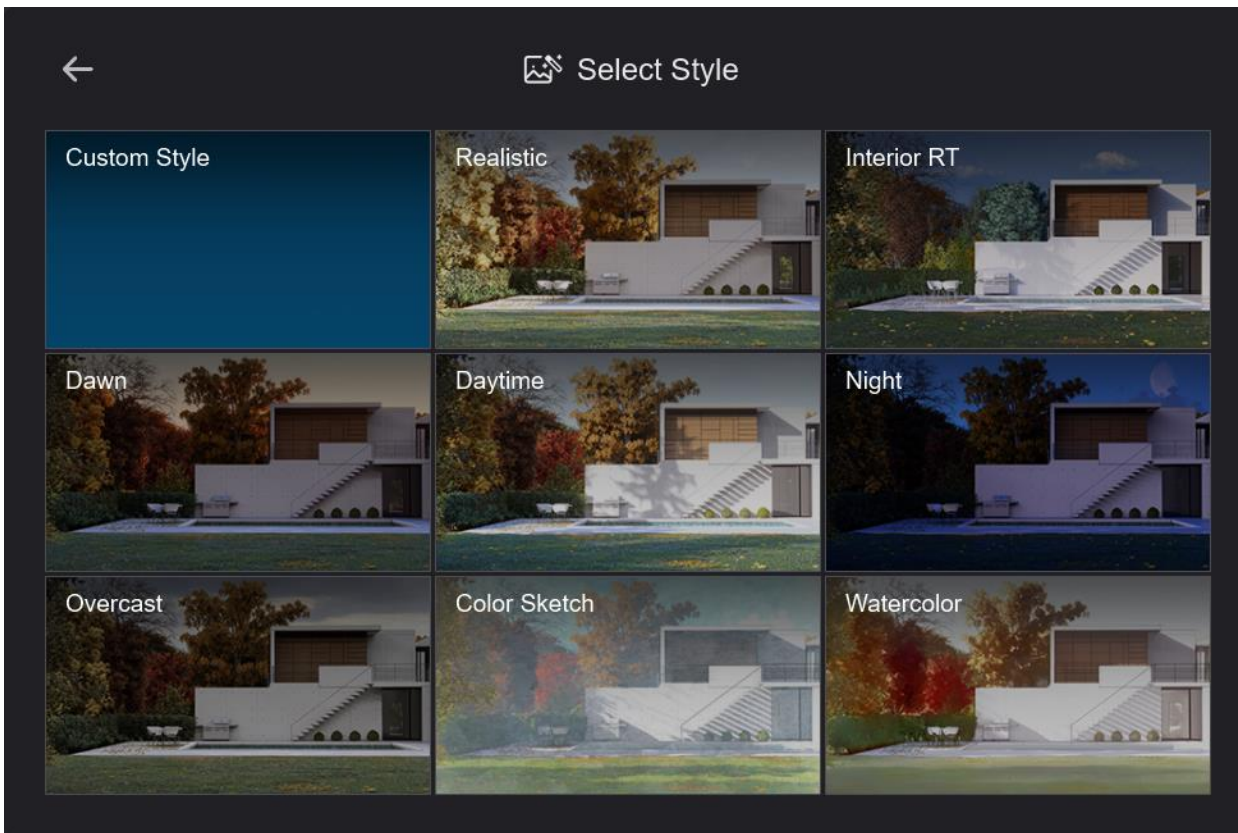
2.29: Templates:

- All *Templates* have been updated.



2.22: Styles:

- All *Templates* have been updated.
 - 1 (one) new *Style: Interior RT.*
 - 8 (eight) improved *Styles.*



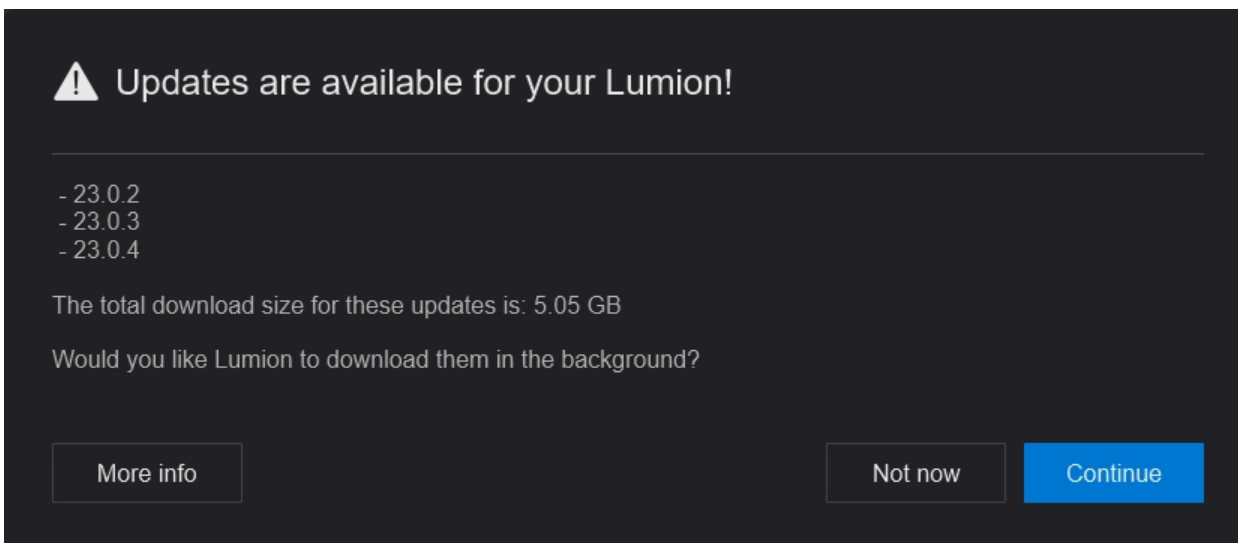
Miscellaneous

2.30: Interface: *Place Mode* is greyed out when 'Select all categories' is active.

2.31: *Installer/Updater:*

Lumion 2023 can now be updated when opening Lumion.

2.31.1: When an update is available, a notification will appear:



2.31.2: Choosing to continue will download the update:



2.31.3: An option to postpone is also available.

More information on the *Updater* can be found in the article below:

- Knowledge Base: [How does the updater for Lumion work?](#)

3. Changes & Resolved Errors

3.1: Build Mode and Object Library

- **Move Mode:** the movement distance of an object has been limited to 3km instead of 30km while moving it freely or horizontally.
- **Place Mode -> Always place on terrain:** Objects no longer get stuck on the terrain after moving them with 'Always place on terrain' active.
- **Place Mode -> Always place on terrain:** 'Always place on terrain' can now be toggled while moving an Object.
- **Place Mode -> Always place on terrain:** Imported Models are now ignored with moving an Object horizontally and having 'Always place on terrain' active.
- **Select Mode:** The Gizmo is disabled during box selection.
- **Custom License Plates:** no longer accidentally exceed the limit of 10.
- **Locked Objects:** the following options are no longer available for *Locked Objects*:
 - Randomise Position/Rotation/Size
 - Reset Size/Rotation
 - Space objects evenly
 - Place on/Conform to landscape
 - Align Position/Rotation
 - Align Size/Height
- **Sun:** The Sun no longer leaves a visible shadow rectangle on *Landscape* or *3D Grass*.

Object library:

- **Omni Lights and Area Lights:** The *Falloff* property has been removed. B4.19
- **Align Positions:** *Align Positions* no longer moves all objects to 0,0,0 if the selection contains Objects from multiple *Categories*. B4.21
- **Imported Animated Models:** now pause when returning to *Movie Mode* after recording a *Clip*. B4.66
- **Library -> Lights:** Changing the color of multiple *Area/Line Lights* in the same selection now affects all of them instead of only one.
- **Library -> Decals:** The *Map Thumbnails* are now displayed as intended.
- **Library -> People and Animals:** The texture and animation now work as expected for *Woman Caucasian 011 Baby*.
- **Library:** *Ambient Occlusion* is enabled for *Nature Objects* when *Ray Tracing* is applied to a *Photo, Clip, or Panorama*.

3.2: Photo Mode, Movie Mode & Panorama Mode

Photo Mode

- **Rendering:** on two different Lumion versions at the same time in Print/Poster resolutions no longer results in an error. B1.35

Movie Mode

- **Mass Move Effect:** an *Object's* position is no longer reset after saving an .LSF file if the *Mass Move Effect* has been added in *Movie Mode*. - B1.27
- **Recording Clips:** the reflection cube map now works as expected while recording a *Clip*. - B1.32
- **Sounds:** Lumion *Sounds* will be muted when Lumion is not the active window. - B1.37
- **'Clip from image file' and 'Clip from movie file':** have been removed
- **Video textures:** are now displayed as static while the *Preview* is not running after recording a *Clip*.

Panorama Mode

- **"Target device: Generic device or Gear VR":** have been renamed to reflect the assigned projection type: '*Project type: Equilateral or Cubic*'.

Photo Mode, Movie Mode & Panorama Mode

- **Image Overlay Effect:** Loaded images can now be aligned to the *Preview* and are no longer stretched to conform to its proportions.
- **Flat-shaded Characters:** The *SkyLight Effect* no longer causes *Flat-shaded Characters* to have depth.
- **Flat-shaded Characters:** The *Precipitation Effect* no longer causes specularity on *Flat-shaded Characters*.
- **Layer Visibility Effect:** now behaves as expected and displays the updated *Layer* state accurately.
- **Metadata:** Files exported from Lumion record the Lumion version they were created in their Properties
- **Rendering:** times have been considerably reduced when exporting as .PNG in *Print/Poster* resolution.
- **Rendering:** using the *Ray Tracing* in *Print/Poster Resolutions* is disabled.

3.3: Materials

- **Materials -> Fur:** applying a *Fur Material* no longer makes a surface double-sided.
- **Material -> Waterfall:** when applied in the *Project* and adjusting the *Lightup Water Color* slider will no longer affect the exposure of the whole *Scene*.
- **Assigning Materials:** Applying *Materials* on multiple *Imported Models* in the same session no longer results in missing *Materials* when reopening the .LS file.
- **Assigning Materials:** Cancelling the assignment of *Materials* after deleting and undoing the deletion of an *Imported Model* now results in the correct *Materials* being applied, respectively the ones used before cancelling the assignment.
- **Materials -> Foliage:** The *Ground Level* slider now ranges from -100m to +100m.

3.4: Effects & Styles

- **Advanced Move Effect:** The user interface is no longer occasionally click-through.
- **Phasing Effect:** The user interface no longer flickers when using the Up or Down arrows. B3.78
- **Orthographic View Effect:** *Materials* are no longer occasionally displayed as invisible.
- **Volumetric Clouds Effect:** *Clouds* are now correctly shaded when used in combination with *Real Skies*.
- **Motion Blur Effect:** The *Preview* has been improved to better display *Motion Blur* when active.
- **Phasing Effect:** Canceling a title change in the *Phasing Effect* no longer freezes Lumion.

3.5: Save, load, and recovery

- **Landscape:** The *Landscape* texture remains consistent when quick-loading or loading a *Recovery File*.

3.6: Importing and Exporting

- **Place item on nodes:** Cancelling the file dialog will no longer cause the *Place item on nodes* function to behave as when a model had been selected to use as a source for the *Nodes*. B5.5
- **LiveSync:** no longer defaults to 15mm *Focal Length* when active and the Lumion window is selected.
- **LiveSync:** When camera synchronisation is on, LiveSync will now use the field of view set in the 3D modelling software when in *Build with FX*.

3.7: Miscellaneous

- **Windows version:** *Lumion 2023* will only run on a Windows 10 or 11 operating system.
- **Graphics card driver version check:** *Lumion 2023* will check that the minimum requirements for the graphics card driver are met.
- **Lumion Pro Trial:** The remaining days are now displayed in the windows Lumion title bar.
- Various UI changes.

3.8 Interface:

- **Branding:** Lumion 2023 features a refreshed brand identity that has been integrated into all platforms, versions and editions.
- **EULA:** The End User License Agreement window has been revised and the interface has been improved.
- **Student version:** A link to the relevant Knowledge Base article has been added when attempting to open an .LS file created in a commercial version.

3.9: Features also now in Lumion 2023 (Standard)

These are features that were available previously only in *Lumion Pro*.

Build Mode - Object Library:

- *Area Lights* and *Line Lights*

3.10: Features that are still developed:

VERY IMPORTANT: Due to the significant changes we recommend that you complete any *Projects* you have started in previous versions of Lumion in the respective version. Then start new *Projects* in Lumion 2023.

IMPORTANT: Lumion 2023 is fully functional but certain features may require additional development or workarounds. More information on features in development and technical limitations can be found in the article below:

- **Knowledge Base:** [What are the changes for the new Lumion 2023?](#)