ARCHICAD 22

New Features Guide
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ARCHITECTURAL DESIGN

Curtain Wall Tool – Renewal

In ARCHICAD 22, we have launched a renewal of the Curtain Wall Tool, improving its usability as a flexible design tool for mid to large size architectural offices. We focused on the design process - making the tool easy and fun to use. The Curtain Wall Tool now supports more accurate design and a closer adherence to local requirements for documenting and listing. This development also supports the traditional and algorithmic (Grasshopper) driven workflows. We have enabled algorithmic control in scheme and pattern design. (See the ‘AC – RH-GH connection’ section below.)

Now let’s get into the details.

Functional update of input methods

Creating a custom CW Pattern - in addition to the current Schematic Pattern way - is now easy: start with an empty CW in Edit mode (available as a Favorite), then draw Frames in 3D, Section/Elevation or Floor Plan. Temporary divisions are created and removed automatically, as needed.
Display the Pattern Definition Box: move, stretch or edit the Box to define the extent of your custom pattern. Once you finalize it, the CW pattern contents and origin are redefined, based on what you drew inside the Box.

Fine-tune the pattern at the panel and frame level, then apply it to the entire Curtain Wall (or segment).

On the Scheme level, too, setting up the Curtain Wall Pattern is more intuitive than ever:

- Define Fixed Size, Number of Divisions, and Best Division logic, separately for Rows and Columns
- For Column and Row, set the one you want to end the pattern with
- When using the Fixed Size pattern logic, choose an option for how to handle the “remainder” of the CW segment
- Preset the Pattern Origin numerically in both directions
- When inputting or editing the Curtain Wall, snappable feedback makes it easy to end on an integer number of columns
- Define panel divisions, merge panels, delete panels/frames – all at the pattern level
- Define diagonal frames at the pattern level (limitation: one diagonal frame per pattern cell). See predefined Scheme Favorites for examples.
Usability enhancements

2D Representation: MVO Control of detail level

- Three levels of detail are available, for each Component Type separately. For example, display CW frames with a rectangle (simplified), CW panels with a single plane only, (schematic), or show everything fully detailed, except for accessories that remain simplified.
- Schematic detail level can still display Opening Lines for D/W panels

Content upgrade

Newly introduced functions:
- Create any number of Frame/Panel Classes
- Use any of these Classes at the Pattern level
- Label elements by Class, using the Label Components command (previously Label CW Members)
- Building Materials have been moved from the System level to the Frame/Panel Class level, so each Class has its own Building Material
Multi-way frame intersection handling:
- Whenever 3 or more equal priority frames meet, for example in Hexagonal, or Triangular patterns, intersections are handled by ARCHICAD automatically, using the correct geometry.

Customizable 2D Representation (Hybrid Floor Plan Mode):
- Introducing the Hybrid Floor Plan Projection, instead of the All Symbolic/All Projected modes.
- New mode for Cut display: combines Projected mode with Symbolic Panels (similar to Symbolic D/W in Projected Walls)
- Separate controls for Cut, Uncut, and Overhead parts. For example, one CW can have a Projected Uncut display, Symbolic Overhead display, and a “Projected with Symbolic Panels” display for Cut parts. Or any other combination you prefer.
- CW-specific default library parts (frames, panels, doors, windows, accessories) have been redeveloped, with new options for Level of Detail.

CW GDL Content:
- Detail levels of CW Doors/Windows more closely match those of the regular doors and windows
- Introduction of Building Materials in CW Doors/Windows (instead of Cut Fills/Cut Pens/Surfaces)
- New Polygonal Window element: openable Hinged Window that can adapt to any Panel Polygon (e.g. Hexagonal, Octagonal, Trapezoid windows)
- New Profiled Frame: use Profiles (defined in the Profile Manager) for the Frame and the Cap
- New Profiled Edge Panel: use a Profile (defined in the Profile Manager) as the perimeter extrusion of a panel. Also define a Composite infill for the panel.
- Corner Frame handling: we have introduced 6 new corner frame types.
Stair Tool – further enhancements

The flagship feature of ARCHICAD 21 has been further enhanced based on market feedback. We have also added new features:

- Stair Headroom visualization in 3D and on Sections/Elevations
- Introducing Stair Headroom in Collision Detection function
- Option to extend the Break Mark line on both sides of the Stair
- Number the Stair steps in Section/Elevation with automatic labels
- New numbering option: number every First and Last Tread/Riser of Flights

- 2D representation for Monolithic Structure

- Additional Connection types for Monolithic, Beam and Stringer Structures
- Monolithic Stairs: option to have draining on both sides

- Automatic option to offset all Risers at the same time, to match the Open Stringer offset from boundary

- Automatic Level Dimensioning on stair landings: place level dim on top of any tread and landing, or on top of a landing structure (not a flight structure!).

- Set walking line orientation (up or down) in different directions on different floors

- New “Accessory only” tread type – for concrete stairs, for example
Railing Tool – further enhancements

The Railing tool has been also further enhanced based on market feedback. The new features are:

- **Rail Ending**: Introducing Vertical and Horizontal endings on sloped railings

- **Rail Panel**: Custom profiles for panel frame

- **Rail Endings and Connections**: edit graphically in any view, using hotspots
- Rail Post: New options for top and bottom part of Newel Posts

- Rail Post: Refined stretching option for Newel Post’s heights
- Solid Element Operation function added between rail sub-elements.

**Custom Geometry Modifiers in Profiles**

With this new function for Profiles, users can create more intelligent Profiles for Walls, Beams and Columns, by defining parametricity to edges in the Profile Editor. This will allow offset or control of individual (or multiple) edges, at the instance level, either graphically or via element settings. This enhancement combines the power of parametricity with the freedom of graphical profile creation.

Features include:

- A single profile can be manipulated and edited at the instance level, decreasing the need to create and manage multiple similar Profiles;
- Manipulate the profile numerically via its settings dialog, or graphically in Floor Plan, Section and 3D;
- Parametric modifiers and their values can be labeled, scheduled and used in Expression-type properties;
- Existing Stretch Zones (renamed to Stretch Modifiers) have been enhanced to work better with parametric modifiers; stretch modifiers can now be compressed;
- Stretch modifiers have been renamed from Vertical/Horizontal Stretch to Width/Height Stretch;
- New nominal width and height definitions in the Profile: these can be used where the total width/height values aren't the relevant or required values for the Profile. In settings dialogs, user can edit the nominal - with feedback via tooltip - of both values;
- Updated and live handling of uniform contour and separator line overrides;
- Updated and new Profiles in the template now take advantage of these parametric modifiers;
VISUALIZATION

CineRender

ARCHICAD 22 uses the new CineRender engine (R19), utilizing new features, including:

- the new Tone mapping post-effect
- Stereoscopic renderings, using a dedicated camera
- Spherical camera, producing 360-degree or dome-renderings
- Stereoscopic spherical renderings (combination of the 2 cameras)
- Optimized performance, including:
  - Speedups for Standard Renderer
  - Speedups for simple transparencies in Physical and Standard Renderers.
PRODUCTIVITY

Expression Defined Property Values

This new function in ARCHICAD lets you define any calculation rule as an element property value and update it automatically, without time-consuming and error-prone manual data entry. The property value definition is based on user-defined expressions, composed using simple data fields. The expression can include built-in or custom ARCHICAD Properties and parameters, global settings and Project Info fields as building blocks, governed by arithmetic, logical and text handling operations – very similar to functions in standard spreadsheet programs.

With this technology, you can perform any model-based custom calculation or data processing of numeric, text or Boolean property types. The result can be used in ARCHICAD for tagging or filtering elements, and presented in any graphical, tabular or model output. Moreover, the property values that form a valid URL will become a live URL hyperlink in the Interactive Schedule, providing a quick way to access any connected data.
Custom Graphical Label

Select any combination of drawing primitives (lines, arcs, polylines), plus Text Blocks (even containing Element-related Autotexts), then save them as a Label (just like Save as Object). Place your newly created custom Label on an element; any Autotext will update automatically.

Priority-Based Selection Highlights of Walls on Floor Plan

In ARCHICAD 22, the 3D geometry intersection of walls on floor plan views have changed: their cut parts are now displayed as if they were true 3D projections – as far as their connections are concerned! Also, they are now aligned with the derived quantity take-offs.

As a result, the user gets the same selection highlight for intersections on the floor plan as on a 3D Document. Moreover, if the user hides a wall or column which takes part in an intersection, the element gets the same contours on floor plan view as in a 3D Document.
Introduction of decimeters in Project Preferences/Working Units

Decimeter is now available as an option for length units in all places where length units can be specified: Working Units (Model Unit, Layout Unit), and Project Preferences: Dimensions (Linear/Radial/Level Dimensions, Elevation Dimensions, Door, Window and Skylight Dimensions, Sill Height Dimensions), Calculation Units & Rules (Length Unit). Users can set 0 to 3 decimals for this unit option.

Updated Attribute Manager dialog

The Attribute Manager dialog has been re-engineered to work faster and more reliably. New features include:

- Instant Search of Attributes, of the left and/or right side and when switching between tabs;
- Delete and Replace functionality now works directly in Attribute Manager;
- Layers and Layer Combinations merged into a single tab, allowing Layer states (like show/hide, lock/unlock, layer intersection grouping) to be edited across multiple selected Layer Combinations;
- Support for editing of multiple Attributes simultaneously, such as editing Pens and Surface colors, Surface Vectorial Hatch, Building Material settings, Pen Description and Weight, Line Type Scale or the "use with" filtering options, etc.;
- Markup Styles are now available in Attribute Manager. The Markup Styles dialog has been simplified, allowing in-row editing of pens and multi-selection editing;
- New Associated Attributes list, to clearly see which attributes are inside another; double-click an Associated Attribute to immediately switch tabs and select that attribute;
- New ‘Changes’ tab replaces previous sub-dialog, to check and revert any Changes;
- Pen Sets now includes “used” checkmark column to see if the Pen Sets is used in the Project;
- Copy/Paste (via context menu) a Pen between Pen Sets and between Left/Right lists
- AAT saving has been discontinued (only save to XML), but can still load in from an AAT, XML or AC Project;
- Teamwork reservation functionality in the dialog has been upgraded, to be more reliable and more consistent with other dialogs, such as Property Manager.
Updated Model View Options dialog

The Model View Options dialog has been redesigned, to match the layout of other dialogs, with the following changes:

- MVO Combinations and the Search field are now on the left side of the dialog
- ‘Store as’ and ‘Rename’ functions have been removed: editing now occurs instantly, as in other similar dialogs
- Panels on the right side of the dialog have been reorganized and simplified
- During migration, previous “Custom” Sets used by project views will become automatically named MVO Combinations.
GRAPHISOFT ID – Unified Login

When logging into your GRAPHISOFT ID, you only need to log in once. This is used for License Management and publishing to the BIMx Model Transfer Site.

You can access GRAPHISOFT ID login from the Start dialog, status bar, help menu and the existing BIMx Publishing dialog.

Trackpad and Magic Mouse Support for Mac

On Mac, using the built-in trackpad on laptops or Magic Trackpad accessory, use gestures to navigate around 2D and 3D views, without having to rely on using a mouse. New interactions include:

- 2-finger scroll to Pan in 3D and 2D views
- 2-finger scroll + hold shift to Pan faster in 2D views
- 2-finger scroll + hold shift to Orbit in 3D
- 2-finger scroll + Option/Alt to Zoom in and out in 3D and 2D views
- 2-finger pinch to Zoom in and out in 3D and 2D views
- Follows Natural scrolling behavior as set in System Preferences

The Magic Mouse accessory also follows this new Trackpad behavior (using a single finger for Pan, with Option/Alt to Zoom), matching native macOS behavior. New Work Environment option for Magic Mouse and Trackpad, to switch to legacy behavior, preferring Zoom when scrolling.

Enhanced Security Options for PDF

New options help protect content and prevent unwanted editing of published PDF content. Enable or disable the following in the PDF Options dialog (opened from Document Options in Publisher, if a PDF item is selected):

- Annotate or modify
- Explode or copy contents
- Print

Collision Detection Enhancements

The Collision Detection feature, introduced in ARCHICAD 21, has been further enhanced:

- New Volume and optional Surface Tolerances, allow to ignore small collisions based on the value defined in the dialogue;
Collision Detection Report can now be cancelled to return to the Collision Detection dialog, to refine settings.

![TOLERANCES](image)

**Label Components of Selected Elements Enhancements**

The Label Components of Selected Elements feature has been enhanced:
- Now supports Stair components - such as Treads, Risers and Structure components,
- Choose from any Label Favorite to apply when labelling components, not just the Label Tool’s Default Settings.

![Label Components of Selected Elements](image)

**Small Improvements**

Some small but welcome improvements and fixes:
- Selections palette has been simplified and its interface modernized; new Redefine function allows any selected Selection Set to be updated based on current element selection.
- New Work Environment option, under On-Screen Options, to turn on/off contours for all Favorite and Object Setting 3D previews.
- Selection of overhead elements in Floor Plan now omit their surface detection, to give priority to selection of uncut elements. Select overhead elements by their outline.
- Element Transfer Settings: Home Story definitions are now stored correctly. Sets and default have been updated accordingly.
- Element Transfer Settings: New options added for Curtain Wall, including Classes and Scheme Pattern.
- The “Reference Line” algorithm for Zone creation automatically detects the logical Zone Boundary where Walls and a Curtain Wall form a closed space.
- Re-associate a Label to another element using Cmd (mac) / Ctrl (win) + Click.
- Grid Tool lines visible in Section: bug fix to ensure that custom settings will “stick” correctly.
- Updated interfaces for Create Sun Study and Create Fly-Through dialogs; new “Total Length” feedback indicates how long the exported movie will run (total frames divided by frame rate).
- New algorithm for calculating Sun position, using the Solar Position Algorithm of the U.S. National Renewable Energy Laboratory, results in more accurate shadow casting (e.g. for 3D Projection and Sun Study), as a result ‘Year’ setting has now been added.
- Work Environment lists to set visibility of Settings dialogue and Info Box panels, and ability to remove Toolbar and Menu items, now support multi-selection to edit more than one item at a time.
- New System Autotext for today’s date including: Day of Month/Week, Month (name)/(number) and Year (short)/(long).
- Interactive Schedule, ‘Schedule Cell Size’ dialogue now supports multi-selection editing, and new buttons to resize all Rows and Columns to fit content with 1 click.
- New Info Box command from Element panel, for all Library Parts (such as Doors, Windows, Objects) to “Reset to Default Settings” without needing to open settings and switch back and forth.
- Surface Settings, New from Catalog, when selecting an item during search, after clearing the search, the selection is now kept.
- Edit width and height of rectangular and profiled Column cross sections graphically on Floor Plan via their boundary nodes, previously was only available in 3D.
- Stretching graphically a rectangular Column in Floor Plan and 3D, now adheres to its defined Anchor – previously always used center.
The renewed Add-on generates reports based on the BRI 277-1:2016 standard for gross floor area, gross volume, net floor area, net volume, construction floor area and construction volume. The generated list view appears in the Navigator as a standard project view, so it can be placed onto a layout, like any other native list view. The user can automatically update these lists: a huge time-saver compared to previous releases, which required the user to manually update and place these reports every time the model changed.

The new Add-on also supports the Layout Book’s Multi-page layouting feature to generate these reports. In addition, the list can now be saved to .xlsx format.

All generated spreadsheets have the same header, which is filled in with data from Project Info.

### Apartment Area Calculation

according to "Verordnung zur Berechnung der Wohnfläche" from 01.04.2004 (WofV)

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Room Description</th>
<th>Area</th>
<th>To be filled by authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Overbuilt Area</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Area to be calculated</td>
</tr>
<tr>
<td>01</td>
<td>Zone</td>
<td>138.17</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Gross Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1. 10.77 * 8.83</td>
<td>95.10</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2. 0.62 * 0.24 / 2</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3. 8.58 * 0.92 / 2</td>
<td>3.95</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4. 1.62 * 2.42 / 2</td>
<td>1.94</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>5. 9.15 * 2.42 / 2</td>
<td>11.07</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>6. 5.90 * 8.83 / 2</td>
<td>26.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gross Area Sum:</td>
<td>138.24</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Rounding Correction:</td>
<td>-0.87</td>
<td></td>
</tr>
</tbody>
</table>

| 02  | Zone             | 29.34 |                           |
|     |                  |      |                           |
| 9   | Gross Area       |      |                           |
| 10  | 1. 5.78 * 3.94 | 22.77 |                           |
| 11  | 2. 1.09 * 0.18 / 2 | 0.10 |                           |
| 12  | 3. 5.60 * 1.09 / 2 | 3.65 |                           |
| 13  | 4. 3.94 * 0.65 / 2 | 1.28 |                           |
| 14  | 5. 3.94 * 1.08 / 2 | 2.13 |                           |
PERFORMANCE

Smooth pan and 2d navigation for vectorial model views

The pan and zoom feature provides a natural and smooth user experience even for large models in the floor plan, section, elevation, worksheet and 3D document type views. The performance gain will be achieved by utilizing:

- The advanced capabilities/resources of the hardware and OS drivers, e.g.: generation of complex hatches/fills/cut surfaces/cover fills will be completely done by the array of GPUs
- A further improved caching system that will decrease the number of view generations
- Trace and reference regeneration can be interrupted just by continuing the navigation, allowing users to keep trace and reference on continuously, without affecting the performance
- Panning, zooming and navigation is already capable to utilize multiple cores of the computer, now it has been developed further to best utilize the computing power to the changing needs of a continuous navigation. As elements are appearing and disappearing during the navigation the algorithm continuously balances the calculation tasks between the cores to make sure they all finish at the same time, so no time is wasted waiting for overloaded cores. This happens in the background continuously and it is able to increase the picture frame rate making the navigation user experience much smoother.

Increased performance of Morph elements

In ARCHICAD 22, we significantly increased the performance of the large number of complex Morph elements. This was achieved by reducing the memory footprint of them, which will require a magnitude less memory compared to version 21.

Increased performance of Teamwork element reservation

In ARCHICAD 22, we significantly increased the performance of the element reservation in Teamwork, so it will take only a fraction of a second, even for very large selection sets. This will make sure that the Reservation Assistant feature will provide an excellent user experience.

Note: this new feature is only available with BIMcloud User license.

High resolution support on WIN

4k/5k screens offer much sharper display of details; now ARCHICAD can utilize this resolution, similarly to the retina display on MAC, to draw additional details of icons, lines, etc. and produce a much sharper look. (Windows 10 and above)

Prevent macOS from Automatically Mounting Server Volumes

New experimental feature to prevent ARCHICAD and macOS from automatically mounting server volumes. When switched on, ARCHICAD will not attempt to mount volumes, but only read from already mounted volumes. Use this feature, if you have slow network connection, which can cause ARCHICAD to hang, as the operating system attempts (but times out) to mount volumes.
INTEROPERABILITY

Export of Component Quantities and Properties to IFC

In ARCHICAD 22, we have improved the quality and precision of exporting Component and Material information to IFC2x3 and IFC4. This is important for users who want to create schedules, calculations and cost estimates based on data related to Building Materials, individual Composite Skins, and Complex Profile parts. This export function works both when exporting a complex element as a single element, and when exporting it by exploding into parts.

Import of IFC Properties as ARCHICAD Properties

In ARCHICAD 22, we extended the possibilities for users to customize IFC import: users can map IFC data to ARCHICAD Properties of the host project. Thanks to this feature, all functions that work with ARCHICAD Properties are also applicable to imported elements. For example:

- Criteria-based Graphic Override
- Collision Detection
- Labeling
- Interactive Schedule
- Find & Select
- Expressions
- Autotexts
Import of NURBS Geometry from IFC files

Starting with ARCHICAD 22, we support the import of IFC model elements that have NURBS (non-uniform rational basis spline) geometry representation. These model elements can be imported as either Morph elements or GDL Objects. In the latter case, the generated GDL Object keeps the original NURBS definition in its GDL script, enabling users to control the level of complexity at which the imported curved geometry is displayed in the ARCHICAD project.

Layer Mapping at IFC Model Import

In ARCHICAD 22, users can map the layers of IFC model elements to existing ARCHICAD Layers, preventing the import of unwanted layers to the ARCHICAD project. Intelligent mapping template allows the list of mapped IFC layers to be easily expanded based on IFC file content. In addition, the layer of cutting bodies created by openings is now controlled by the user.

Import/Export of DWG/DXF 2018 Files

ARCHICAD 22 reads and writes AutoCAD 2018 DWG/DXF files.
LIBRARY ENHANCEMENTS

Please note: Some new Library Part developments are available in certain localized libraries only (where applicable, this is indicated in the descriptions below).

General Library Enhancements

The following improvements are available in all local libraries.

Rich text in GDL related texts

From ARCHICAD 22, GDL elements with editable texts (for example door/window markers, labels, section/elevation markers) are using the same text handling features as general ARCHICAD elements. This project enables “rich text” editing for all GDL related texts.
New Detail Level Settings for Library Parts (Model View Options)

New settings allow for increased control over view-based display of Objects and Lamps.

On Floor Plan:
- Low
- Medium
- High

3D Projections:
- Full
- Simplified
- Schematic

For Doors and Windows, new Display Types are available (e.g. without leaf, with leaf, without glazing, with glazing.)

Note: Skylights can use symbolic display only in single plane roofs and only if it is enabled at Project Preferences / Legacy.
New Geometries for Generic Library Parts
To take advantage of new Detail Level settings in Model View Options, many Library Parts have been extended to include 3D and 2D Detail Level geometries. As a result, users can now centrally control the Detail Level appearance of these Library Parts in different views.

Countertop element with new sub-features
The Countertop element, developed for AC 21 for the USA market only, is now available worldwide, with new sub-features: add a “skirt” component to the front and to the sides.

Kitchen Cabinets’ Counter Top On/Off setting
Easily accessible control to show/hide the Countertop part of Kitchen Cabinets in Object Settings.

Improved Skin List Label functionality
New functions in the Skin List Label:
- Marker Head Text can display Structure (not just ID)
- Option to display Thickness as percentage of total
- Display Fills as part of the Label (with three different display options)
New Label Frame Style

The new Frame Style has a divided first row, suitable for Classification and Property labels.
Other Local Library Enhancements
New developments in selected local libraries only.

Section Marker, Detail Marker and Detail Drawing Title functionality (RUS only)
The international Section Marker, Detail Marker and Detail Drawing Title elements will be completed with RUS market specific functionalities.

Sanitary objects - for handicapped people - further developed (GER/AUT only)
Sanitary objects for handicapped people now fulfil the DIN 18040 regional standards.

Even distribution of multi-pane windows (NED only)
Evenly distribute the panes of the multi-pane windows based on the distance between the fixed frames, rather the width of the visible glass surface.

Asymmetric sliding Doors and Windows (NED only)
Use sliding Doors and Windows with asymmetric division.

Improved Roof Slope symbol (USA only)
In ARCHICAD 22 we have improved the original Roof Slope Label (USA) element.
With the new option of 50% scale in the Layout Stamp Object, it is possible to fulfil a common workflow to create A3 layouts proportionally downscaled from A1.
ARCHICAD – GRASSHOPPER LIVE CONNECTION

This free, add-on product enables Rhino/Grasshopper and ARCHICAD to communicate directly in order to create and manipulate a BIM model in full or in parts through Grasshopper’s visual scripting interface. It can be downloaded from GRAPHISOFT website.

Below you find all the feature we have published since ARCHICAD 21 release, back in June 2017.

Deconstructor Node (introduced in AC21 Update 2)

This new Node type provides access to the model data (both metadata and geometry) of ARCHICAD elements that are referenced in from a live project. Through such a Node, user can retrieve any available parameters, assigned property, or attributes of a given element and use its data in the Grasshopper script as input for any suitable node from the Grasshopper ecosystem. This function enables optimized design and access to BIM model data through Grasshopper. Also, it can support a “reversed” workflow, where data is channeled from ARCHICAD to RHINO/Grasshopper platform.

GDL Node - static library content creation (introduced in AC21 Update 2)

With this new Node, users can create static (non-parametric) GDL library parts from any geometry. During creation, the ARCHICAD-Grasshopper connection instantly adds the model to the embedded library of the running ARCHICAD project, while placing the object in the location specified by connecting anchor point coordinates to the Node.

Updated Curtain Wall Node - new custom pattern functionality for AC22

The updated CW Node is prepared to fully support the new upgraded CW feature set, to access and manage all sub-element subtypes, settings, and custom content created with the custom pattern tool.

In addition to the existing option of creating a CW pattern from a scheme, a new mode enables creation of a custom CW frame pattern from any set of 2D lines, generated in Grasshopper.