From the 3D building model to the „commercial building model“ with BIM2AVA

Model-oriented cost planning within the BIM process
Creative design is fun!

Do you find AVA and cost planning a chore?

With BIM2AVA from California.pro, moving from the 3D building model to the „commercial building model“ in California.pro is easy.

BIM – what is it?

BIM stands for Building Information Modelling, i.e. for model-oriented planning processes in the construction industry.

One typical application is to link the 3D model with cost planning and tendering.

You can link quality with quantity, i.e. components with their part-services, thereby generating the respective costs.

The digital building model (3D) of the CAD provides geometric data and information on component properties in varying quality and detail for further planning.

In the simplest case, besides the geometric data it provides at the very least the information that the component represents, for example, an outer or inner wall.

Ideally, the CAD building model already includes a component classification, which automatically has a corresponding commercial counterpart.

A key advantage of the BIM methodology is that up-to-date, optimal – quality project information is always available – including with redesigns.

Compared to the traditional planning process, a BIM-guided process is faster, more transparent and more secure.

Experience BIM2AVA at: www.bim2ava.de

BIM Module

BIM2AVA – graphic quantity and cost calculation from IFC files in the BIM process

With BIM2AVA, the commercial building model in California.pro is created in the BIM process from the IFC-3D building model of every CAD.

The bi-directional linking means that each viewed AVA component can be localised directly in the 3D model and vice versa.

The automatically created schedule of rooms and buildings lists precise quantities for components and services and is updated each time the model is changed.

In the schedule of rooms and buildings, all the components and rooms contained in the BIM model are logically grouped together with the properties stored in the IFC file and shown as component elements.

For identically specified BIM objects such as walls, ceilings, windows etc., component variants are automatically created. In this way, the planner can still specify the qualities of the components in detail.

You can automatically simulate different cost situations by exchanging all or some components.

In addition, BIM2AVA supports the interface format BIM-LV-Container according to DIN SPEC 91350. This means that you will be using components specified with trade oriented part-services from other software solutions, e.g. from DBD-Kosten-Kalkül.

BIM2AVA enables fast, accurate cost calculation that also correctly takes into account changes in the planning, as well as a „real“ cost structuring with automated production of the bill of quantities from the part-services of the components.

The bills of quantities feature geometry oriented quantity determination with dynamic linking to the schedule of rooms and buildings.
The key functions

- Direct processing of CAD data in the commercial building model of the AVA software California.pro via IFC
- Transparent updating of plan changes in the BIM model
- Coupling of drawing elements and sampling
- Automatic further use of the model for producing bills of quantities and cost documentation.

The benefits for you

- Automatic issuing of the room schedules
- Incorporation of the entire building structure for geometry oriented quantity and cost determination
- Automatic issuing of component variants
- Qualities and costs can be assigned to the components in groups
- Simultaneous display of the structure arranged according to geometry, trades and DIN276, no manual reordering
- Verifiable update process for plan changes, including with advanced construction work
- A high degree of automation through predefined component variants for standardised construction is possible
- The priced bill of quantities, rearrangement according to DIN276 and cost overviews for all planning phases are automatic results in California.

Note: The procedure described here presupposes the following modules: KOS, BIM, RGB, LVE

We recommend: KOS, BIM, RGB, LVE, AUF, PRO, DAT.

With BIM2AVA, you will gain time, transparency and cost security – from the famous „first number“ through to the billed project.