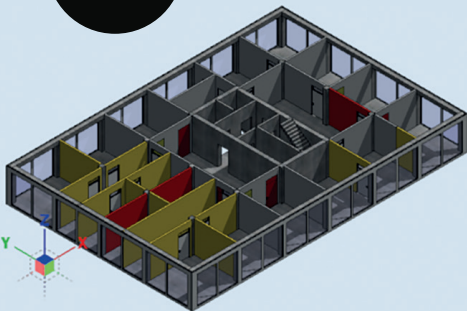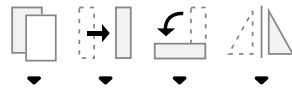ALLPLAN
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\ CHECKLIST

8 CRITERIA FOR SUCCESSFUL BUILDING RENOVATION

How to get a grip on the challenges with the help of BIM software

How to get a grip on the challenges with the help of BIM software

For many architectural and multidisciplinary planning consultancies, building in existing structures represents a significant part of their daily project work and is constantly increasing. A number of additional tasks need to be mastered, and the approach differs significantly from that of new construction projects, especially at the beginning. In this context, choosing the right BIM software is a decisive factor in successfully managing a renovation, conversion or repurposing project.

This checklist is intended as a guide to help you find the optimum software tool for efficient construction in existing buildings and that can map the entire associated workflow. This begins with the review and integration of existing documents as well as the evaluation and processing of point clouds from an on-site survey, which are merged into an overall model. This model serves as the basis for damage mapping and the creation of detailed design documents for refurbishment and conversion. Various materials such as timber can also be considered.

Checklist

1. **Does the software support various interfaces for transferring data from different sources?** — The software should have a variety of interfaces that allow the user to read in data from different file formats and relate them to each other. ☐

2. **Does the software enable optimal processing of terrestrial and drone laser scan data?** — The precise recording and processing of laser scan data is playing an increasingly important role in as-built surveys in connection with renovation projects. Efficient software should have open BIM workflows that optimally support this process. ☐

3. **Can relevant data be transferred to the software in real time to ensure seamless integration of the point clouds?** — To reduce the amount of data when integrating point clouds and speed up the process, powerful software should offer the option of transferring only the relevant data in real time. ☐

4. **Can the software be used to document the condition of the building object in 2D and 3D?** — Based on the recording and analysis of the existing building stock, damage mapping can be carried out if necessary. An efficient software tool for planning and building in existing structures should provide users with effective support in that damage patterns can be easily located; damage classifications and quantity calculations can be carried out and the condition of the building can be documented in 2D and 3D. ☐

5. **Can the software be used to efficiently create detailed documents such as demolition and new construction plans and to plan a conversion?** — A powerful BIM solution for conversion and renovation projects should provide comprehensive and easy-to-use functionalities for the quick creation of clear demolition and new construction plans. ☐

6. **Can the software also be used to determine quantities?** — As part of the reporting process, a quick determination of demolition and new construction quantities, e.g. walls or rooms, should be standard with just a few clicks ☐

7. **Is it possible to visualize time sequences with the software?** — For the timely implementation of a conversion or refurbishment project, planners should be able to use their software to carry out a process simulation in order to coordinate the sequence and dependency of the measures and thus ensure a smooth execution phase. ☐

8. **Does the solution offer the option of multi-material planning for more flexibility in the selection of building materials?** — A good software for construction in existing buildings should be equipped for every type of building material, such as timber construction, either directly or by connecting to specialized programs using an OPEN BIM workflow. ☐

About ALLPLAN

ALLPLAN is a global provider of AEC software with BIM solutions for architecture, structural engineering, detailing, fabrication and construction. True to our "design to build" claim, we provide tools that enable earlier data-driven design decisions, support digital fabrication and leverage information throughout the entire construction process. Integrated cloud technology further optimizes interdisciplinary collaboration on building and infrastructure projects.

Our innovative workflows empower architects, engineers, and construction professionals to deliver their projects more productively, safely, and eco-consciously.

Around the world, over 700 dedicated employees continue to write the ALLPLAN success story. Headquartered in Munich, Germany, ALLPLAN is part of the Nemetschek Group — a pioneer for digital transformation in the construction sector.

ALLPLAN is a member of:

buildingSMART. International home of openBIM®   OPEN BIM™

Interested in ALLPLAN software?

Start your 14-day free trial with ALLPLAN

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