

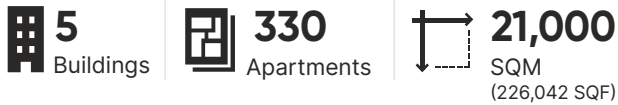


## CASE STUDY

# MBN-Buildots-koppla Rhinstrasse 143



### Project Overview



### Introduction

MBN is a medium-sized construction and real estate company operating across Germany. In operation for more than 60 years, the business has been successfully delivering a variety of projects for their clients including corporate business and residential complexes, hotels, and industrial facilities.

Through their commitment to LEAN construction methodologies and as a leader in the use of innovative technologies, MBN continuously aims to provide unmatched value and efficiency for their clients and projects.

By successfully integrating [koppla](#) - an intuitive construction schedule which is also suitable for LEAN construction and [Buildots](#) - a company that provides AI-based data analysis from 360° captures on-site, MBN becomes the first general contractor to benefit from an objectively verified single source of truth for all project participants.

### Lean Construction Enabled By Technology

MBN was awarded the Rhinstrasse 143 project in Berlin, a residential scheme comprising five eight-story buildings with a total of 330 apartments. They immediately realised that this project would benefit greatly from their LEAN construction approach, especially considering the high number of repetitive elements and workflows.

The LEAN construction methodology aims to establish an uninterrupted, fluid construction process that minimizes costs and maximizes value for customers. To facilitate this LEAN approach in the field, MBN has been working together with [koppla](#), a ConTech start-up from Potsdam, for the last 1.5 years.

[koppla](#) acts as the central scheduling and production system used by the on-site team, providing an intuitive schedule for ease of construction planning where changes are made in real time, ensuring efficient documentation and data-supported optimization of processes.

### Buildots Overview

Buildots removes human subjectivity from the construction progress tracking process by gathering actual site data by means of 360° video capture. Using its advanced AI capabilities, Buildots compares

this data to the BIM model used for construction and flags any discrepancies. With this information, project managers can accurately track real-time progress compared to the projects critical path and make scheduling adjustments as required.

### Background Of The Integration

Both [koppla](#) and [Buildots](#) aim to optimize the construction processes through intelligent use of data. Therefore, MBN earmarked the Rhinstrasse 143 project to be a pilot project where the two platforms could be integrated to allow for complete visibility and control over construction project management. As a result, MBN would have a detailed overview of the progress of the entire project.

*During the whole project, Buildots identified 38 relevant errors for MBN that were pushed to the koppla platform. The early identification helped to stabilize the LEAN process by avoiding time consuming and cost-incurring errors.*



**STEPHAN SÄNGER - SITE MANAGER, MBN**

# From Guesswork To Objective Data-Based Decisions



## The Challenge

To keep its progress scheduling up-to-date, koppla typically relies on feedback from subcontractors and project managers on-site. However, this can result in inputted data, which in turn causes resource inefficiencies and results in difficulties carrying out detailed site inspections.

## The Solution

This is exactly where the capabilities of Builddots, together with koppla, come into their own.

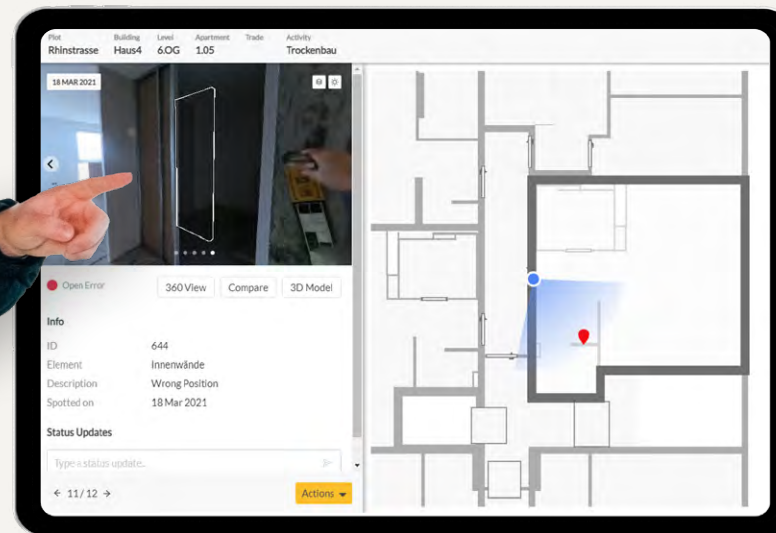
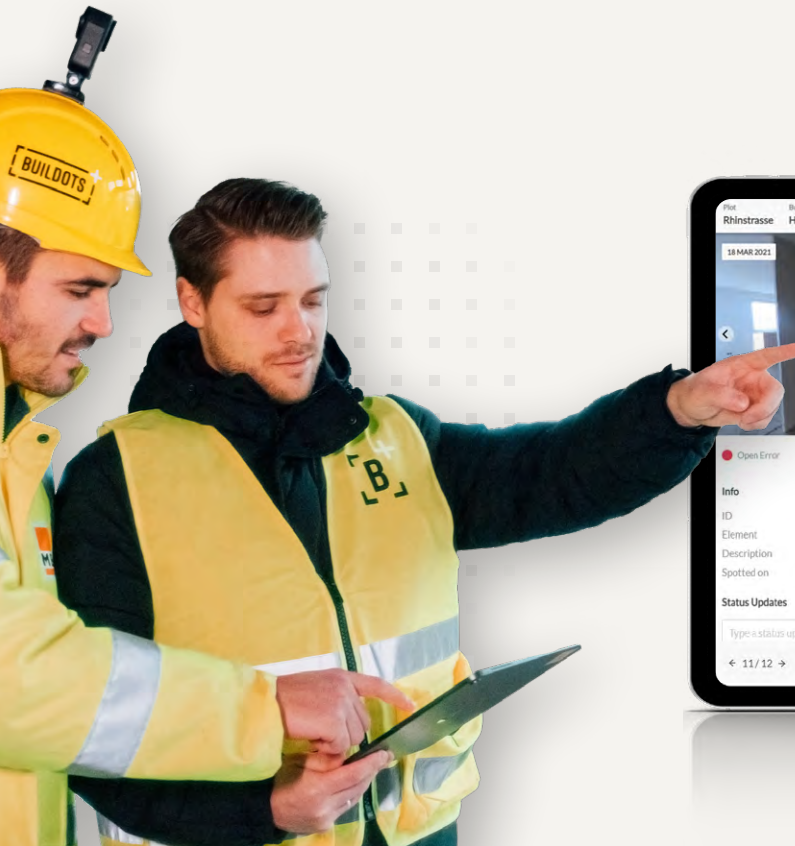
By integrating both software solutions, the entire value chain can be covered during the construction project. The implementation of koppla ensures reliable data documentation throughout the construction process. Builddots captures actual on-site data and compares it to the BIM model used for construction so it is an accurate representation of what is happening on-site. All subcontractors and project managers are involved to share their latest status updates and accelerate processes.

As illustrated by the example below, Builddots enabled

a double-checking system that allows for errors and omissions to be identified far more accurately than what can be achieved by human inspection alone.

Residential projects such as this one often contain a large number of repetitive areas. This means that catching errors and omissions straight away provides an opportunity for streamlining and refining processes early on as well as for avoiding expensive rework as the project progresses.

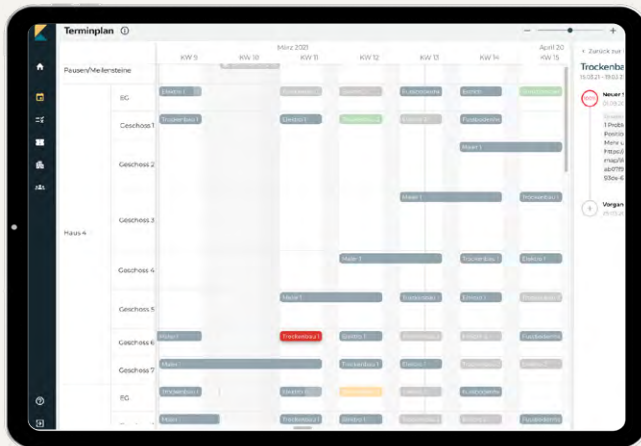
For instance, Builddots identifies a drywall in the wrong place on level 6 which can be easily missed in a human inspection. Typically, subcontractors would report this work as complete and move on to the next TAKT area, following the approval of the site team. In the best-case scenario, one of the contractors would notice the error and report it. Unfortunately, this would have still led to an interruption of the continuous workflow. In the worst case, the customer would have noticed this error during the acceptance process after all contractors would be done. This would have again led to a costly rebuilding process.



**Error found by Builddots  
Drywall in the wrong position**

## Results

In this example, the costs would have been around €7000, as all the parts around screed, underfloor heating, flooring, drywalls, etc. would have been removed and rebuilt. Builddots helped MBN to detect this error at an early stage - right after the studs were installed. This led to an easy and quick rebuilding process avoiding unnecessary costs and delays. Furthermore, identifying 38 errors in total had a significant impact on ensuring resources were utilized efficiently and the project stayed on schedule for its successful delivery.



**Builddots triggers a deficiency in the koppla schedule that can now be adjusted accordingly.**

## Benefits Of The Integration

Thanks to the successful integration of koppla and Builddots, progress and error data were fully exchanged between the two systems. Subcontractors and project managers had easy access to the data provided on both systems and were able to make their decisions based on objective data that had been universally coordinated. The data provided by Builddots accurately validated the areas automatically tagged as complete.

The capture, analysis and tracking of construction progress is now more automated than ever before. Project managers can now spend their time on what

matters most - keeping the project planning on track without chasing subcontractors for updated information.

As a result, MBN worked in a central system that helped optimize the construction progress and enabled communication with subcontractors around a single source of truth with a detailed view of the project progress.

## Conclusion

By combining the LEAN scheduling and planning capabilities of koppla with the accurate, objective data supplied by Builddots, MBN have a powerful, single source of truth that allows for easy, objective decision making that keeps the project on its critical path.

Because of the success provided by the integration of these two platforms, MBN is looking to use this integration on future projects.