

✓ AUTODESK Construction Cloud



How Upgrade Estate Avoided 9,000 Clashes during Preconstruction with BIM 360

Upgrade Estate provides housing for students, young professionals, and companies in Belgium. From student apartment blocks to semi-furnished apartments for young professionals, Upgrade Estate works on construction projects that capture the entire build process. Disjointed methods of project documentation created inefficiencies in how data was stored and distributed. With BIM 360 within Autodesk Construction Cloud™, Upgrade Estates was able to increase collaboration and reduce 9,000 clashes during preconstruction to save time and build more sustainably.



Customer Snapshot

FIRM SIZE: <500

FIRM TYPE: OWNER / GENERAL CONTRACTOR

REVENUE: N/A

FOCUS AREA: COMMERCIAL

HQ: GHENT, BELGIUM

PHASE:



CAPABILITIES:

- · Document Management
- · Project Management
- · Quality Management

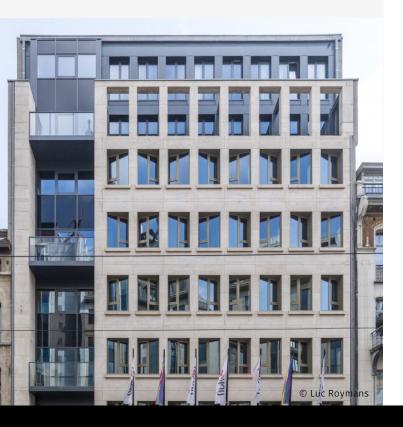
OUTCOME:



Schedule



Quality



Adopting New Processes to Increase Collaboration

Koenraad Belsack, CEO and Founder of Upgrade Estate, has a strong vision around the important link between sustainability and innovation. "At Upgrade Estate, we aim to be entirely net-zero by 2035. This means we're taking steps to reduce embodied carbon in the design, build, and operations of our assets," remarks Koenraad.

With varying levels of digital competency, Upgrade Estate wanted to standardise document management. In its previous workflow, sharing information was time-consuming, and often employees relied on email or using screen grabs to share digital models with external parties.

"There was a risk of losing important project data with our old ways of working," reflects Katrien De Norre, BIM Manager for Upgrade Estate. "We acknowledged the necessity to look for a more robust solution, but only when the Covid-19 pandemic arrived did we have to accelerate this search as our VPN was not reliable for remote working."

The team worked with GeoIT – an Autodesk channel partner in Belgium – to identify the best solution for their needs. Koenraad says, "We wanted to find a solution that allowed us to work collaboratively on models and link our Revit models in one environment."

This led the team to adopt BIM 360 as their common data environment.

Piloting New Practices

Upgrade Estate piloted BIM 360 on a student accommodation project that consisted of 131 student apartments in Brussels. The project was already underway when implementation began, but the team was impressed with the intuitive features.

The project team used BIM 360 to manage meetings and reports, approval checklists, and workflows like issues management with their external project partners.

Internal team members such as designers and engineers and external partners like architects and supply chain contractors can access project data in BIM 360 from anywhere. This has reduced time lost to miscommunication and time lost waiting on documentation to be shared.

"The willingness of our external partners to embrace the technology was integral to the successful implementation," says Koenraad. "And having our project teams working from one place has been transformational."

Designing Entirely Before Building to Reduce Waste

For Upgrade Estate, using BIM 360 has meant that the team can focus more on pre-engineering. The project team reviews the 3D model to make improvements, focusing on reducing waste on-site and during the build phase of a project.

Koenraad says, "We're able to use BIM 360 to design our assets better, meaning that we can identify clashes during the preconstruction phase of our projects and eliminate issues that could affect our activity on site."

This means quality is instantly improved, and the team can spend more time identifying and resolving quality issues.

"External supply chain partners have shared the feedback that working in this new way means projects are smoother and more transparent. Resolving issues is much quicker because the model is always up-to-date so our partners can access the important information they need whenever they need it," says Katrien.

On a commercial level, having the most accurate information on a project means Upgrade Estate and their partners have more certainty on project costs. Katrien affirms, "As an example, we identified around 9,000 clashes in preconstruction on our pilot project using BIM 360. We were shocked and began to think about how we resolved this before implementing BIM 360. Our team must have spent a significant amount of time manually completing this activity which is time-consuming and open to human error."

Sustainability at the Forefront

Upgrade Estate's ambitions to be carbon neutral by 2035 are at the forefront of their approach to construction projects. "We have invested in our own energy saving company to use wind turbines to power our buildings to have an entirely circular energy system within our buildings," says Koenraad.

The next stage for Upgrade Estate involves evolving their BIM models to capture both their environmental

footprint on projects and integrate with solutions like HSBCAD to directly share material in the factory with the asset's BIM model.

"Software is at the heart of what we do now," says Koenraad. "And it will be core in allowing us to become an even more sustainable business that is not harming the planet but contributing to our society, the communities we serve, and paving the way for sustainable construction practices."

66

We're able to use BIM 360 to design our assets better, meaning that we can identify clashes during the preconstruction phase of our projects and eliminate issues that could affect our activity on site."

-Koenraad Belsack
CEO and Founder,
Upgrade Estate

