

autodesk

Customer Success Story

A3 Architects (Pty) Ltd



"We've put Autodesk Revit through its paces on a very large project and it's come through with flying colours."

– **Willem Ackerman**, partner,
A3 Architects (Pty) Ltd

When the Johannesburg architectural practice, A3 Architects (Pty) Ltd, agreed to host a pilot site of the new design and documentation system, **Autodesk Revit**, little did it realise the impact the software would have on the day-to-day operations of its organisation. Within days productivity had soared. The software even began to play a role in the substance of the practice's designs. But, no one could have predicted the excitement and enthusiasm it would inject into the practice, boosting the morale of personnel.

Healthcare Sector

A3 has defined the character of many private and government hospitals in South Africa's healthcare sector. It is a specialist area in which it has operated for 15 years, balancing functionality with aesthetic appeal. The most recent project completed by the practice is the R30-million Roseacres Hospital, which forms part of the Afrox Healthcare portfolio. The 120-bed hospital, which is situated outside Johannesburg, was relocated from the suburb of Primrose Hill to Fisher's Hill, which is closer to the hospital's target market.

Glynnwood Hospital

Extensions to another Afrox Healthcare centre, Glynnwood Hospital, which is situated in Benoni outside Johannesburg, provided A3 with its first opportunity to put Autodesk Revit through its paces. A complete new wing was being added to the four-level structure. Facilities for the ground floor casualty section were being extended and there were first-floor alterations to create a larger lobby. In addition, the height of the hospital's helipad was being increased.

Swift Design Development

The team created 3D images, plans, sections and multiple elevations for the R35-million Glynnwood Hospital project in just three weeks. The rapid speed at which they worked is attributable to Autodesk Revit. Using a technique called building information modelling, the software allows users to create a virtual model of a project. The model is underpinned by a database that contains every specification pertaining to the project and from which all documentation is generated. Changes are made only once to the model and are instantly reflected across the entire document set.

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Intuitive

A3 was introduced to Autodesk Revit by the specialist architectural Autodesk reseller, Cadplan, which developed and presented the training course attended by the A3 team.

“Autodesk Revit is the first technology that thinks like an architect,” says associate, Adriaan Swart. “Its approach is intuitive and we took to Autodesk Revit like ducks to water! Not only is it easy to use, but implementation of revisions – which are a fundamental part of our work – are so easy to make.”

Adriaan actually timed himself and found that changes, which would typically have required extensive re-drawing with a conventional CAD program, were completed in a few minutes. They were also immediately reflected across the entire document set.

For partner, **Willem Ackerman**, one of the biggest benefits of Autodesk Revit is the peace of mind it gives him.

“I no longer have to be concerned about errors creeping in if I forget to reflect a change on all the drawings. Autodesk Revit eliminates that type of error. Now I’m confident that once I’ve made a revision, it will be appear on all the documentation – be it a plan, section, elevation or even a schedule.”

With Autodesk Revit, amendments to annotations and titles are also updated immediately and users are alerted to errors, such as duplicate annotations.

Error Free

Initially the Glynnwood Hospital model had been based on levels taken from plans of the existing hospital. Further time savings were achieved when the team defined the authentic level of the structure. Survey information supplied by the engineer was input into Autodesk Revit, which automatically calculated the correct levels of the building. Re-drawing, which would have taken at least two weeks, was done in about five minutes. And the team could rest assured that the calculation was error free!

Perspective

The benefits of Autodesk Revit extend beyond the swift documentation of designs. In spite of the short period of time for which A3 used the software, it quickly became aware of the impact Autodesk Revit had on its designs.

The ease with which the building information modelling technology extracts and records 3D images, gives clients – many of whom struggle to interpret 2D plans – an excellent impression of the perspective of a structure. In the case of Glynnwood Hospital, the design team identified on 3D images that the location of the security centre detracted from the look of the hospital and relocated it, giving the building a much more streamlined look. Access to the 3D images with sun studies also contributed to the decision to use glass throughout the hospital lobby.

Excitement and energy

One of the most unexpected benefits of Autodesk Revit has been the excitement and enthusiasm it has created among professional staff at A3.

“We couldn’t have achieved this new camaraderie with all the team building exercises in the world,” says Adriaan. “With Autodesk Revit having eliminated all the drudge work, we’re not only excited about what we’re doing, we feel much more in control of our projects. We don’t feel that everyone is waiting for us. When the quantity surveyor wants the sections of a building, I print it out immediately.”

And the excitement about Autodesk Revit isn’t limited to A3. According to Adriaan the enthusiasm engendered by the new software is infectious and architects around the world are posting models on web sites, sharing them with the entire architectural community.

Learn More

More detailed information about Autodesk Revit is available on the Autodesk website at www.autodesk.co.za. You can also phone Amanda Wesson on (011) 805-1555 for more information about the technology.

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