

COMPANY

Robert Bird Group

LOCATION

Melbourne, Australia

SOFTWARE

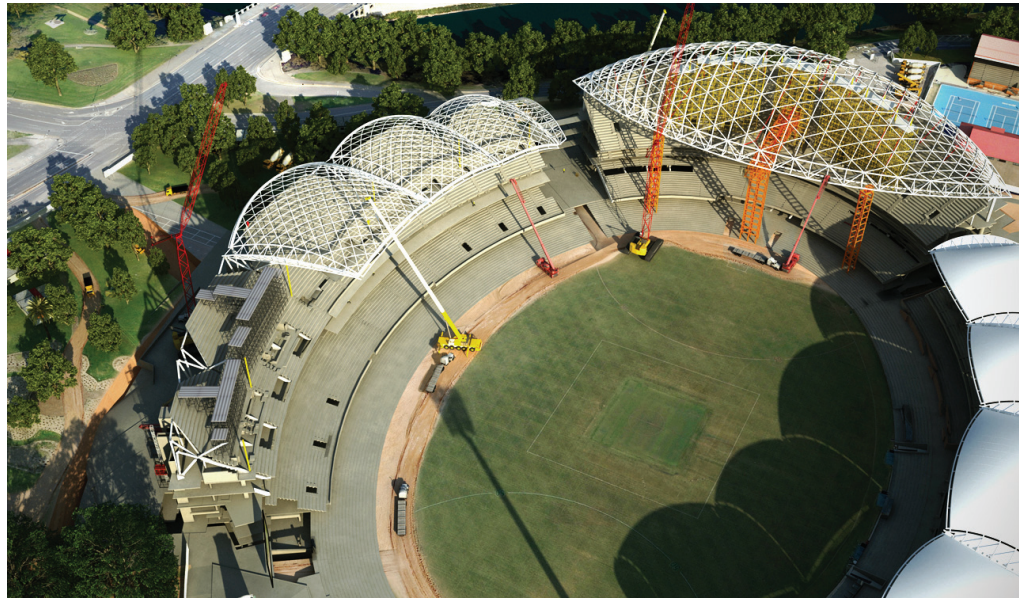
Autodesk® Building Design Suite**Autodesk® Product Design Suite****Autodesk® Infrastructure Design Suite**

Robert Bird Group leads the charge with Autodesk visualisation technology

Global building solutions firm experiences exponential growth with visualisation

Visualisation capacities have forever changed the architecture and construction industries, bringing added surety, precision, and efficiency. When you're pushing the boundaries—making the impossible possible—the certainty that visualization brings is highly prized. It not only enables us to secure important projects but is now driving the successful completion of some of the world's most significant and iconic structures in a way which would not be possible otherwise.

—**Stephen Lester**
Visualisation Manager
Robert Bird Group



3D staged Roof Construction of Adelaide Oval - Adelaide

A global industry leader in Visualisation technology

With a strong global portfolio and offices across Asia, the Middle East, and the U.K., as well as 10 offices Australia-wide, Robert Bird Group is an established industry leader, offering world-class engineering solutions to complex design construction challenges. Experience underpins the group's insight and has led to the establishment of Robert Bird Group's visualization team.

At the forefront of engineering design and construction for more than 30 years, Robert Bird Group continues to explore ways to improve the communication and value of its engineered solutions to the needs of the construction industry. This aim has led to the establishment in 2008 of a specialised team who are totally focused on the delivery of 3D visualisations using Building Information Modelling (BIM).

This core interactive Visualisation Team of Robert Bird Group, specialises in the visualisation of construction methodologies, sequencing, and design for the built environment. Robert Bird Group uses Autodesk® Navisworks®,

Autodesk Revit Structure 2012, and Autodesk Architecture 2012 software to create technically accurate drawings, images, and animations that simulate reality by displaying construction processes to the highest level of detail.

Although the Visualisation Team was originally formed to support the 3D visualisation needs of Robert Bird Group, the team's expertise has enabled it to broaden its network, securing a range of new projects. From just two specialists, they have grown to a team of 12 and are currently expanding both nationally and internationally. Senior animators, architects, engineers, graphic designers and programmers utilise these specialised skills and expertise available within Robert Bird Group.

Visualisation is now a signature offering, and Robert Bird Group is leading the way to create a new industry standard in 3D representation. Robert Bird Group has become well known throughout the construction industry for its high-quality visualisation and is consistently approached by developers to assist in the creation of visualisation to be used in landmark projects.

Transitioning from 2D to 3D

The transition from 2D to 3D representations has made a huge impact on the construction industry and is setting a new standard. The visualisation not only shows an exact representation of the finished product, enabling the user to “walk through” the structure, it also identifies architectural problems that can be fixed long before construction begins, saving construction companies both time and money.

“We found that our clients wanted to see preliminary methodology. However, trying to convey how we planned to build structures in two dimensions alone was quite challenging.

This is why we use visualisation—to present to our clients three-dimensional, accurate representations, giving them the opportunity to see the project realistically before it has begun,” says Daniel Sambell, a senior 3D Designer at Robert Bird Group.

Autodesk delivers performance and leads to company growth

Using the BIM process, Robert Bird Group creates information-rich models that help their customers win tenders, and the team is often invited to collaborate for the duration of the project once it is won. Since it began using Autodesk® visualisation software, Robert Bird Group has experienced a significant increase in work from referrals. Visualisation Manager Stephen Lester comments, “The number of calls we receive has risen exponentially since we started using the new Autodesk software. We are working off referrals and since word has spread on our visualisation technology, clients have been coming to us for visualisation services to help secure tender bids and then to assist in the project for its duration.”

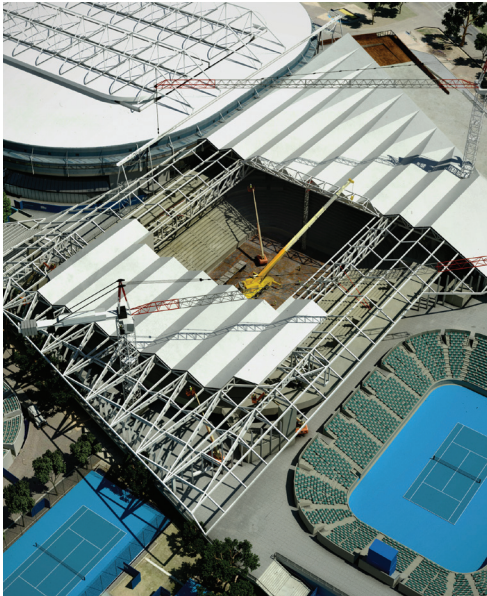
Robert Bird Group uses Autodesk® Navisworks® Manage 2012, Revit Structure, and Autodesk Revit Architecture 2012 software to create the 3D model. The Navisworks project review software combines project data into a single model that can be examined from every angle for whole-project review. Then engineers can find clashes and interferences before building begins, and managers can link model data with project schedules and cost in order to simulate project activities. Robert Bird Group then imports the model to Autodesk® 3ds Max® software for animating the design, giving it lifelike qualities and providing a realistic representation of the project.

“Currently a large portion of the business is utilising the BIM process on projects and this is predicted to rise over the next 12 to 18 months. This is definitely the way forward for the industry—to win tenders and secure work, BIM is now as necessary as a 2D representation once was,” says Ken Lee, a technical coordinator at Robert Bird Group.

Adelaide Oval—from visualisation through realisation

Boulderstone Building Company approached Robert Bird Group with its designs for the Adelaide Oval. They knew that in order to win the bid they needed their designs to be represented in 3D with pin-point accuracy, taking into account every detail of the project.

Robert Bird Group provided temporary works, construction methodology, and construction visualisation services to Boulderstone during the tender period of the proposed Adelaide Oval redevelopment of the Southern and Eastern stands. The construction methodology included a detailed 3D presentation of the overall key project milestones, plus a detailed schedule showing the proposed construction sequence of the two complex grandstand roof structures. Boulderstone used visualisation services provided by Robert Bird Group extensively in their presentation, which were instrumental in clearly and effectively presenting both their technical understanding of the project and the key project milestones.



3D staged Roof Construction of Margaret Court Arena, Melbourne Park, Melbourne