Bird Construction Reduces Risks and Increases Efficiencies with Autodesk Assemble

Richmond Yards is a new district in the North End of Halifax where diverse spaces and people coalesce to become something greater than the sum of their parts.

About the Organization

Founded in 1920, **Bird Construction** is a premier builder in the Canadian construction industry. Operating from coast to coast, Bird's services range from new construction for industrial, commercial, and institutional markets to industrial maintenance, repair and operation services, heavy civil construction, and mine support services.

Bird is a people-focused company, creating an environment where its professionals strive to build on its tradition of trust with clients through dedication, collaboration, customer satisfaction, and value creation. Bird works on challenging projects that take advantage of the strength of the company and its employees to generate superior and sustainable financial performance.

The Challenge

Throughout its history of more than 100 years, Bird has stayed at the forefront of the construction industry by evolving with technology advancements to increase both employee and client satisfaction. Currently, the company is making changes to take advantage of the many benefits of digitization.

Mohamed Adel, East BIM/VDC Manager, Bird Construction, said, "In alignment with our company's digitization goals, we set out to find a technology solution that would streamline pre-construction workflows, improve the consistency of the data in our models, eliminate redundant work, and enhance collaboration between the many people who contribute to and depend on the information in our models."

The Solution

"Bird uses Autodesk software products and works with IMAGINiT for insight and recommendations as well as licensing and support," said Mohamed. "I reached out to our Account Manager, who listened to our needs and facilitated discussions with subject matter experts within Autodesk."

After reviewing various options, Bird decided to move forward with IMAGINiT's recommendation of Autodesk Assemble, an easy-to-use cloud-based BIM and quantity management solution used by construction professionals to condition, query, and connect BIM data to key workflows, including design reviews, change management, and work-in-place tracking.

"We chose Assemble because it offers the functionality we need, and it aggregates model data the way we want, not as the software dictates," said Mohamed. "This flexibility was a key driver in our decision."

The IMAGINiT Account Manager facilitated the transaction, helping Bird identify and secure the right licenses and connecting them with the Autodesk Assemble team for answers to user questions.
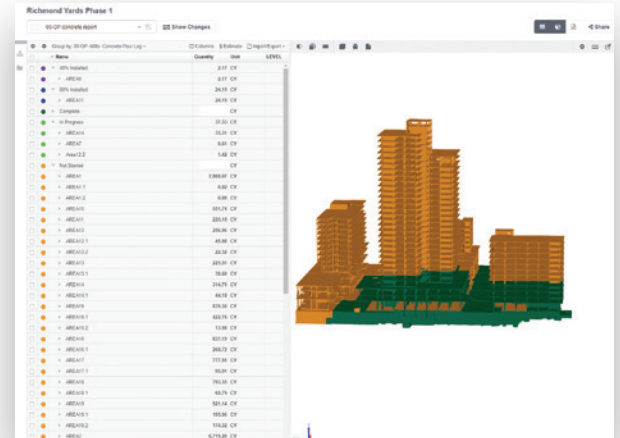
The Results

"We experienced significant benefits as soon as we started using Assemble to process our models," said Mohamed. "With all the elements and data within the elements processed per our master standards, the data was structured properly, eliminating the need to interpret or rectify information."

In addition to using Assemble to improve quality and consistency during the design process, Bird's on-site teams use it to:

Concrete progress tracked on Assemble by the superintendent on site

1. **Reduce errors –** "Before Assemble, superintendents, managers, coordinators, and others would have to enter the same information into the platforms they used," said Mohamed. "Now, with Assemble, the data is entered once and all can access it on a dashboard, reducing the chance of errors common with manual processes."

2. **Keep projects on track –** "The dashboard raises flags if deadlines are missed, so we can identify and fix problems before they escalate."

3. **Eliminate on-site quantity estimations –** "For example, in the past, our on-site teams manually measured the amount of concrete needed. Now, when the model is in Assemble, they have accurate information at their fingertips, so they can completely skip that step."

4. **Align the Estimation team with Operations –** "By harmonizing both teams, the efforts of the estimation team in the beginning of the project are utilized by the operations team, saving time and increasing accuracy. Also, quantifying from a 'right' model is crucial to the accuracy of data extracted from the model, allowing Bird to have competitive pricing for its tenders."

Richmond Yards project Schedule Visualization

5. **Check the quality of the data received from subcontractors –** "Before handing a facility management model over to a client, we use Assemble to check the data. We can see what's right, what's wrong, what's missing, etc. This ensures the models we deliver meet our high standards."

6. **Streamline takeoffs –** "The interface is easy to use, so the estimation teams can navigate the models and make sure they are quantifying model elements correctly. And once the estimate is done, all the information is aggregated into one place on the dashboard."

"Assemble has proven to be a great tool for Bird," said Mohamed. "We now deliver high-quality models in less time, increasing both employee and client satisfaction. I expect that the benefits will continue to increase as we implement more of its functionality into our daily workflows."