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Partner Spotlight: Gafcon

Delivering the Gafcon Digital Twins and e-Builder Solution

Gafcon is an Owner Representative based in San Diego, CA with 33 years of experience helping clients in the private and public sectors. Gafcon Digital is the evolution of their Innovative Solutions Group and is focused on the use of Digital Twins in the digital building lifecycle. This process provides Owners with the ability to Plan, Design, Procure and Construct in a virtual environment that is a replica of the building with a fully coordinated model incorporating all components of one inch and above. This is not just a visual model but it provides the data required to ensure collaboration by all involved in the process as well as the data required for the operations phase, for example, warranty information; Maintenance Schedule, Manufacturer, serial numbers, etc. It can even incorporate data on the sensors that link the physical world to the virtual world of Internet of Things (IoT). Gafcon has now supervised the design and construction of around fifty Digital Twins projects.

As an e-Builder Gold Certified Partner and Diamond Sponsor at Elevate 2019, Gafcon has made the delivery of the integrated Digital Twins and e-Builder solution a critical part of their business strategy.

Gafcon's delivery of Digital Twins starts with ensuring the asset lifecycle has the proper data structure and standards in place to put everyone on the same page. Then they layer in technology to manage the myriad of "issues" that arise during the design and construction phases bringing it together with best in breed workflows and processes. As a result, from conception to decommissioning, every part of the overall building, including every asset inside that building, is tracked. At any time, the Owner can see where that asset is in the virtual model and align it to where it is in the lifecycle (eg, we just installed this chiller in Building 1, Room A and we have 5 more installed in other buildings/rooms).

The integration of Digital Twins and e-Builder takes the power of Digital Twins to the next level. Every scope of work, labor, materials can be tracked in the BIM, applied to cost, and fed into e-Builder as an estimate. The work and cost breakdown structures can be tracked in e-Builder and related back to the model in real-time, making value engineering a very visual undertaking. This provides Owners with a virtual representation to compare their tangible building and enables them to process payment applications with measurable completion milestones by scanning the physical building and comparing it to the model. Equally important, having this scope of information digitized during construction eliminates the need for boxes of paper submittals and, after occupancy, gives Owners the detailed asset information they need for preventative maintenance.

When we asked Gafcon what motivated them to put four years of effort into integrating the nine systems required for Digital Twins, they said: "The construction world's event horizon is now. It is at a point where technology is propelling the open-minded organizations into a new realm of efficiency and collaborative communication."

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Meet the Partner Team

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