

Digital Fabrication

What is it?

Digital fabrication is a computer-aided design and manufacturing process based on technologies such as Computer Numeric Control (CNC), laser cutting and 3D printing. Trade partners use this process to fabricate components from a source 2D or 3D model. Trade partners create highly detailed fabrication models that accurately capture all the components to be installed. This process is highly dependent on properly resolving conflicts during clash coordination to ensure accuracy of the fabricated components. Shop drawings are then generated from a 3D model, which can be set up such that the components are prefabricated off site using fabrication and machining technologies, pre-assembled as a kit of parts and shipped to the site ready to be installed.

How does it benefit stakeholders at the Airport?

- ❑ Clear conformance between construction and design intent
- ❑ Reduction of waste (material, labor, staging area etc.)
- ❑ Lean construction process
- ❑ Improves construction productivity
- ❑ Improves on-site safety

