## Mortenson reduced time spent on reality capture efforts by 80% and was able to learn how to use HoloBuilder's JobWalk app in minutes.

### Background

Mortenson is a general contractor and real estate developer that specializes in higher education, healthcare, data center, corporate, sports, and hospitality projects. One of their current projects is the $18M renovation of the Armerding Center for Music and the Arts at Wheaton College. The 52,000 sq ft project includes music studios, a recital hall, practice rooms, and offices for faculty. The project's design and construction scope is primarily driven by its acoustical requirements. Each partition type includes seven layers of drywall, isolated floors, and flex conduits to rooms. In order to meet the acoustical requirements, wall penetrations must be caulked and sealed after installing approximately 70 sheets of drywall in each room. For this reason, it's crucial to document inwall progress, provide status updates to the owner and consultants, and create a deliverable that can be used throughout the entire lifetime of the building.



*Fig. 1: HoloBuilder view showing a field engineer capturing a 360° photo on-site.*

### Challenge

Mortenson already had experience using 360° photos to document construction progress, but their previous process was cumbersome and took a very long time. They networked six GoPro cameras, took photos, uploaded files, processed batches of photos, and set up the project in Kolor PanoTour. This manual process required two different types of software and a custom app developed inhouse that automatically sorted photos. This entire process yielded 20 photos after a 3 hour setup. Jake Davis, an integrated construction coordinator at Mortenson, became very familiar with this manual workflow which was intended to create and share digital tours easily. HoloBuilder and the JobWalk app were created to address this specific problem and make digital jobwalks fast and straightforward to create.

## Solutions

Rachel Marshall is the primary user of HoloBuilder's JobWalk app for Mortenson at the Wheaton College project. With the app, she is able to capture every room in the project which includes fifty 360° photos. Every 360° image is updated weekly. On a typical day she can take an updated picture every 30 seconds. On a typical week she captures roughly 3x the number of photos in half the time compared to the previous process.

**"The JobWalk app was awesome! It's very simple, and I was able to learn everything I needed in minutes."**

-Rachel Marshall, Project Engineer, Mortenson Construction

The 360° photos provide a digital tour of the site which is used for providing insight on a number of critical activities including inwall photo documentation, showing blocking installation locations for mounting wall accessories, and spray painting wall studs as a signoff method during inspection. The JobWalk app makes capturing 360° photos an accessible task that anyone can perform quickly.

## Results

The remote acoustical theater consultant and owner were able to easily view construction progress, which saved the project time and money by eliminating the need for regular site visits. Capturing 360° photo updates is considerably faster and anyone can complete the work without requiring specialized knowledge or training for various types of software. At the end of the project, Mortenson can provide a deliverable to their owner that can be used throughout the lifetime of the project. By using HoloBuilder, Mortenson reduced time spent on reality capture by 80%.