

Overview

Drone and 3D scanning technology has surpassed normal expectations in the field of AEC. What would normally take a helicopter, manned aircraft or high-end laser system can now be done with smaller, more affordable alternatives.

How Drones and 3D Scanners are Changing the AEC Space

And how DynAeroTech can Help

Design

Drones technology has changed the world of site planning. If you are interested in seeing the 2-story view of a home, drones are the way to go. At DynAeroTech, we love to show clients the possibilities of drones for building models. We can capture high-resolution photos to be used in photo-mapping software like Autodesk® ReCap™. There are also ground systems that can capture the same quality of data for interior viewing as well.



Aerial Image of a Home



Recap model from Aerial Photos

Construction



3D Model rendering from Matterport Scans

Drones are great for outdoor modeling, but what about indoor modeling? That's where the Matterport 3D scanner excels at. For us, we use the MatterPort to capture homes fast and with precision. In a digital age where visualization is key, the Matterport camera ensures an immersive viewing experience among the models captured.

Give customers a tangible model to move freely in and without distraction. Our clients like to use Autodesk® ReCap™, or any modeling software, to clean and convert point clouds that we captured with 3D scans. Then use them for drafting, monitoring, archiving, sharing with clients or simple just for exploring.

Our Key Equipment



Phantom 4 Pro

Small, yet robust platform capable of capturing ~40 acres in 15 minutes.



Inspire 1 Pro

Heavy-duty imaging at its finest. Has zoom capability for viewing intricate details.



Matterport Pro2

Sophisticated 3D scanner camera that stitches models within minutes

Marketing

Showcase your finalized project or inform your stakeholders about construction progress. With 3D scanning, clients can get a better perspective for the shape and the size of a building, as well as verifying any materials being used. Generate floor plans to verify blueprints or give to customers for easy interpretations.



3D Model of Structural Frame

Having a virtual tour is perfect for documenting changes and highlight key features. For aerial imagery, being able to view models from outside, especially if the photos were taken periodically, can explain the building process. As UAV technology is growing, the use of drones in the construction field is expanding. We can utilize such technology to alleviate our job processes, increase safety and reduce costs.



Finished 3D Model

Contact Us

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COMMON AEC FAQ

Collected from various DynAeroTech customers

Q. Can I fly a drone to scan inside a building?

A. While the technical answer is yes, we *do not* suggest flying inside. The metal frame and other components of the building will affect the drones IMU and can make flying unstable due to magnetic interference. There are other alternatives, such as ground-based 3D scanning systems, that can do the job quicker and safer.

Q. Why should I use 3D ground scanning?

A. Having point clouds of models that are tangible and easily understood are becoming the industry standard. Having the ability to modify and examine models quickly in Autodesk® ReCap™, or other modeling software, can speed up production time. It's easy to tag locations with more info and even create a *visual punchlist*. Share this information with stakeholders, builders and designers easily via the internet.

Bringing aerial imagery to this industry can revolutionize company workflow. The photorealistic look of both drones and 3D scanners make site documentation familiarly easy. This is a fantastic way to grab a client's attention and show them a new perspective.
