Overview of Matterport E57 File

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The Matterport E57 file contains a high-density point cloud for all scan locations in the Matterport space. It contains point cloud, pano images, and metadata from each scan location. The file format, .E57, is a compact, vendor-neutral point cloud format that's defined by the ASTM E2807 standard. This format is widely adopted by most 3D design applications, so you can use your Matterport digital twin in a wide range of applications, including but not limited to:

- *Autodesk Recap Pro*
- *Leica Register 360*
- *Leica Cyclone*
- *Faro Scene*
- *Autodesk Revit*
- *Autodesk Navisworks*
- *Autodesk*
- *AutoCAD*
- *Trimble Sketchup*
- *Trimble Forensics*
- *Trimble Business Center*
- *TopCon Magnet*
- *Cintoo Cloud*

With the E57 file:

- *Architects and designers can conceptualize designs with a detailed understanding of the space.*
- *Project stakeholders and construction teams can collaborate more efficiently.*
- *Building operators can maintain inventories of equipment and assets across a portfolio.*

Before You Begin

You must satisfy the following prerequisites to order an E57 file:

- *Have a Professional plan or higher.*
- *Use one of the following devices: Matterport Pro3, Pro2, Pro2 Lite, Pro, or Leica BLK360 G1 camera. We're currently evaluating whether we can also offer the E57 file for the Axis combined with a smartphone that has lidar.*
- *Your model must be active.*

Who Is the E57 File For?

The E57 file is for architects, MEP engineers, general contractors, mechanical engineers, electrical engineers, BIM managers, VDC managers, and other construction professionals who need a higher density point cloud than the MatterPak .XYZ point cloud file provides to complete complex workflows.

You can import the E57 3D point cloud data into 3D and architecture, engineering, and design applications, including easily importing point clouds to Autodesk Revit® using the Matterport for Revit® Plug-in.

What Is a Point Cloud?

A point cloud is a 3D description of spatial data consisting of geometric points in space, as measured by capture devices. These points typically represent the 3D shape of a physical object. Each point position has its set of Cartesian coordinates (X, Y, Z). Point clouds are most commonly used to capture the existing (as-built) conditions of a structure. Point cloud data is commonly used to extract analysis from these structures, and to import into 3D design and BIM software workflows.

How is E57 different from a MatterPak?

E57 is a single file containing a colorized point cloud, as opposed to the MatterPak bundle which has several components (colorized point cloud, reflected ceiling plan, high-resolution floor plan, and 2D mesh file). The MatterPak is designed to provide decimated point cloud information from the capture device to create a light-weight solution that can be accessible from anywhere, including a phone or tablet.

E57 is a higher-density point cloud that processes a much larger dataset coming from the capture device which results in more than 10x the detail derived from a MatterPak. Compare the following examples: