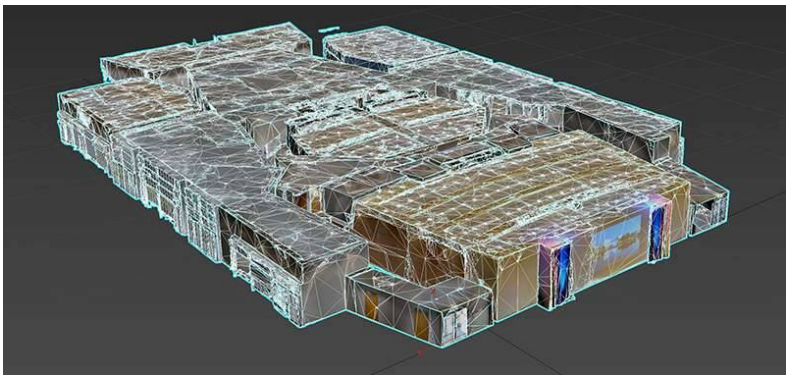
MatterPak™ Readme

Thank you for purchasing this MatterPak™ from Matterport! The MatterPak™ is a bundled set of files automatically generated from the collected 2D and 3D data that design and development professionals can use to jumpstart their projects. For more information about the Matterpak™, see our Matterport Help Center link here: https://support.matterport.com/s/article/Download-the-MatterPak-Bundle

A MatterPak™ includes:

- One .XYZ Point Cloud, always named *cloud.xyz*
- One .OBJ file, a polygonal mesh with texture-mapping coordinates
- One .MTL file, containing material information used by the .OBJ
- Many texture map images in .JPG format, referenced by the .OBJ and .MTL files
- Color Plan (floor plan view) in .JPG and .PDF formats
- Ceiling Color Plan (ceiling plan view) in .JPG and .PDF formats

.OBJ file



The .OBJ file is a simple-to-open 3D file format that can be imported into many 3D applications. The file format has long been used to move meshes from one program to another. It contains an optimized triangular polygonal mesh, made up of vertices, edges, and faces. The .MTL file references the image textures applied to the mesh, to give a realistic representation of the space. What you see in the dollhouse view of a Matterport space is similar to the .OBJ mesh with textures applied.

To use the .OBJ file, import it into a 3D editing program that can accept it. These are a few, but not all, of the many 3D applications that can import the .OBJ file:

- MeshLab
- Blender
- Autodesk 3ds Max

- Autodesk Maya
- Rhino
- Cinema 4D

For instruction on importing into a specific application, please refer to the support documentation for that program.

The scale of the .OBJ is set to 1 unit = 1 meter. If you set your imported units to meters, you will view the model in real-world scale.

The coordinate system for the .OBJ is right-handed with Z pointing up. Choose this parameter during your import process if possible so that the mesh comes in properly oriented.

It isn't possible to get a higher-density mesh in the MatterPak™ .OBJ. It is automatically extracted from the data in a Matterport model. It may be necessary to manually edit the mesh to remove excess faces, or to model rounder surfaces.

The mesh of the .OBJ file will show the effects of Window, Mirror, and Trim markers placed in the Matterport mobile app. Window and Mirror markers will add a wall of triangular faces to close up holes. All three types of markers will have mesh removed from behind the line of the markers.

The .OBJ file will not contain the floor separation that you see in the Matterport Virtual Tour; nor will it have any of the post-upload edits such as tags, guided tours, or 360° views. The Dollhouse Trim tool has no effect on the mesh.

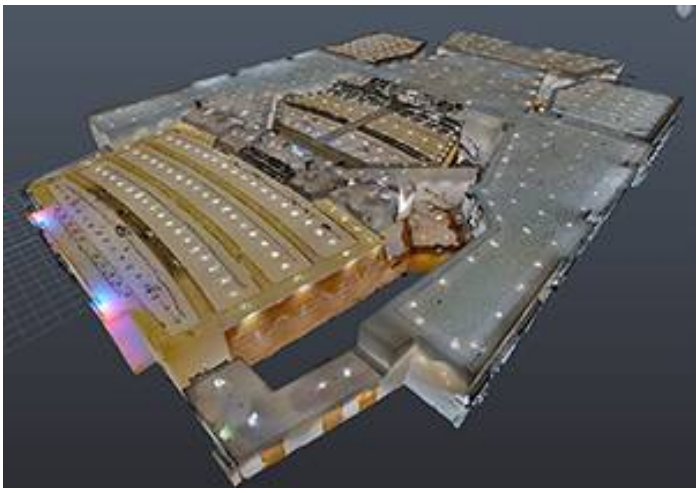
.MTL file

The Material Template Library format (.MTL) is a companion file to the .OBJ file that describes surface shading (material) properties of objects within the .OBJ files. .MTL files are ASCII text that define the properties of surfaces to display the model accurately. If the .MTL file is not included with the .OBJ file and the texture maps, there won't be any textures on the mesh of the model. Do not rename the .MTL file, or it won't be found by the .OBJ that is referencing it.

.JPG texture map images

These are the color image maps, which are texture maps used by the .OBJ file. There will be a multitude of them. These are required to show the colors and contents of the model when viewing the .OBJ file in another program. These images are not the same as photos captured using the photos tool in the Matterport space; those must be downloaded from your my.matterport.com account. Panoramic images are also not included in a MatterPak™.

.XYZ Point Cloud



The .XYZ is a format of optimized point cloud. Each point has a 3D location in space and an RGB color. In a MatterPak™, it is always named cloud.xyz. This is a reduced point cloud format that keeps the file size smaller by omitting or decimating points to reduce the noise level of the file. If you need a higher-density point cloud, Matterport also offers E57 point clouds as a separate add-on purchase.

Using point clouds will enable you to complete your construction projects more quickly and accurately, improving timelines and reducing costs. Accurate documentation can be generated at all phases of construction based on point cloud data.

To use the .XYZ file, import it into a 3D editing program that can accept it. These are a few, but not all, of the many 3D applications that can import the .XYZ file:

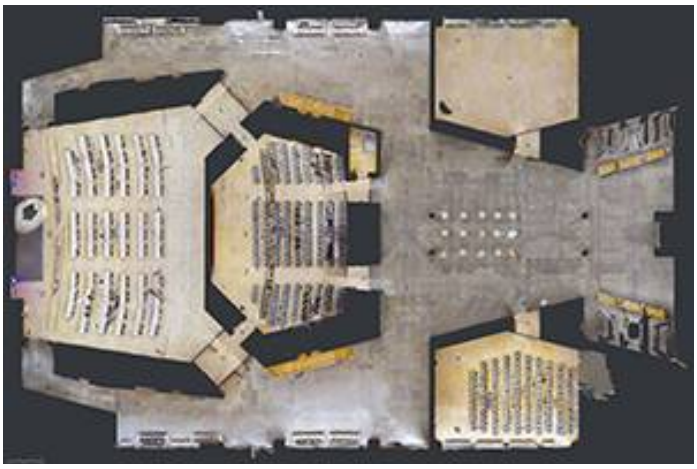
- CloudCompare
- Autodesk Recap and Recap Pro
- Vectorworks
- Archicad
- MicroStation
- SolidWorks

For instructions about importing into a specific application, please refer to the support documentation for that program.

The scale of the .XYZ file is 1 unit = 1 meter. The scale and coordinate system are the same as for the .OBJ file.

The point cloud in the .XYZ file will only partially show the effects of Window, Mirror, and Trim markers placed in the Matterport mobile app. You can expect all three marker types to have points removed from behind the line of the markers. However, Window and Mirror markers will not add a wall of points to close holes in windows and mirrors. The Dollhouse Trim tool has no effect on the point cloud.

Colorplan.pdf (and .jpg)



A .PDF and .JPG file of the color plan. This is the view looking down from above. There will be one .JPG color plan image per floor of the model. The .PDF will include all floors on separate pages. This is not the same as a Schematic Floor Plan, which is a separate add-on.

Ceilingcolorplan.pdf (and .jpg)

A .PDF and .JPG file of the ceiling color plan. This is the view looking up at the ceiling. The image is reflected so that it matches the color plan for the floor. There will be one .JPG color plan image per floor of the model. The .PDF will include all floors on separate pages.

Construction professionals can use the ceiling plan and floor plan images for documentation/verification and building turnover packages.

V. 1.4