

MEP FREQUENTLY ASKED QUESTIONS

Mercer Mass Timber (MMT) offers a basic MEP framing package which allows for the CNC framing of openings for Mechanical, Electrical and Plumbing services.

Please note, MEP requires focused coordination on your part. Please inform MMT if this (MEP) is a service required for this project. If so, please note the following important points and FAQ's:

What are MEP penetrations?

MEP (penetrations) are cut-outs or voids in the CLT panels or Glulam which allow for mechanical, electrical, and plumbing to enter or pass through the panel or beams.

How are MEP penetrations created?

MEP are modeled using solid volumes in a 3D model (coordinated with our 3d project model) and exported to a file type acceptable to MMT (refer to the attached MEP Guidelines document)

Who creates the MEP penetrations?

Ultimately, the contractor is responsible to fully coordinate and supply the 3D file, at their cost. Size and location of penetrations must be accurately modelled, as we will cut exactly what is in this model.

Who approves the MEP penetrations?

Typical allowable penetration locations into CLT floors and Glulam beams/purlins should be provided by the EOR. All penetrations must be approved by the EOR.

We don't have BIM (3D Modeling) staff. Who can provide this service?

Often the architectural firm may have a source available (for a fee) or there are BIM companies that can provide this service. Many construction companies have developed internal BIM arms to handle this type of coordination.

Are there limitations to what can be cut on the CNC equipment?

YES! Please refer to the attached MEP Guidelines document, also please note MMT will include MEP penetrations within reason at no additional costs, subject to schedule. Excessive MEP penetrations may include additional costs due to additional CNC time required to frame a multitude of MEP features.

Does MMT create or coordinate MEP files?

NO, MMT does not take any responsibility in the creation or coordination of the MEP files

What does MMT do with the file?

MMT will add the 3D MEP file into our model and use the volumes to cut hard into our panels. MMT will not review or check the model. The results will be CNC framed and delivered.

Will we see the results of the MEP and panels?

MMT can send, upon request, a 3D file with all MEP information incorporated, for viewing.

When does MMT require the final MEP file?

MMT requires a fully coordinated 3D file upon the receipt of the **Geometry Approval (GA) / LOD300** markups. After the GA markups are incorporated and the model is complete, the last step is to incorporate the MEP model.

Can a delay in the MEP file delivery affect the project fabrication schedule?

YES, it can. This is a common risk item when not adequately addressed in due time.

Layout drawings, panel fabrication lists and single-piece shop drawings are all affected by the MEP model. A delay in the MEP model will directly affect the production schedule.

MEP can also be cut on site to avoid project schedule delays.

What is an acceptable level of MEP?

A general rule of thumb is 3 to 4 MEP penetrations on average per panel.

Will we be charged for MEP?

No, MMT will not charge extra if the level of MEP is standard and all information is received in due time.

If there is more than a normal amount or information is received late, we may need to charge or limit the amount available.

Is it a requirement to provide MEP for this project?

NO! MEP can be field framed as well, but we have found that if coordinated properly, this can be a time-saver on site and is an added benefit for using Mass Timber construction with CNC machinery.