

03/18/09

RDK BIM Matrix for MEFPTD

Level 0 – 2D Cad

- Standard 2-D drawings using ACAD or ACAD MEP
- Drawings are at a level to be used for bidding the project
- The general arrangement of the MEFPTD systems are at a level for the contractors to prepare coordination drawings

Level 1 (M) – Modeled Mechanical Rooms

- 3-D modeling of major system components for HVAC, Electrical, Plumbing and Fire Protection systems in mechanical rooms, electrical rooms, Pump rooms, corridors and Shafts. Continuation of systems outside of these areas will be shown in 2-D using ACAD or ACAD MEP
- 3-D modeling at RDK discretion and for internal use only.
- The general arrangement of the MEFPTD systems are at a level for the contractors to prepare coordination drawings
- Legends, schedules and details to be in standard 2-D drawings using ACAD or ACAD MEP

Level 2 (BM) – Introductory Model

- Architect must provide Architectural model in Architectural Desktop, Revit or Archicad.
- Structural Engineer must provide structural model in Revit Structures.
- Most systems are completely modeled and connected (Excluding Bathroom Chases).
- Modeled equipment data base (Information) attached to systems, equipment, MV parts and families is limited and at the discretion of RDK.
- Legends, schedules and details to be in standard 2-D drawings using ACAD or ACAD MEP
- Model may be turned over to the contractor for continuation of actual equipment installed. Contractor to update the model and include Data base (Information) as contracted.

Level 3 (BIM) – Full Model W/ Introductory Intelligence

General

- Architect must provide Architectural model in Architectural Desktop, Revit or Archicad.
- Structural Engineer must provide structural model in Revit Structures.
- All systems are completely modeled and connected.
- All MEFPTD equipment includes design Data base (Information) attached.
- Legends and Schedules to be in ACAD MEP or Revit MEP
- Details to be in standard 2-D drawings using ACAD or ACAD MEP.
- Model to be turned over to the contractor for continuation of actual equipment installed. Contractor to update the model and include Data base (Information) as contracted.

HVAC

- HVAC Load calculations are included in the Model
- Building Energy calculations are included in the Model using Trane Trace.

Electrical

- Panel Schedule Loads including Demand Factors.

Level 4 (P-BIM) – Full Model W/ Full Intelligence

General

- Architect must provide Architectural model in Revit.
- Structural Engineer must provide structural model in Revit Structures.
- All systems are completely modeled and connected.
- All MEFPTD equipment includes Parametric Information Modeling (All Objects are linked bi-directionally).
- Legends to be in Revit MEP.
- Schedules to be connected to the objects they reference within Revit.
- Details to be converted from ACAD MEP library into Revit format and reside within the model.
- Model to be turned over to the contractor for continuation of actual equipment installed. Contractor to update the model and include Data base (Information) as contracted.

HVAC

- HVAC Load calculations are included in the Model.
- Building Energy calculations are included in the Model using Trane Trace.
- Building Performance Analysis completed within the model.

Electrical

- Electrical Feeder Sizing.
- Panel Schedule Loads including Demand Factors.
- Lighting Calculations including linked IES information that can be used for lighting in Model renderings.