Introduction to Revit MEP Detailing/Annotation & Tagging

Explore Your Career in Revit MEP know what Annotation & Tagging Is?

A career in Service Detailing & Tagging is one of the most growing options in the current scenario. Making a career as a Detailer Experts needs patience as well as skills. In the following article, we will walk-through various career opportunities as well as benefits of Service Detailing in Revit MEP. Have a look!



Are you aware of Service Detailing or <u>Annotation and Tagging</u> in Revit MEP?

Let's begin with knowing the concepts of Annotation and Tagging in Revit MEP

Annotation and Tagging is the concept used in Revit MEP where Tagging or a Tag is an Annotation. It recognizes the elements in the drawings. When a tag develops, the labels that added in the display represent the exact value of the desired component's parameters. When the tag loads and gets placed in the project, the cost for the object's corresponding parameters is showcasing by these tags. In Revit MEP, a symbol is a graphic illustration of an annotation element or another object. Annotation scale in Revit MEP can utilize in getting the Generic Annotation that retains its actual size on paper. Thus, it means that Revit will compensate for the View Scale by scaling the annotation up.

Now check what is annotation family in Revit MEP?

In Revit MEP Annotation families can also be either graphics or symbolic, which respectively are being used in the project.

It can also split down into two primary classifications: Annotations or detailing the data of that report from the model. An excellent example of one that does report data from the model is a Door Tag.

Whereas, an annotation that does not report data, a north arrow is a good example of an annotation family which is static and do not report data from the model.

In Revit MEP, an annotation is always a view specific element in 2D. They exist in views but don't live in the 3D model like floating elements.

We can also differentiate 4 main blocks of Detailing or annotation families in Revit MEP:

- Generic detailing/annotations (mainly symbols)
- Tags
- Detail Items
- Title Blocks

The generic annotations and tags have general similarities including fix size and also are related to printing sizing. While, the detail Items sizes are changeable depending on the annotation scale of the project.

1. Generic Detailing or Annotation

Generic detailing/annotation signify a symbol which may either static graphical information or contains a label (description). A label is also known as a tag. It means a piece of text which is parametric and will update according to the final project data. In generic detailing or annotations, tags are merely the placeholder to transcribe or to write something. In generic detailing for specific properties of elements, Labels or tags are not attached; therefore, it cannot read data from them. Although in advanced family modeling, generic Detailing can also nest within model families and also work as nested detailing as it directly shows family data information. Probably, Terminology is the most challenging aspect of working with generic annotation.

2. Tags

A Tag signifies an Annotation Family which inscribes data embedded inside a Model Element. Construction records utilize all brands of tags- For Example Door tags, Window tags, Wall tags, and many more. Labels also used by Tags. Labels point the information of the host holder in tags.

The labels are a piece of name text that links to some properties in the model.

3. Detail items/detail components

Annotation scale

In the above figure, the Detail elements known as families or objects that consists 2D elements. Detail elements can only display in view, in which they are placed in. Unlike the model families, Detail families also get generated correspondingly (with reference planes controlling geometry). These are the 2D element, but with model dimensions. And therefore, they react to annotation scale changes.

Mask fields generate a white shade, while a fill region creates fill patterns.

1. Repeating detail components

Repeating detail components are a particular way of nesting detail elements in a project. These are a sort of structured arrays, and their function is to support detail constructive drawings in projects.

These Components are system elements that apply some commands to load detail components. They are produced directly in a project.

4. Title Blocks

The Title Blocks are Detailer/annotation elements which are inside Revit MEP. It also has their own category; i.e., (same name: Title Blocks), and also are intended to be the design template for sheets.

Title Blocks are custom annotation families who have single unique feature; i.e., the external lines of the format determine the margins or borders of the sheet. They usually hold data about the design firm, about the projects and client. As custom families, we can build them with any aspect that requires in a project.

Benefits of Detailing/Annotation in Revit MEP:

The intelligent, smart way of technical detailing in Revit MEP is to use objects. So now the puzzle is, how can we tag a line in Revit MEP?

Rather, build a line-based detail family, and consider yourself as an object, which can draw the same as a line. Though, it has more advantages...

Let's check the Benefits:

- The line can be tagged
- The length can control numerically in the attributes
- . The line can also replace in multiple views with a different Family in a matter of seconds using the right click option

pick all instances to swap the Family or Type.

• The line can have different visibility states, i.e., Course, Medium and Fine.

Now check an overview of Revit Families

As you are now aware of the benefits of Detailing/Annotation Revit MEP, let's now check the overview of Revit families.

Primarily, Revit families are a combination of objects that build a building element such as a desk or a window.

Revit families are the cornerstone of BIM. If you embed a family into a model, you can see a completely parametric, data-rich 3D objects that can change to anything that is hosting the family.

If you insert a window family into a wall, you don't require telling the family what size the wall is. It just recognizes itself. But if you change the wall, the family automatically flexes against the wall.

There are a few different types of families:

Let's start, with some of the categories-

1. System families- System families, consisting of walls, floors, roofs, stairs (including ramps.)

2. Hosted families- Hosted families, require a system family for existence. Primarily, all Revit MEP families need some host for presence. When you plan a hosted family in Revit MEP, it should face-based.

(i) A face-based family- A face-based family is the simplest method of hosting to walls, ceilings, or floors. A few face-based families are wall sconces, light switches, receptacles, or maybe ceiling-mounted projectors and lighting fixtures. Sidewall & ceiling-mounted air terminals.

(ii) A work plane-based family A floor plan or a level essentially host work plane-based family.

1. Parametric- They're not just 3D!

• Families in Revit MEP are adjustable based on sizable to flex to any situation, (automatically or manually)

- They are parameter driven
- It is definable- You can redefine a well-made family by duplicating its type.
- They are Data rich.

So, this was all about Revit Families. Hope you have got a proper idea on Annotation/Detailing, Tagging, Annotation families in Revit MEP and Revit families.

Sounds Interesting?

Well, if you want to make a career as an Expert in Service Detailing/Annotation, here is a bright chance to step your foot. Do you also think that the numbers, figures, and minute details on drawings can be your friends? Then check out this course by NIBT (National Institute of Building Technology)

The course offers a chance for you to be an expert detailer in software technologies like Revit, Bluebeam, AutoCAD, and Navisworks!

Further is an in-depth explanation of what the course offers. Keep reading on!

Do you know that there are also excellent opportunities for Detailing or Annotation?

Course backgrounds:

NIBT helps in bridging the gap of employment skills and requirement of employers according to the current construction industry standards by providing Service Detailer in Revit MEP training course.

If your dream is to work with the International Projects, your skill sets must be higher according to their working levels as well as you should be apt in their modeling techniques, and fabrication logistics planning detailing.

In this field of Project Management or BIM Management, knowing Detailing (Annotation and tagging) services and having Revit MEP skill will significantly serve you greater opportunities that will help you in building your career as well as fulfilling your dreams.

Job Opportunities

On completion of the course, you will be liable for following career opportunities:

- Revit MEP Detailer Expert
- Structural Detailer in Revit
- Autodesk AutoCAD Detailer
- Revit Detailer Specialist

Who is this course designed for and Technology used?

The design of Detailer in Revit MEP Training course is for Diploma students, Graduates, Engineering students or Construction professional in architectural, consulting and construction firms.

To perceive better careers opportunities and to enhance their professional skill sets, join the Detailing & Annotation course!

Technologies used in Revit MEP Training:

- 1. Revit
- 2. Blue beam
- 3. AutoCAD
- 4. Naviswork

To conclude, the Detailing & Annotation course has tremendous advantages and benefits in Revit MEP. After completion of the course, there are bright career opportunities ahead. You can also get training for Quality Control (QC) Manager.

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