

Autodesk Point Layout for Revit

Brief Synopsis of Class Contents:

This class covers the basics of Autodesk Point Layout. Attendees will learn how to setup and use APL in conjunction with Revit as it relates to creating control points, analyzing points for QA/QC, or importing and exporting points for As-Builts

Learning Objectives:

- Attendees will learn how to setup and use APL in conjunction with Revit
- Understand the concepts of using coordinate systems
- Understand the importance of starting with control points
- Create points for system families such as walls, floors, footing, pipes, and conduits
- Create points for component families such as sleeves, hangers, embeds, and footings
- Understand the workflow for importing/exporting points to/from the jobsite

Courseware:

Applied Software Training Material

Number of Days:

Two ½ day sessions

Continuing Education Hours:

7 hours

Who Should Attend:

All new users to Autodesk Point Layout
General Contractors, Subcontractors, Layout Teams

Prerequisites:

Basic Computer skills
Revit Fundamentals helpful but not required

System and Software Requirements:

<http://www.asti.com/LiveLab-Learning-amp-Training/LiveLab-System-Requirements>

FAQs and Cancellation Policy:

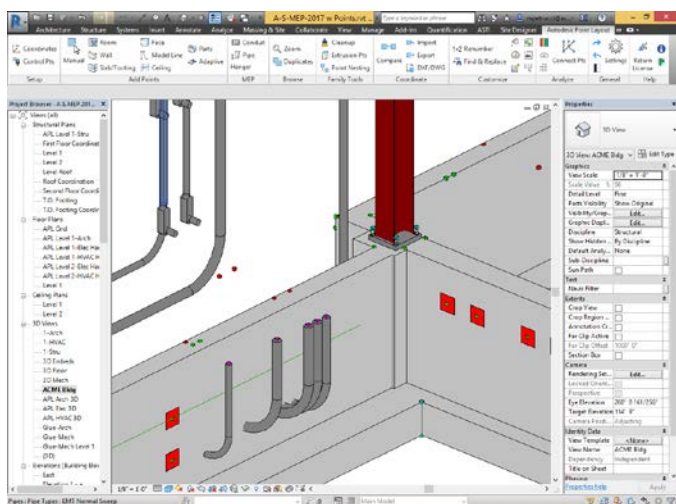
<http://www.asti.com/LiveLab-Learning-amp-Training/LiveLab-FAQS>



Class Outline and Topics:

Introduction

- What is Autodesk Point Layout?
- Who uses Autodesk Point Layout?
- What are the benefits of APL?



Interface & Navigation

Best practices working with

- Project Browser
- View Organization
- Floor Plans, Elevation, 3D Views
- Levels and Grids
- Properties Palette
- Duplicate Views
- View Properties
- Visibility Graphic Overrides
- Hide/Unhide Categories and Elements

Coordinate Systems

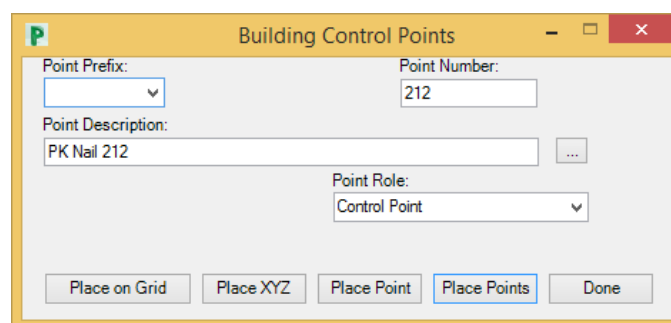
- True North, State Plane Coordinates
- Project North, Bldg Coordinates

Points

- System vs Component Families
- Settings
- Point Roles
- Point Types
- Nested Families

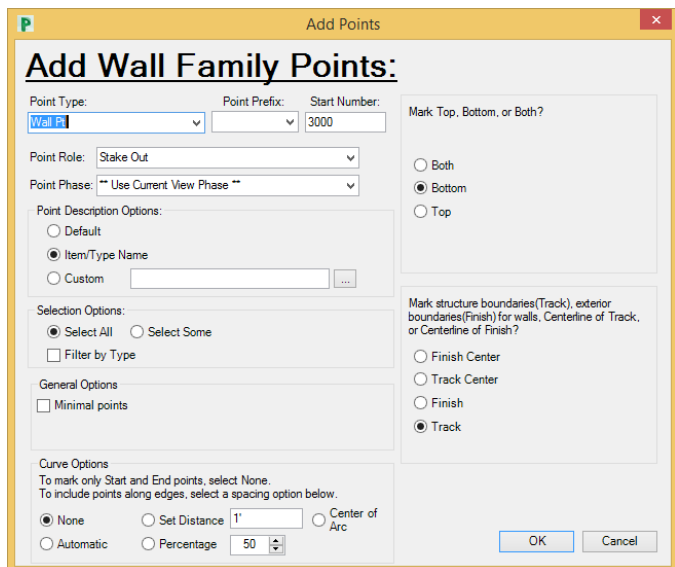
Control Points

- Site vs Building Control Points
- Place on Grid
- Place XYZ
- Place Point
- Place Points



Adding Points

- Manual
- Wall
- Slabs and Footings
- Floors
- Lines and Faces
- Pipe and Conduits



Add Points

Add Wall Family Points:

Point Type: **Wall** Point Prefix: Start Number: 3000

Point Role: Stake Out

Point Phase: Use Current View Phase

Point Description Options:

- Default
- Item/Type Name
- Custom

Selection Options:

- Select All Select Some
- Filter by Type

General Options

- Minimal points

Curve Options

To mark only Start and End points, select None.
To include points along edges, select a spacing option below.

- None Set Distance: 1'
- Automatic Percentage: 50
- Center of Arc

Mark Top, Bottom, or Both?

- Both
- Bottom
- Top

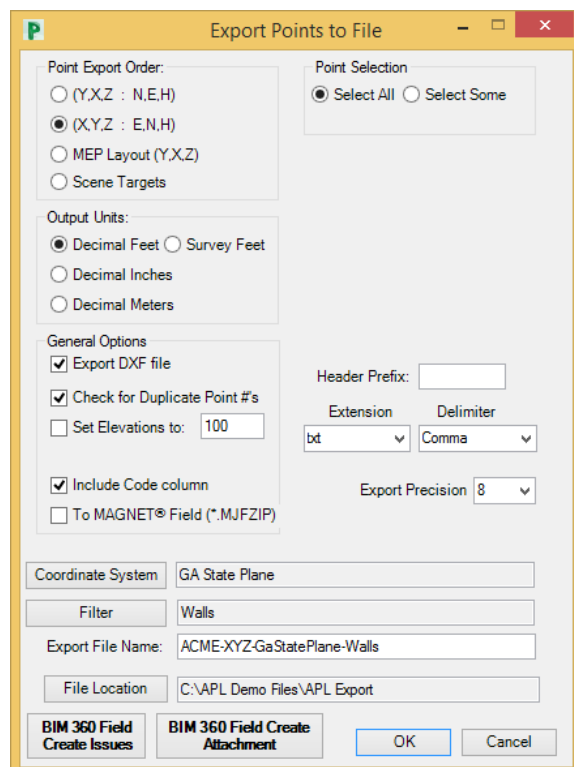
Mark structure boundaries(Track), exterior boundaries(Finish) for walls, Centerline of Track, or Centerline of Finish?

- Finish Center
- Track Center
- Finish
- Track

OK Cancel

Import / Export / Compare

- Exporting DWG & Points to the field
- Point Export Order
- Output Units
- General Options
- Code Columns
- Coordinate System
- Filters



Export Points to File

Point Export Order:

- (Y,X,Z : N,E,H)
- (X,Y,Z : E,N,H)
- MEP Layout (Y,X,Z)
- Scene Targets

Point Selection

- Select All Select Some

Output Units:

- Decimal Feet Survey Feet
- Decimal Inches
- Decimal Meters

General Options

- Export DXF file
- Check for Duplicate Point #'s
- Set Elevations to: 100
- Include Code column
- To MAGNET® Field (*.MJFZIP)

Header Prefix: []

Extension: **bd** Delimiter: **Comma**

Export Precision: **8**

Coordinate System: **GA State Plane**

Filter: **Walls**

Export File Name: **ACME-XYZ-GaStatePlane-Walls**

File Location: **C:\APL Demo Files\APL Export**

BIM 360 Field Create Issues **BIM 360 Field Create Attachment** **OK** **Cancel**

Browse

- Zoom to Points
- Duplicate Points

Customize / Utilities

- Mange Points Dialog
- Renumber Points
- Tag Points
- Edit Code Maps