



CHAPTER 5 CHECKLISTS - FOUNDATION



Foundation
CheckList

A. MAKING COMPONENTS

Construction models require simple components to minimize file size and maximize visual flexibility.

- ☐ Build simple components
- ☐ No color or texture
- ☐ Extrude 3D from 2D
- ☐ Embed stand-in dummies
- ☐ Use handles for alignment
- ☐ Save to a components folder
- ☐ Regularly update your collection

B. WORK AREAS & SCENES

Set up work areas and scenes to both visually scale the model and simulate movement as you stage the process.

- ☐ Stage the jobsite in phases
- ☐ Use scaled equipment and tools
- ☐ Insert components from a library
- ☐ Outliner organizes the assembly
- ☐ Hide and unhide for staging
- ☐ Set Scenes for the work
- ☐ Use Scenes to move around

C. FOOTING FORMWORK

Use string lines to align components and assemble the formwork and reinforcing for the footing.

- ☐ Plumb-bob from the string lines
- ☐ Locate the workpoint
- ☐ Add components for formwork
- ☐ Copy and rotate into position
- ☐ Use segmented lines and guides
- ☐ Add reinforcing, copy and rotate
- ☐ Delete guides and layout lines

D. PLACING CONCRETE

Set J-bars in the formwork to visually tie the footing to the foundation wall before placing the footing concrete.

- ☐ Add J-bar components
- ☐ Rotate and copy the J-bar
- ☐ Position with lines and guidelines
- ☐ Hide the formwork
- ☐ Drag out a rectangle
- ☐ Use Off-set to outline the footing
- ☐ Push-pull the 2D shape into 3D
- ☐ Group and name the footing

E. CONCRETE WALL

A 2D outline of the concrete foundation wall is drawn on the footing and extruded as a separate group with Push-pull.

- ☐ Locate the corners of the wall
- ☐ Drag a rectangle out on the footing
- ☐ Use Off-set tool to shape the wall
- ☐ Group and name the 2D wall profile
- ☐ Edit Group and Push-pull to 3D
- ☐ Infer the top of the excavation
- ☐ Add and array anchor bolts

F. MASONRY WALL

Build the wall from the corners using string lines and batter boards to simulate the assembly process.

- ☐ Plumb bob locates the corners
- ☐ Add a concrete block component
- ☐ Rotate and copy into position
- ☐ Unhide the embedded dummy
- ☐ Select multiple blocks for copy
- ☐ Add anchor bolts for framing
- ☐ Illustrate process with staging