

Chief Architect®



Training Seminar
Introductory

Welcome

Getting the Most from Chief Architect Training

Chief Architect Seminars present a great deal of information in a very short period of time. To help you to take full advantage of this intensive format, we offer a few suggestions:

- Chief Seminars are an excellent place to meet and network with other Architects, Builders, Designers and Drafters, and it can be easy to get distracted by interesting side conversations. We encourage you to get to know your neighbors and to assist someone if they need a quick answer; however, to avoid falling behind in this fast-moving class, save longer conversations for breaks or after class.
- Consider your own learning style. If you are a hands-on-learner, follow along with the instructor in the program on your laptop, if you can keep the pace. If you learn best by listening, feel free to sit back and do so. Take written notes if it helps you to absorb the information. Many people use a combination of listening, writing notes and following along on the computer to help them to retain the most information.
- Within an hour or so after the class is over, take a few minutes to review the topics that were covered. In your head, on paper, or in a conversation with a neighbor from your class, go over the different subjects that were discussed and consider which were most useful to you and how you can use those tools and techniques to become more successful with Chief Architect.
- Before going to sleep each night, try to spend some time practicing some of the skills that were taught in class that day. Review the subjects covered in class within a few days of returning home from the seminar and then again about a week later. Spaced repetition of the information will help you to make those things a part of your skill set.
- ABOVE ALL... Relax and enjoy the class. It is our desire to give you the very best training that we can.

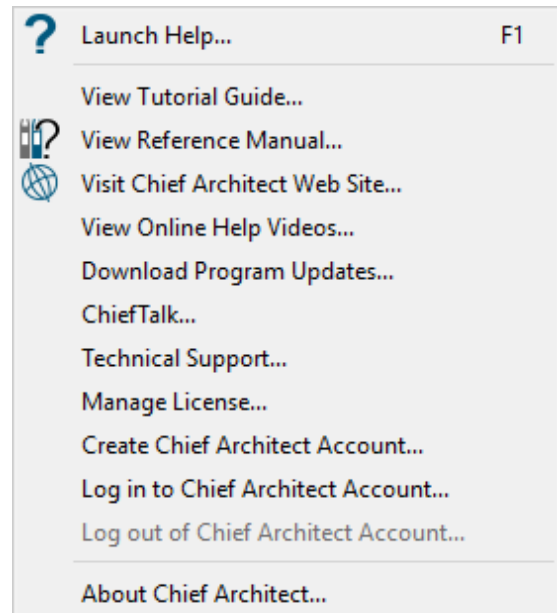
The Chief Architect Training Staff

Introduction to Chief

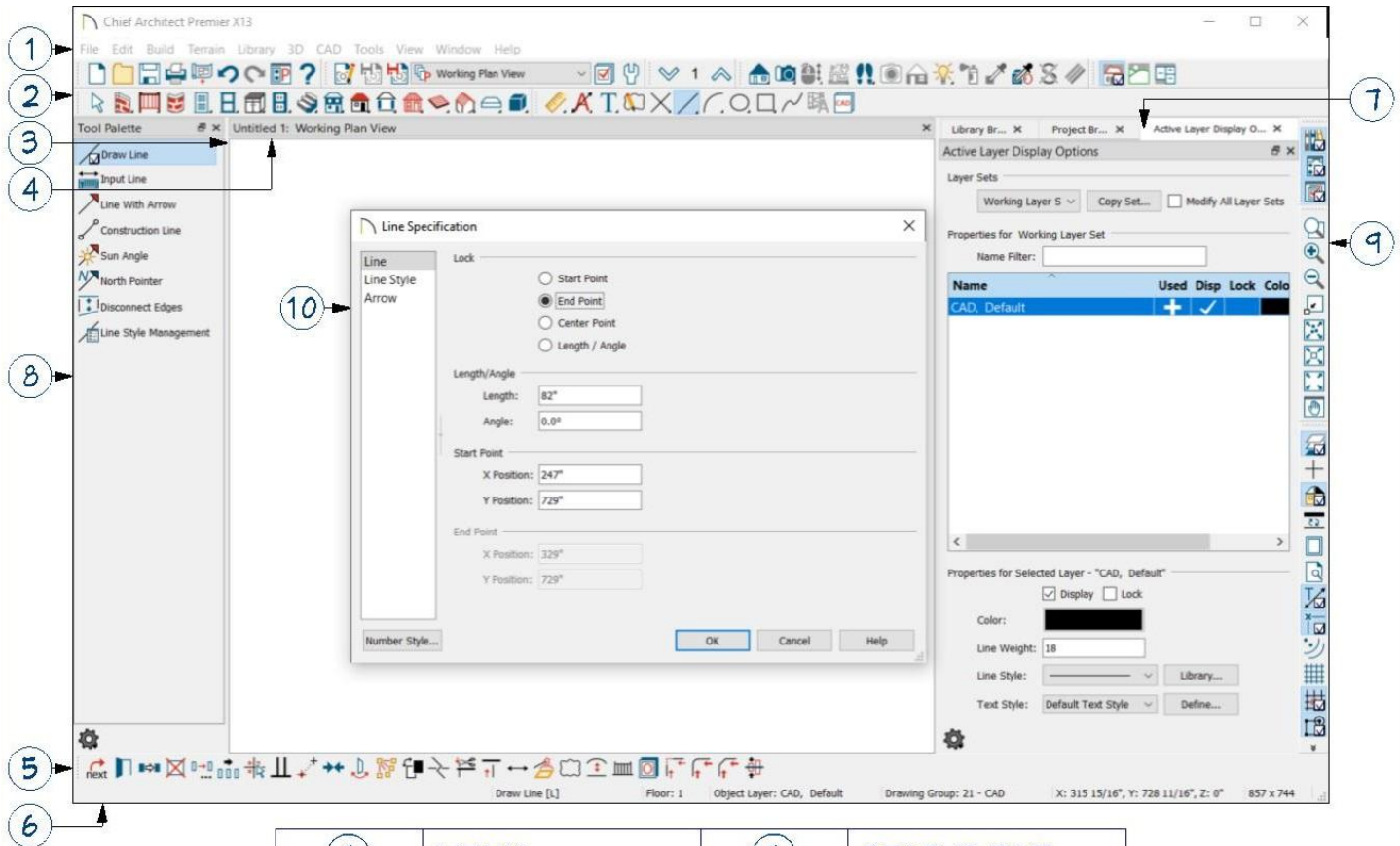
Help Resources

Your primary resources will be found in the Help menu:

- **Launch Help** - Launches the program's Help application. It contains both the Reference Manual and Tutorial Guide in a format that you can browse through by chapter, or you can search for a specific tool or term.
- **View Tutorial Guide** - Opens a PDF copy of the User's Guide which contains helpful tutorials for creating a basic plan.
- **View Reference Manual** - Opens a PDF copy of our comprehensive Reference Manual which contains explanations on every tool and dialog within Chief Architect.
- **Visit Chief Architect Website** - Opens your default web browser to the www.chiefarchitect.com website.
- **View Online Help Videos** - Opens your default web browser to our Online Training Videos site <https://www.chiefarchitect.com/videos>. We have over 500 video tutorials for your enjoyment.
- **Download Program Updates** - Opens your default web browser to a page that tells you if there is an update available for your version of Chief Architect.
- **ChiefTalk** - Opens your default web browser to our User Forum. ChiefTalk is an active community of Chief Architect software users who enjoy answering questions and helping each other out. <https://chieftalk.chiefarchitect.com>
- **Technical Support** - Opens your default web browser to our Support page online <http://www.chiefarchitect.com/support/>. This page has a link to our **Knowledge Base** with over 500 written articles of tutorials and information. This page also has links for contacting support. Technical Support is a useful option for getting pointed in the right direction for specific Training resources.



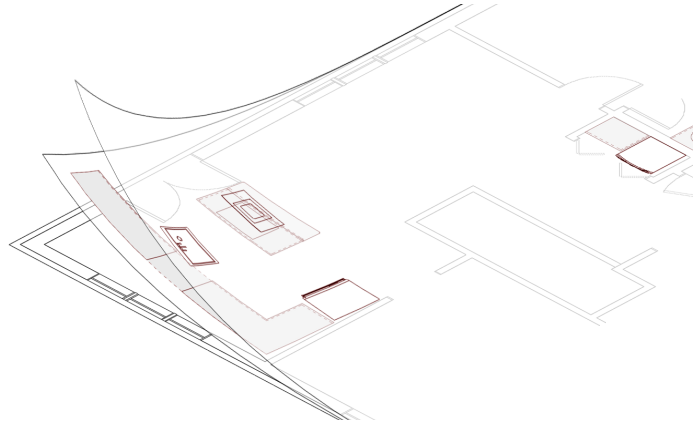
Interface



①	MENU	⑥	STATUS BAR
②	TOOLBAR	⑦	SIDE WINDOWS
③	VIEW WINDOW	⑧	TOOL PALETTE
④	VIEW TITLE	⑨	SIDE TOOLBARS
⑤	EDIT TOOLBAR	⑩	DIALOG BOX

Layers and Layer Sets

Chief Architect uses Layers to control the display of different types of objects present in the plan. Each layer can be displayed or hidden in order to show more or less detail, depending on the type of view you wish to create. Various layer properties can be customized, including Line Color, Style and Weight, and Text Style for all objects on a given layer. Every object that is drawn or placed in the plan is associated to a layer by default but can be reassigned to different layers as needed.

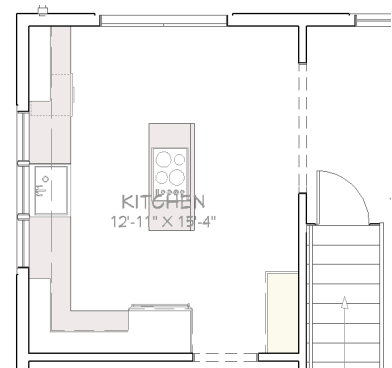


A Layer Set is a saved list of specified layer properties that can easily be switched between in order to display the same structure with different displayed layers, line styles, etc., for a specific view. Some examples are provided at right of different Plan Views and their associated Layer Sets.

Plan Views

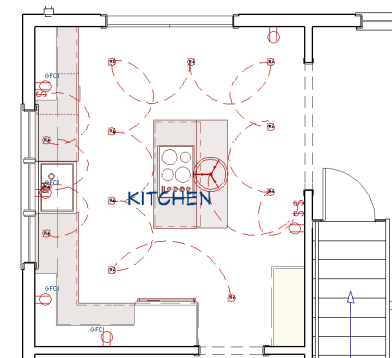
When a plan file is first opened, a single plan view is active. A plan view is a view of a plan with customized settings for a range of purposes. You can think of plan views as tied to a specific task (e.g.: “Roof Plan View” for roof work, “Framing, Floor Plan View” for floor framing work, “Electrical Plan View” for electrical work). Chief Architect comes with several pre-made Plan Views but you can customize them to fit your needs as well as create your own.

Plan Views have a number of important settings associated with them. These include using different Default Sets, Reference Display settings, and which Layer Set is in use for the view. For the purpose of this class, the main use for Plan Views will be for changing your Layer Set but be aware that there are several other settings that a Plan View can change.



Plan View: Floor Plan View Shell

Layer Set: Floor Plan Shell Layer Set



Plan View: Electrical Plan View

Layer Set: Electrical Layer Set

Common Keyboard Hotkeys

By using hotkeys you can activate a variety of tools and functions within the program without having to move your mouse to find the tool in menus or toolbars. Learning the common hotkeys is a great way to increase your speed and productivity in Chief Architect.


COMMAND	DEFAULT HOTKEY
SAVE PLAN	CTRL or ⌘ + S
SELECT OBJECTS	SPACEBAR
OPEN OBJECT	CTRL or ⌘ + E
SELECT NEXT OBJECT	TAB



Class Recommended Preferences

(May be different than out-of-box settings)

- Appearance
 - Contextual Menus
 - Click twice to display
 - Toolbars
 - Child Tool Palette
 - Colors
 - Handle Fill
 - Selection Line
 - Selection Fill
- General
 - Save Dialog Size and Position
 - Each Session
 - Open Dialogs to the Last Panel Visited
 - Time Tracker
 - Display Idle Timeout Dialog
- Edit
 - Selection
 - Show Start and End Indicators
 - Snap Properties
 - Object Snaps
 - Other Snaps
 - Bumping/Pushing
 - Angle Snaps

Defaults

Default settings are plan-specific specifications that dictate how objects are generated when added to the plan. It is important to note that some defaults are dynamic, meaning that changing the default settings for a type of object will change any of that type of object in the plan. Non-dynamic defaults will not change objects present on the plan, allowing changes to be made to newly placed objects of that type, without affecting ones already in place. Dynamic defaults can be identified in an object's specification dialog by  in a field, "**Use Default**" in drop-downs, or a **Default** check box.

Fields with the  icon in them mean they are currently following the default. If a field has  icon, that means that property has a dynamic default but it is not currently following that default.

Note that any changes made in the Default Settings dialog must be saved in a Template file in order to be used in future plans.

Critical Defaults

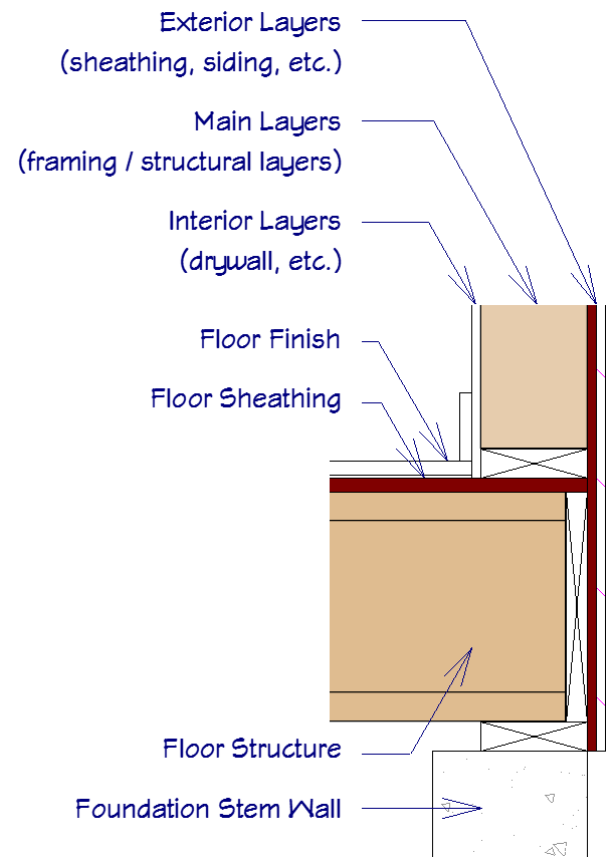
These are defaults that should be set on each plan prior to drawing; changing these defaults later on may affect various aspects to the drawing which is likely to require additional work to correct:

- Floors and Rooms
 - Floor/Ceiling Platform - Floor and Ceiling Structure - Platform Thickness and Framing type (lumber/i-joist).
 - Floor Levels - 1st Floor - Floor and Ceiling Heights.
- Framing
 - Foundation - Joist Width and On-Center Spacing.
 - 1st - Joist Width and On-Center Spacing.
 - Roof - On-Center Spacing and Structural.
- Walls
 - Exterior/Interior
 - Wall Types panel, select the default and redefine as needed.

Wall Type Definition

Layer #	Line Color	Line Style	Weight	Material	Pattern	Texture	Fill	Thickness
Exterior Layers								
1			1	Lap Siding				1/2"
2			1	Housewrap				0"
3			1	OSB-Hrz				7/16"
Main Layers								
4			35	Fir Framing 2				5 1/2"
Interior Layers								
5			35	Drywall		No Texture		1/2"

- **Exterior** layers will continue to the bottom of the Floor Structure on the exterior side of the walls concealing the floor framing.
- **Interior** layers will stop at the floor structure.
- **Main** layers, in most circumstances, should be specified as the structural layer. The Main Layer determines many things, for example:
 - Floor and Ceiling platforms and automatically built foundation walls normally build to the outer edge of the Main Layer.
 - At intersections, walls join at the interior surfaces of their Main Layers.
 - Windows are placed relative to the outer surface of the outermost Main Layer.
 - Exterior walls on different floors are aligned by the exterior edges of their outermost Main Layer.
 - Roof baselines and gable/roof lines that are manually drawn snap to the outermost edge of the Main Layer.

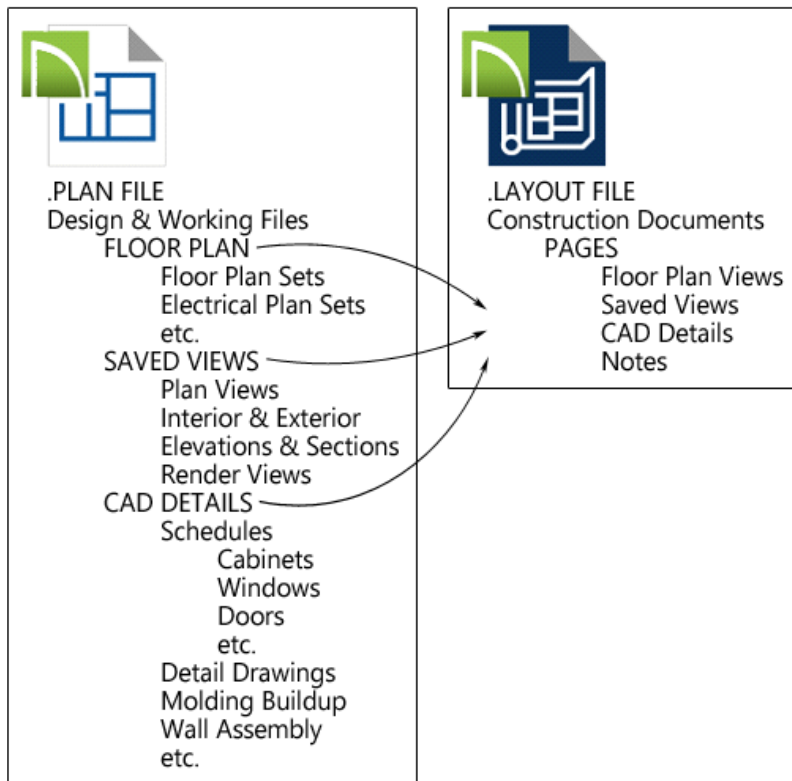


It is possible to have multiple layers specified as the Main layer. For example, you may want an additional framing layer for horizontal girts or furring.

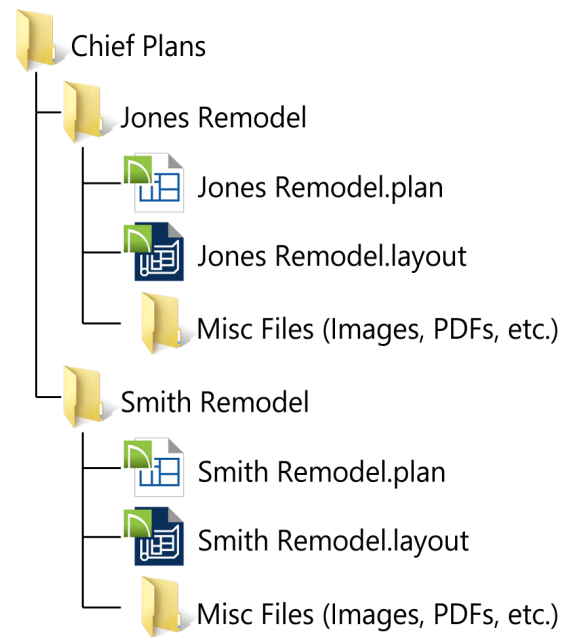
All of this information is reliant on the Main Layer group, so creating your wall type definitions accurately beforehand and specifying the Main Layer correctly is **very** important.

File Management

New projects are started by creating a plan file. This file contains your 3D model as well as floor plan views, saved camera views and CAD Details. When a view is sent to a layout, the plan is then dynamically linked with the layout and those views will update automatically so that any view on the layout will be exactly as it appears on the plan. In order to maintain this link it is best to save and keep the plan and the layout in the same folder.



For efficiency, it is a good idea to also keep other supplemental materials in this same location. Here is an example of recommended file structure:



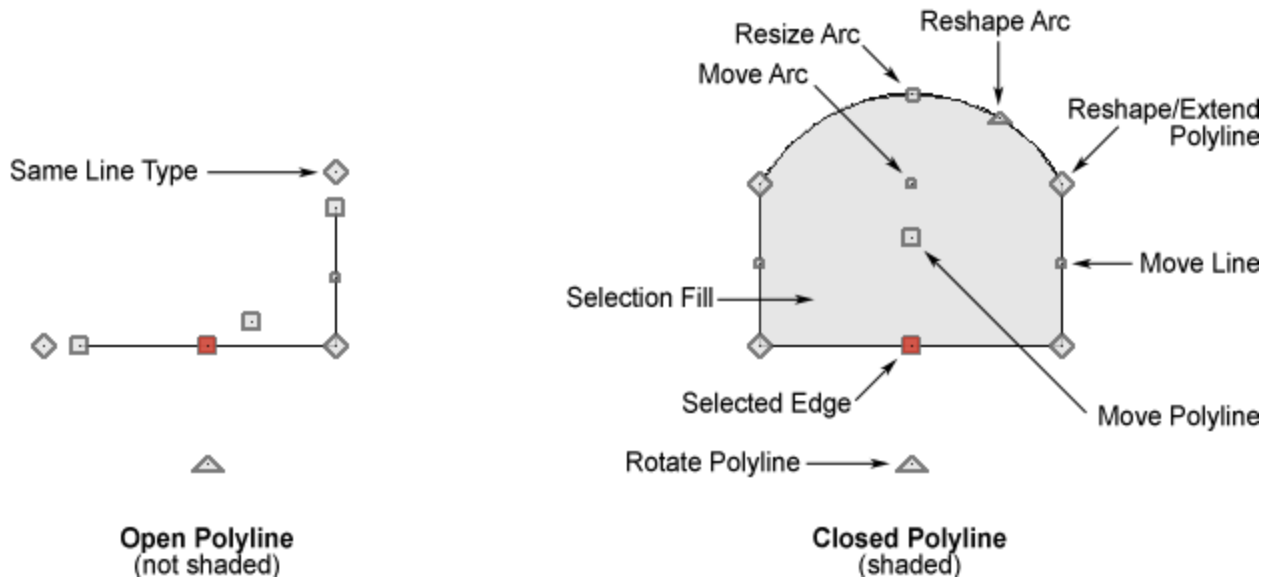
Drawing in Chief Architect

Drawing Order

While this drawing order is recommended for efficient drawing, we'll be using a slightly modified order for the class.

1. Open the desired Plan and Layout Templates.
2. Set Default Settings (see Critical Defaults section):
 - a. Floors and Rooms
 - i. Floor/Ceiling Platform - Specify appropriate Floor/Ceiling Structure.
 - ii. Floor Levels - 1st Floor - Specify appropriate Floor/Ceiling elevation.
 - b. Framing
 - i. Foundation/1st - Specify Joist Width and O.C. Spacing.
 - ii. Wall - Specify Wall Framing, Plates.
 - c. Roof - Specify appropriate rafter spacing, size, etc.
3. Draw primary walls and build additional floors:
 - a. Draw exterior perimeter and any necessary bearing walls.
 - b. Specify special rooms - (i.e. Garage, Porch, etc.)
 - c. Adjust special Ceiling Heights per room, if necessary.
 - d. Build> New Floor - specify new floor Ceiling Heights if necessary.
 - e. Repeat as needed.
4. Build Foundation - Specify Foundation floor defaults.
5. Detail the plan:
 - a. Draw additional interior Walls to create interior spaces, set Room Types.
 - b. Add openings, cabinets, furniture, etc.
6. Specify Roof Defaults.
7. Frame Floors, Walls, and Roof (Premier only):
 - a. The Build Framing dialog will reflect the same settings as in the Framing Defaults.
8. Create Terrain Perimeter and Landscaping (Premier only).
9. Create any necessary CAD Details, Elevations, etc., and build Layout.

CAD

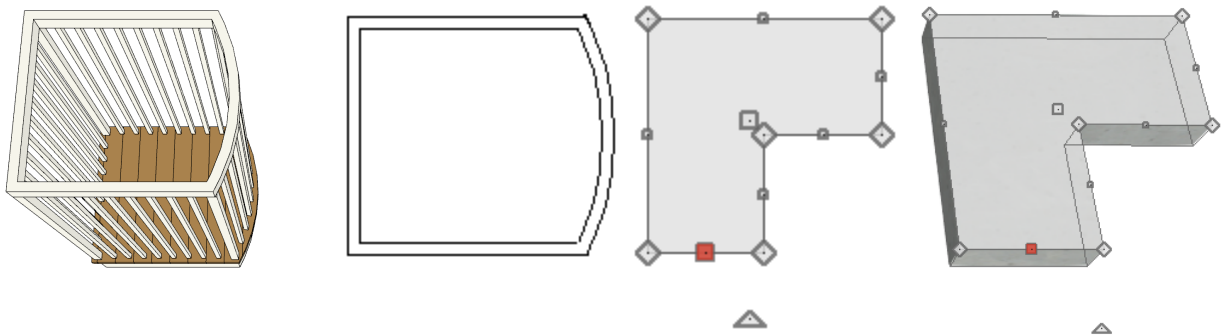


Polyline - a CAD line with multiple segments.

Closed Polyline - a CAD line with multiple segments that results in a closed shape.

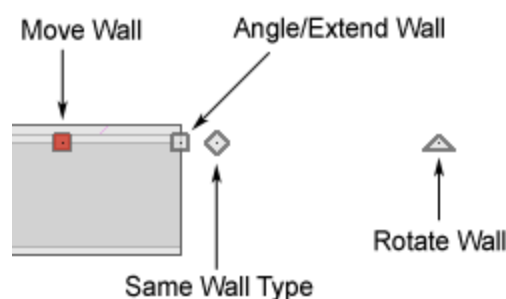
When you click on a CAD Box or Polyline object, the nearest edge to where you click becomes the Selected Edge and displays a larger, differently colored edit handle than those on other edges. The handle on this edge may also display at the point where you clicked to select it.

Many objects in Chief Architect are polyline based objects that are drawn using CAD Tools to create a 3D object based on a 2D shape. For example, Landings and Polyline Solids are 2D shapes that create 3D objects.












Walls

Walls are line-based architectural objects; similar to 3D CAD objects, they are drawn in plan view as lines and can be modified similar to a CAD Line objects. However, where a CAD Line only exists in a 2D view, a wall's defined layers are created along the line that is drawn and are then generated in 3D, building up to the ceiling height of the room.



2D Views

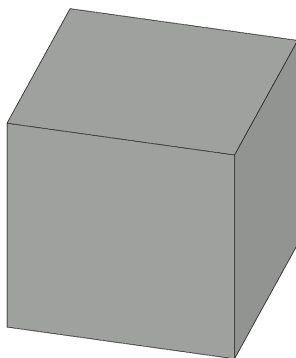
Zooming and Panning in Chief Architect is easiest with a standard 3-button mouse. The mouse wheel will zoom in and out, and when pressed the wheel acts as a middle-mouse button which allows you to Pan the view. Otherwise, the following Zoom and Panning tools can be found along the right hand side of the screen:

-  **Zoom** allows you to drag a marquee around an area on the screen to zoom in to that area.
-  **Zoom In** zooms toward the center of the screen.
-  **Zoom Out** zooms away from the center of the screen.
-  **Undo Zoom** reverses the last Zoom action. Note:  **Undo** does not affect Zoom actions.
-  **Fill Window Building Only** fits the drawing onto the screen based on walls and railings.
-  **Fill Window** fits the drawing on the screen based on all visible items.
-  **Pan** allows you to click and drag to move your view across the screen. Double-click to keep active.
-  **Reference Floor Display** displays a reference layer of another floor.

3D Views








Orthographic views do not have a focal or vanishing point. Parallel surface edges and pattern lines appear parallel in these views and objects appear to be the same size regardless of their distance from the camera.







Perspective views have a focal, or vanishing, point. Surface edges and lines that would be parallel in real life appear to converge towards that focal point, and objects closer to the camera appear larger while objects farther from the camera appear smaller.



-  **Cross Section/Elevation** view displays all floors of the model.
 - If the view is created outside the structure looking toward it, the result is an exterior elevation.
 - If the view is created inside the structure, or passes through any of the structure, a cross section is created.
-  **Backclipped Cross Section** views include only the objects between the starting point and stopping point of the cross section line.
-  **Wall Elevation** views are an elevation of a wall on a single floor and in a single room.
 - The Wall Elevation tool cannot be used to create exterior views.
-  **Full Camera** creates a multi-floor perspective view of the 3D model.
-  **Overview** cameras are automatically generated views, giving you a bird's-eye view of the entire drawing. Full, Floor, or Framing Overviews can be generated as either Perspective or Orthographic views.

Tip: While in 3D views...

- Use  **Select Objects** to select items in 3D Views.
-  **Mouse-Orbit Camera** orbits the camera about its focal point.
-  **Mouse-Tilt Camera** orbits the camera's focal point about its location.
-  **3D Center on Point** sets its focal point.
- **F, B, U, D, L, and R** keys move the camera Forward, Back, Up, Down, Left and Right, respectively.

Chic Cottage Floor Plan

Plan Defaults

- Default Settings (ref: Page 7)
 - Floors and Rooms> Floor Levels> 1st Floor
 - Rough Ceiling: **97 1/8"**
 - Walls
 - Exterior Wall: **Siding-6**
 - Pony Wall:
 - Upper: **Siding-6**
 - Lower: **Stone-6**
 - Copy of Stucco-6, change exterior siding to **Stacked Stone**.
 - Height Off Floor: **20"**

Draw Exterior Walls

- Straight Pony Wall

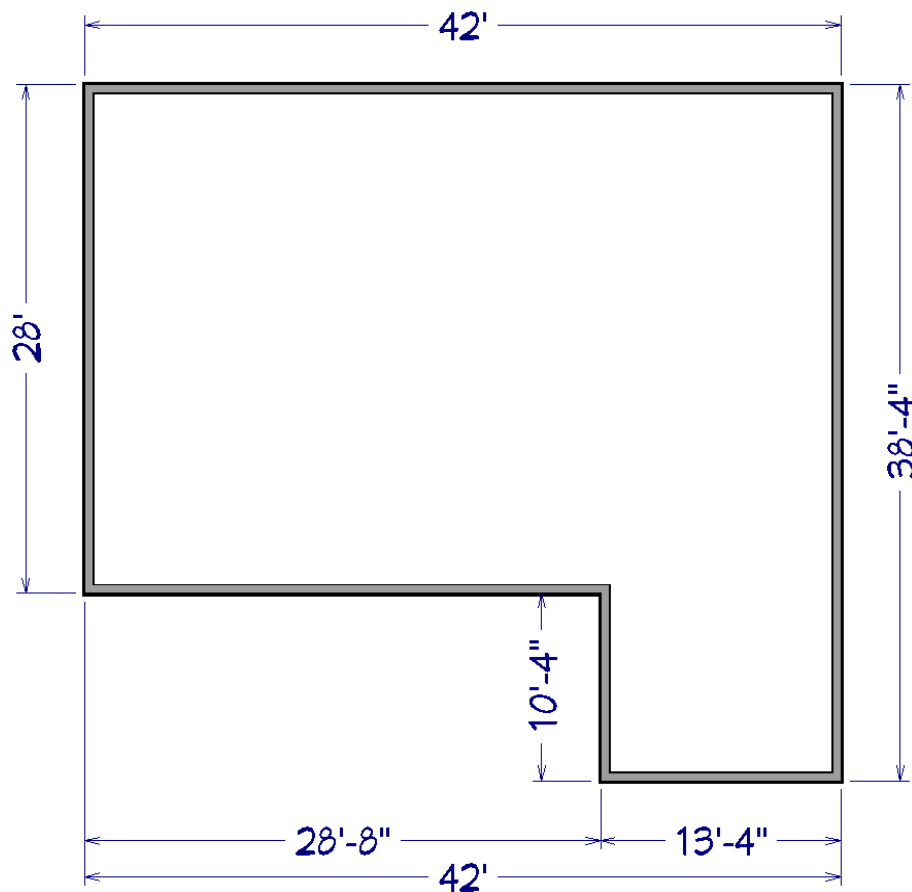






Fig. 4-1

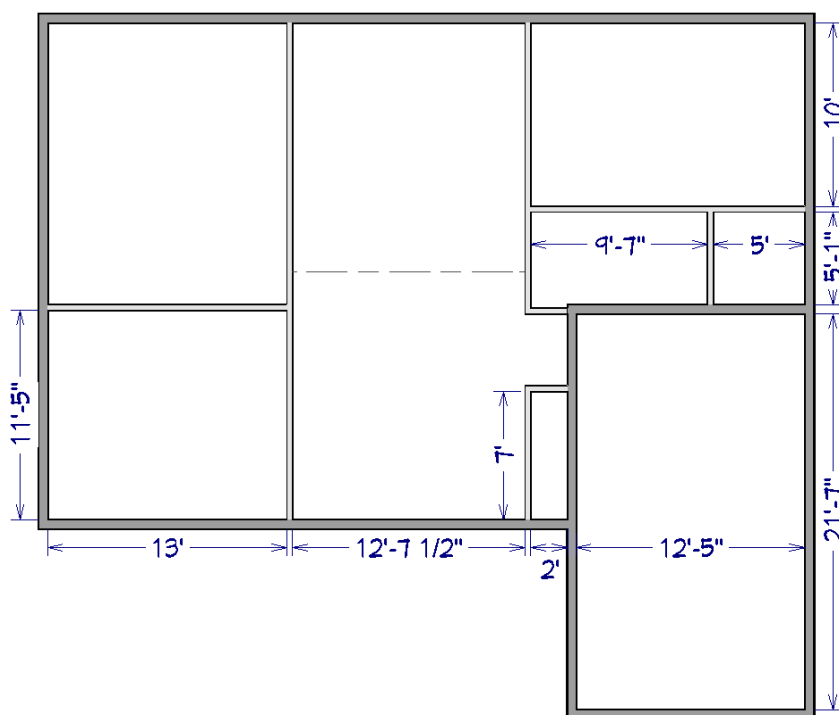
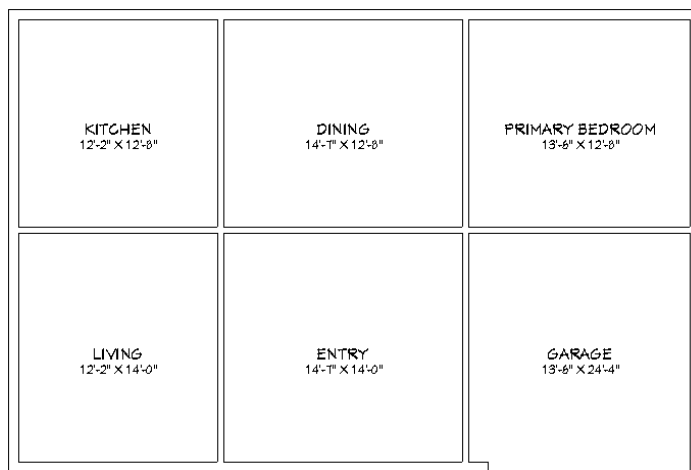
- Hide "Roof Planes" layer

Draw Interior Walls


- Draw Interior Walls - **Interior-4**
- Specify **Rooms Types** as shown on right.

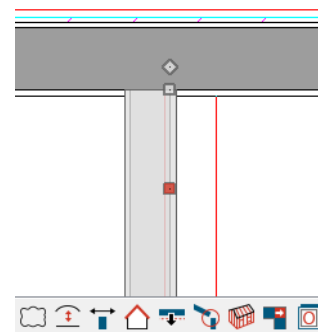
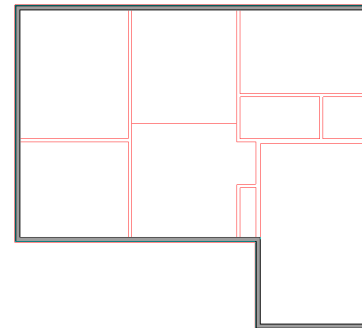
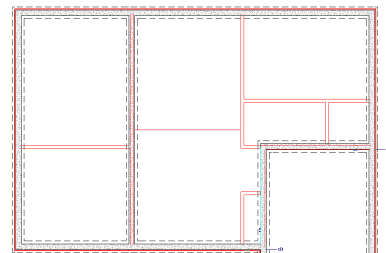
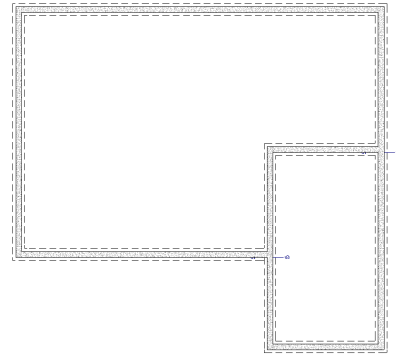
Room Type will be maintained in the event that a specified room is split:

- Draw an Interior Wall to add closet room to the left of the Garage.
- Specify Room Type as **Closet**, then split with interior wall, note how it inherits Closet room.
- Use  **Add Break** to separate and delete extra closet wall.
- Draw additional walls to create and specify **Bath** and **Closet** rooms.
- Use  **Add Break** to set Garage walls to **Fire-6**.
- Note wall facing, use  **Reverse Layers** to correct, if necessary.
- Use  **Add Break** to isolate and change wall to **Room Divider** between the Living and Entry rooms.
 - Set divider to **Invisible** and **No Locate**.
- Position Interior Walls using **Interior Dimensions** (dimension to Framing).



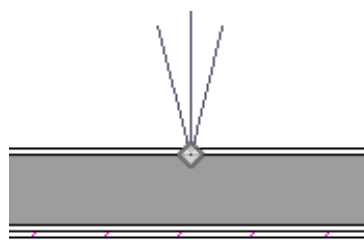
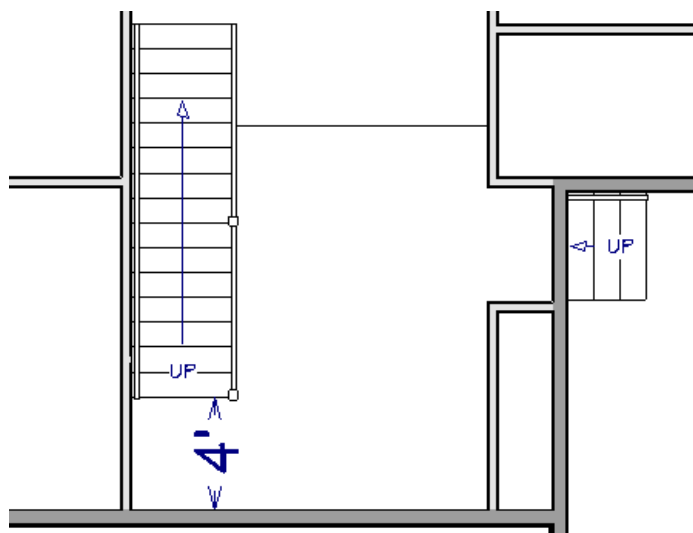
Multiple Floors

- Build> Floor> Build Foundation
 - Automatically Rebuild Foundation: **Checked**
 - Foundation Type: **Walls with Footings**
 - Stem Walls: **101 1/8"**
(97 1/8" rough ceiling + 4" slab)
- Set **Bearing Wall** on Floor 1 wall.
 - Defaults to Create Wall/Footing below.
- Enable **Reference Floor Display** to see walls of Floor 1 referenced on Floor 0.
- Create crawl-space
 - Stem Wall: **36"**
 - Ceiling Finish: **0"**
 - Edit, delete layers
 - Uncheck **Floor Under This Room**.
- Build> Floor> Build New Floor
 - Derive new 2nd floor from the 1st floor plan.
- Floor 2
 - Draw Interior wall, noting the direction the wall is drawn.
 - Use  **Align with Wall Below** if necessary.



Stairs

- Default Settings
 - Materials
 - Stair Tread: **Birch 5" Plank - Weathered**
 - Balusters: **Color - Bone**
 - Railings: **Color - Bone**
 - Stairs and Ramps
 - Interior Stairs
 - Width: **44"**
 - Newels/Balusters
 - Newel: **BX-02**
 - Rail Passes Over Newel: **Unchecked**
 - Height: **44"**
- On Floor 1:
 - Click to auto-place stairs to garage.
 - Draw stairs up to Floor 2
 - Dimension and locate 4' from wall.
 - Manual Dimension, located to interior Dimension layer.
- Modify Stair Specification
 - **Make Best Fit**
 - **Lock Bottom**

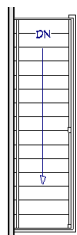


Stairwells



Auto Stairwell

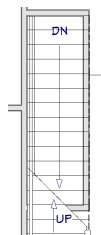
- Automatically creates a stairwell on floor above, surrounded by railings.
- Must have defined room area above.



Floor 2

Manual stairwell below

- Wall under second tread.
- Walls under stairs.
- Room Type: **Open Below**
- Hide Room Label



Floor 1

Basement Stairs

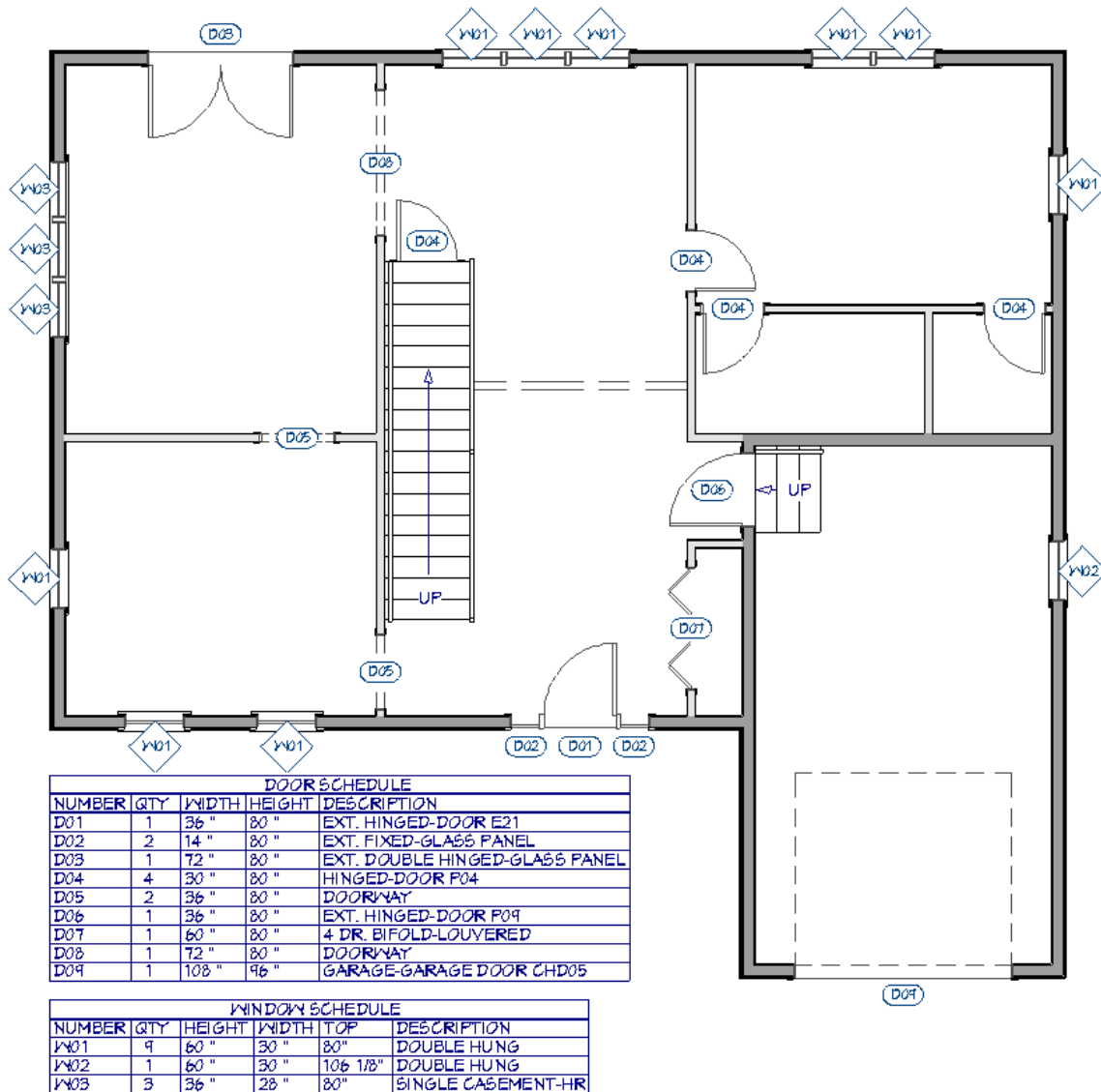
- **Copy / Paste Hold Position** to make copy of stairs on Floor 0.
- Adjust Width to snap to Foundation wall.



Floor 0

Doors and Windows

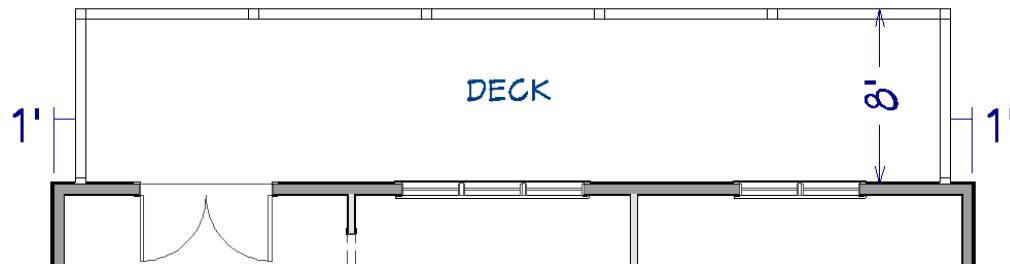
- Default Settings> Materials
 - Exterior Trim: **Color - Bone**
- Window Defaults
 - Width: **30"**
 - Height: **60"**
 - Lites
 - Across: **3**; Vertical: **2**;



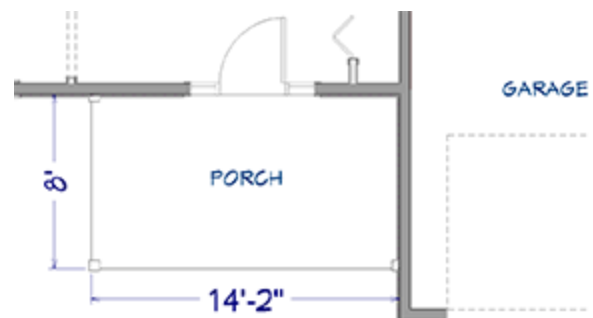
Tip: When placing doors, click and drag to place with correct swing side and direction.

Deck and Porch

- Default Settings> Walls> Deck Railing
 - Rail Style: **Post to Beam**
 - Newels/Balusters
 - Width: **5 1/2"**
 - Type: **CP-02**
 - Core> Architectural> Millwork> Balusters, Newels, & Posts> Capped

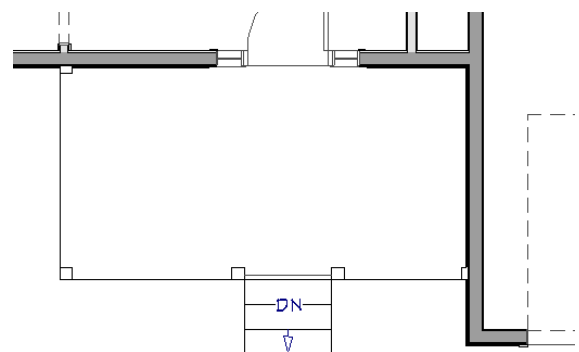


- Deck Railing
 - Rail Style: **Open**
 - Top/Bottom Rail:
 - Include Top Rail: **Uncheck**
 - Include Bottom Rail: **Uncheck**
 - Newels/Posts:
 - Spacing: **180"**



- Floor 0
 - Draw **Straight Foundation Walls** under Porch.

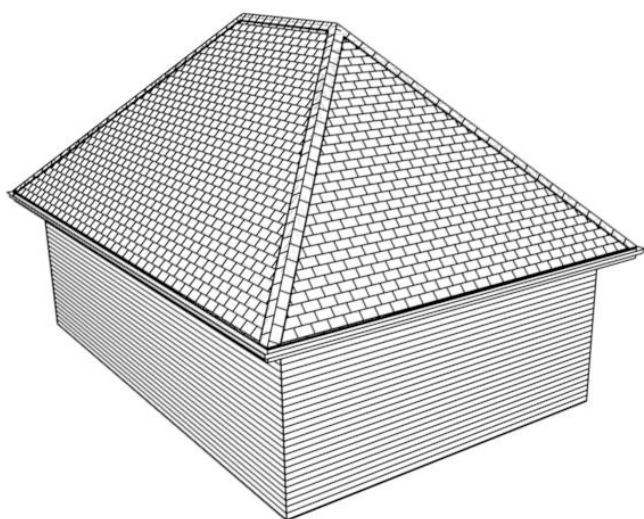
- Terrain> Create Terrain Perimeter
- Terrain> Terrain Specification
 - Subfloor Height Above Terrain:
 - Uncheck **Automatic**
 - Set to **28"**
- Build> Stairs> Draw Stairs
 - Click to place stairs down to terrain.
 - **Center Object** on Entry door.



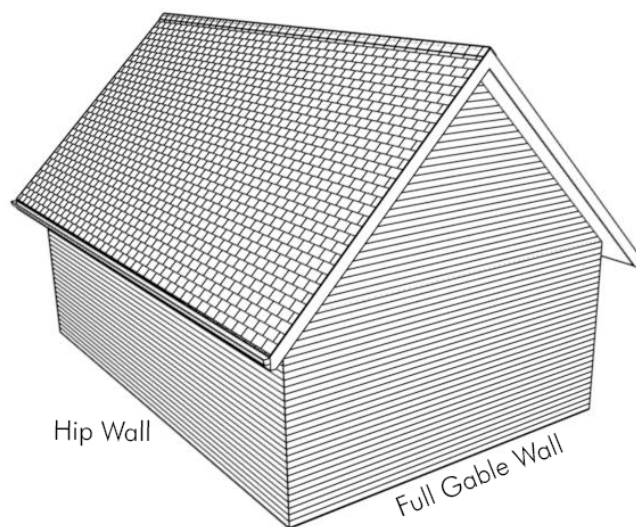
Roofs

Basic Roof Styles

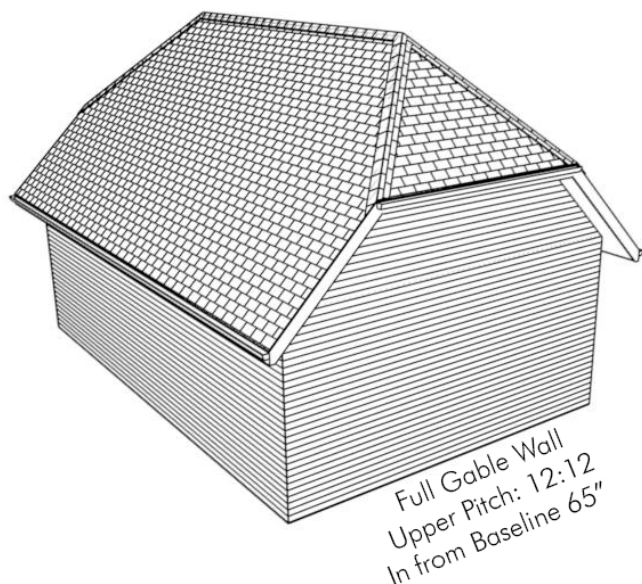
Chief Architect builds roof planes based on Roof Directives set within the exterior walls. By default it will generate a roof plane bearing on each exterior wall that does not have a room-defining wall directly above it, and will use the pitch specified in the Build Roof dialog, resulting in a hip style roof. By modifying and combining the various roof directives, different roof styles can be achieved, such as:



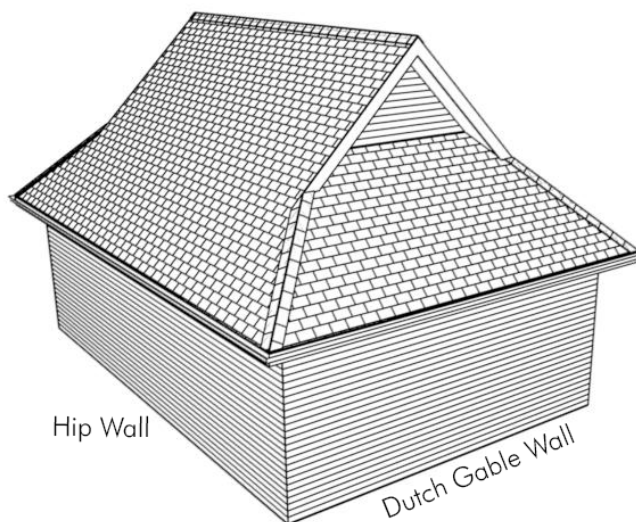
HIP ROOF



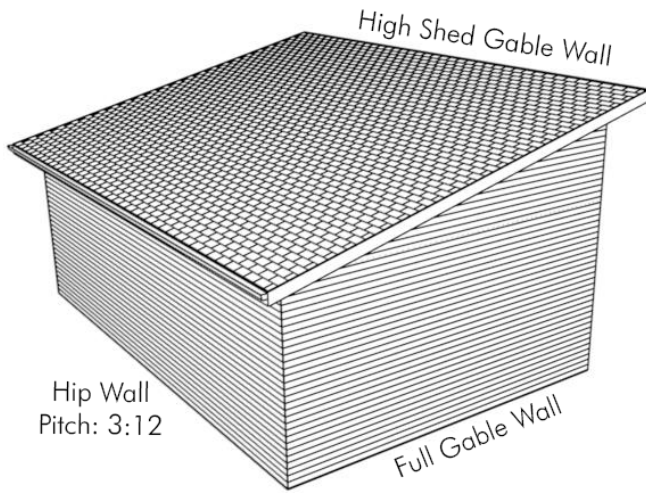
GABLE ROOF



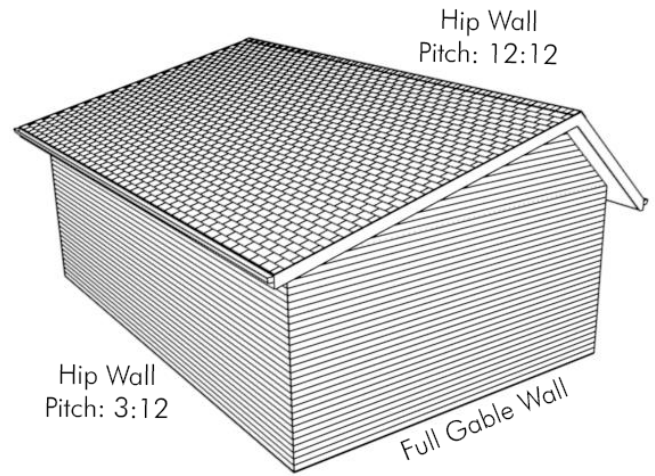
HALF-HIP ROOF



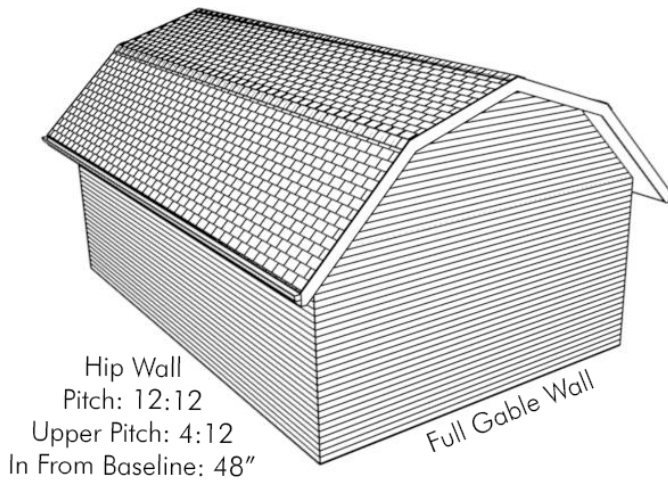
DUTCH GABLE ROOF



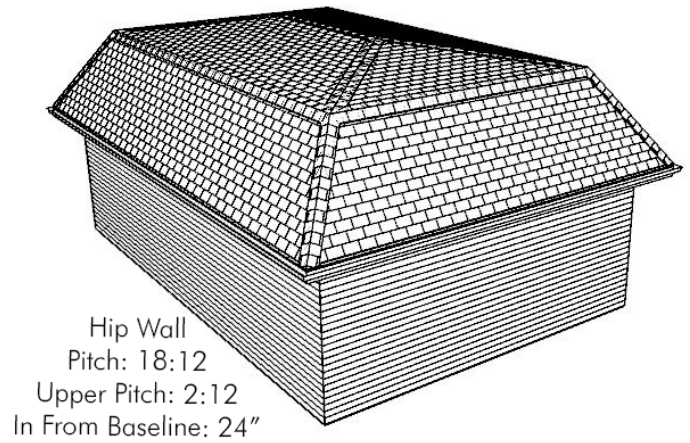
SHED ROOF



OFFSET GABLE ROOF

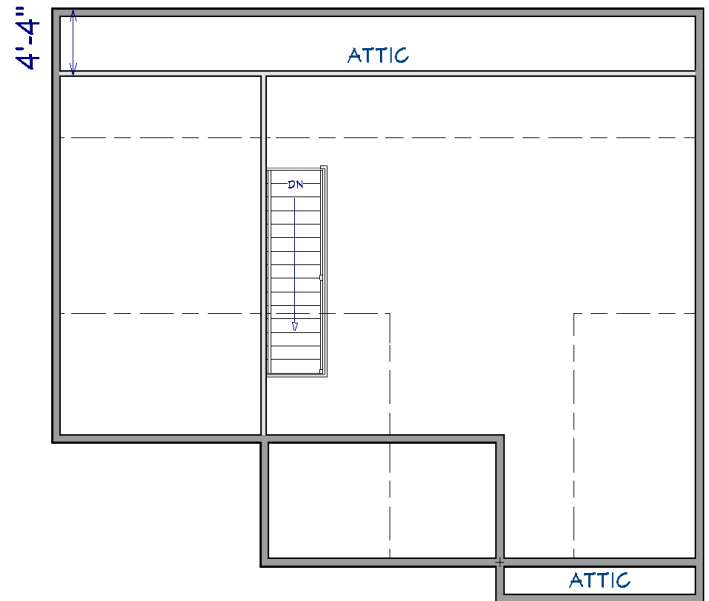


GAMBREL ROOF



MANSARD ROOF

- Reference Floor Display
 - Floor 2, reference Floor 1.
 - Draw **Exterior Wall** over porch walls.
- Build> Roof> Build Roof
 - Auto Rebuild Roofs: **Check**
 - Pitch: **12"**
 - Raise/Lower from Ceiling: **15 5/8"**
 - Ignore Top (2nd) Floor: **Check**
- Use **Change to Gable Wall** on West wall and south walls.
- Use **Break Wall** on East wall
 - Use **Change to Gable Wall**.
 - Set gable to **28'**.
- Extend exterior wall of nested gable across to make Attic room.
 - Break side wall and merge nested gable wall
- Draw Interior wall, 4' 4" from north wall to create Attic room.



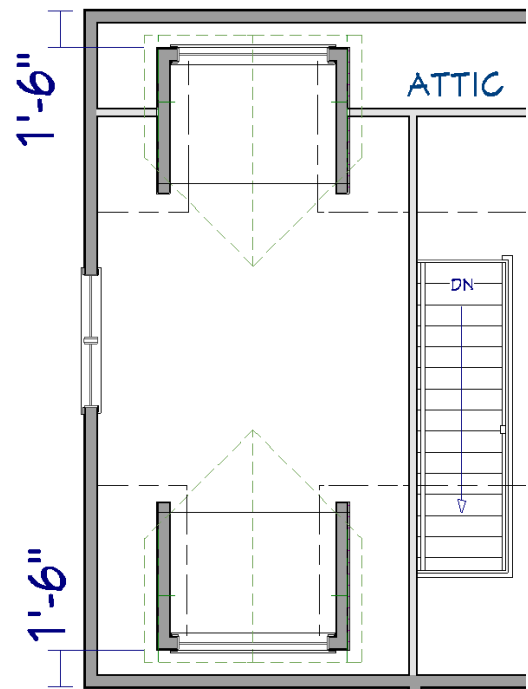
Dormers

Auto Floating Dormers are non-structural dormers that rests on top of the roof.

Auto Dormers are structural dormers that must be built over a knee wall, creating unused Attic space.

- Default Settings> Dormer
 - Width: **96"**
- Place an **Auto Floating Dormer** on the south side.
- Place an **Auto Dormer** on the north side.
- Use **Temp Dimensions** to set them **1' 6"** from the exterior wall.
- Use **Center Object** to center them to the room.

Note: Dormers create a Hole in Roof Plane polyline that display wherever the Roof plane is drawn and as a result may be visible on floors below where a dormer is placed. Hide the **Roofs, Openings** layer to hide these shapes.

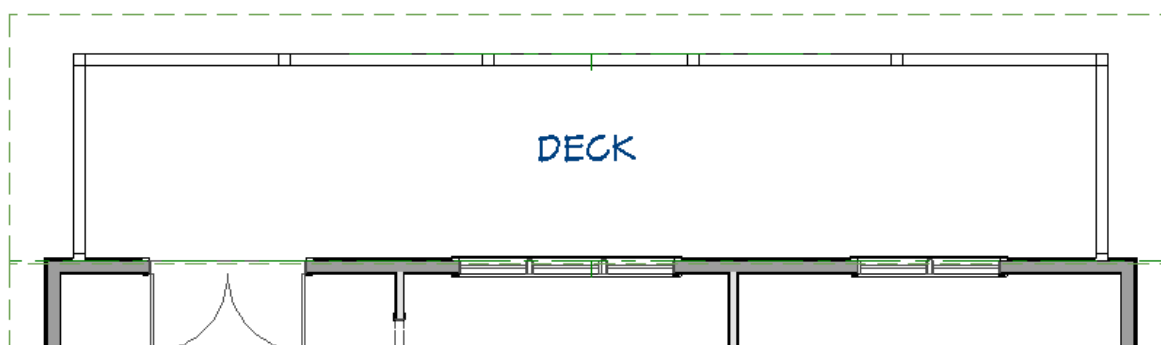
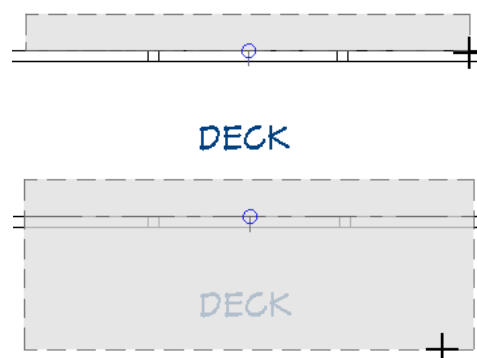


Manual Roof Planes

Roof Planes are drawn in plan view as 2D rectangular polylines, and can thus be modified as a standard polyline object, with a few exceptions as well as a few special roof-specific functions.

When drawing a roof plane, first click and drag along a wall to create the roof's Baseline, you will see the eave overhang generate as you draw the baseline. Then release the mouse and move the cursor up the slope toward the ridge. Always draw the baseline along the exterior line of the bearing wall.

- Build> Roof> Build Roof
 - Auto Rebuild Roofs: **Uncheck**
 - Pitch: **2"**
 - Raise/Lower From Ceiling Height: **0"**
- Use **Join Roof Plane** to join the deck roof to the existing roof plane.

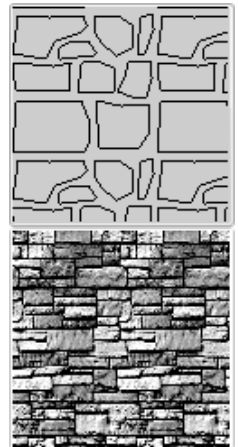


Interior Design

Materials

Materials are composed of two main components: Patterns and Textures.

- A material **Pattern** is a solid color with CAD Lines that represent the material in Vector views, such as Cross Sections and Elevations, as well as vector-based perspective views using rendering techniques such as Technical Illustration and Line Drawing.
- A material **Texture** is an image file that is mapped to an object's surface in Perspective views and will be visible in standard and artistic rendering techniques.



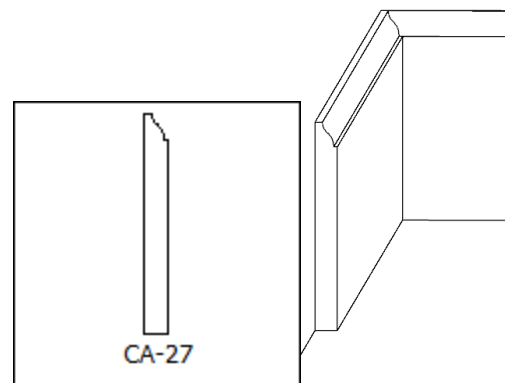
In the Default Settings dialog you will find **Material Defaults**. Modifying these is an easy way to set the default material for a variety of objects before they are placed into the plan; many objects found in the Library Browser are set to use a default material that is specified in the Material Defaults dialog. Object materials can be changed at any point, but setting these defaults ahead of time can be a huge time saver.

- Default Settings> Floors and Rooms> Floor Levels> 1st Floor
 - Floor Finish: **Birch 5" Plank - Weathered**
- Walls
 - Kitchen (Plan view)
 - Room Specification> Materials:
 - Walls: **Color - Ivory**
 - Living Room (Full Camera)
 - Material Painter, Scope: **Room**
 - **Color - Teal**

Room Moldings

Moldings are extruded shapes based on a molding profile (a CAD shape used to define the size and shape of moldings).

- Default Settings> Floors and Rooms> Floor Levels> 1st Floor> Moldings
 - Crown: **CA-34**
 - Base: **CA-27**



Interior Furnishings

Search or browse through the Library Browser to place desired furniture into your plan. Additional catalogs can be downloaded by selecting Library> Get Additional Content Online.

Kitchen & Bath

- Kitchen and Bath Plan View
 - Kitchen & Bath Annotation / Layer Set

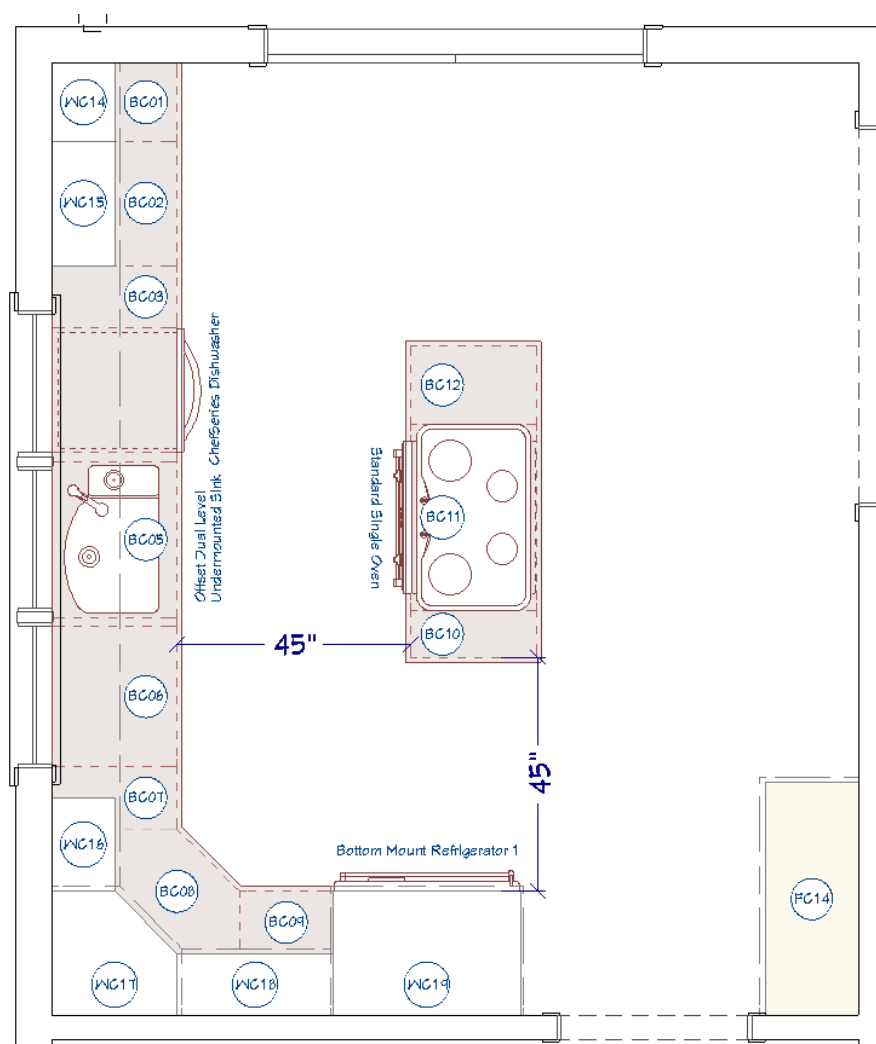
This tutorial uses the Benjamin Moore catalog which will be provided for you, but can be downloaded from the 3D Library page by clicking Library> Get Additional Content Online.

Cabinet Styles

- Review Defaults
 - Materials
 - Appliances: **Aluminum Brushed**
 - Cabinet: **OC-72 - PINK DAMASK**
 - Cabinet Doors/Drawers: **OC-72 - PINK DAMASK**
 - Countertop: **Concrete 2**
 - Base Cabinet
 - Door/Drawer
 - Door Style: **Framed Panel**
 - Drawer Style: **Beaded**
 - Materials
 - Backsplash: **Pearlescent Mosaic Tile**
 - Wall and Full Height
 - Door/Drawer
 - Door Style: **Basic Arch Recessed Panel**
 - Molding: **Delete**
 - Full Height Cabinet
 - Door/Drawer
 - Door Style: **Framed Panel**
 - Molding: **Delete**
 - Soffits
 - Materials
 - **Color - Ivory**

Cabinet Layout

- Using the cabinet schedules provided, place all of the base, wall, and full height cabinets.



Base Cabinet Schedule							
Number	Label	Qty	Height	Width	Depth	Description	Comments
BC01	3DB15	1	36 "	15 "	24 "	base cabinet	
BC02	B24R	1	36 "	24 "	24 "	base cabinet	
BC03	3DB12	1	36 "	12 "	24 "	base cabinet	
BC05	5B30	1	36 "	30 "	24 "	base cabinet	Centered Under Middle Window
BC06	B27	1	36 "	27 "	24 "	base cabinet	
BC07	B12L	1	36 "	12 "	24 "	base cabinet	
BC08	DCB36L	1	36 "	36 "	36 "	corner base cabinet	
BC09	B18R	1	36 "	18 "	24 "	base cabinet	
BC10	B9	1	36 "	9 "	24 "	base cabinet	Island
BC11	Standard Single Oven	1	36 "	36 "	24 "	base cabinet	Electric Cooktop
BC12	B15	1	36 "	15 "	24 "	base cabinet	Island

Wall Cabinet Schedule							
Number	Label	Qty	Height	Width	Depth	Description	Comments
WC14	W1536R	1	36 "	15 "	12 "	wall cabinet	
WC15	W2436R	1	36 "	24 "	12 "	wall cabinet	
WC16	W1836R	1	36 "	18 "	12 "	wall cabinet	
WC17	DCW2436R	1	36 "	24 "	24 "	corner wall cabinet	
WC18	W3036	1	36 "	30 "	12 "	wall cabinet	
WC19	W361824	1	18 "	36 "	24 "	wall cabinet	Above Refrigerator

Full Height Cabinet Schedule							
Number	Label	Qty	Height	Width	Depth	Description	Comments
FC14	U451890	1	90 "	45 "	18 "	utility cabinet	

Appliances & Fixtures

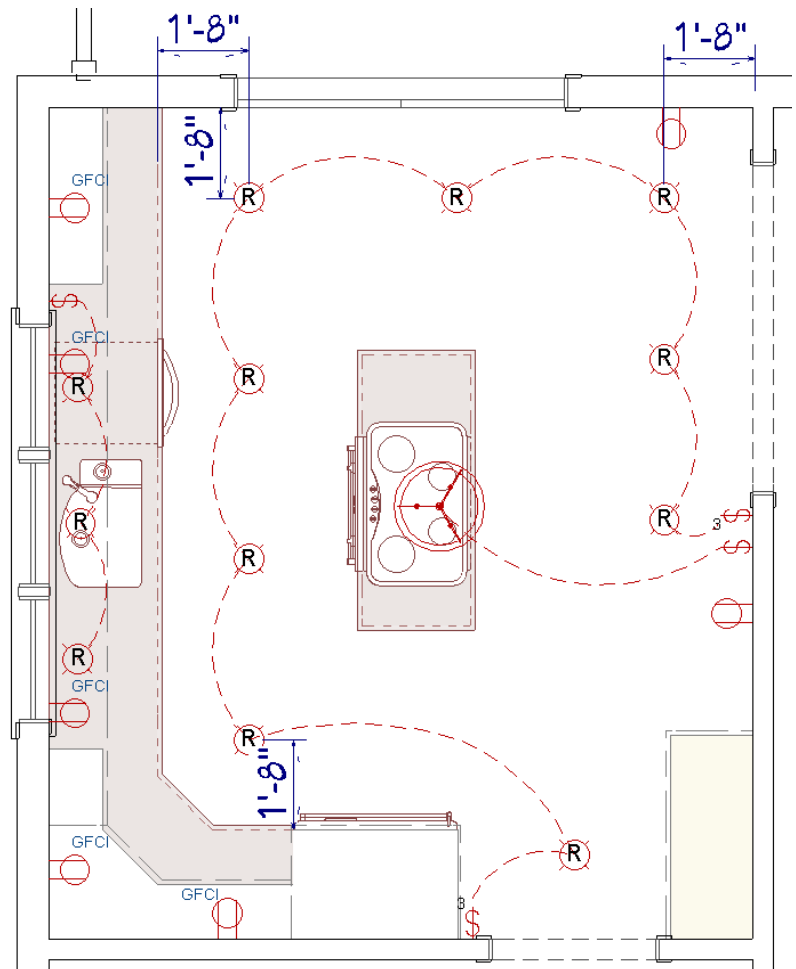
Most library items place as standalone objects, however some, such as dishwashers and cooktops, are designed to be embedded into cabinets. These items can be placed outside of cabinets, but a message will indicate that this may not be desired. As long as your Material Defaults are set ahead of time, any appliance placed from your Core Catalog folder will automatically use the specified finish material.

Light Fixtures

- Electrical Plan View
 - Electrical Annotation / Layer Set
- Default Settings> Electrical
 - Light - Ceiling
 - Light - Wall
- Place default puck lights.
- Place **Bowl Pendant Chandelier** over island.

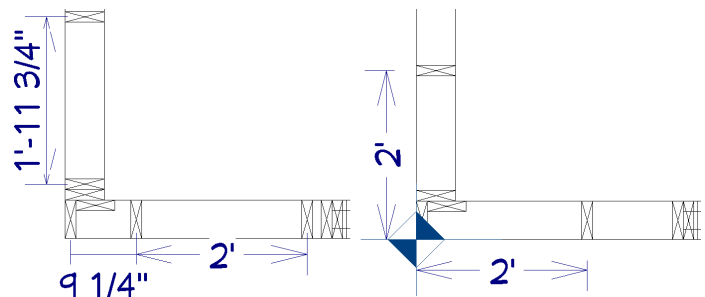
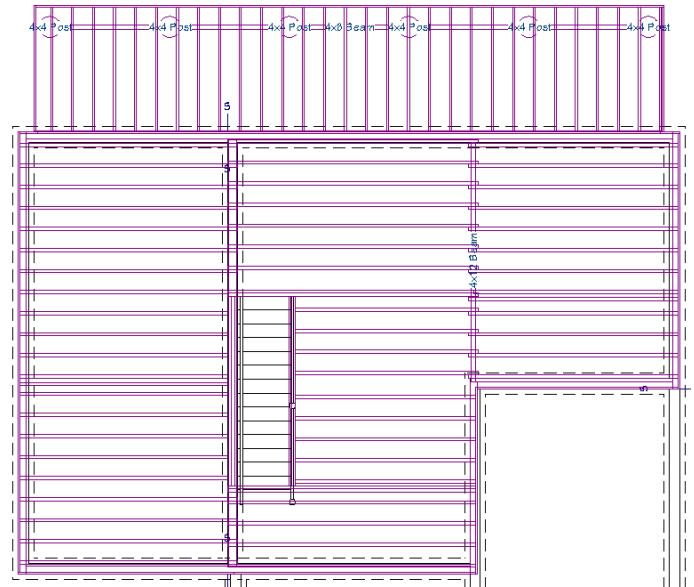
Electrical Objects

- Default Settings> Electrical
 - Outlet
 - Switch
 - **Switch (decorator)**
- Use **Connect Electrical** lines to connect switches to specific electrical fixtures.



Framing

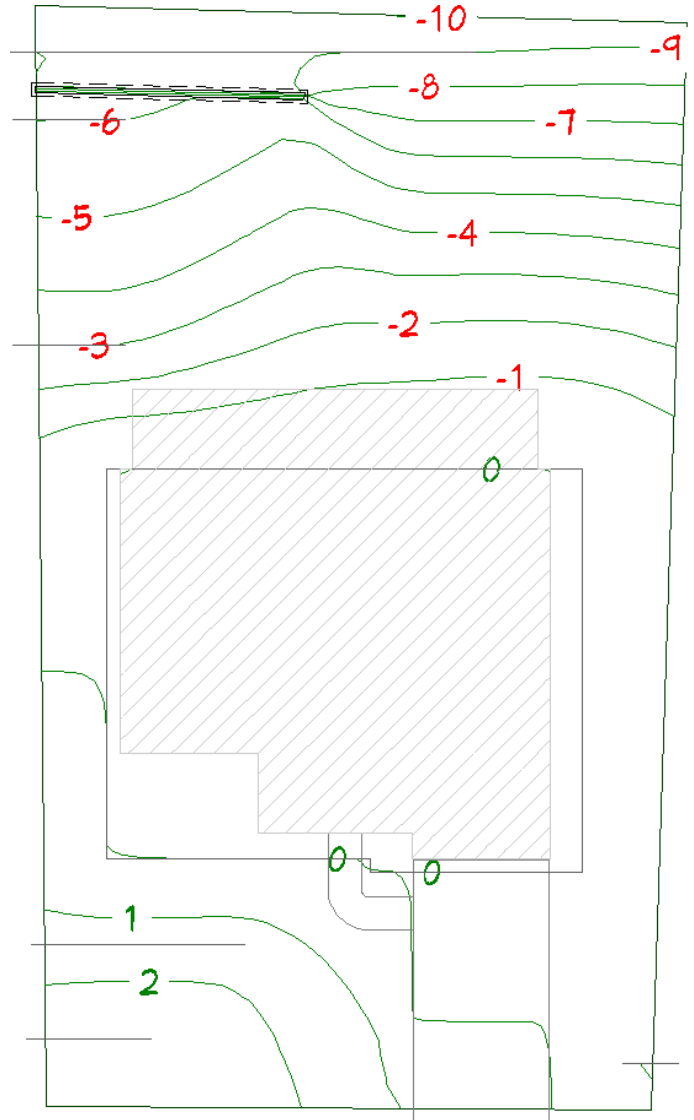
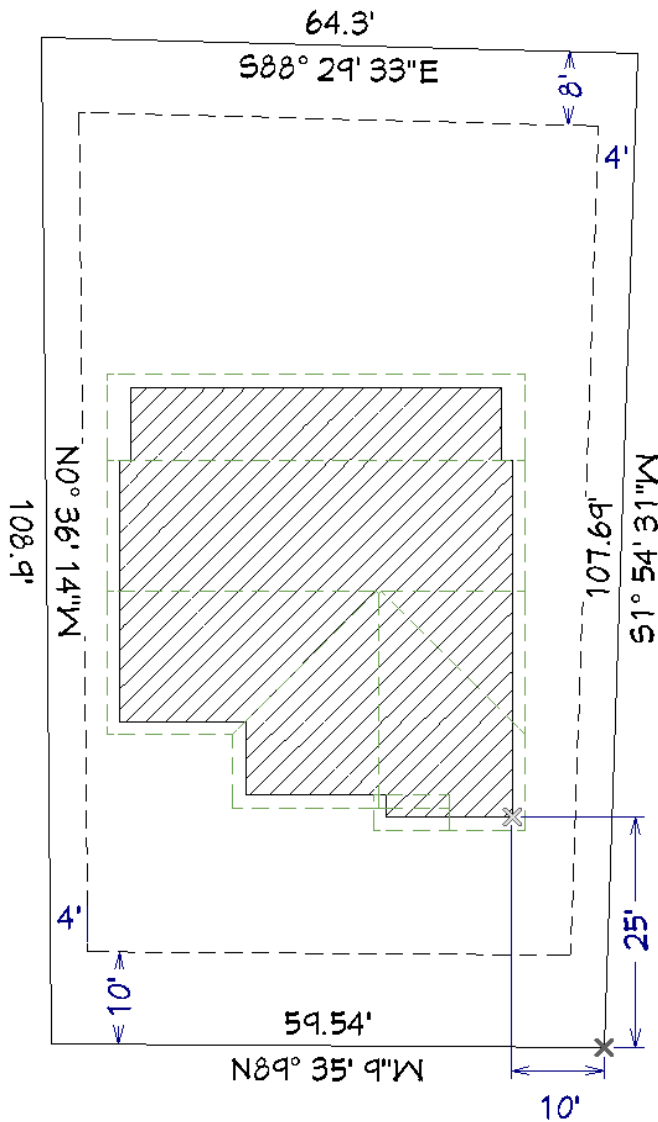
- Framing, Floor Plan View
 - Framing, Floor Layer Set
- Build> Framing> Build Framing...
 - Foundation, 1st, 2nd...
 - Ceiling Above / Subfloor for
 - Wall
 - Roof
- Floor 0
 - Set Foundation Wall as Bearing Wall
 - Add Floor/Ceiling Beam
- Tools> Plan Views> Save Plan View As...
 - Framing, Floor 0
 - Floor: Foundation
 - Framing, Floor 1
 - Floor: 1st Floor
- Floor 1
 - Set walls as Bearing walls where needed.
- Manually modify as needed.
- Use Framing Reference Marker to set where floor and ceiling On Center spacing begins.



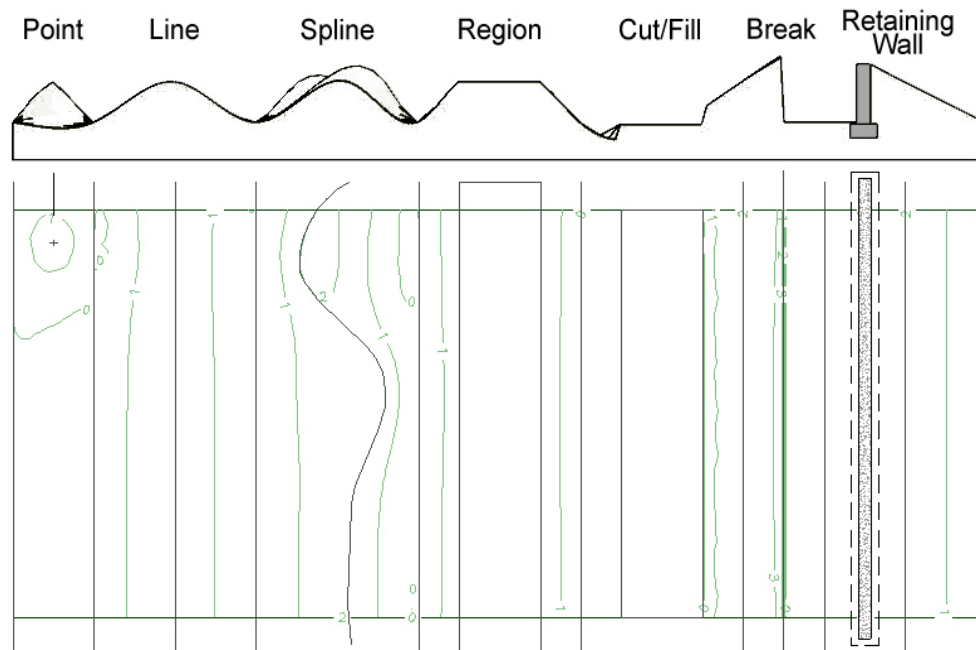
Terrain

Site Plans

Site plan data can be imported from AutoCAD (.DWG, .DXF) files, terrain data (.TXT, .CSV, .PRN, .XYZ) files or GPS (.GPX) files. It can also be manually entered by using the CAD> Lines> Input Line and CAD> Arcs> Input Arc tools.



Terrain Elevation



Elevation Points contain elevation data for a single point in the terrain model. Because it plots only a single coordinate point on the plan it typically takes many points to make an accurate approximation of your site.

Elevation Lines plot terrain elevation at a constant height along a line. Elevation lines can be connected to create a polyline with many straight sections.

Elevation Splines can be used to form complex curves and shapes. Like elevation lines, elevation splines contain elevation data along a constant elevation along the curved path.

Elevation Regions contain elevation data for an enclosed region and is ideal for creating a flat surface in your terrain.

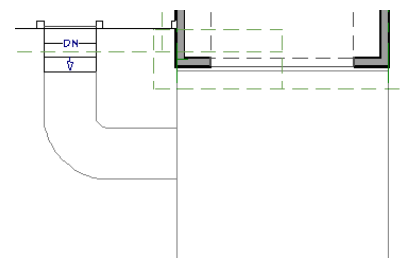
Cut/Fill creates a level area by cutting from one side and filling the other, based on the height at the center of the drawn region.

Terrain Break creates a division along the terrain surface; elevation data on one side of the terrain break does not affect the terrain generation on the other side, allowing you to create immediate drops in terrain.

Terrain Retaining Wall work the same as a Terrain Break while also drawing a retaining wall.

Roads, Sidewalks, & Driveways

Standard road, driveway and sidewalk objects are “path” objects, meaning they are drawn as a center line, and the object’s width is extended out on either side to a distance specified in Default Settings> Roads, Sidewalks and Driveways. They can also be drawn as Spline objects or Polyline objects, making them quite versatile.



Layout

Layout Templates

Creating a default Layout Template file will save time on future projects; setting up a default layout file to have the typical pages you'll need, your company name and logo, etc., will make finalizing projects much more streamlined.

It is important to note that layout files have Template pages that determine how the rest of the pages appear. Page 0 is dedicated for the default template page, meaning that anything that exists on Page 0 will be visible, but not actually exist, on all pages that are using the default template page.

Title Blocks and Borders

A Layout's Title Block and Border are simply CAD Line/Polyline and Text objects and can be easily modified. There is also a large number of global text macros that can be used to automatically display data. These macros can be placed on the template page, but report information based on the page being shown, a common example is automatic page numbering without needing a text box manually added to every page.

Sending Views to Layout

When views are sent to the layout, a Layout Box object is created on the layout page specified. This Layout Box object is a dynamically linked view back to the plan and as such, any changes made on the plan will be reflected on the layout. Layout Boxes record the views active defaults (Annotation Set), Layer Set, Reference Layer Set if used, Floor, and Zoom and Pan data. Since Saved Plan Views easily control all of these options, it is recommended to create Saved Plan Views for each view you know you will be sending to layout.

