
SmartBuild Details Tab Definitions

The purpose of this document is to provide SmartBuild users with specific information about the purpose and options available for each field on the Details tab of SmartBuild. These definitions are provided in the same order they are presented within the interface. If you would like to skip to a specific category, you can click on it within the alphabetized list immediately below.

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Bays

Use Bay Spacing – Bay Spacing can be used to define the distance between posts, and any rafters and trusses they may carry, on all eave walls. If this checkbox is enabled, posts and their trusses will be locked in place, and can only be moved within the application via the Bay Spacing field. (As opposed to being defined via the Eave Spacing field under Wall Framing.)

Bay Spacing – Use this drop-down list to select the spacing between posts for eave walls. Values are range from 2' to 30'.

Bay Placement – This drop-down list defines the location of the Bay Placement starts, relative to your building. Options include: Front, Back and Custom. The Custom option allows you to define a specific length for each separate bay section.

Foundation

In SmartBuild, “Foundation” refers to all materials that are located at the very bottom of the construction, in direct contact with the soil, and act to transfer loads safely from the building to the ground.

Type – The foundation Type drop-down list is used to define the kind of foundation to be installed. The options include: Post Hole, Stem Wall, Thick Edge Slab or None.

Depth – This field defines the foundation depth *below grade*. The value entered must be in decimal feet.

Post Offset – The Post Offset field is used to define the vertical offset of the post bottom, relative to the bottom of the foundation. The value entered must be in decimal feet.

Width – The total Width of the building’s foundation, entered in decimal feet.

Footing Depth – This field is used to define the depth of the spread-footing below grade, entered in decimal feet.

Footing Width – The width of the spread-footing below grade, in decimal feet.

Fastener – Use this drop-down list to select the specific part to be used to fasten posts to the foundation.

Base – Use this drop-down list to select the specific material to be used in the foundation’s construction.

Uplift – Use this drop-down list to select the material to be attached to the bottom of a post in order to resist wind forces and keep the post embedded.

Advanced Post Hole Settings – When this checkbox is enabled, scores of other post settings are enabled for your use. Advanced Post Hole Settings lie beyond the scope of this introductory document.

Slab

Slab Depth – Enter the desired depth for your building’s slab in decimal feet.

Slab Offset – Using decimal feet, enter the desired offset down from grade to the bottom of the slab.

Wall Framing

Wall Framing – Use this drop-down list to select whether to use Post Framing or Stud Framing for the current job.

Interior Wall Framing – Select the type of framing to be used on interior walls. The options include: Match Exterior, Post Frame and Stud Frame. Match Exterior is the default value.

Gable Wall Style – Use this drop-down list to select the type of framing to be used for gable walls. Options include: Balloon Framed, Gable Truss, Gable Truss (Short Post), Inset Gable, and Inset Gable (Short Post).

Post Material – Use the drop-down list to select the specific post material to be used for framing walls.

Open Wall Post Material – Use the drop-down list to select the specific material to be used for posts supporting open walls.

Keep Open Wall Gable Posts – When this checkbox is enabled, posts on open gable walls will be preserved.

Post Margin – Using decimal feet, enter the desired length of material to be added automatically to each post.

Eave Post Spacing – Use this drop-down list to select the distance between eave posts. NOTE: If you have enabled Bay Spacing (under Bays), then this field will be disabled, and you must use Bay spacing to define post placement for your eave walls. Values range from 8’ to 20’.

Eave Post Placement – Use the drop-down list to select the starting point for eave-post placement, relative to your building. The options include: Front, Back, Centered, Right, Even and Custom.

Gable Post Spacing – Use the drop-down list to select the distance between gable posts. Values range from 8’ to 60’.

Gable Post Placement – Use the drop-down list to select the starting point for gable-post placement, relative to your building. The options are: *Left, Right, Peak, Centered, Even* and *Custom*.

Shed Post Spacing – Use the drop-down list to define the spacing between posts for an attached building with a shed roof. Values range from 2' to 16'.

Shed Post Placement – Use the drop-down list to identify the starting point for shed-post placement, relative to your building. The options include: *Left, Right, Centered, Even* and *Custom*.

Corner Post Placement – Use the drop-down list to choose whether Corner Posts are to be used for either Eave Walls or Gable Walls of your building.

Corner Post Material – Use the drop-down list to select the specific material to be used for all corner posts on this building.

Truss Carrier

Truss Carrier Style – Use the drop-down list to select the category of truss carrier to be used on this building. Options include: *Single, Double, Triple, Quadruple* and *Use Top Girt*.

Truss Carrier Material – Use this drop-down list to select the specific material to be used as truss carriers. NOTE: if *Top Girt* has been selected as your *Truss Carrier Style*, this field will be disabled.

Truss Carrier Length Overrides – This field is used to define the part lengths to be use when splitting truss carriers. You can enter a single value, or multiple values separated by commas. When this field is left blank, the default values defined by your System Administrator will be used. NOTE: if *Top Girt* has been selected as your *Truss Carrier Style*, this field will be disabled.

Per Bay Sizing – Enabling this checkbox will allow you to define different truss carriers for each bay.

Top Girt Material – Use the drop-down list to select the specific material to be used for all top girts.

Top Girt Length Overrides – In decimal feet, enter the part lengths to use when splitting top girts. When this field is left blank, the default values defined by your System Administrator will be used.

Wall Girt Framing

Girt Style – Use the drop-down list to select the specific category of girts to be used. Options include: *Standard, Commercial* and *Bypass*. NOTE: The selection made here will filter the materials presented in related fields.

Offset Ply Posts – Only applies when standard girts are used. Posts will have a single-ply offset 1 ½" to the outside of the building, which will cut the girts and other horizontal exterior wall framing accordingly.

Girt Material – Use the drop-down list to select the specific material to be used for wall girts.

Girt Spacing – Use the drop-down list to define the distance between girts. Values range from 6" to 12'.

Girt Length Overrides – This field is used to define the part lengths to be used when splitting girts. You can enter a single value, or multiple values separated by commas. When this field is left blank, the default values defined by your System Administrator will be used.

Girt Space Evenly – When this checkbox is enabled, girts will be spaced evenly, at a maximum of the defined Girt Spacing.

Stagger Girts – When this checkbox is enabled, girt splits will be staggered, rather than aligned on a single column.

Wainscot Girt – Use this drop-down list to select the specific material to be used for wainscot girts.

Wainscot Girt Backer – Use this drop-down list to select the specific material to be used for backing girts.

Skip Girts Below Wainscot – When this checkbox is enabled, on-center girts below the wainscot will not be included in your building.

Skirt Boards

Skirt Board Material – Use this drop-down list to select the specific material to be used for all skirt boards.

Skirt Board Length Overrides – Use this field to define the part lengths to use when splitting skirt boards. You can enter a single value, or multiple values separated by commas. When this field is left blank, the default values defined by your System Administrator will be used.

Rows of Skirt Boards – Enter a whole number to indicate the number of skirt boards to be stacked, starting from the bottom of the wall.

Skirt Board Alignment – Use the drop-down list to select whether skirt boards are to be aligned at the Bottom of the wall or the Top.

Skirt Board Offset – Enter the distance from the grade line to the bottom of the skirt board edge, as specified in the *Skirt Board Alignment* field above.

Cut Skirt Board at Walkdoors – Use this drop-down list to indicate whether skirt boards will be cut at all walk doors. Options include: *Auto*, *Always* and *Never*.

Roof Framing

Roof Framing Style – Use this drop-down list to select whether trusses or rafters will be used to frame this roof.

Truss Special – Use this drop-down list to indicate any “special” trusses required for this job. Options include: *Flat*, *Scissor*, *Attic*, *Parallel Chord Truss*.

Match Truss Heel Height – When this checkbox is enabled, the heel height will be set to that of the selected truss on either side. Enabling this checkbox disables the *Truss Heel Height* field below it.

Truss Heel Height – Match the desired distance from each roof truss’s top chord to the underside of each bottom chord, as shown in Figure 1 at right.

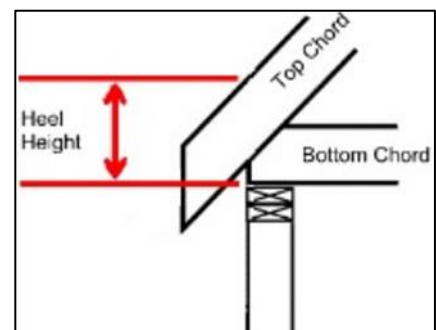


Figure 1: Heel Height

PCT Depth – This field is used to defined the depth of parallel chord trusses, as measured from the top of top cord to the bottom of bottom cord. Parallel Chord Truss must be selected in the *Truss Special* field, or else this field will be disabled.

Use Standard Trusses for Gables – If this checkbox is checked, standard trusses will be used for all gable walls.

Drop Gables w/ Flush Purlins – When this checkbox is enabled, SmartBuild will drop the top chord of end trusses, in order to accommodate the use of flush purlins.

Truss Spacing – Use this drop-down list to define the spacing between trusses. values range from 1’4” to 12’. NOTE: This field is disabled if Bay Spacing is being used.

Truss Placement – This drop-down list is used to define truss placement relative to the building. The options are: Front, Back, Centered, Even, and Custom. The Custom option allows you to define a specific length for each separate bay section.

Overhang Style – Use this drop-down list to select the type of overhang to be used. Options include: Cantilever, Truss Tails and Outrigger.

Double Truss – When this checkbox is checked, two trusses will be placed at each truss location.

Truss Block Style – Use this drop-down list to specify whether to install Single or Double truss blocks at each truss location.

Truss Block Material – Use this drop-down list to identify the specific material to be used to connect trusses to headers.

Eave Sub Fascia Material – Use this drop-down list to specify the material to be used for attaching fascia at the end of overhangs.

Eave Sub Fascia Length Overrides – The part length to use when splitting eave sub fascia. When this field is left blank, the default values defined by your System Administrator will be used.

Gable Sub Fascia Material – Use this drop-down list to identify the specific material to be used for attaching fascia at gable ends.

Gable Sub Fascia Length Overrides – The part length to use when splitting gable sub fascia. You can enter a single value, or multiple values separated by commas. When this field is left blank, the default values defined by your System Administrator will be used.

Purlin Framing

Purlin Material – Use this drop-down list to identify the specific material to be used for all purlins.

Purlin Type – Use this drop-down list to define the alignment of purlins. Options include: Flat, On Edge and Flush.

Purlin Spacing – Use this drop-down list to specify the spacing between purlins. Values range from 1’ to 6’.

Purlin Space Evenly – When this checkbox is checked, all purlins will be spaced evenly, at a maximum of the *Purlin Spacing* defined in the filed above.

Purlin Length Overrides – Use this field to define the part length(s) to use when splitting purlins. You can enter a single value, or multiple values separated by commas. When this field is left blank, the default values defined by your System Administrator will be used.

Overlap Purlins – When this checkbox is checked, purlins will be offset and overlapped at splits.

Stagger Purlins – When this checkbox is checked, purlin splits will be staggered, rather than aligned in a row.

Rafter Framing


Rafter Material – Use this drop-down list to select the specific material to be used for rafters.

Rafter Length Overrides – Use this field to define the part length(s) to be used when consolidating rafters. When this field is left blank, the default values defined by your System Administrator will be used.

Double Rafter – When this checkbox is checked, two rafters will be placed at each rafter location.

End Rafter Material – Use the drop-down list to select the desired materials for your rafter ends.

Rafter Spacing – Use this drop-down list to specify the distance between rafters. Values range from 1' to 12'.

Rafter Placement – Use this drop-down list to specify the placement of rafters relative to . Options include: Front, Back, Centered, Even, Left, Right and Custom.

Rafter Height Above Plate – Use this field to specify the distance from the top of the rafter to the top of the truss carrier.

Hip Rafter – Use this drop-down list to identify the specific material to be used for all hip rafters.

Hip Rafter Plies – Use this drop-down list to specify whether rafters are to be one or two ply.

Ridge Board – Use this drop-down list to identify the specific material to be used for your ridge boards.

Ridge Board Plies – Use this field to specify the number of plies to be used for all ridge boards. Values range from one (1) to three (3).

Roof Ledger Material – Use this drop-down list to identify the specific material to be used for connecting your roof to walls.

Roof Ledger Length Overrides – The part length to use when splitting roof ledgers. When this field is left blank, the default values defined by your System Administrator will be used.

Roof Ledger Offset – Enter the distance to raise the roof ledger, in order to allow for the fastening of sheathing.

Rafter Bond Plate Material – Use this drop-down list to identify the specific material to be used for all rafter bond plates.

Rafter Bond Plate Length Overrides – The part length to be used when splitting rafter bond plates. When this field is left blank, the default values defined by your System Administrator will be used.

Ceiling Framing

Ceiling Joist Space Evenly – When this checkbox is checked, all ceiling joists will be spaced evenly throughout the building.

Interior Purlin Material – Use this drop-down list to identify the specific material to be used for all interior purlins.

Interior Purlin Type – Use this drop-down list to specify the category of interior purlins to be used. Options include: `Flat`, `On Edge` and `Flush`.

Interior Purlin Spacing – Use this drop-down list to specify the spacing between interior purlins. The options are 2', 3' and 4'.

Interior Purlin Space Evenly – When this checkbox is checked, all interior purlins will be spaced evenly, using the Interior Purlin Spacing value defined in the field above.

Interior Purlin Length Overrides – Use this field to enter the part length to be used when splitting interior purlins. When this field is left blank, the default values defined by your System Administrator will be used.

Overlap Interior Purlins – When this checkbox is checked, interior purlins will be offset and overlapped at splits.

Stagger Interior Purlins – When this checkbox is checked, interior purlin splits will be staggered, rather than aligned in a row.

Floor Framing

Joist Material – Use this drop-down list to identify the specific material to be used for all joists.

Joist Spacing – Use this drop-down list to define the distance between joists. Values include 16" 24" and 48".

Joist Space Evenly – When this checkbox is checked, joists will be spaced evenly at a maximum of the distance defined in the *Joist Spacing* field above.

Joist Length Overrides – This field is used to define the part lengths to be used when splitting joists. You can enter a single value, or multiple values separated by commas. When this field is left blank, the default values defined by your System Administrator will be used.

Perpendicular Rim Joist Material – Use this drop-down list to identify the specific material to be used for all perpendicular rim joists.

Perpendicular Rim Joist Length Overrides This field is used to define the part lengths to be used when splitting perpendicular rim joists. You can enter a single value, or multiple values separated by commas. When this field is left blank, the default values defined by your System Administrator will be used.

Parallel Rim Joist Material – Use this drop-down list to identify the specific material to be used for all parallel rim joists.

Parallel Rim Joist Length Overrides – This field is used to define the part lengths to be used when splitting parallel rim joists. You can enter a single value, or multiple values separated by commas. When this field is left blank, the default values defined by your System Administrator will be used.

Skid Material – Use this drop-down list to identify the specific material to be used for this building's skids.

Skid Offset – Enter the distance from the edge of the wall to the center of the skid.

Skid Spacing – Enter the maximum on-center distance between the skids, starting from the center of the floor, measured along the skids.

Skid Space Evenly – If checked, the skids will be spaced evenly at a maximum of the input spacing.

Skid Length Overrides – The part length to use when splitting skids. When this field is left blank, the default values defined by your System Administrator will be used.