



# SmartBuild Systems

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## Getting Started

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## Table of Contents

Rolling out SmartBuild – Who, What and When .....	5
Getting Started - Overview .....	6
We're here to help.....	6
Additional Resources .....	6
A Note about Terminology.....	7
Default Database and File Templates (CSV or XLSX files) .....	7
Step 1: Define Colors.....	8
Create a New Color .....	8
Upload Color List.....	10
Changes to Color list .....	11
Step 2: Setup Material Databases.....	12
Major Types of Materials (Base / Ancillary).....	12
Categories of Materials.....	12
Exporting Material Lists from Existing Software (Exported Source List/File) .....	13
Data Needed for Each Category (except Trusses).....	13
Required Data Needed for Every Category.....	13
Additional Data Needed for Select Categories .....	14
Format of Material Upload File (except Trusses).....	16
Preparing Material List for Upload (except Trusses) .....	18
SKUs .....	18
Pricing Data during Material Upload: .....	19
Adding Framing Material to the Material Upload File.....	20
Adding Sheathing to the Material Upload File.....	22
Adding Trim to the Material Upload File .....	24
Adding Fasteners to the Material Upload File .....	26
Adding Doors and Windows to the Material Upload File .....	27
Adding Cupolas to the Material Upload File.....	28

Adding items from the Remaining Categories to the Material Upload File.....	29
Adding/Uploading Material (except Trusses) .....	30
Uploading Material (File Upload).....	30
Uploading Material (Guided Upload).....	32
Adding Material one item at a time.....	35
Truss Data .....	38
Adding Individual Trusses .....	38
Uploading Truss Data .....	40
Pricing Data .....	42
Change Pricing Data directly on SmartBuild Window.....	42
Change Pricing Data by Using the EDIT MARKUP Option .....	43
Change Pricing Data by Uploading a File .....	43
Payment Schedule: .....	45
Material Setup Completion:.....	46
Step 3: Define Framing Rules .....	47
Adding products to the material usages on the Framing Rules page.....	47
Step 4: Configure Packages.....	54
Introduction: .....	54
Adding a Package: .....	54
Adding Materials to a Package: .....	58
Note on Materials .....	60
Door and Window Packages .....	69
Using Excel Functions in SmartBuild Package Calculations .....	71
Recommendations (do's and don'ts):.....	74
Conclusion:.....	75
Step 5: Setup Model Templates Library.....	76
Step 6: Customize Outputs .....	77
SmartBuild Outputs.....	77

SmartBuild Output Types..... 79

# Welcome to SmartBuild!

## Rolling out SmartBuild – Who, What and When

Thank you for making the decision to go with SmartBuild. This document will serve as a guide that outlines what needs to be done and how to do it. It is important that the right people in your organization are selected for accomplishing the various tasks needed.

One person could potentially fill the requirements needed to implement SmartBuild. But, usually it requires an internal team and consultation with SmartBuild's technical team. With a strong push and the right team in place, SmartBuild should produce comparable quote outputs in less than 2 weeks.

SmartBuild integration will require the following ingredients and effort from your organization to roll out efficiently:

- Project Management (~5-10 hours)
  - An organized, technically skilled and knowledgeable person to push the project is highly desirable. The job of the Project Manager is to identify tasks, assign to the right individual, provide resources, and track progress.
- Pricing and Accounting (~15-25 hours),
  - SmartBuild requires an Excel file of the materials and pricing used to quote and order barns. Usually an IT individual who is familiar with the accounting system is tasked with downloading an inventory database which is modified and then loaded up to SmartBuild. Pricing is similarly uploaded. When properly implemented, this process will result in "single button click" where a dealer creates a job, clicks to make it an order, and it seamlessly loads into your accounting software.
- Field Practices and Model (~15-20)
  - It is important to involve a field expert with technical skills or a combination of individuals to integrate field practices into the 3-d model and electronic outputs. This individual will be tasked with creating framing standards and "packages" which automate the takeoff of materials not modeled in SmartBuild.

SmartBuild will require some level of sustained energy to maintain, manage and use the system to its fullest. With an initial push SmartBuild will quickly become a part of your organization and prove to be a strong technology partner.

To reiterate, it is feasible to implement SmartBuild within 2 weeks if the right persons are assigned to the required tasks and given time to accomplish those tasks. The following document shows in great detail what needs to be done.

## Getting Started - Overview

The purpose of this guide is to provide you with step-by-step instructions on how to setup your SmartBuild software. This guide is designed to get you up and running as quickly and efficiently as possible. The more accurate and detailed the information you provide during this setup process, the more accurate your quotes, diagrams and other outputs will be.

There are six specific tasks to be accomplished during the setup process:

- STEP 1:** *Define Sheathing Colors* – Define the colors to be made available for all your steel sheathing and trim materials.
- STEP 2:** *Setup Up Material Databases* – Import detailed information about all of your building materials into the SmartBuild materials database.
- STEP 3:** *Define Framing Rules* – Assign one or more usages for each of the different materials in your SmartBuild materials database.
- STEP 4:** *Configure Packages* – Create associations between materials used in conjunction with one another to fulfill a single function. (For example: a door, threshold and hardware.)
- STEP 5:** *Setup Model Templates Library* – Create a library of models to use as templates when starting a new design.
- STEP 6:** *Customize Outputs* – Customize your quotes, material takeoffs, 2-D and 3-D diagrams, and other outputs to display your company's logo and desired content.

### We're here to help...

Every company is different. A single guide, such as this, cannot take into account all of the variables users may encounter when setting up their software. *If you have any questions during the setup process we are here to help!* There are a variety of ways to contact our help desk:

- You can reach the support desk by emailing: [support@keymark.com](mailto:support@keymark.com)
- Or create a support ticket on our website: [Support.smartbuildsystems.com](https://support.smartbuildsystems.com)

### Additional Resources

In addition to this guide, we have other resources to help you learn more about the SmartBuild System. We have training videos, weekly live webinars, recordings of previous webinars, and release notes.

Check out our collection of SmartBuild **training videos**, on our YouTube channel.

[https://www.youtube.com/playlist?list=PLMRs4X1scK0wZcO5eIKp0LV\\_LzAvWgUs1](https://www.youtube.com/playlist?list=PLMRs4X1scK0wZcO5eIKp0LV_LzAvWgUs1)

Our live webinars are scheduled on a regular basis. You should receive an invitation email announcing the topic, and the link to register for the webinar. If you didn't receive a webinar invitation email, go to the registration page on our website to find out about the next webinar, and register.

<https://smartbuildsystems.com/webinar-landing-page/>

Check out the Resource page of our website to watch **recordings of previous webinars**.

<https://smartbuildsystems.com/resources/>

We are currently releasing new versions of SmartBuild every two weeks. Check out the News & Blog page of our website to access previous **release notes**.

<https://smartbuildsystems.com/news/>

## A Note about Terminology

Within the industry, and sometimes within a single company, multiple names are sometimes used to describe a single type of object. For example, the terms “header” and “truss carrier” are often used interchangeably, as well as the terms “post” and “column.” When it comes to naming the materials to be imported into your custom version of the SmartBuild materials database, we ask that users follow the naming conventions outlined within this document. This will ensure that all the 2D and 3D renderings, material takeoffs and quotes generated by SmartBuild are accurate. Rest assured that, once your materials have been entered into the database, SmartBuild provides all of the tools needed to name your materials in any way you choose, both within the system displays and in your outputs!

## Default Database and File Templates (CSV or XLSX files)

Our support department will create your company database in SmartBuild prior to you customizing/using the data. We will populate the colors and material databases with some default data.

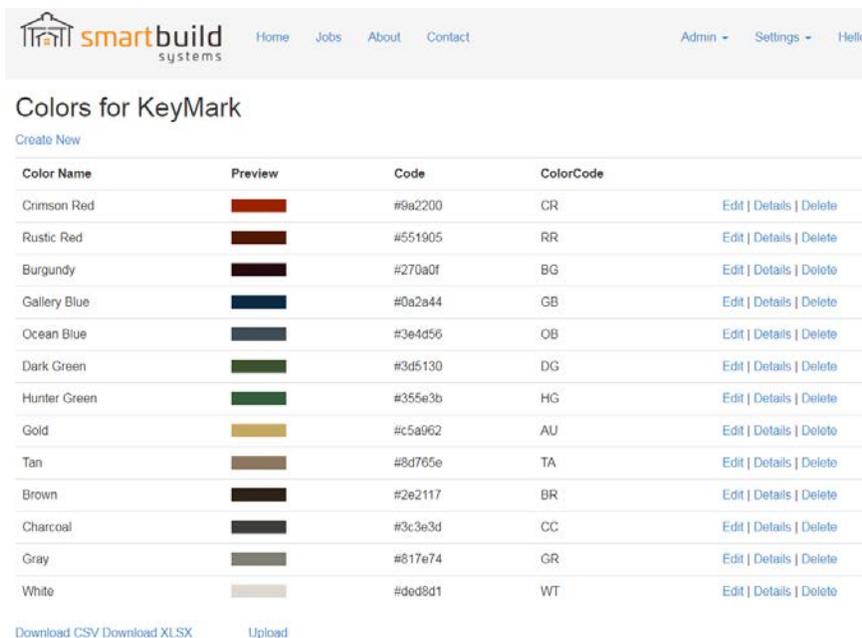
There are a couple of reasons we do this. SmartBuild requires data to actually use the software. Having this default data, will allow your company to use the software prior to completing the creation of your actual database in the software.

Secondly, SmartBuild can only recognize data in a particular format. To help get the format correct, we have detailed descriptions in this document. However sometimes it’s more helpful to have an actual template with which you can start the process of creating your actual database. SmartBuild gives you the option of downloading a file you can use as a template. This default data will also be downloaded, giving you an even better sample of what you need to create to populate your database.

You can choose between CSV or XLSX format for the upload and download files. When downloading a file, SmartBuild gives you the option of which format you want for the download file. When uploading a file, select either a CSV or XLSX file. When uploading an XLSX file, only the first worksheet will be uploaded (even if there are multiple worksheets in the file).

## Step 1: Define Colors

The first step in setting up SmartBuild is to define the palette of colors your company offers for its steel sheathing, trim and fasteners. From the SmartBuild home page, click on the SETTINGS drop down, and then select COLORS. This will open the Colors window (below) that displays the set of default colors used by SmartBuild.



Colors for KeyMark

Create New

Color Name	Preview	Code	ColorCode	
Crimson Red		#9e2200	CR	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Rustic Red		#551905	RR	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Burgundy		#270a0f	BG	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Gallery Blue		#0e2a44	GB	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Ocean Blue		#3e4d56	OB	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Dark Green		#3d5130	DG	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Hunter Green		#355e3b	HG	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Gold		#c5a962	AU	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Tan		#8d765e	TA	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Brown		#2e2117	BR	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Charcoal		#3c3e3d	CC	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Gray		#817e74	GR	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
White		#ded8d1	WT	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>

Download CSV Download XLSX Upload

Within the Colors window, there are five basic functions you can perform.

1. Create New – Add a completely new color to your palette.
2. Edit – Change the actual color, the Color Code, or the Color ID associated with a color that is currently in the list.
3. Delete – Delete a specific color, and all its associated properties, from your color palette.
4. Upload – This function allows you to create the color list from an uploaded CSV or XLSX file.
5. Download – Download the current color list into a CSV or XLSX file.

The DELETE and EDIT functions are fairly simple and straight forward, so we will not cover their use them here. For the moment, we will turn to the subject of creating an entirely new color to add to your custom color palette.

### Create a New Color

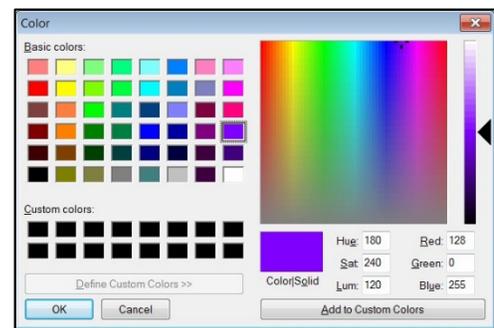
To create an entirely new color, in the SmartBuild Colors window, click on CREATE NEW to open the CREATE COLOR box.



The screenshot shows a web form titled "Create Color". It has three input fields: "Color Name", "Code", and "ColorCode". The "Code" field is currently filled with a black color swatch. Below the fields is a "Create" button and a "Back to List" link.

Creating a new color requires you to enter values into three fields, COLOR NAME, CODE, and COLORCODE. This process is described below:

1. COLOR NAME – Enter the specific name your company uses for this color. (Note: This field is not case sensitive.)
2. CODE – The process of entering a value into the Code field varies, depending upon the internet browser program you are using. To enter a value into the CODE field using *Google Chrome*, click anywhere within the CODE field to open the COLOR dialog box shown at right. If you know the specific values for your color (**Red, Green, Blue, Hue, Saturation, and Luminosity**), you can enter them in the fields in the lower right-hand corner of this dialog box.



If you do not know your color's specific values, start by clicking on the BASIC COLOR that is closest to the new color you wish to define. You can then use the slide bar on the right side of the dialog box to fine-tune the color's values. When you are done, click on the OK button, and the COLORS dialog box will close.

If you are using *Microsoft Internet Explorer*, you must type in the **hexadecimal code** for your new color. (NOTE: THIS FIELD IS CASE SENSITIVE!) If you don't know the hex code for your new color, there are a variety of "color picker" apps on in the internet that will scan a color and give you this code. If you still need help, contact the SmartBuild Help Desk and we can look it up for you.

NOTE: If you are using a browser other than *Internet Explorer* or *Google Chrome*, and you have any questions about how to enter a value into the CODE field of this dialog box, please contact the SmartBuild Help Desk.

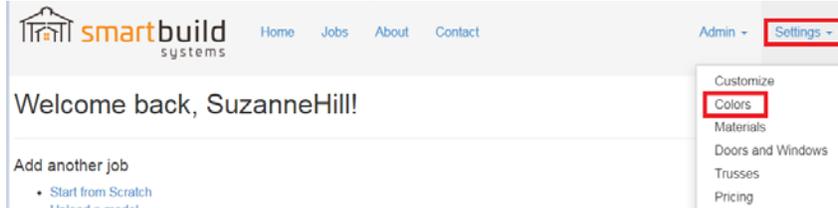
3. COLOR CODE – The value entered should relate back to the SKU numbers of your steel sheathing, trim and fasteners. If your current SKUs have a Color Code embedded in them, then you should use that same code. When creating your material lists, these same codes will be used to generate unique SmartBuild SKU's.

## Upload Color List

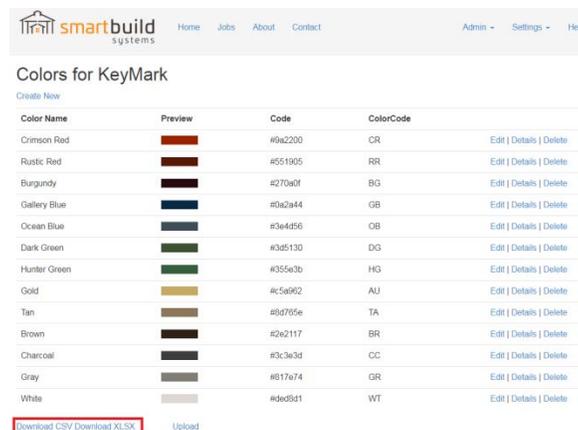
Instead of creating individual color entries as previously described, a CSV or XLSX file with all available colors can be created which can then be uploaded to SmartBuild. To start this process, you can download a CSV or XLSX file from SmartBuild to be used as a template to create this new Upload file.

### Creating COLOR File Template:

From the SmartBuild Home Page select COLORS from the SETTINGS drop down menu.



From the COLORS page, select the DOWNLOAD (CSV or XLSX) option.



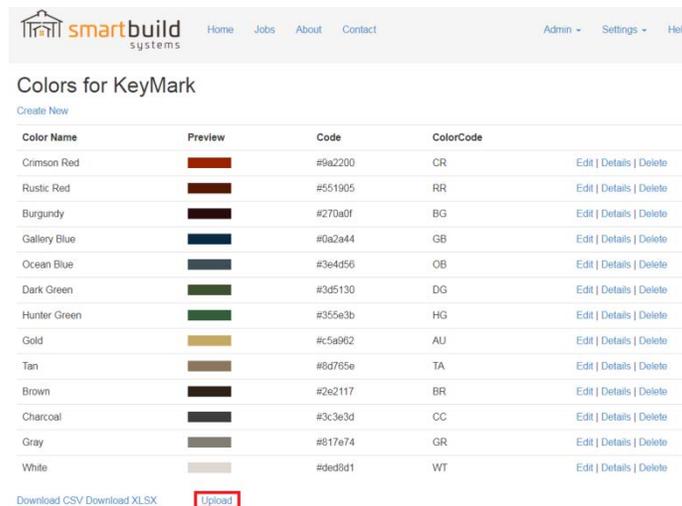
A file named “Colors-CompanyName” will be saved in your DOWNLOADS folder. If the database had any default data in it, you should delete this data from the file template, AND delete the entries individually in SmartBuild. The upload process will NOT delete an entry in the SmartBuild database. Below is the format of this file.

A	B	C
Color Name	Code	ColorCode
Crimson Red	#9a2200	CR
Rustic Red	#551905	RR
Burgundy	#270a0f	BG
Gallery Blue	#0a2a44	GB
Ocean Blue	#3e4d56	OB
Dark Green	#3d5130	DG
Hunter Green	#355e3b	HG
Gold	#c5a962	AU

In this process, the hex code for the color is required, including the # symbol. The Color Name and Color Code are the same as defined above.

The color list displayed in the SmartBuild Colors window will be in the same order as the list uploaded, so you may want to consider an appropriate order of the color entries then put the CSV or XLSX upload list in that order.

Once the upload file is completed, navigate to the SmartBuild Colors window (via the SETTINGS drop down) and select UPLOAD (at the bottom of the screen).



Color Name	Preview	Code	ColorCode	
Crimson Red		#9a2200	CR	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Rustic Red		#551905	RR	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Burgundy		#270a0f	BG	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Gallery Blue		#0a2a44	GB	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Ocean Blue		#3e4d56	OB	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Dark Green		#3d5130	DG	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Hunter Green		#35e3b3	HG	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Gold		#c5a902	AU	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Tan		#8d785e	TA	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Brown		#2e2117	BR	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Charcoal		#3c3e3d	CC	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
Gray		#817e74	GR	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>
White		#ded8d1	WT	<a href="#">Edit</a>   <a href="#">Details</a>   <a href="#">Delete</a>

Download CSV Download XLSX **Upload**

The UPLOAD COLOR window will appear, allowing you to choose the Color CSV or XLSX file (via Windows Explorer) to upload. Once the file is chosen, select UPLOAD.



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### Upload Color CSV for KeyMark

Step 1: Click [here](#) to download the current color CSV file.  
or: Create a csv file with the required columns.

Step 2: Edit the color csv file.  
(The Color Name column is the "key", so if you change it you will get a new color entry.  
You can change the Code or MFCCode to update the values for an existing color.)

Step 3: Upload the color csv file

No file chosen

When the upload is complete, SmartBuild will display the upload status (indicating success or failure of the upload).

## Changes to Color list

After you create the color list, and start uploading/adding material, please be aware that any changes to the color list won't change the material list retroactively. If you change the color list, then you'll need to delete and re-upload any materials that might be affected by that change. For Example, if you change the color code of a particular color, the change to the color page will not propagate throughout the material list. You'll need to delete any affected material and re-add them (either via upload or individually).

## Step 2: Setup Material Databases

### Major Types of Materials (Base / Ancillary)

Before beginning the process of importing information about your materials into the SmartBuild database, it is important to understand how the materials are managed within the system. In SmartBuild, all of your materials fall into one of two major types:

1. **Base Materials** – In SmartBuild, these are the materials that are displayed within the 2D and 3D renderings of your models. They include all materials associated with framing, sheathing, and trim. A model cannot be displayed within the SmartBuild interface until your Base Materials have been added to the materials database.
2. **Ancillary Materials** – These include all materials other than framing, sheathing, and trim. Ancillary Materials include items associated with doors, windows, foundations, hardware, fasteners, connectors, trusses and so on.

### Categories of Materials

Within the two major types of material mentioned above (Base and Ancillary), SmartBuild uses multiple categories to group materials. The different categories used in SmartBuild are listed below. All materials need to be placed into one of these categories.

#### **BASE Material:**

Framing  
Sheathing  
Trim

#### **ANCILLARY Material:**

Walk Door  
Overhead Door  
Slider  
Windows  
Cupola (uploaded to Accessories tab)  
Foundation  
Hardware  
Walk Door Hardware  
Overhead Door Hardware  
Slider Hardware  
Window Hardware  
Cupola Hardware  
Connector  
Fastener  
Labor  
Trusses

SmartBuild can also include your Truss database. Since the truss defining variables are different than any other category, **trusses will be handled separately**. For additional information about Trusses, see paragraph ***Truss Data***.

## Exporting Material Lists from Existing Software (Exported Source List/File)

An important step for gathering material data for SmartBuild is to retrieve any lists from the software currently in use (e.g. Maestro, PostFrameManager, Epicor, Quickbooks, etc). Material lists can usually be exported from existing software (most likely in CSV file format). It's helpful to only include material used with post frame structures. Including other material will clutter your material database. This exported source file/list will be used as the basis for extracting and reformatting the data needed by SmartBuild.

## Data Needed for Each Category (except Trusses)

A basic set of data is required by SmartBuild for every category. Several of the categories require an additional set of data that may be unique to that category. If the required data is missing or invalid, the upload may fail.

### REQUIRED DATA NEEDED FOR EVERY CATEGORY

Below is the list of required data for every category:

**Category** – Category of material, using the spelling required by SmartBuild

**Material/Description** - A brief but informative description of each specific material.

**SKU** – SmartBuild SKU generated with Vendor SKU, and possibly Linear Feet and Color.

**Full SKU** – SmartBuild will generate this SKU.

**Vendor SKU** – (optional) your company's internal SKU / Part # or other ID used to designate this part. This column is not required. However, it can provide a useful link between the SmartBuild SKU and the Vendor SKU used elsewhere.

**Taxable** – Indicator of taxable status (0-nontaxable, 1-taxable)

**Weight** – decimal weight of item, used to calculate the weight of the order so shipping can be estimated.

Category (required)	Material (required)	SKU (required)	Vendor SKU (optional)	Taxable (required)	Weight (required)
Framing	Material in predefined length++	xx.....xx{LF}	xx.....xx	0 or 1	Blank, 0 or 1
Framing	Material by the foot (random)	create new or copy from Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
Sheathing	Material by the foot (random)++	xx.....xx{CC}*	xx.....xx	0 or 1	Blank, 0 or 1
Sheathing	Material in predefined part length++	xx.....xx{LF}{CC}*	xx.....xx	0 or 1	Blank, 0 or 1
Trim	Material in predefined part length++	xx.....xx{LF}{CC}*	xx.....xx	0 or 1	Blank, 0 or 1
Trim	Material by the foot (random) ++	xx.....xx{CC}*	xx.....xx	0 or 1	Blank, 0 or 1
WalkDoor	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
Overhead	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
Slider	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
Window	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
Cupola	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
Foundation	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
Hardware	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
WalkDoorHardwa	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
OverheadHardwa	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
SliderHardware	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
WindowHardware	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
CupolaHardware	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
Connector	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1
Fastener	Material/Description++	xx.....xx{CC}*	xx.....xx	0 or 1	Blank, 0 or 1
Labor	Material/Description	create new or same as Vendor SKU+	xx.....xx	0 or 1	Blank, 0 or 1

## ADDITIONAL DATA NEEDED FOR SELECT CATEGORIES

The category will determine which of the following data is needed for each piece of material:

Dim 1 – definition depends on category

Dim 2 – definition depends on category

Dim 3 – definition depends on category

Part Length – length of part in decimal feet, rounded down to the nearest foot  
(leave blank if not a Base material, or material is sold by the foot)

Color Code – ColorCode from the Color List defined in Step 1

Categories with additional data needs are listed below, along with required fields.

### FRAMING –

Dim 1 – ACTUAL width in decimal inches (e.g. 2x4 has Dim 1 of 1.5)

Dim 2 – ACTUAL depth in decimal inches (e.g. 2x4 has Dim 2 of 3.5)

Part Length – length of part in decimal feet

### SHEATHING –

Dim 1 – Coverage width in decimal inches

Dim 2 – Actual width in decimal inches

Dim 3 – used to show texture in model

(Current options: “standingseam”, “corrugated”, or “agpanel”)

Part Length – length of part in decimal feet (leave blank if material is sold by the foot)

Color Code – ColorCode from the Color List, when applicable

### TRIM –

Dim 1 – Reveal width in decimal inches

Dim 2 – Thickness in decimal inches (if Z trim, use middle bend)

Part Length – length of part in decimal feet (leave blank if material is sold by the foot)

Color Code – ColorCode from the Color List, when applicable

### WINDOW / WALK DOOR / OVERHEAD DOOR / SLIDER

Dim 1 – Opening width in decimal feet

Dim 2 – Opening height in decimal feet

Dim 3 – (Optional) Image used for 3d model (initially leave blank)

### CUPOLA (ACCESSORIES) –

Dim 1 – Length / Width in decimal inches

Dim 2 – Height in decimal inches

Dim 3 – Roof Pitch

### FASTENER –

Color Code – ColorCode from the Color List, when applicable

Below is a layout of the **additional** data needed for each category (except the truss category).

Category (required)	Dim 1	Dim 2	Dim 3	Part Length	Color Code
Framing	ACTUAL Width in inches	ACTUAL Depth in inches	(leave blank)	length in feet	(leave blank)
Framing	ACTUAL Width in inches	ACTUAL Depth in inches	(leave blank)	(leave blank, if sold by the foot)	(leave blank)
Sheathing	Coverage Width in inches	Actual Width in inches	standingseam / corrugated / agpanel	(leave blank, if sold by the foot)	Color Code
Sheathing	Coverage Width in inches	Actual Width in inches	standingseam / corrugated / agpanel	length in feet	Color Code
Trim	Reveal width in inches	Thickness in inches	(leave blank)	length in feet	Color Code
Trim	Reveal width in inches	Thickness in inches	(leave blank)	(leave blank)	Color Code
WalkDoor	Opening Width in feet	Opening Height in feet	OBJ for 3D Model	(leave blank)	(leave blank)
Overhead	Opening Width in feet	Opening Height in feet	OBJ for 3D Model	(leave blank)	(leave blank)
Slider	Opening Width in feet	Opening Height in feet	OBJ for 3D Model	(leave blank)	(leave blank)
Window	Opening Width in feet	Opening Height in feet	OBJ for 3D Model	(leave blank)	(leave blank)
Cupola	Length/Width in inches	Height in inches	roof pitch	(leave blank)	(leave blank)
Foundation	(leave blank)	(leave blank)	(leave blank)	(leave blank)	(leave blank)
Hardware	(leave blank)	(leave blank)	(leave blank)	(leave blank)	(leave blank)
WalkDoorHardwa	(leave blank)	(leave blank)	(leave blank)	(leave blank)	(leave blank)
OverheadHardwa	(leave blank)	(leave blank)	(leave blank)	(leave blank)	(leave blank)
SliderHardware	(leave blank)	(leave blank)	(leave blank)	(leave blank)	(leave blank)
WindowHardware	(leave blank)	(leave blank)	(leave blank)	(leave blank)	(leave blank)
CupolaHardware	(leave blank)	(leave blank)	(leave blank)	(leave blank)	(leave blank)
Connector	(leave blank)	(leave blank)	(leave blank)	(leave blank)	(leave blank)
Fastener	(leave blank)	(leave blank)	(leave blank)	(leave blank)	Color Code
Labor	(leave blank)	(leave blank)	(leave blank)	(leave blank)	(leave blank)

All categories should also have the following pricing data. However, absence of this data will not cause the upload to fail. See the **Pricing Data** paragraph for more information of this data.

Cost - Cost, with/without dollar sign. Leaving blank or 0 are valid choices

Markup – cost to price markup percentage

Price – Price, with/without dollar sign. Leaving blank or 0 are valid choices

## Format of Material Upload File (except Trusses)

SmartBuild requires the upload file be a CSV or XLSX file. You can create either a **single upload file**, with all of your materials, or **multiple upload files**, with each separate file containing a single category of materials. As previously mentioned, you can download a file from SmartBuild to be used as a template for this Upload file.

### Creating the MATERIALS & DOORS/WINDOWS Upload File Template:

From the SmartBuild Home Page select MATERIALS from the SETTINGS dropdown menu.



From the MATERIALS (or DOORS/WINDOWS) page, select the DOWNLOAD option.



A file named "Materials-CompanyName" will be saved in your DOWNLOADS folder. Use this as the template for your upload file. If the database had any default data in it, you should delete this data from the file template, AND delete the entries individually in SmartBuild. The upload process will NOT delete an entry in the SmartBuild database.

Category	SKU	Vendor SKU	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Connector	HANGER01	HANGER01	NAILS PURLIN HANGER						\$10.00	\$20.00	1	0
Cupola	C24	C24	KEY 2' x 2' Square Cupola	24	18	4			\$144.00	\$144.00	1	0
CupolaHardware	WV-BEAR-30	WV-BEAR-30	Weathervane BLACK BEAR 30						\$10.00	\$20.00	1	0
WalkDoor	3068	3068	3'w x 6' 8"h KEY Walk Door	3	6.6667				\$100.00	\$100.00	1	0
Fastener	1.510Hex	1.510Hex	1 1/2" #10 Hex						\$12.00	\$12.00	1	0
Fastener	FAST{CC}	FASTBG	Screws					BG	\$12.00	\$12.00	1	0
Foundation	PCL5	PCL5	KEY 5' PermaColumn						\$12.00	\$12.00	1	0
Framing	LVL12{LF}	LVL1216	KEY 12" LVL	2	12		16		\$30.00	\$33.00	1	32
Framing	210{LF}DL	21010DL	KEY 2x10	1.5	9.25		10		\$6.00	\$6.00	1	20
Framing	212DL	212DL	2x12 (sold by the foot)	1.5	11.25				\$8.00	\$8.40	1	0
Hardware	OSB5848	OSB5848	OSB						\$10.00	\$11.00	1	0
Overhead	100100	100100	10'w x 10'h KEY Overhead	10	10				\$500.00	\$550.00	1	0
OverheadHardware	1165	1165	LiftMaster Model DT-75-11						\$875.00	\$962.50	1	0
Sheathing	CR26{CC}	CR26CR	26 ga Corrugated	36	37.5	standingseam		CR	\$2.05	\$2.26	1	0
Sheathing	CR{LF}{CC}	CR10LFWT	Sheathing by the Sheet	36	37.5	standingseam	10	WT	\$40.00	\$44.00	1	0
Sheathing	CR{LF}{CC}		Sheathing by the Sheet	36	37.5	corrugated	14	*	\$40.00	\$44.00	1	0
Slider	SLIDER -10x10	SLIDER -10x10	10x10 Slider	10	10				\$1,000.00	\$1,100.00	1	0
SliderHardware	BACCENGUIST	BACCENGUIST	CENTER GUIDE & STOP						\$10.00	\$11.00	1	0
Trim	DT10{LF}{CC}	DT1010CR	KEY 10 7/8" Overhead Door Trim	10.875	1.5	0	10	CR	\$5.44	\$5.98	1	0
Trim	FA12{LF}{CC}	FA1210CR	KEY 12" Fascia	12	0	0	10	CR	\$6.00	\$6.60	1	0
Trim	FA3{LF}{CC}	FA310CR	KEY 3" Fascia	3	0	0	10	CR	\$1.50	\$1.65	1	0
Trim	FA3{LF}{CC}		KEY 3" Fascia	3	0	0	10	*	\$1.50	\$1.65	1	0
Trim	PT5{LF}{CC}	PT510CR	KEY 5 1/2" Post Trim	1.5	0	0	10	CR	\$0.75	\$0.83	1	0
Trim	BF{LF}{CC}	BF10CR	KEY Flat Base	1.5	0	0	10	CR	\$0.75	\$0.83	1	0
Trim	BF{CC}	BFCR	KEY Flat Base BY THE FOOT	1.5	0	0		CR	\$0.75	\$0.75	1	0
WalkDoorHardware	LOCK-EZ-2K/K	LOCK-EZ-2K/K	ADVANTAGE-KNOB/KNOB ENTRY						\$10.00	\$20.00	1	0
Window	2040	2040	2'w x 4'h KEY Window	2	4				\$40.00	\$40.00	1	0
WindowHardware	SHUT-15X63-BLK	SHUT-15X63-BLK	SHUTTERS 15X63 VINYL - BLACK						\$10.00	\$20.00	1	0

The columns in the upload file can be in a different order, but the **column headers** must be spelled exactly as in the example below.

Another requirement is that the **category names** be spelled exactly as listed below (please note there aren't any spaces in these category names):

- Framing
- Sheathing
- Trim
- WalkDoor
- OverheadDoor
- Slider
- Window
- Cupola
- Foundation
- Hardware
- WalkDoorHardware
- OverheadDoorHardware
- SliderHardware
- WindowHardware
- CupolaHardware
- Connector
- Fastener
- Labor

Review previous paragraph **Data Needed for Each Category** for definition of which data is needed for each category. If a material is in a category that doesn't require any of these columns of data, the field can be left blank (e.g. for a Foundation item, Dim 1, Dim 2, Dim 3, Part Length and Color Code fields can be left blank).

Category	SKU	Full SKU	Vendor SKU	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Foundation	PCL5	PCL5	PCL5	KEY 5' PermaColumn						\$12.00	\$12.00	1	0
Window	2040	2040	2040	2'w x 4'h KEY Window	2	4				\$40.00	\$40.00	1	0
Window	3040	3040	3040	3'w x 4'h KEY Window	3	4				\$60.00	\$60.00	1	0

If the format of the Basic Upload File is not as expected, SmartBuild may abort the upload, displaying informative error messages to help identify the problem in the upload file.

## Preparing Material List for Upload (except Trusses)

Using the downloaded "Materials-CompanyName" as the template, you have started the process of creating your new upload file. You can either copy the bulk of the data from the exported source file/list discussed earlier into this new upload file, or you can keep that data separate, and copy the data a field/line item at a time. This is personal preference.

Fill in the appropriate columns in the new file with data from the exported source file/list. There won't be a one to one correspondence between the columns in the two files (the exported source file/list, and the new upload file). You will probably need to extract the data from certain columns in the exported source file/list, and distribute the data to the appropriate columns in the new file.

## SKUs

There are 3 SKUs listed: **SKU**, **Full SKU**, **Vendor SKU**. The only SKU that you are required to include is **SKU** (which will sometimes be referred to in this document as the SmartBuild SKU). SmartBuild uses this SKU to populate/expand material in the database. The **Full SKU** is an internal SKU that SmartBuild will generate using the SmartBuild SKU and length/color code data you provided. In fact, if you put data in the Full SKU column it will be ignored. However, we'll continue to show it in the examples. One important thing about the SmartBuild generated Full SKU is that it may indicate materials with duplicate SKUs (which can cause issues). The **Vendor SKU** is not required, but it can provide a helpful link between the SmartBuild system and other software systems you may use (for accounting, inventory, ordering, etc).

If there is a **Vendor SKU** in the exported source file/list it can be used as the basis for the SmartBuild **SKU**. For all categories **except framing, sheathing, trim and fasteners**, the Vendor SKU can simply be copied to the SmartBuild **SKU**. Additional information may be needed to create the new SmartBuild SKU for the exceptions mentioned (framing, sheathing, trim and fasteners).

**To make the document a little easier to understand, we'll assume that a pre-existing Vendor SKU will be used as the base for creating the SmartBuild SKU.** However, as I've already mentioned this isn't

required. If you don't have (or want to use) Vendor SKUs, you can generate the SmartBuild SKU from scratch. You can come up with your own structure as long as you follow the guidelines below:

- Don't use < > and &

- Only use the strings {LF} or {CC} in the SKU when appropriate (to designate length or color)

SKUs can be informative, if you use the right structure for your material. If you don't currently have a Vendor SKU structure, below are some "best practices" (however these are **NOT** SmartBuild requirements).

- Make your SKUs easy to understand (consider dimensions, size, type, color, etc)

- Arrange words according to importance (category, size, color, etc)

- Only use relevant Information

- Don't use letters that look like numbers, spaces, accents or symbols.

- Only use alphanumeric characters (substituting – or \_ for spaces is a great option)

- Start SKUs with letters (helpful when using in spreadsheets)

- Keep SKUs short (but with enough info to be relevant)

## **PRICING DATA DURING MATERIAL UPLOAD:**

The pricing data includes the cost, markup, price and taxable status of each item in the database. This data can be included when uploading the material list.

There is usually a one to one mapping with **Cost** and **Price** columns from the exported source file/list to the new upload file that you're creating. However you may need to watch out for a change in pricing units (e.g. switching from price/item to price/foot). The Cost/Price data can be included when uploading the material list. Or you can wait until later to populate the Cost/Price data.

**Markup** can be defined or left out.

**Taxable** status is a usually straight forward, and required during the material upload.

## ADDING FRAMING MATERIAL TO THE MATERIAL UPLOAD FILE

Framing material has several defining parameters (width, depth, length). The exported source file/list may be formatted so this information is in separate field. However sometimes the data may be embedded in a field (such as Vendor SKU, description), requiring the exact data needed to be extracted. For Example:

- Material Description is "2x6 8' DL". Dim 1, Dim 2 and Part Length data can be extracted from the description in the exported source file/list. Please note that 2 and 6 are nominal dimensions, and SmartBuild needs actual dimensions (1.5 and 5.5) for framing material.
- Vendor SKU is "0204LVL10" indicating 2x4 10' LVL. Dim 1, Dim 2 and Part Length data can be extracted from the Vendor SKU. In the case of LVL, 2 and 4 are the actual dimensions.

### SKU for Framing Material with Fixed Part Length (SmartBuild SKU needs to be built with {LF} token):

If the Vendor SKU has the Linear Feet embedded in it,

then extract the Linear Feet and replace it with {LF} to build the SmartBuild SKU.

If the Vendor SKU does NOT have the linear feet embedded in it,

then copy the Vendor SKU to the SmartBuild SKU, and append {LF} to it.

Any reference to linear feet in the Material column in the new file should be removed so this field will be exactly the same for every entry with the same SmartBuild SKU.

Category	SKU	Full SKU	Vendor SKU	Original Description*	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Framing	LVL12{LF}	LVL1216	LVL1216	KEY 12" LVL 16'	KEY 12" LVL	2	12		16		\$30.00	\$33.00	1	32
Framing	210{LF}DL	2108DL	2108DL	KEY 2x10 8'	KEY 2x10	1.5	9.25		8		\$50.00	\$50.00	1	16
Framing	212{LF}DL	21214DL	21214DL	KEY 2x12 14'	KEY 2x12	1.5	11.25		14		\$7.00	\$7.00	1	28
Framing	88{LF}DL	8818DL	8818DL	KEY 8x8 18'	KEY 8x8	7.25	7.25		18		\$24.00	\$24.00	1	0
* ORIGINAL DESCRIPTION is only included to show the difference between it and the new MATERIAL description that will be uploaded to SmartBuild														
Do Not Upload the ORIGINAL DESCRIPTION column, you'll get an error message														

### SKU for Framing Material with Random Length:

The SmartBuild SKU can be exactly the same as the Vendor SKU. The Part Length should be left blank, and the cost/price data should be the cost/price for one foot of material.

Category	SKU	Full SKU	Vendor SKU	Original Description*	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Framing	LVL12	LVL12	LVL12	KEY 12" LVL (BY THE FOOT)	KEY 12" LVL (BY THE FOOT)	2	12				\$4.00	\$4.40	1	2
Framing	212DL	212DL	212DL	2x12 sold by the foot	2x12	1.5	11.25				\$8.00	\$8.40	1	0
Framing	88DL	88DL	88DL	KEY 8x8 sold by the foot	KEY 8x8	7.25	7.25				\$24.00	\$24.00	1	0
* ORIGINAL DESCRIPTION is only included to show the difference between it and the new MATERIAL description that will be uploaded to SmartBuild														
Do Not Upload the ORIGINAL DESCRIPTION column, you'll get an error message														

### Additional Data as defined for the Framing Category:

Dim 1 – ACTUAL width in decimal inches (e.g. 2x4 has Dim 1 of 1.5)

Dim 2 – ACTUAL depth in decimal inches (e.g. 2x4 has Dim 2 of 3.5)

Dim 3 – (leave blank)

Part Length – length of part in decimal feet, rounded down to nearest foot  
(leave blank if material is sold by the foot)

Color Code – (leave blank)

Cost – Current Cost (with/without dollar sign), 0 or Blank

Markup – cost to price markup percentage

Price – Current Price (with/without dollar sign), 0 or Blank

Taxable – Indicator of taxable status (0-nontaxable, 1-taxable)

Weight – weight of item, used to calculate the weight of the order so shipping can be estimated

When the framing list is complete, upload the file to SmartBuild. Follow the directions in the ***Adding/Uploading Material (except Trusses)*** paragraph.

## ADDING SHEATHING TO THE MATERIAL UPLOAD FILE

Sheathing can be sold by the foot (Random Length), by the sheet (Fixed Part Length), and in multiple colors. The SmartBuild SKU definition is determined by each of these defining factors.

### SKU for Sheathing in Random Length (SmartBuild SKU to be built with {CC} token):

If there isn't a color associated with the Sheathing,

then the Vendor SKU can simply be copied to the SmartBuild SKU.

If there is a color associated with the Sheathing, the SmartBuild SKU will need to be created with {CC}.

If the Vendor SKU has the color code embedded in it,

then extract that code and replace it with {CC} to build the SmartBuild SKU.

If the Vendor SKU does NOT have the color code embedded in it,

then copy the Vendor SKU to the SmartBuild SKU, and append {CC} to it.

Any reference to color in the Material column in the new file should be removed so this field will be exactly the same for every entry with the same SmartBuild SKU.

For sheathing that comes in a variety of colors, SmartBuild requires that each piece be defined with every available color. One way to accomplish this is to manually enter duplicate entries with the different color codes of each available color into the upload file (e.g. 1 piece that comes in 10 colors will result in 10 different pieces entered into the upload file. Another way is to use the **wildcard (\*)** in the color code. This feature makes it possible for you to manually enter only one item in your upload file (with the wildcard in the color column), and SmartBuild will do the work of expanding the item for every color.

Category	SKU	Full SKU	Vendor SKU	Original Description*	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Sheathing	CR26{CC}	CR26CR	CR26CR	KEY 26 ga Corrugated - Cranberry Red	KEY 26 ga Corrugated	36	37.5	standingseam		CR	\$2.05	\$2.26	1	0
Sheathing	CR26{CC}	CR26RR	CR26RR	KEY 26 ga Corrugated - Really Red	KEY 26 ga Corrugated	36	37.5	corrugated		RR	\$2.05	\$2.26	1	0
Sheathing	CR26{CC}	CR26BG	CR26BG	KEY 26 ga Corrugated - Beige	KEY 26 ga Corrugated	36	37.5	agpanel		BG	\$2.05	\$2.26	1	0
Sheathing	CR26{CC}			KEY 26 ga Corrugated - Beige	KEY 26 ga Corrugated	36	37.5	agpanel		*	\$2.05	\$2.26	1	0

\* ORIGINAL DESCRIPTION is only included to show the difference between it and the new MATERIAL description that will be uploaded to SmartBuild  
Do Not Upload the ORIGINAL DESCRIPTION column, you'll get an error message

### SKU for Sheathing sold by Fixed Part Length (SmartBuild SKU to be built with {LF} & {CC} tokens):

Generating the SmartBuild SKU for Sheathing sold by the fixed Part Length is complicated by the fact that both Linear Feet and Color Code need to be used. Follow both processes described above (for Framing/Sheathing) to create a Sheathing SmartBuild SKU with both {LF} and {CC}.

Category	SKU	Full SKU	Vendor SKU	Original Description*	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Sheathing	CR{LF}{CC}	CR10LFWT	CR10LFWT	Sheathing by the 10' sheet - White	Sheathing by the Sheet	36	37.5	standingseam	10	WT	\$40.00	\$44.00	1	0
Sheathing	CR{LF}{CC}	CR12LFWT	CR12LFWT	Sheathing by the 12' sheet - White	Sheathing by the Sheet	36	37.5	standingseam	12	WT	\$40.00	\$44.00	1	0
Sheathing	CR{LF}{CC}	CR14LFWT	CR14LFWT	Sheathing by the 14' sheet - White	Sheathing by the Sheet	36	37.5	corrugated	14	WT	\$40.00	\$44.00	1	0
Sheathing	CR{LF}{CC}			Sheathing by the 14' sheet - White	Sheathing by the Sheet	36	37.5	corrugated	14	*	\$40.00	\$44.00	1	0

\* ORIGINAL DESCRIPTION is only included to show the difference between it and the new MATERIAL description that will be uploaded to SmartBuild  
Do Not Upload the ORIGINAL DESCRIPTION column, you'll get an error message

**Additional Data as defined for the Sheathing Category:**

Dim 1 – Coverage width in decimal inches

Dim 2 – Actual width in decimal inches

Dim 3 – used to show texture in model (standingseam, corrugated or agpanel)

If Dim 3 is invalid, the sheathing will appear smooth in the model.

Part Length – length of part in decimal feet, rounded down to nearest foot

(leave blank if material is sold by the foot)

Color Code – ColorCode from the Color List, when applicable (or \* for all)

Cost – Current Cost (with/without dollar sign), 0 or Blank

Markup – cost to price markup percentage

Price – Current Price (with/without dollar sign), 0 or Blank

Taxable – Indicator of taxable status (0-nontaxable, 1-taxable)

Weight – weight of item, used to calculate the weight of the order so shipping can be estimated

When the sheathing list is complete, upload the file to SmartBuild. Follow the directions in the ***Adding/Uploading Material (except Trusses)*** paragraph.

## ADDING TRIM TO THE MATERIAL UPLOAD FILE

Trim can be sold by the piece (Fixed Part Length), by the foot (Random Length), and in multiple colors. The SmartBuild SKU is determined by each of these factors.

Trim material has several defining parameters (reveal width, thickness, length, color). The exported source file/list may be formatted such that this information is in separate fields. However sometimes the data may be embedded in a field (such as Vendor SKU, description), requiring the exact data needed to be extracted. For Example:

- Material Description is "J CHANNEL 10'3" SMOKE GRAY" – Part Length and Color Code data can be extracted from the description in the exported source file/list. The Color List will be used to get the Color Code for "SMOKE GRAY".

### SKU for Trim item with Fixed Part Length (SmartBuild SKU to be built with {LF} & {CC} tokens):

Generating the SmartBuild SKU for Trim is complicated by the fact that both Linear Feet and Color Codes may be used. Follow both processes described above (for Framing/Sheathing) to create a Trim SmartBuild SKU with both {LF} and {CC}.

Category	SKU	Full SKU	Vendor SKU	Original Description*	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Trim	DT10{LF}{CC}	DT1010CR	DT1010CR	KEY 10 7/8" Overhead Door Trim - Cranberry Re	KEY 10 7/8" Overhead Door Trim	10.875	1.5	0	10	CR	\$5.44	\$5.98	1	0
Trim	DT10{LF}{CC}	DT1010RR	DT1010RR	KEY 10 7/8" Overhead Door Trim - Really Red	KEY 10 7/8" Overhead Door Trim	10.875	1.5	0	10	RR	\$5.44	\$5.98	1	0
Trim	DT10{LF}{CC}	DT1010BG	DT1010BG	KEY 10 7/8" Overhead Door Trim - Beige	KEY 10 7/8" Overhead Door Trim	10.875	1.5	0	10	BG	\$5.44	\$5.98	1	0
Trim	FA12{LF}{CC}	FA1210CR	FA1210CR	KEY 12" Fascia - Cranberry Red	KEY 12" Fascia	12	0	0	10	CR	\$6.00	\$6.60	1	0
Trim	SF12{LF}{CC}	SF1210CR	SF1210CR	KEY 12" Soffit - Cranberry Red	KEY 12" Soffit	12	1	0	10	CR	\$6.00	\$6.60	1	0
Trim	SF12{LF}{CC}	SF1210RR	SF1210RR	KEY 12" Soffit - Really Red	KEY 12" Soffit	12	1	0	10	RR	\$6.00	\$6.60	1	0
Trim	SF12{LF}{CC}	SF1210BG	SF1210BG	KEY 12" Soffit - Beige	KEY 12" Soffit	12	1	0	10	BG	\$6.00	\$6.60	1	0
Trim	FA3{LF}{CC}	FA310CR	FA310CR	KEY 3" Fascia - Cranberry Red	KEY 3" Fascia	3	0	0	10	CR	\$1.50	\$1.65	1	0
Trim	FA3{LF}{CC}	FA310RR	FA310RR	KEY 3" Fascia - Cranberry Red	KEY 3" Fascia	3	0	0	10	*	\$1.50	\$1.65	1	0
Trim	FA3{LF}{CC}	FA310RR	FA310RR	KEY 3" Fascia - Really Red	KEY 3" Fascia	3	0	0	10	RR	\$1.50	\$1.65	1	0
Trim	FA3{LF}{CC}	FA310BG	FA310BG	KEY 3" Fascia - Beige	KEY 3" Fascia	3	0	0	10	BG	\$1.50	\$1.65	1	0
Trim	BF{LF}{CC}	BF10CR	BF10CR	KEY Flat Base - Cranberry Red	KEY Flat Base	1.5	0	0	10	CR	\$0.75	\$0.83	1	0

\* ORIGINAL DESCRIPTION is only included to show the difference between it and the new MATERIAL description that will be uploaded to SmartBuild  
Do Not Upload the ORIGINAL DESCRIPTION column, you'll get an error message

For trim material that comes in a variety of colors, SmartBuild requires that each piece be defined with every available color. One way to accomplish this is to manually enter duplicate entries with the different color codes of each available color into the upload file (e.g. 1 piece that comes in 10 colors will result in 10 different pieces entered into the upload file. Another way is to use the **wildcard (\*)** in the color code. This feature makes it possible for you to manually enter only one item in your upload file (with the wildcard in the color column), and SmartBuild will do the work of expanding the item for every color.

### SKU for Trim item with Random Length (SmartBuild SKU needs to be built with {CC} token):

Build the SmartBuild SKU for trim sold in random lengths by the foot by including {CC}. The Part Length field should be left blank. The cost/price should also be the cost/price for one foot of material.

Category	SKU	Full SKU	Vendor SKU	Original Description*	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Trim	BF{CC}			KEY Flat Base BY THE FOOT - Cranberry Red	KEY Flat Base BY THE FOOT	1.5	0	0		*	\$0.75	\$0.75	1	0
Trim	PTS{CC}	PTSBG	PTSBG	KEY 5 1/2" Post Trim (by the foot) - Beige	KEY 5 1/2" Post Trim	1.5	5.5	0		BG	\$0.75	\$0.75	1	0
Trim	BF{CC}	BFCCR	BFCCR	KEY Flat Base BY THE FOOT - Cranberry Red	KEY Flat Base BY THE FOOT	1.5	0	0		CR	\$0.75	\$0.75	1	0

\* ORIGINAL DESCRIPTION is only included to show the difference between it and the new MATERIAL description that will be uploaded to SmartBuild  
Do Not Upload the ORIGINAL DESCRIPTION column, you'll get an error message

**Additional Data as defined for the Trim Category:**

Dim 1 – Reveal width in decimal inches

Dim 2 – Thickness in decimal inches (if Z trim, use middle bend)

Dim 3 – (leave blank)

Part Length – length of part in decimal feet, rounded down to nearest foot  
(leave blank if material is sold by the foot)

Color Code – ColorCode from the Color List, when applicable (or \* for all)

Cost – Current Cost (with/without dollar sign), 0 or Blank

Markup – cost to price markup percentage

Price – Current Price (with/without dollar sign), 0 or Blank

Taxable – Indicator of taxable status (0-nontaxable, 1-taxable)

Weight – weight of item, used to calculate the weight of the order so shipping can be estimated

When the trim list is complete, upload the file to SmartBuild. Follow the directions in the ***Adding/Uploading Material (except Trusses)*** paragraph.

## ADDING FASTENERS TO THE MATERIAL UPLOAD FILE

Fasteners may or may not have color association with them. If they do, then you should create the items with this information. If they don't have color associated with them, then there is very little additional information needed in the upload for these items.

### SKU for Fasteners:

If there isn't a color associated with the Fastener,

then the Vendor SKU can simply be copied to the SmartBuild SKU.

If there is a color associated with the Fastener, the SmartBuild SKU will need to be created with {CC}.

If the Vendor SKU has the color code embedded in it,

then extract that code and replace it with {CC} to build the SmartBuild SKU.

If the Vendor SKU does NOT have the color code embedded in it,

then copy the Vendor SKU to the SmartBuild SKU, and append {CC} to it.

Any reference to color in the Material column in the new file should be removed so this field will be exactly the same for every entry with the same SmartBuild SKU.

For fasteners that come in a variety of colors, SmartBuild requires that each piece be defined with every available color. One way to accomplish this is to manually enter duplicate entries with the different color codes of each available color into the upload file (e.g. 1 piece that comes in 10 colors will result in 10 different pieces entered into the upload file. Another way is to use the **wildcard (\*)** in the color code. This feature makes it possible for you to manually enter only one item in your upload file (with the wildcard in the color column), and SmartBuild will do the work of expanding the item for every color.

Category	SKU	Full SKU	Vendor SKU	Original Description*	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Fastener	1.510Hex	1.510Hex	1.510Hex	1 1/2" #10 Hex	1 1/2" #10 Hex						\$12.00	\$12.00	1	0
Fastener	Fastener #2	Fastener #2	Fastener #2	Screws	Screws #2						\$12.00	\$12.00	1	0
Fastener	FAST{CC}	FASTCR	FASTCR	Screws - Cranberry Red	Screws					CR	\$12.00	\$12.00	1	0
Fastener	FAST{CC}	FASTRR	FASTRR	Screws - Really Red	Screws					RR	\$12.00	\$12.00	1	0
Fastener	FAST{CC}	FASTBG	FASTBG	Screws - Beige	Screws					BG	\$12.00	\$12.00	1	0
Fastener	FAST{CC}			Screws - Cranberry Red	Screws					*	\$12.00	\$12.00	1	0
* ORIGINAL DESCRIPTION is only included to show the difference between it and the new MATERIAL description that will be uploaded to SmartBuild														
Do Not Upload the ORIGINAL DESCRIPTION column, you'll get an error message														

### Additional Data as defined for the Fastener Category:

Dim 1 – (leave blank)

Dim 2 – (leave blank)

Dim 3 – (leave blank)

Part Length – (leave blank)

Color Code – ColorCode from the Color List, when applicable (or \*)

Cost – Current Cost (with/without dollar sign), 0 or Blank

Markup – cost to price markup percentage

Price – Current Price (with/without dollar sign), 0 or Blank

Taxable – Indicator of taxable status (0-nontaxable, 1-taxable)

Weight – weight of item, used to calculate the weight of the order so shipping can be estimated

When the Fastener list is complete, upload the file to SmartBuild. Follow the directions in the **Adding/Uploading Material (except Trusses)** paragraph.

## ADDING DOORS AND WINDOWS TO THE MATERIAL UPLOAD FILE

There are 4 different opening types in SmartBuild: Walk Doors, Overhead Doors, Sliding Doors, and Windows. SmartBuild requires the definition of opening width and height (in decimal feet). To improve the display of the model, you can define an OBJ file that will be used to display the window/door in the model. The Support Department can help with the creation of this OBJ file.

### SKU for Doors and Windows

The SKU can be the Vendor SKU or one created from scratch (see previous requirements/suggestions about SKUs).

Category	SKU	Full SKU	Vendor SKU	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
WalkDoor	3068	3068	3068	3'w x 6' 8"h KEY Walk Door	3	6.6667				\$100.00	\$100.00	1	0
Overhead	100100	100100	100100	10'w x 10'h KEY Overhead	10	10				\$500.00	\$550.00	1	0
Overhead	160100	160100	160100	16'w x 10'h KEY Overhead	16	10				\$800.00	\$880.00	1	0
Overhead	KEY OHD-0	KEY OHD-0	KEY OHD-0	8'w x 8'h KEY Overhead	8	8				\$900.00	\$990.00	1	0
Slider	SLIDER-10x10	SLIDER-10x10	SLIDER-10x10	10x10 KEY Slider	10	10				\$1,000.00	\$1,100.00	1	0
Slider	SLIDER-12x12	SLIDER-12x12	SLIDER-12x12	12x12 KEY Slider	12	12				\$1,200.00	\$1,320.00	1	0
Slider	SLIDER-16X12	SLIDER-16X12	SLIDER-16X12	16x12 KEY Slider	16	12				\$1,600.00	\$1,760.00	1	0
Window	2040	2040	2040	2'w x 4'h KEY Window	2	4				\$40.00	\$40.00	1	0
Window	3040	3040	3040	3'w x 4'h KEY Window	3	4				\$60.00	\$60.00	1	0

### Additional Data as defined for Doors and Windows Categories:

Dim 1 – Opening width in decimal feet

Dim 2 – Opening height in decimal feet

Dim 3 – object file to display on model. You can initially leave this field blank

Part Length – (leave blank)

Color Code – (leave blank)

Cost – Current Cost (with/without dollar sign), 0 or Blank

Markup – cost to price markup percentage

Price – Current Price (with/without dollar sign), 0 or Blank

Taxable – Indicator of taxable status (0-nontaxable, 1-taxable)

Weight – weight of item, used to calculate the weight of the order so shipping can be estimated

When the door and window list is complete, upload the file to SmartBuild. Follow the directions in the **Adding/Uploading Material (except Trusses)** paragraph.

### ADDING CUPOLAS TO THE MATERIAL UPLOAD FILE

Cupolas have a special set of defining parameters (see below for that definition). Cupola isn't a named category. When uploading Cupolas, you'll need to use the ACCESSORIES category.

#### SKU for Cupolas

The SKU can be the Vendor SKU or a newly created one (see previous requirements/suggestions about SKUs).

Category	SKU	Full SKU	Vendor SKU	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Cupola	C24	C24	C24	KEY 2' x 2' Square Cupola	24	18	4			\$144.00	\$144.00	1	0
Cupola	C36	C36	C36	KEY 3' x 3' Square Cupola	36	27	4			\$324.00	\$324.00	1	0

#### Additional Data as defined for the Cupola Category (using the Accessories category):

Dim 1 – Length / Width in decimal inches

Dim 2 – Height in decimal inches

Dim 3 – Roof Pitch

Part Length – (leave blank)

Color Code – (leave blank)

Cost – Current Cost (with/without dollar sign), 0 or Blank

Markup – cost to price markup percentage

Price – Current Price (with/without dollar sign), 0 or Blank

Taxable – Indicator of taxable status (0-nontaxable, 1-taxable)

Weight – weight of item, used to calculate the weight of the order so shipping can be estimated

When the Cupola list is complete, upload the file to SmartBuild. Follow the directions in the **Adding/Uploading Material (except Trusses)** paragraph.

## ADDING ITEMS FROM THE REMAINING CATEGORIES TO THE MATERIAL UPLOAD FILE

(Foundation, Hardware, Walk Door Hardware, Overhead Door Hardware, Slider Hardware, Window Hardware, Cupola Hardware, Connector, Labor)

These remaining categories don't have any special defining parameters. The main data needed for these are the SKU and Material/Description. It is possible for some of these items to have color associated with them. If they do, you can use the {CC} token to create items with the color code (as previously described).

**SKU** - The SKU can be the Vendor SKU or a newly created one.

Category	SKU	Full SKU	Vendor SKU	Material	Dim 1	Dim 2	Dim 3	Part Length	Color Code	Cost	Price	Taxable	Weight
Connector	HANGER01	HANGER01	HANGER01	NAILS PURLIN HANGER						\$10.00	\$20.00	1	0
CupolaHardware	WV-BEAR-30	WV-BEAR-30	WV-BEAR-30	Weathervane BLACK BEAR 30						\$10.00	\$20.00	1	0
Foundation	PCL5	PCL5	PCL5	KEY 5' PermaColumn						\$12.00	\$12.00	1	0
Hardware	OSB5848	OSB5848	OSB5848	OSB						\$10.00	\$11.00	1	0
OverheadHardware	1165	1165	1165	LiftMaster Model DT-75-11						\$875.00	\$962.50	1	0
SliderHardware	BACCENGUIST	BACCENGUIST	BACCENGUIST	CENTER GUIDE & STOP						\$10.00	\$11.00	1	0
WalkDoorHardware	LOCK-EZ-2K/K	LOCK-EZ-2K/K	LOCK-EZ-2K/K	ADVANTAGE-KNOB/KNOB ENTRY						\$10.00	\$20.00	1	0
WindowHardware	SHUT-15X63-BLK	SHUT-15X63-BLK	SHUT-15X63-BLK	SHUTTERS 15X63 VINYL - BLACK						\$10.00	\$20.00	1	0

### Additional Data as defined for the remaining categories:

Dim 1 – (leave blank)

Dim 2 – (leave blank)

Dim 3 – (leave blank)

Part Length – (leave blank)

Color Code – (leave blank)

Cost – Current Cost (with/without dollar sign), 0 or Blank

Markup – cost to price markup percentage

Price – Current Price (with/without dollar sign), 0 or Blank

Taxable – Indicator of taxable status (0-nontaxable, 1-taxable)

Weight – weight of item, used to calculate the weight of the order so shipping can be estimated

## Adding/Uploading Material (except Trusses)

Material can be added to SmartBuild in one of three ways:

- Basic File Upload
- Guided Upload
- Adding items one at a time

The initial addition of material to the SmartBuild database should be accomplished with the Guided Upload or the Basic File Upload since there could be thousands of items. The Guided Upload is a more user friendly option, guiding you to choose what you want to upload and mapping the appropriate fields. However this option can't be used to upload material with a color code in the SKU.

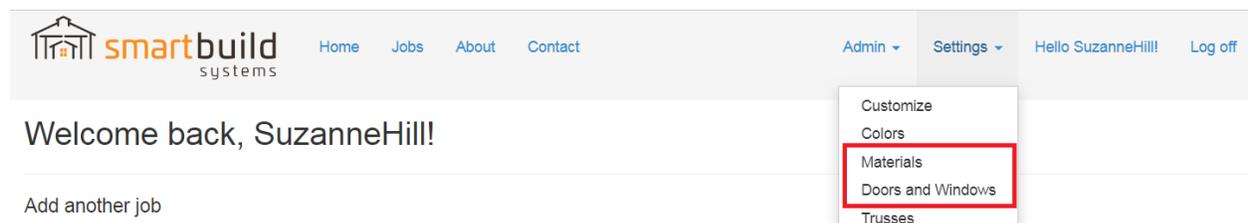
Once the correct format of the upload file is learned, the Basic File Upload can be a good choice to upload the material. To determine the correct format for the Basic Upload file, revisit the previous paragraphs **Format of Material Upload File** and **Preparing Material List for Upload**.

Adding items one at a time is appropriate when you only have one or two items to add (after your main database has already been created).

## UPLOADING MATERIAL (FILE UPLOAD)

The Basic File Upload method requires a CSV or XLSX file in the appropriate format. If SmartBuild detects an issue with the format of the file, the upload may be aborted and error message(s) will be displayed.

To start the file upload process, go to the Materials (or Doors/Windows) page via the SETTINGS drop down menu.



The screenshot shows the SmartBuild Systems user interface. At the top, there is a navigation bar with the logo, links for Home, Jobs, About, and Contact, and user information for 'Hello SuzanneHill!' with a 'Log off' link. A 'Settings' dropdown menu is open, showing options: Customize, Colors, Materials (highlighted with a red box), Doors and Windows, and Trusses. Below the navigation bar, a message says 'Welcome back, SuzanneHill!' and there is a link to 'Add another job'.

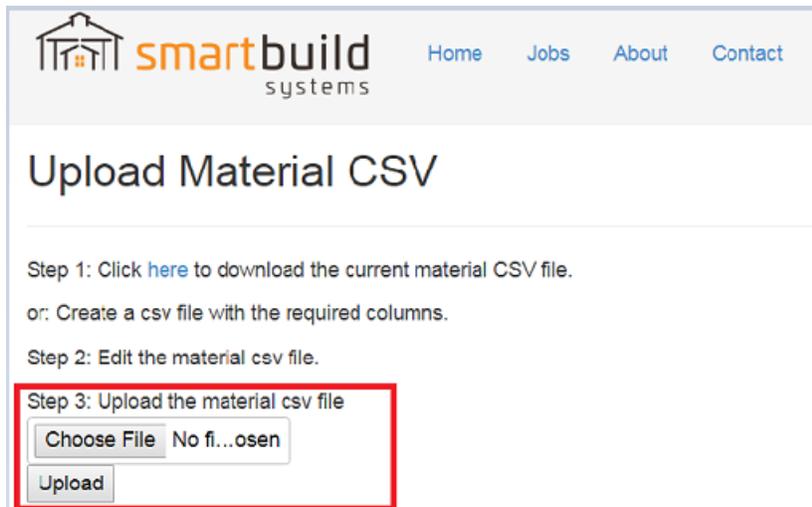
On either the Materials page (see below) or the Doors/Windows page, select the UPLOAD button



The screenshot shows the 'Materials for KeyMark' page in the SmartBuild Systems user interface. The page title is 'Materials for KeyMark'. At the top, there is a navigation bar with the logo, links for Home, Jobs, About, and Contact, and user information for 'Hello SuzanneHill!' with a 'Log off' link. Below the navigation bar, there are action buttons: '+ Add', 'Edit', 'Delete', 'Delete ALL', 'Guided Upload', 'Upload' (highlighted with a red box), and 'Download'. Below the buttons is a table with the following data:

#	SKU	Description	Dimension 1	Dimension 2	Dimension 3
1	210{LF}DL	2x10	1.5	9.25	0

The UPLOAD MATERIAL page will be displayed.  
 Click on the CHOOSE FILE button, and choose the appropriate CSV or XLSX file via Windows Explorer.  
 Select UPLOAD.



If the upload is successful, a message will be displayed indicating the number of entries uploaded, along with the number of pricing entries created.



If SmartBuild detects an issue with the data in the upload file, the upload may be aborted and error message(s) displayed. These messages may contain the line number(s) in the original file to help with the identification of the source of the error.

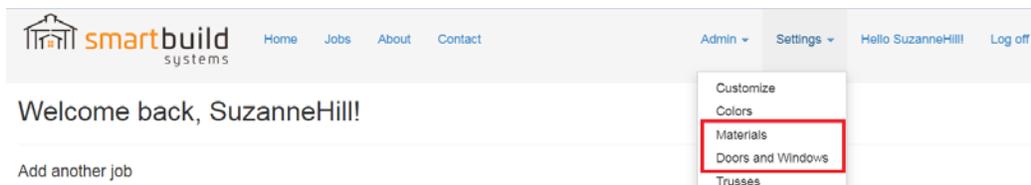


Examples of upload issues:

- Invalid Category listed (may not be using the exact spelling that SmartBuild requires)
- Missing/invalid values (each category has a set of required data)
- Different Material description for same SmartBuild SKU
- Same Material description for different SKU's

## UPLOADING MATERIAL (GUIDED UPLOAD)

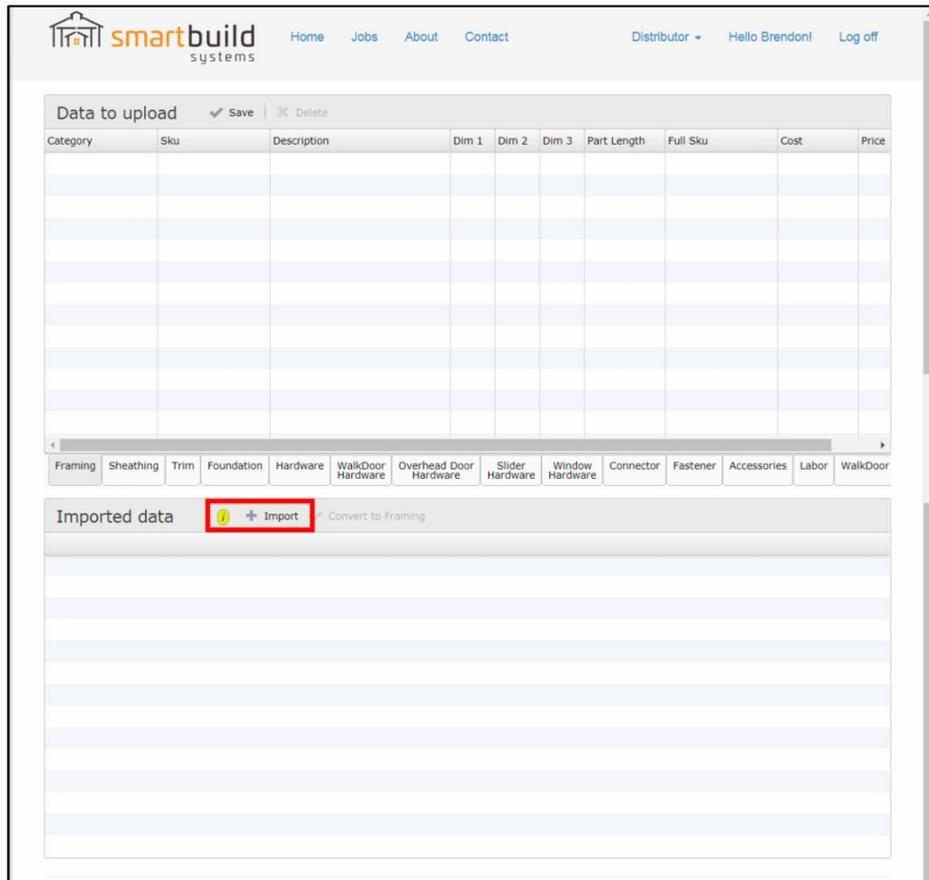
To import your material using the Guided Upload option data from a CSV or XLSX file, go to the Materials, or Doors/Windows page.



On either the Materials page (see below) or the Doors/Windows page, select the GUIDED UPLOAD button.

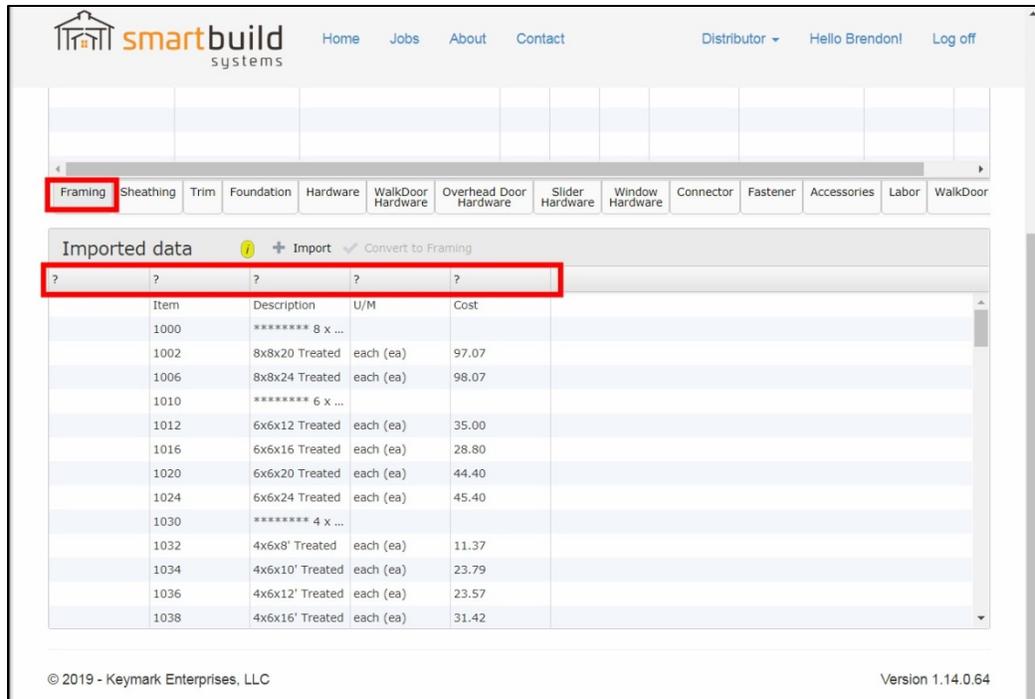


The DATA TO UPLOAD page will be displayed. On the bottom section of this page, click on the IMPORT button.



The LOAD A CSV FILE dialog box will open. Click on the CHOOSE FILE button to open Windows Explorer. Using Windows Explorer, navigate to the CSV file you have prepared for uploading. Select the file and click on the OK button to close Windows Explorer.

Once Windows Explorer closes, the bottom pane of your SmartBuild window will automatically populate with the data from your CSV file, as shown below.

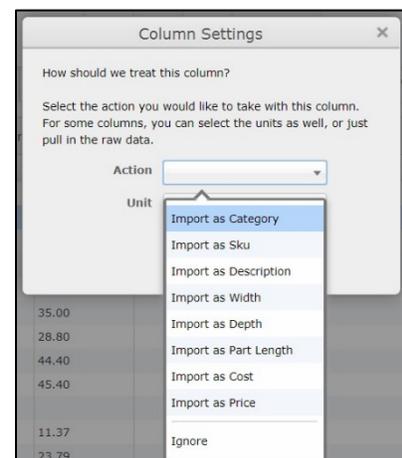


In the top half of the window, select that tab to which the data is to be added. (In the screen shot above, the FRAMING tab has been selected.) Notice that there are question marks where your column headers should be.

Click on each header that currently displays a question mark (?). In the CUSTOM SETTINGS dialog box that opens, select the name to be used as the header for that specific column of data. Repeat this process, until there are \*NO\* columns that display a question mark as their title.

Return to the rows of data on the bottom part of your screen, and select the specific rows to be added to your materials database. Click on the CONVERT TO (category) button. Notice that the selected data is moved from the bottom table into the table that you have selected above.

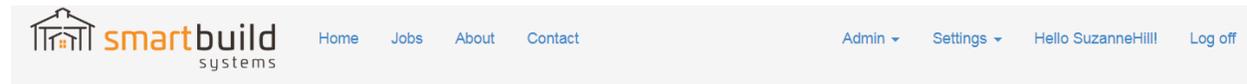
Be sure to hit the SAVE button when you have completed your work!



## ADDING MATERIAL ONE ITEM AT A TIME

After a majority of the material has been uploaded, you may have an occasion to add one or two additional items. You can either create a CSV or XLSX file to upload, or you can use the ADD function to add individual items.

Navigate to the Materials, or Doors/Windows page (using the SETTINGS drop down menu). On either the Materials page (see below) or the Doors/Windows page, select the ADD button.



### Materials for KeyMark

#	SKU	Description	Dimension 1	Dimension 2	Dimension 3
1	210{LF}DL	2x10	1.5	9.25	0

The CREATE MATERIAL page will be displayed. Click the drop down arrow in the category field, and select the appropriate category of material to be added. Enter the SKU, Description, Dim 1, Dim 2, and Dim3 for the material to be added. Then select the CREATE button.



### Create

Material

Category: Framing

SKU:

Description:

Dimension1:

Dimension2:

Dimension3:

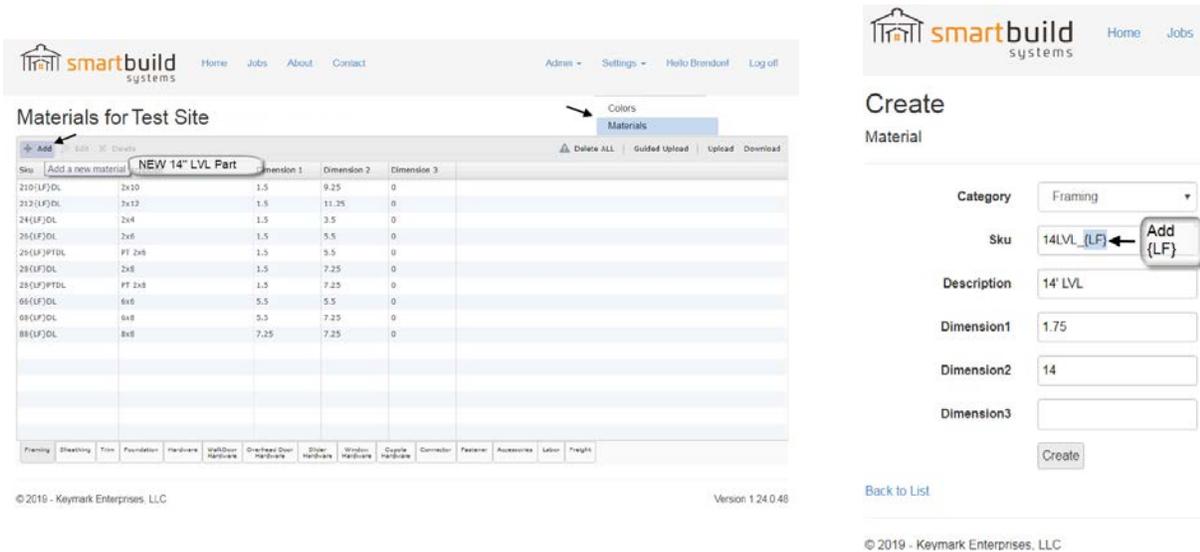
[Back to List](#)

### *Adding Framing Parts (individual)*

When adding or editing any material in SmartBuild, there are two different pages that control the material properties. First the material must be added on the Settings/Materials page, then after a material is added, use the Settings/Pricing page to add or delete part lengths, colors and update pricing.

To change a part length of an existing trim or lumber material, on the Pricing page, double-click on the part length and type in a length. (Note: the part lengths for Framing parts can only be rounded to the nearest foot). To delete a part length, select just a single line item, or multiple line items by holding down the Shift or Ctrl buttons, and use the Delete (trashcan) button to remove them from the Pricing list. To add a part length, just select a part that's already on the Pricing page list and click the Add button. A new line item with a 1' foot length will be added to the list, then double click the new 1' foot length and edit to the desired length.

Here are some examples for adding a basic Framing part like LVL on to the Materials and Pricing pages:

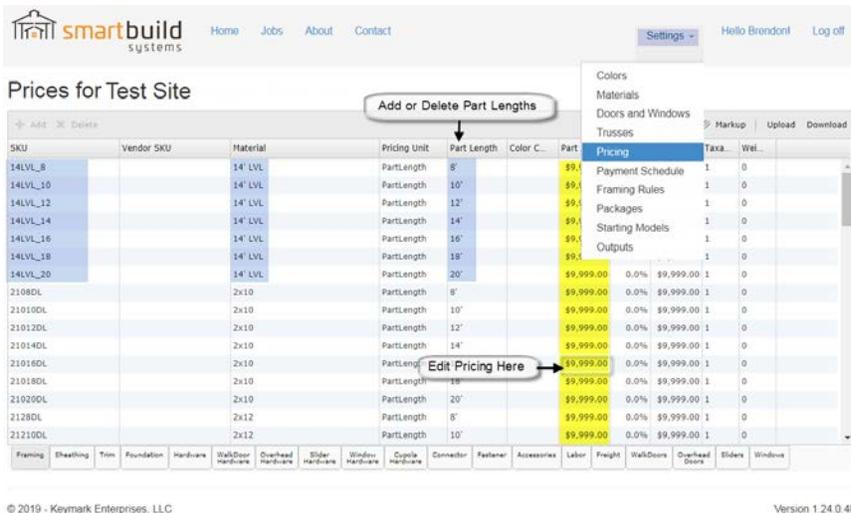


The left screenshot shows the 'Materials for Test Site' page. A new material 'NEW 14" LVL Part' has been added. The table below shows the material details:

SKU	Material	Dimension 1	Dimension 2	Dimension 3
210(LF)DL	2x10	1.5	9.25	0
212(LF)DL	2x12	1.5	11.25	0
24(LF)DL	2x4	1.5	3.5	0
26(LF)DL	2x6	1.5	5.5	0
28(LF)PTDL	PT 2x8	1.5	5.5	0
28(LF)DL	2x8	1.5	7.25	0
28(LF)PTDL	PT 2x8	1.5	7.25	0
66(LF)DL	6x6	5.5	5.5	0
68(LF)DL	6x8	5.5	7.25	0
88(LF)DL	8x8	7.25	7.25	0

The right screenshot shows the 'Create Material' form. The 'Category' is set to 'Framing'. The 'SKU' is '14LVL\_{LF}' with an 'Add {LF}' button next to it. The 'Description' is '14" LVL'. The 'Dimension1' is '1.75', 'Dimension2' is '14', and 'Dimension3' is empty. A 'Create' button is at the bottom.

The new part must be first added on the Materials page, with a {LF} included in the SKU. The {LF} is required by the program to allow for multiple part lengths for the LVL. Add a Description and fill out the relevant dimensions in decimal inches (see example above). Once added on the Materials page, you can then edit the part lengths and prices together on the Pricing page.



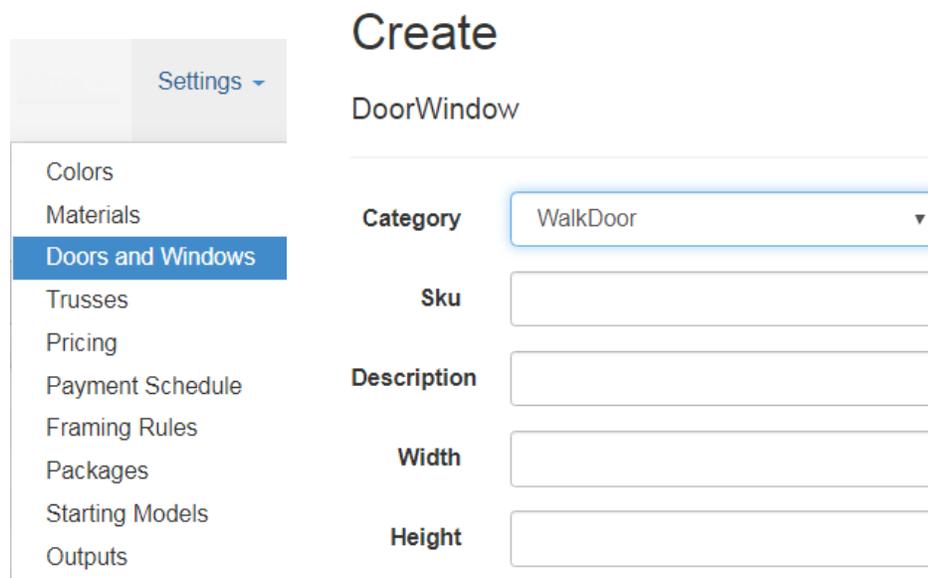
The screenshot shows the 'Prices for Test Site' page. A table lists various materials and their pricing. The '14" LVL' materials are highlighted in blue. The table below shows the pricing details:

SKU	Vendor SKU	Material	Pricing Unit	Part Length	Color C.	Part	Pricing	Taxa	Wel
14LVL_8		14" LVL	PartLength	8'			\$9.1		
14LVL_10		14" LVL	PartLength	10'			\$9.1		
14LVL_12		14" LVL	PartLength	12'			\$9.1		
14LVL_14		14" LVL	PartLength	14'			\$9.1		
14LVL_16		14" LVL	PartLength	16'			\$9.1		
14LVL_18		14" LVL	PartLength	18'			\$9.1		
14LVL_20		14" LVL	PartLength	20'			\$9,999.00	0.0%	\$9,999.00
2108DL		2x10	PartLength	8'			\$9,999.00	0.0%	\$9,999.00
21010DL		2x10	PartLength	10'			\$9,999.00	0.0%	\$9,999.00
21012DL		2x10	PartLength	12'			\$9,999.00	0.0%	\$9,999.00
21014DL		2x10	PartLength	14'			\$9,999.00	0.0%	\$9,999.00
21016DL		2x10	PartLength	16'			\$9,999.00	0.0%	\$9,999.00
21018DL		2x10	PartLength	18'			\$9,999.00	0.0%	\$9,999.00
21020DL		2x10	PartLength	20'			\$9,999.00	0.0%	\$9,999.00
2128DL		2x12	PartLength	8'			\$9,999.00	0.0%	\$9,999.00
21210DL		2x12	PartLength	10'			\$9,999.00	0.0%	\$9,999.00

Annotations in the image point to 'Add or Delete Part Lengths' and 'Edit Pricing Here'.

### *Adding Doors and Windows (individual)*

To add a new Door or Window part to the database use the Door and Windows page under Settings. There are 4 different opening types in SmartBuild: Walk Doors, Overhead, Sliders and Windows. After clicking on the Add button, pick the opening type you want to add from the category pull down. Only fill out the SKU, Description, Width and Height. The width and height are in decimal feet (not feet and inches). There are no special requirements in SmartBuild for the SKU and Description for doors and windows, they can be anything that makes sense for your business. The rest of the settings on this page can be left blank for doors and windows. Once doors and windows have been created in Materials, then you can go to the Pricing page to update the pricing for all the doors and windows that have been added.



### *Adding Hardware Parts ('Each' items) - individual*

To add a new Hardware part, use the Add button on the Materials page. When adding a new Hardware part, first make sure to select the correct hardware category for the specific type of hardware you are adding. If there is a question about what category material belongs to, use the 'Hardware' category as a general catch-all category. Because most Hardware items do not have part lengths or colors they can be listed as "each" items with no {LF} {CC} codes necessary in the SKU field. Hardware SKUs and Descriptions can be whatever makes sense for your business. Note: Some Hardware items like Gutters and Vinyl Siding can also use a color code {CC} but it's not required for most Hardware items.

## Truss Data

SmartBuild can also include truss data. The data needed for trusses is different than all other materials (framing, sheathing, doors, etc.) discussed. The truss list is also added or uploaded from a different window. The Trusses database is separate from the main Materials database (notice that there are no Truss parts listed when downloading the Material or Material Pricing CSV or XLSX file).

Trusses can be added individually, or using the Basic File Upload method. Guided Upload is not available for trusses.

Below are the truss fields that can be included in SmartBuild.

TRUSS (\* items are required):

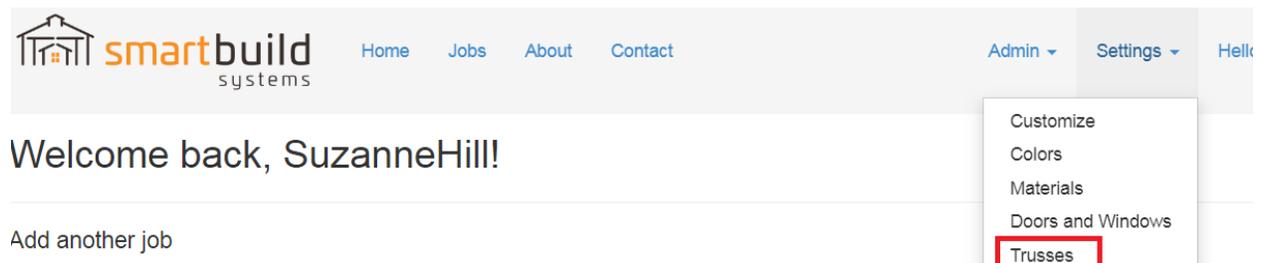
- \*Sku - your company's internal SKU / Part # or other ID used to designate this truss.
- \*Description - A brief but informative description of each truss
- \*TC Style – Choices: Common, Mono, Gambrel, Asymmetric, OffsetPeak
- \*Span – Span (format: 1' 6")
- Dim2 – offset in feet (format: 1' 6")
- Pitch - to nearest half inch (format: 4)
- Pitch2 - to nearest half inch (format: 4)
- Heel - height in inches, to nearest 1/8<sup>th</sup> (format: 1' 6")
- OH L – Overhang in feet (format: 1' 6")
- OH R – Overhang in feet (format: 1' 6")
- Cant L – Cantilever (format: 1' 6")
- Cant R – Cantilever (format: 1' 6")
- \*Spacing - (format: 1' 6")
- Loading – text string defining loading data
- Is Gable – Yes or leave blank
- \*Special – choices: flat, scissor, attic  
(and the pricing data previously defined)

For a better understanding of the Truss Table, watch this training video.

[https://www.youtube.com/watch?v=E5gLwn\\_HJtI&t=9s](https://www.youtube.com/watch?v=E5gLwn_HJtI&t=9s)

## ADDING INDIVIDUAL TRUSSES

To add an individual truss, select the TRUSSES option from the SETTINGS menu:



The screenshot shows the SmartBuild Systems website header with navigation links: Home, Jobs, About, Contact, Admin, Settings, and Help. Below the header, a user is greeted with "Welcome back, SuzanneHill!". A dropdown menu is open under the "Settings" link, listing options: Customize, Colors, Materials, Doors and Windows, and Trusses. The "Trusses" option is highlighted with a red box.

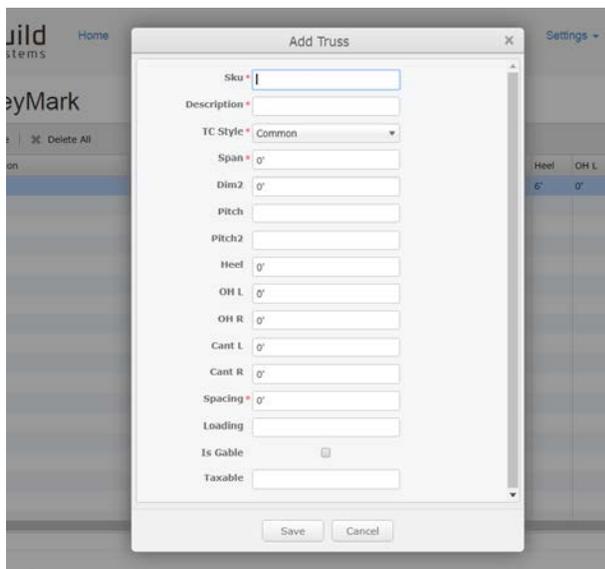
The TRUSSES page will then be displayed. From this page, select the ADD option.



## Trusses for KeyMark



The ADD TRUSS dialog box will be displayed, allowing you to enter the truss definition data you want to add. Please note the required fields have an asterisk by the field name.



The truss menu that pops up has specific truss attributes (like span, heel height, spacing etc.) to define the truss that gets added. These truss attributes are used so SmartBuild can find the exact or closest matching truss based on the specifics of each job. When adding trusses to the Truss page first add a few basic trusses by using the Add button, then you can use the Download button to download the full Truss table in a CSV or XLSX format, and then use the downloaded file as a template to add and fill out the rest of the Trusses.

For each truss that gets added make sure there is also a corresponding Gable-End Truss. These truss pairs will have all the properties except the "Is Gable" will be 'Yes' for the gable truss, and the price will be different. The Truss pricing is also controlled on this same Truss table (no need to go to the Pricing page for trusses). Note that a few of the settings on the Truss table like Loading are not required and can be left blank unless otherwise noted.

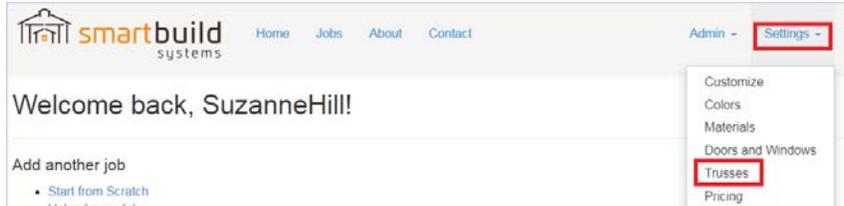
Once all the data has been entered, select the SAVE button.

## UPLOADING TRUSS DATA

The Basic File Upload method requires a CSV or XLSX file in the appropriate format. As previously mentioned, you can download a CSV or XLSX file from SmartBuild to be used as a template for this Upload file.

### Creating TRUSSES File Template:

From the SmartBuild Home Page select TRUSSES from the SETTINGS dropdown menu.



A file named "TrussList-CompanyName" will be saved in your DOWNLOADS folder. Use this as the template for your upload CSV or XLSX file. If the database had any default data in it, you should delete this data from the file template, AND delete the entries individually in SmartBuild. The upload process will NOT delete an entry in the SmartBuild database.

Below is the format of the **Truss** upload CSV file. A few examples are included to show how the actual data should be formatted. Please note that **column headers** must be spelled exactly as listed below, or SmartBuild will not recognize the data (and will most likely abort the upload). The required fields are highlighted in blue.

Skus	Description	TC Style	Span	Dim2	Pitch	Pitch2	Heel	OH L	OH R	Cant L	Cant R	Spacing	Loading	Is Gable	Cost	Markup	Price	Taxable	Special
Truss 01	Truss 01 - 18'	Common	18'	0' 5 1/2"	4	4	1' 6"	0'	0'	0'	0'	4'	30-10-10		\$500.00		\$600.00	1	
Truss 02	Truss 02 - 18' Span	Common	18'	0' 5 1/2"	4	4	1' 6"	0'	0'	0'	0'	4'	30-10-10	Yes	\$500.00		\$600.00	1	
Truss 03	Truss 03	Common	20'	0' 5 1/2"	4	4	1' 6"	1'	1'	0'	0'	4'	30-10-10		\$100.00		\$165.00	1	
C20P4HH18OH1SP4L30-10-10GB	Truss 04	Common	20'	0' 5 1/2"	4	4	1' 6"	1'	1'	0'	0'	4'	30-10-10	Yes	\$100.00		\$155.00	1	
C20P4HH18OH1SP8L30-10-10GB	Truss 05	Common	20'	0' 5 1/2"	4	4	1' 6"	1'	1'	0'	0'	8'	30-10-10	Yes	\$400.00		\$450.00	1	
C50P4HH18OH1SP4LGB	Truss 06	Common	50'	0' 3 1/2"	4	4	1' 6"	1'	1'	0'	0'	4'		Yes	\$375.00		\$380.00	1	
M1P4HH18OH2SP8L30-10-10GB	Truss 07	Mono	0' 1 1/8"	0' 1 1/2"	4	0	1' 6"	2'	0'	0'	0'	8'	30-10-10	Yes	\$100.00		\$200.00	1	
M8P4HH6OH2SP8L30-10-10GB	Truss 08	Mono	8'	0' 1 1/2"	4	0	0' 6"	0'	2'	0'	0'	8'	30-10-10	Yes	\$500.00		\$500.00	1	
O20P4HH18SP4L30-10-10GB	Truss 09	OffsetPeak	19' 7 13/16"	0' 5 1/2"	4	4	1' 6"	0'	0'	0'	0'	4'	30-10-10	Yes	\$500.00		\$700.00	1	
O30P4HH18SP4L30-10-10GB	Truss 10	OffsetPeak	29' 10 1/4"	0' 5 1/2"	4	4	1' 6"	0'	0'	0'	0'	4'	30-10-10	Yes	\$599.00		\$599.00	1	
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*Required

Once the file is completed, the next step is to upload it. From the TRUSSES page, select the UPLOAD button.



The UPLOAD TRUSS LIST page will be displayed. Click on the CHOOSE FILE button, and choose the appropriate CSV or XLSX file via Windows Explorer. Select UPLOAD.

## Upload Truss List CSV for KeyMark

Step 1: Click [here](#) to download the current truss list CSV file.

or: Create a csv file with the required columns.

Step 2: Edit the truss list csv file.

Step 3: Upload the truss list csv file

No fi...osen

[Back to List](#)

When the upload is completed, SmartBuild will display the upload status. If successful, a message indicating the number of trusses uploaded will be displayed. If not successful, SmartBuild will provide informative error messages to help identify the problem in the upload file.

## Pricing Data

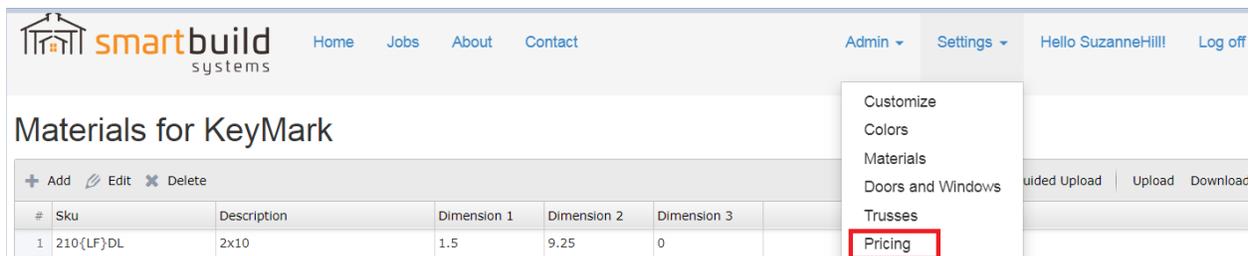
The pricing data includes the cost, markup, price and taxable status of each item in the database.

During this entire uploading/adding of material/trusses, the pricing data of each item could have been updated.

To update pricing data, there are three options;

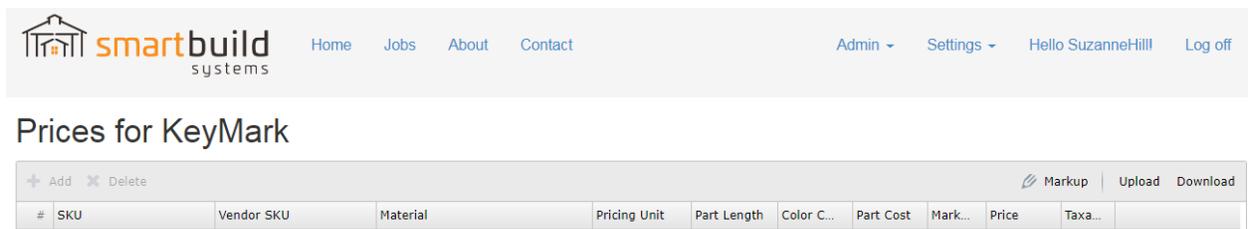
- Change pricing data directly in the PRICES page
- Using the EDIT MARKUP option on the PRICES page
- Upload new prices on the PRICES page

Navigate to the PRICES Page by selecting PRICING in the SETTINGS drop down menu.



The screenshot shows the SmartBuild Systems interface. At the top, there is a navigation bar with the logo, 'Home', 'Jobs', 'About', and 'Contact' links. On the right, there are links for 'Admin', 'Settings', 'Hello SuzanneHill!', and 'Log off'. The main content area is titled 'Materials for KeyMark'. Below the title, there are buttons for '+ Add', 'Edit', and 'Delete'. A table is displayed with columns: '#', 'SKU', 'Description', 'Dimension 1', 'Dimension 2', and 'Dimension 3'. The first row contains the value '1' in the '#' column and '210{LF}DL' in the 'SKU' column. To the right of the table, there is a dropdown menu with options: 'Customize', 'Colors', 'Materials', 'Doors and Windows', 'Trusses', and 'Pricing'. The 'Pricing' option is highlighted with a red box.

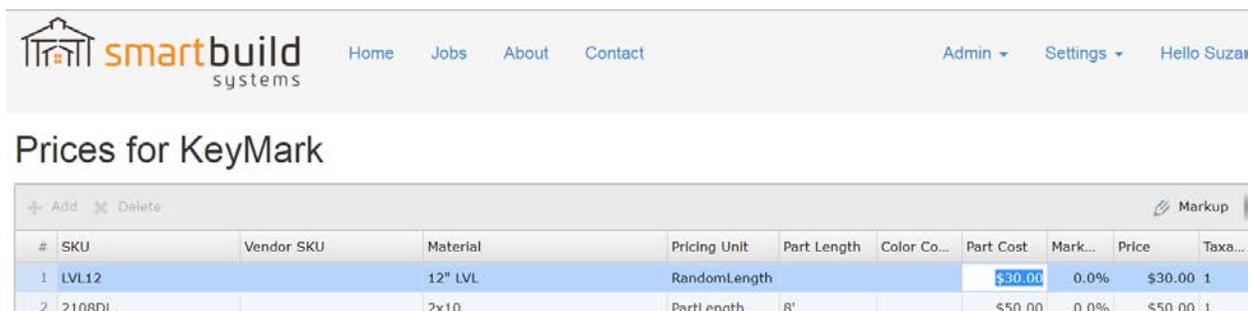
Once on the PRICES page you can choose any of the options listed above.



The screenshot shows the SmartBuild Systems interface. At the top, there is a navigation bar with the logo, 'Home', 'Jobs', 'About', and 'Contact' links. On the right, there are links for 'Admin', 'Settings', 'Hello SuzanneHill!', and 'Log off'. The main content area is titled 'Prices for KeyMark'. Below the title, there are buttons for '+ Add', 'Delete', 'Markup', 'Upload', and 'Download'. A table is displayed with columns: '#', 'SKU', 'Vendor SKU', 'Material', 'Pricing Unit', 'Part Length', 'Color C...', 'Part Cost', 'Mark...', 'Price', and 'Taxa...'. The first row contains the value '1' in the '#' column and 'LVL12' in the 'SKU' column.

## CHANGE PRICING DATA DIRECTLY ON SMARTBUILD WINDOW

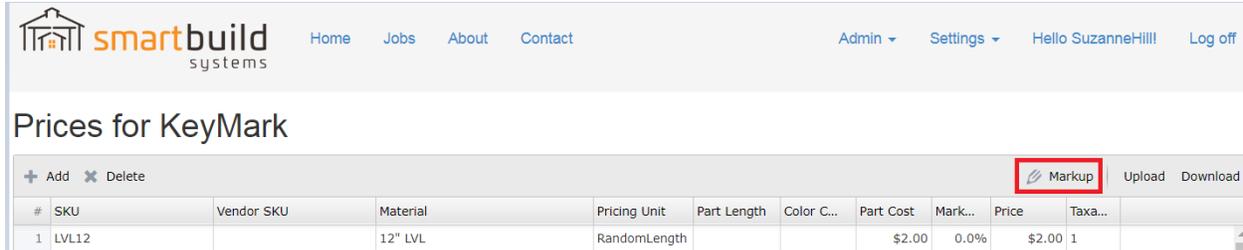
After the PRICES page is displayed, double click the field (cost, price, markup or taxable status) you want changed. Once the existing data is highlighted, enter the new data.



The screenshot shows the SmartBuild Systems interface. At the top, there is a navigation bar with the logo, 'Home', 'Jobs', 'About', and 'Contact' links. On the right, there are links for 'Admin', 'Settings', 'Hello Suzar', and 'Log off'. The main content area is titled 'Prices for KeyMark'. Below the title, there are buttons for '+ Add', 'Delete', and 'Markup'. A table is displayed with columns: '#', 'SKU', 'Vendor SKU', 'Material', 'Pricing Unit', 'Part Length', 'Color Co...', 'Part Cost', 'Mark...', 'Price', and 'Taxa...'. The first row contains the value '1' in the '#' column and 'LVL12' in the 'SKU' column. The 'Part Cost' field in the first row is highlighted in blue.

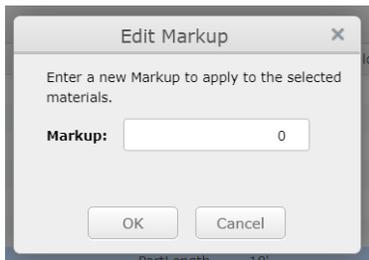
## CHANGE PRICING DATA BY USING THE EDIT MARKUP OPTION

From the PRICES page, select the EDIT MARKUP button.



The screenshot shows the 'Prices for KeyMark' page in the SmartBuild system. At the top, there is a navigation bar with 'Home', 'Jobs', 'About', and 'Contact'. On the right, there are links for 'Admin', 'Settings', 'Hello SuzanneHilll', and 'Log off'. Below the navigation bar, the page title is 'Prices for KeyMark'. There are two buttons: '+ Add' and 'x Delete'. To the right of these buttons, there is a 'Markup' button with a pencil icon, which is highlighted with a red box. Further right are 'Upload' and 'Download' buttons. Below the buttons is a table with columns: '#', 'SKU', 'Vendor SKU', 'Material', 'Pricing Unit', 'Part Length', 'Color C...', 'Part Cost', 'Mark...', 'Price', and 'Taxa...'. The first row of the table contains: '1', 'LVL12', an empty cell, '12" LVL', 'RandomLength', an empty cell, '\$2.00', '0.0%', '\$2.00', and '1'.

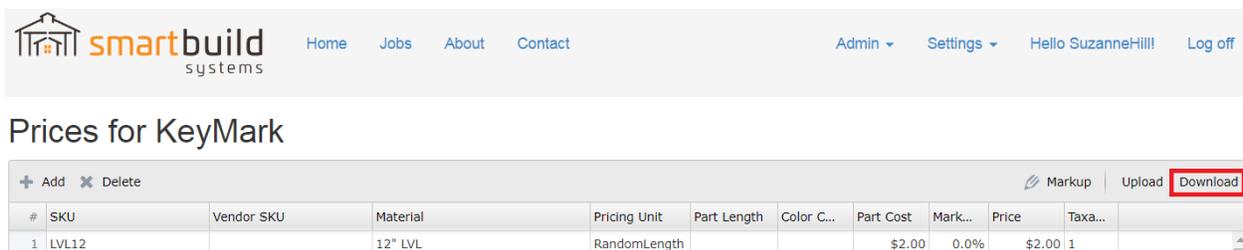
The EDIT MARKUP dialog box will be displayed. Enter the new markup and click on OK. The new markup will be stored, and a new price will be calculated from the new markup value and the existing cost.



The screenshot shows a dialog box titled 'Edit Markup'. It has a close button (X) in the top right corner. The text inside says 'Enter a new Markup to apply to the selected materials.' Below this text is a label 'Markup:' followed by a text input field containing the number '0'. At the bottom of the dialog box, there are two buttons: 'OK' and 'Cancel'.

## CHANGE PRICING DATA BY UPLOADING A FILE

The third way to edit the pricing data is with the Basic Upload File option. This process begins with downloading the pricing data from SmartBuild. From the PRICES page, select the DOWNLOAD button.



The screenshot shows the 'Prices for KeyMark' page in the SmartBuild system. The layout is similar to the previous screenshot. In this screenshot, the 'Download' button is highlighted with a red box. The table below the buttons is the same as in the previous screenshot.

The CSV or XLSX file will be downloaded to your computer. Edit the file, changing the price (markup, cost and/or taxable status data when appropriate) for every item needing a change.

Category	SKU	Vendor SKU	Material	Pricing Unit	Part Length	Color Code	Cost	Markup	Price	Taxable	Weight
Framing	LVL12	LVL12	KEY 12" LVL (BY THE FOOT)	RandomLength			\$4.00	10.00%	\$4.40	1	32
Framing	LVL12{LF}	LVL1216	KEY 12" LVL	PartLength	16		\$30.00	10.00%	\$33.00	1	2
Framing	210{LF}DL	2108DL	KEY 2x10	PartLength	8		\$50.00	0.00%	\$50.00	1	16
Framing	210{LF}DL	21010DL	KEY 2x10	PartLength	10		\$6.00	0.00%	\$6.00	1	20
Framing	212{LF}DL	21214DL	KEY 2x12	PartLength	14		\$7.00	0.00%	\$7.00	1	28
Framing	212{LF}DL	21216DL	KEY 2x12	PartLength	16		\$8.00	0.00%	\$8.00	1	32

There are certain things to consider when changing the PRICING data.

First, save a backup copy of the downloaded file, in case you determine that you've made major mistakes while changing the data. Hopefully you'll never need the backup, but it couldn't hurt to have one.

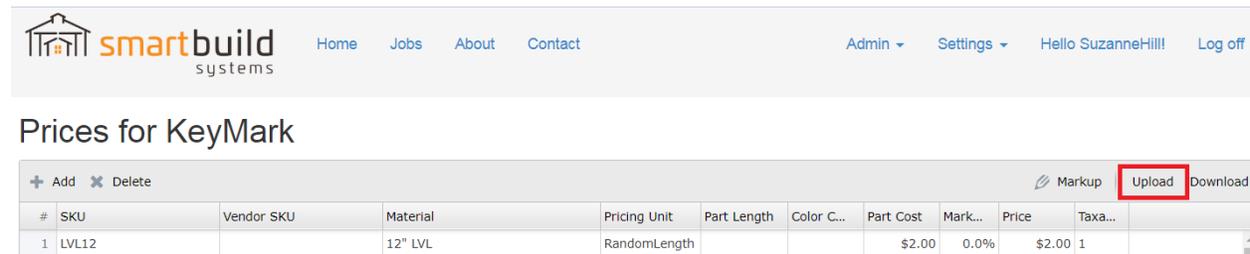
If you don't want to calculate the markup, delete the MARKUP column and just upload the COST/PRICE data. SmartBuild will calculate the margin based on the new cost/price.

If the upload file contains a PRICE column ONLY, SmartBuild will change the COST to same value as PRICE, and set MARKUP to 0.

If you upload new COST/MARKUP data, SmartBuild will recalculate the PRICE based on that new data (even if a different PRICE is uploaded at the same time). The new MARKUP has priority over the PRICE.

The WEIGHT column is required when uploading the PRICING data. However you can set the value to zero, if you want.

Save the file, then re-upload the file to SmartBuild.



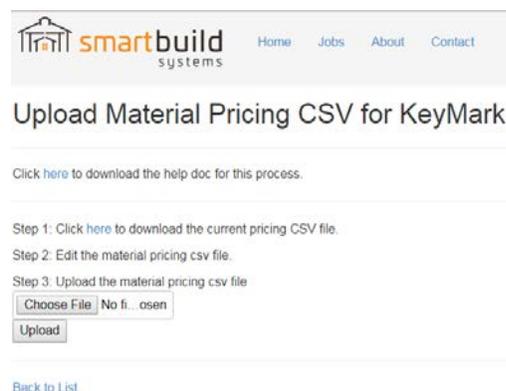
smartbuild systems Home Jobs About Contact Admin Settings Hello SuzanneHill Log off

### Prices for KeyMark

#	SKU	Vendor SKU	Material	Pricing Unit	Part Length	Color C...	Part Cost	Mark...	Price	Taxa...
1	LVL12		12" LVL	RandomLength			\$2.00	0.0%	\$2.00	1

Markup Upload Download

The UPLOAD MATERIAL PRICING page will be displayed. Click on the CHOOSE FILE button, and choose the appropriate CSV or XLSX file via Windows Explorer. Select UPLOAD.



smartbuild systems Home Jobs About Contact

### Upload Material Pricing CSV for KeyMark

Click [here](#) to download the help doc for this process.

Step 1: Click [here](#) to download the current pricing CSV file.  
 Step 2: Edit the material pricing csv file.  
 Step 3: Upload the material pricing csv file

Choose File No files selected

Upload

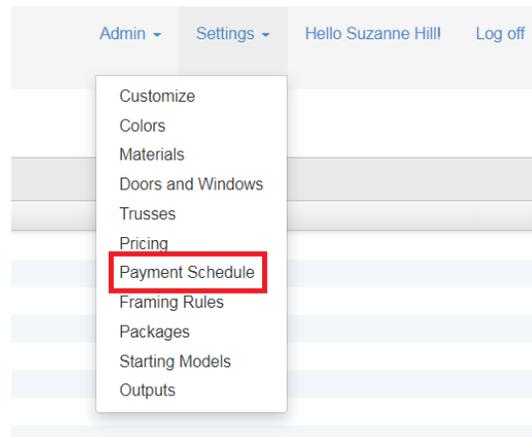
[Back to List](#)

When the upload is completed, SmartBuild will display the upload status. If successful, a message indicating the number of prices uploaded will be displayed. If not successful, SmartBuild will provide informative error messages to help identify the problem in the upload file.

## Payment Schedule:

If customers are required to make payments on a certain payment schedule, you can setup these entries on the Payment Schedule page. Add entries for each payment required (e.g. upon contract signing, upon delivery of materials, upon project completion).

Navigate to the PAYMENT SCHEDULE Page by selecting PAYMENT SCHEDULE in the SETTINGS drop down menu.



Payment entries can be added, deleted or changed on this page. Click on the ADD button to add a new entry. Select an entry to delete. If you want to edit one of the entries, double click the DESCRIPTION or the PERCENT, and change the field. Remember to select SAVE when change is completed.

## Payment Schedule for KeyMark

<span>+ Add</span> <span>🗑 Delete</span>   <span>⬆</span> <span>⬆</span> <span>⬆</span> <span>⬆</span>   <span>✖ Cancel</span> <span>✔ Save</span>	
Description	Percent
Payment 1 - Due when order is signed	50.0%
Payment 2 - Due when materials are delivered	50.0%

Once you've entered the various payments, you can go back in and change the description or percentages. With every change/addition, SmartBuild will recalculate the percentage in the last entry of the list. SmartBuild will not allow you to change the percentage of the last entry in the list. This guarantees that the total of the percentages in the list will total to 100%.

## Material Setup Completion:

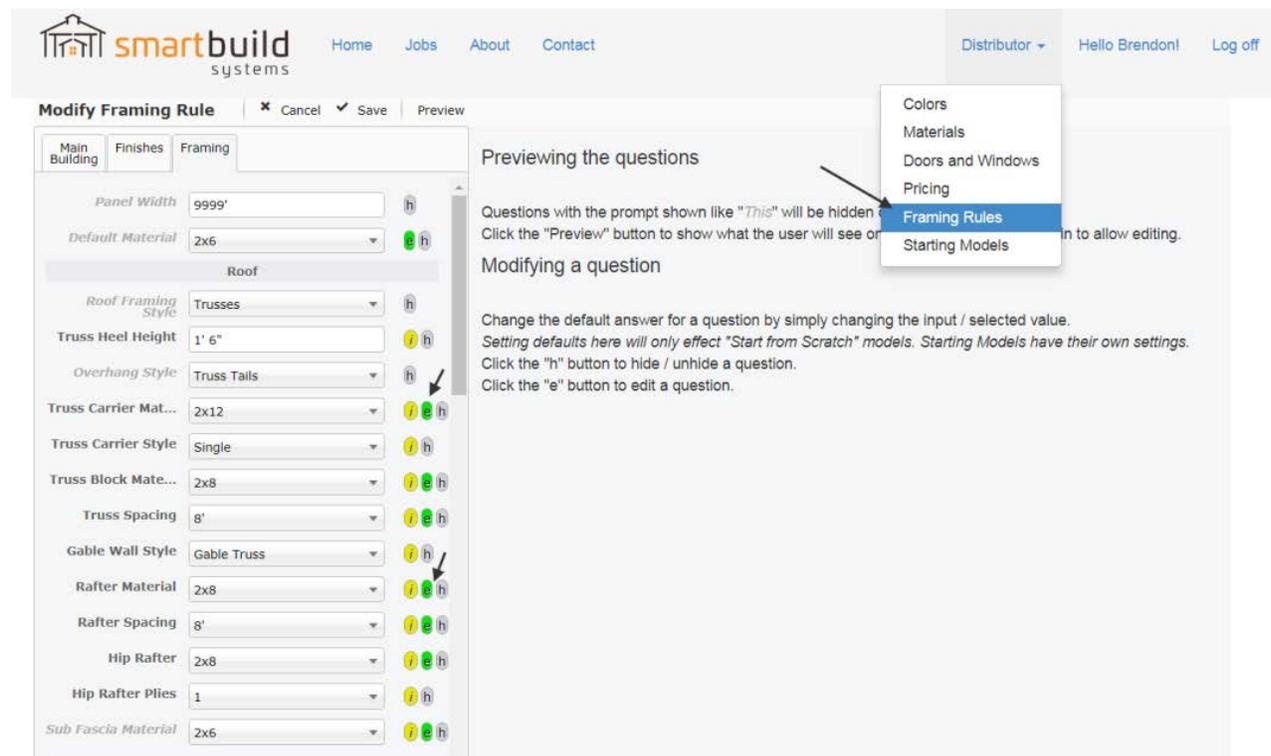
Getting all your materials into SmartBuild takes some upfront work. By identifying the type of material you are uploading, and following the guidelines above, you should be able to load all your materials into SmartBuild in a relatively short period of time.

After you've uploaded your materials into SmartBuild, there's one last step you can do to flag any possible SKU duplicates. Download the material then re-upload that same file. If error messages are displayed, then there are duplicate SKUs in the database. Your error messages should give you enough information to find those duplicates so you can correct them. If the re-upload was a success, then you're ready to move onto the next step in the SmartBuild setup process ... **Step 3: Define Framing Rules**

## Step 3: Define Framing Rules

### Adding products to the material usages on the Framing Rules page

Once all the materials are loaded on the Materials Page the next step is to open the Framing Rules page. The Framing Rules page is where the list of default materials is setup. Use the Framing Rules page to select all the answers to the questions listed on the main form that controls the 3D model on the right side of the screen. Framing Rules page has control buttons for each question. The green E button next to each question is used for editing the materials for that question. The gray H button will hide that question when you're in a 3D model. If the setting is something you never change, choose an answer and Hide the question, that way the answer cannot be changed when in the 3d model (you can always un-hide questions on the Framing Rules page if you want them to show up again).



**Modify Framing Rule** [Cancel] [Save] [Preview]

Panel Width: 9999' [h]

Default Material: 2x6 [h]

**Roof**

Roof Framing Style: Trusses [h]

Truss Heel Height: 1' 6" [h]

Overhang Style: Truss Tails [h]

Truss Carrier Mat...: 2x12 [h]

Truss Carrier Style: Single [h]

Truss Block Mate...: 2x8 [h]

Truss Spacing: 8' [h]

Gable Wall Style: Gable Truss [h]

Rafter Material: 2x8 [h]

Rafter Spacing: 8' [h]

Hip Rafter: 2x8 [h]

Hip Rafter Plies: 1 [h]

Sub Fascia Material: 2x6 [h]

Previewing the questions

Questions with the prompt shown like "This" will be hidden. Click the "Preview" button to show what the user will see or click the "h" button to allow editing.

Modifying a question

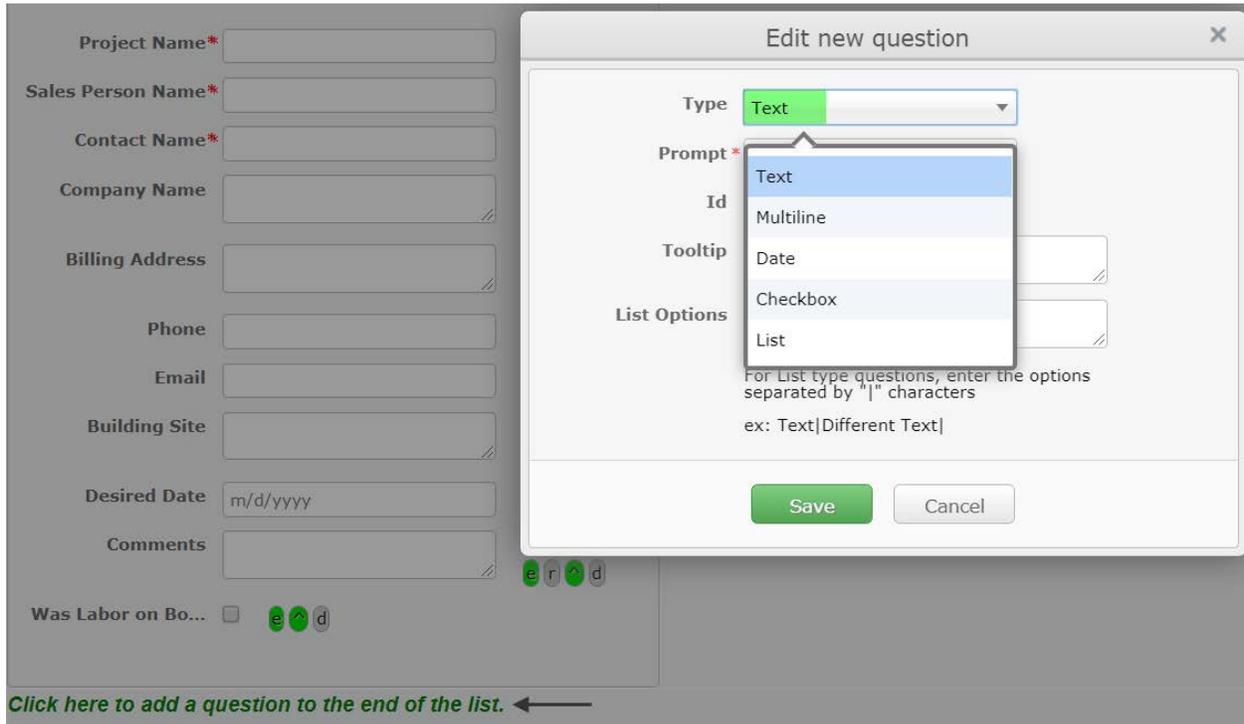
Change the default answer for a question by simply changing the input / selected value. Setting defaults here will only effect "Start from Scratch" models. Starting Models have their own settings. Click the "h" button to hide / unhide a question. Click the "e" button to edit a question.

Use the Framing Rules page to assign the default materials for things like framing, trim and sheathing parts. Just select the materials you want to use for each usage type and save the Framing Rules page. Then when you return to the Home page and select the Start from Scratch 3D model, all the default answers will be shown with the same answers that were saved in the Framing Rules. Note several different types of material options can be selected for each usage...

The first tab on the Framing Rules page is the Job tab. This tab is fully customizable, you can set it up with as many different job questions as you like. This is where the basic job information is gathered for each project. Use the fields to capture whatever job data that is important to you. The job info that gets

saved will show up on the cover pages on the outputs. Some Fields for important job information can be set to “required” by clicking on the gray R button next to that question.

Some of the different question fields you can use are: Text, Multi Line Text, Calendars, Check Boxes and Lists.



## Job Checks

Another feature on the front page of the Framing Rules page is the customizable job checks. These are limits that you can set in the Framing Rules that will show a message on the job, when a particular check gets triggered. The job checks are meant to be used along with the engineering and building standards for your region.

Here are some examples of the checks that you can set: max post spacing, truss heights and building widths. Let us know what other checks you would like to see...

**Modify Framing Rule for Buildings** ✕ Cancel ✓ Save Preview Help

Main Building | Finishes | Framing | **Job**

Project Name\*  7 e r d

Sales Person Name\*  e r d

Contact Name\*  e r d

Company Name  e r d

Billing Address  7 e r d

Phone  e r d

Email  7 e r d

Building Site  e r d

Desired Date  7 e r d

Comments  e r d

Was Labor on Bo...  e r d

**Framing Rule Checks** New Framing Check i

Formula  ... d

Message

Comment

Formula  ... d

Message

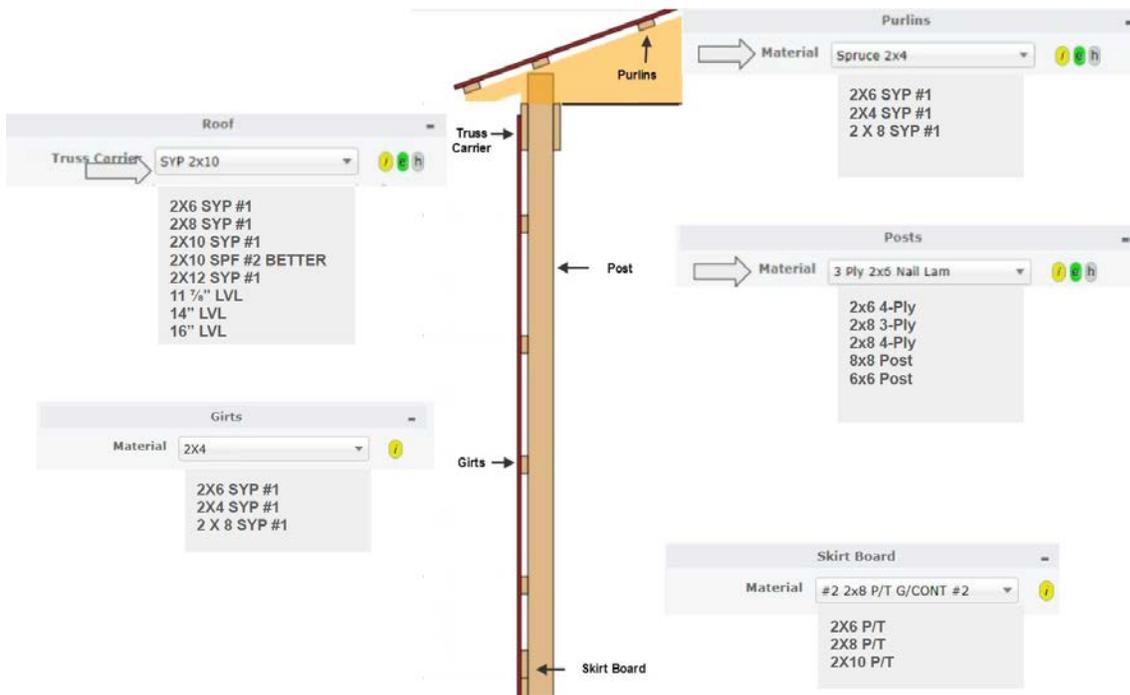
Comment

[Click here to add a question to the end of the list.](#) ←

## Framing tab questions

- The truss carrier material, also known as the “header” or the “top girt” is the part where the trusses are attached to a wall.
- Truss carrier styles include Single, Double and Triple truss carrier;
  - Single style is one truss carrier on the outside of the post.
  - The double gives a single truss carrier on the inside and outside of the post and allows for truss spacing and post spacing to vary.
  - The triple truss carrier style is two on the inside and a single truss carrier on the outside of the post.
- The truss block material is the vertical blocking on either side of the truss that attaches a truss to the truss carrier if there’s not a post underneath it.
- The truss spacing setting sets the center to center distance between the trusses this can be set from the front or back of every building.
- Rafters are used for the roof framing on porches and attached lean-tos. All roofs can also be framed with trusses instead of rafters.
- The hip rafter material is the rafter that’s running along the hip on a wraparound porch or lean-to.
- There are three options for the wall gable wall style...
  - Full height option has no trusses at the end of the building and the posts and girts run all the way up to the top of the roof.
  - Gable end is where there is a gable truss and the posts run all the way up to the roof line.
  - The gable short post option has the post stopping at the bottom of truss.
- Purlins style also have three types
  - The flat option lays flat on top of the truss.
  - The on edge will be in the strong axis on top of the trusses.
  - The flush options will cut around the purlins in between each truss and will mount flush with the top of the truss using hangers.
- Girts have two styles; standard and bookshelf that get cut in between the posts and laid flush with the inside and outside of the post
- The skirt-board material can be stacked and aligned with the building grade so that half the skirt-board is above grade and the other half is below grade.
  - You can also set the line of which the base trim will be set up in the bottom of the wall steel will sit.
- Roof ledger is the part where are the rafters for the attached building get tie into the wall of the main building.
- The open wall siding is used in conjunction with the open wall toggle on the building options tab. This controls how far down will the steel come on an open wall or if there is no steel on the wall.
- Use the Measure from option to determine where the offset will be measured from,
  - Bottom of Truss carrier
  - Or From Grade

Here are some example usages for the framing part questions:



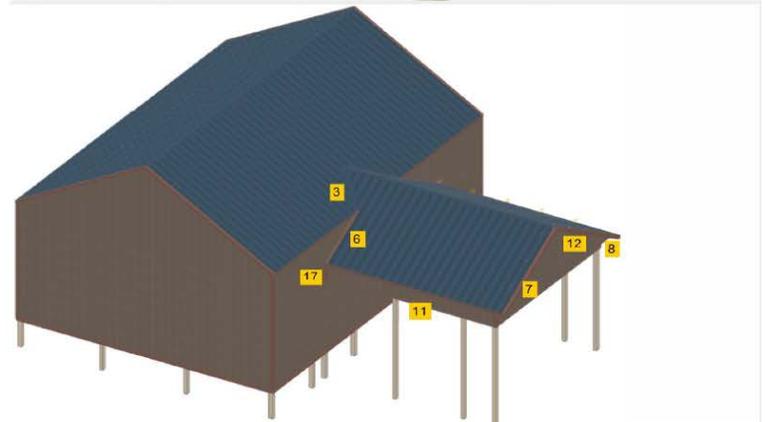
## Finishes tab questions

The Finishes tab questions cover all the exterior steel parts of the building.

- Check on wainscoting for the default building
- Set the default colors and materials you want to use for the walls and the roof metal
- The rest of the Finishes tab questions have to do with all the different trim parts on the building...

And here are some SmartBuild usages for the trim parts:

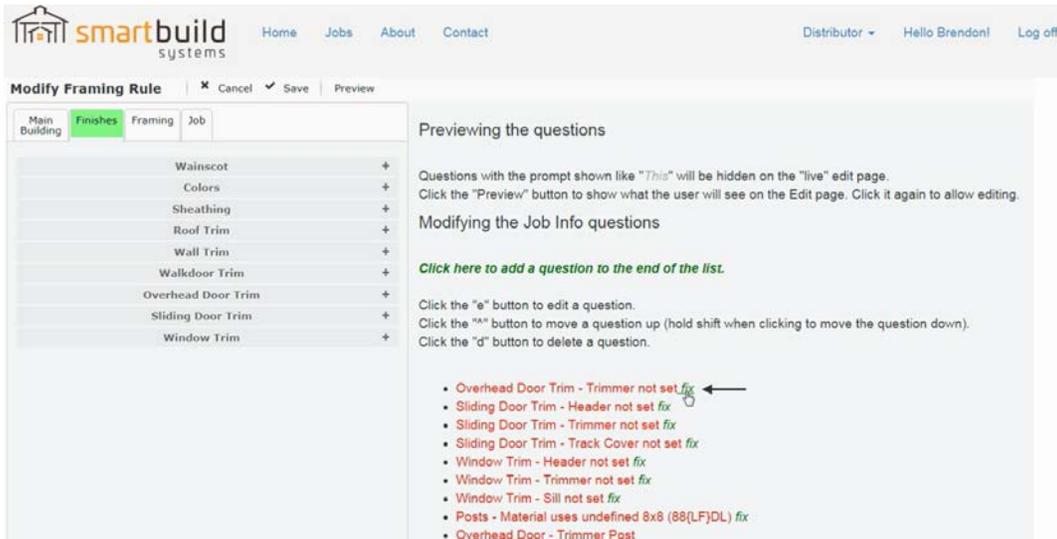
1	Ridge Cap	10	Base Trim
2	Hip Ridge Cap	11	Open Wall Base Trim
3	Valley Trim	12	Top of Wall Trim
4	Eave Edge Trim	13	Wainscot Trim
5	Gable Edge Trim	14	Door Header Trim
6	Roof To Wall Trim	15	Door Jamb Trim
7	Fascia Material	16	Window Sill Trim
8	Soffit Box Material	17	Inside Corner
9	Outside Corner		



Because the website is being continually updated there will be new settings and questions added.

## Fixing new materials on the Framing Rules page

When a default material is deleted from the Framing Rules, or a new material usage is added to SmartBuild a Fix message will pop up on the Framing Rules Page. To fix the message, click on the Fix button and then select the correct materials you want to use for the new answer.



**Modify Framing Rule** [Cancel] [Save] [Preview]

Main Building | **Finishes** | Framing | Job

Wainscot +  
Colors +  
Sheathing +  
Roof Trim +  
Wall Trim +  
Walkdoor Trim +  
Overhead Door Trim +  
Sliding Door Trim +  
Window Trim +

**Previewing the questions**

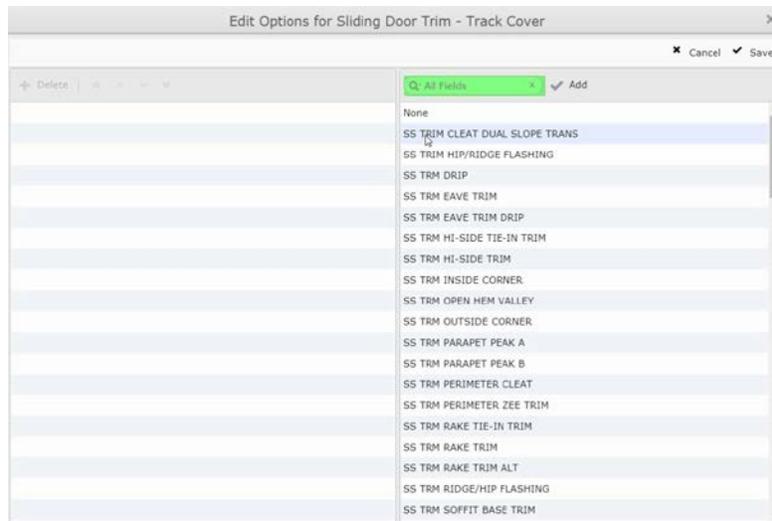
Questions with the prompt shown like "This" will be hidden on the "live" edit page. Click the "Preview" button to show what the user will see on the Edit page. Click it again to allow editing.

**Modifying the Job Info questions**

[Click here to add a question to the end of the list.](#)

Click the "e" button to edit a question.  
Click the "m" button to move a question up (hold shift when clicking to move the question down).  
Click the "d" button to delete a question.

- Overhead Door Trim - Trimmer not set **fix** ←
- Sliding Door Trim - Header not set **fix**
- Sliding Door Trim - Trimmer not set **fix**
- Sliding Door Trim - Track Cover not set **fix**
- Window Trim - Header not set **fix**
- Window Trim - Trimmer not set **fix**
- Window Trim - Sill not set **fix**
- Posts - Material uses undefined 8x8 (88(LF)DL) **fix**
- Overhead Door - Trimmer Post



**Edit Options for Sliding Door Trim - Track Cover** [Cancel] [Save]

Q: All Fields [x] [Add]

- None
- SS TRIM CLEAT DUAL SLOPE TRANS
- SS TRIM HIP/RIDGE FLASHING
- SS TRM DRIP
- SS TRM EAVE TRIM
- SS TRM EAVE TRIM DRIP
- SS TRM HI-SIDE TIE-IN TRIM
- SS TRM HI-SIDE TRIM
- SS TRM INSIDE CORNER
- SS TRM OPEN HEM VALLEY
- SS TRM OUTSIDE CORNER
- SS TRM PARAPET PEAK A
- SS TRM PARAPET PEAK B
- SS TRM PERIMETER CLEAT
- SS TRM PERIMETER ZEE TRIM
- SS TRM RAKE TIE-IN TRIM
- SS TRM RAKE TRIM
- SS TRM RAKE TRIM ALT
- SS TRM RIDGE/HIP FLASHING
- SS TRM SOFFIT BASE TRIM

Note: We post updates to the website every few weeks, some of these updates might change the functionality of the Framing Rules page. We'll post new training videos on our YouTube channel for any new features.

Let us know of any questions you might have or if you'd like to schedule an online training session to review the updates and cover some of the details Settings pages...

## Step 4: Configure Packages

### Introduction:

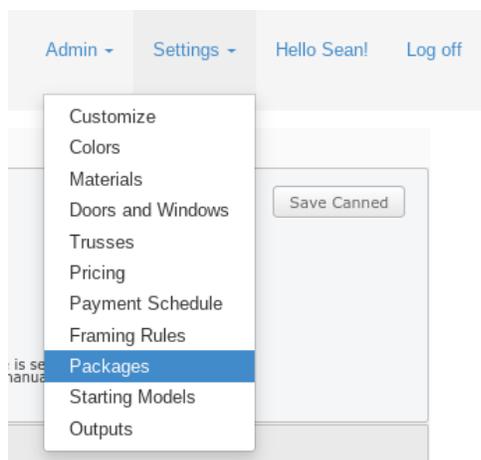
Sheathing, trim and framing members shown in the 3-d model will automatically be included in the material list and priced appropriately. You can also add materials from your catalog or as special order to any job. For everything else, SmartBuild uses Packages to call out materials and prices in a job. Packages are used to price things like insulation, interior liners, closures, bracing, screws, nails, horse stalls, labor, delivery and more.

Essentially, you choose a material from your material database and define a way to calculate, and add that material to any given job. A Package can contain one or many materials. You can have as many or as few packages as you like. Packages can incorporate Excel-like functions and formulas to calculate materials. Packages can also take advantage of job information like square footage, lineal footage, counts of members and many more options. Packages can include questions to be input on a job by job basis, like dimensions of a concrete slab, to calculate cubic yards of concrete required for the specifications of a job.

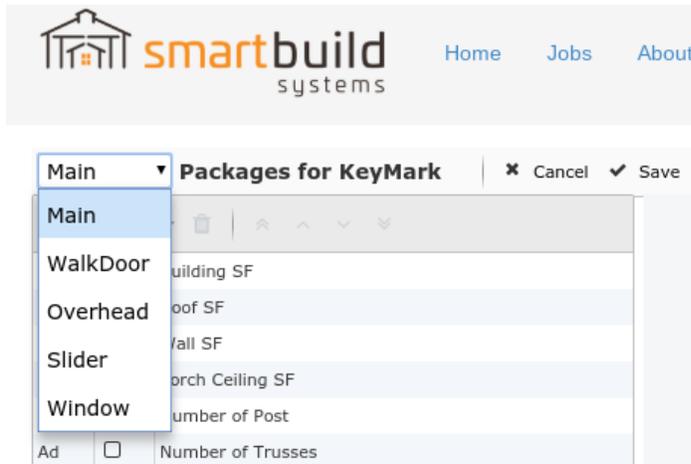
SmartBuild allows you to define packages in a way that makes sense for how you run your business. There are some standard Packages that SmartBuild will provide, but it will be your responsibility to make sure a full list of packages are set up in a way that works for your business.

### Adding a Package:

Packages are created under Settings/Packages:

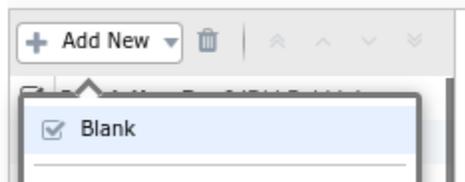


Choose to create Packages that apply to the whole building ('Main').



(see Door and Window Packages section for details on Packages for opening types)

To add a new package select Add New and Blank.



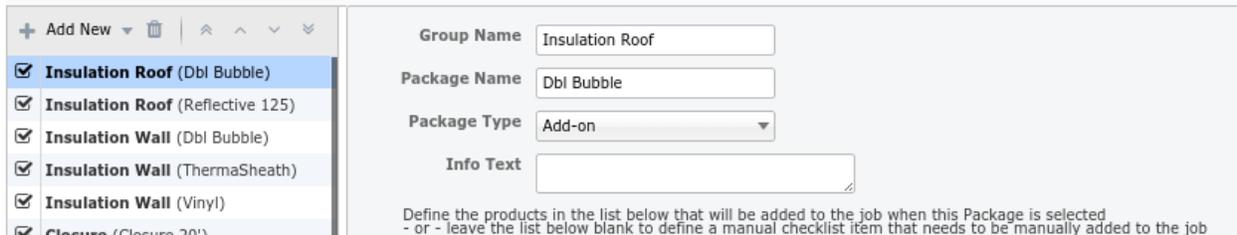
You can also add a pre-defined SmartBuild Package from the list to your packages:



The pre-defined packages are included with SmartBuild as a starting point for many of the common types of packages, but they will require adjustments for your specific materials and practices.

Once you add a New or pre-defined package, you can select the Package and edit the properties of the package and add or edit materials.

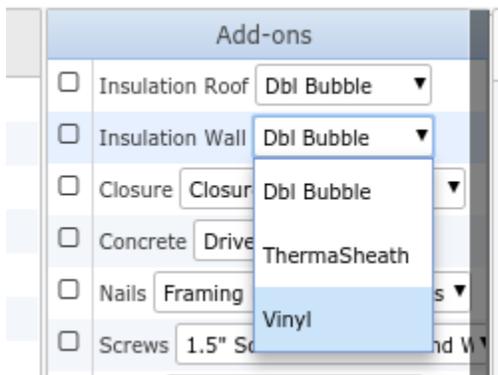
Before adding materials, you should define the properties of the package itself. The following section defines the properties of a Package:



*This shows the properties of the selected package*

**Group Name:** Packages can be grouped together. Any packages that have the same Group Name will be listed together under the Group Name as options to select from in a job.

In the example below, In a job, the two roof insulation material options ('DBL Bubble' and 'Reflective 125') will be grouped together under the 'Insulation Roof' Group Name. And, likewise, the three wall insulation material packages will be grouped together under the 'Insulation Wall' Group Name.



*In a job, the drop down shows the three material packages grouped under 'Insulation Wall'.*

In a job, you can select to turn on the Add-on for a job and you can choose one of the options from the roof and/or wall insulation groups to be added to the material list.

**NOTE:** You can only pick one item from a group (in this case you cannot select 'ThermaSheath' and 'Vinyl' from the list for wall insulation) to add to a job. If you need to have both 'Material A' and 'Material B' in a job at the same time then 'A' and 'B' cannot be under the same Group Name. In this example, the roof and wall insulation are not grouped together because we need the option to add roof insulation and/or wall insulation to a job. But, the different types of wall insulation can be grouped together, because we do not offer different types of insulation for walls in any given job.

**Package Types:** ‘Packages’ is a general term used in the program that refers to several types of packages. Add-on, Base Macro, Bundles and Options are types of ‘Packages’.

You can designate a Package Type which will affect the behavior of the package within a job.

**Add-on:** Add-ons are a type of package that can be included or excluded on a job by job basis. If an Add-on is included in a job, then all materials for that Add-on will be added to the material list and added to the quote price.

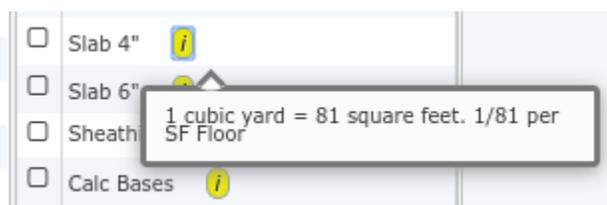
**Base Macro:** Base Macros are like Add-ons except they are automatically included in every job. There is no option to include or exclude per job, Base Macros are always included in every job according to the calculation used. Typically, these are used for nails, screws and other materials that are included with every job and do not require the option to turn off according to job specifications.

**Bundles:** A bundle acts like an Add-on, except it is also shown as a single item in terms of pricing. So, if you create a Bundle called ‘Workbench’ that includes 2x4’s and nails, the bundle will show a single total price for a ‘Workbench’ which is the sum of the individual materials. And, on the materials list, each material is listed as a separate material and added to the quote price. Bundles can be used to present sales bundles to a customer as a single line item price (like ‘Workbench = \$399.95’) with the individual material items that make up the ‘Workbench’ still on the material list as separate material items. Bundles are typically used when you want to present a single price to the end client and still have an itemized material list. Bundles can be listed on document template outputs (Add-ons will not be listed on document template outputs).

**Options:** Options are like Bundles except that an Option can also be shown on outputs with a total price and not added to the material list or total price of the quote. Options are a three way switch. Options can be 1. excluded from a job all together 2. Included in a job as a bundle (see Bundles definition above) or 3. Shown as a single price line item like a bundle but the materials are not included in the material list and not added to the total quote price. But, options can easily be added to a job as a bundle by clicking the checkbox for any given option. Options are typically used to present optional add-ons to the end client. For example, If your client has given specifications for a base building, and wants to consider adding the ‘workbench’, you can show the total price for the work bench as part of the original sales quote without affecting the price of the base building. If the client decides to add the work bench, then a single button click will add the option to the material list and quote price.

**Default Setting:** You can choose at set up if an Add-on will default to ‘turned on’ or ‘turned off’ in a job. If you choose ‘On’ then the Add-on will be automatically checked upon opening a job and therefore included in the job materials (and can be unchecked in the job to remove the Add-on). If you select ‘Off’ then the Add-on will be unchecked and not included in the job materials (and can be checked-on in the job to add the Add-on).

**Info Text:** The text entered here will be available in a job.

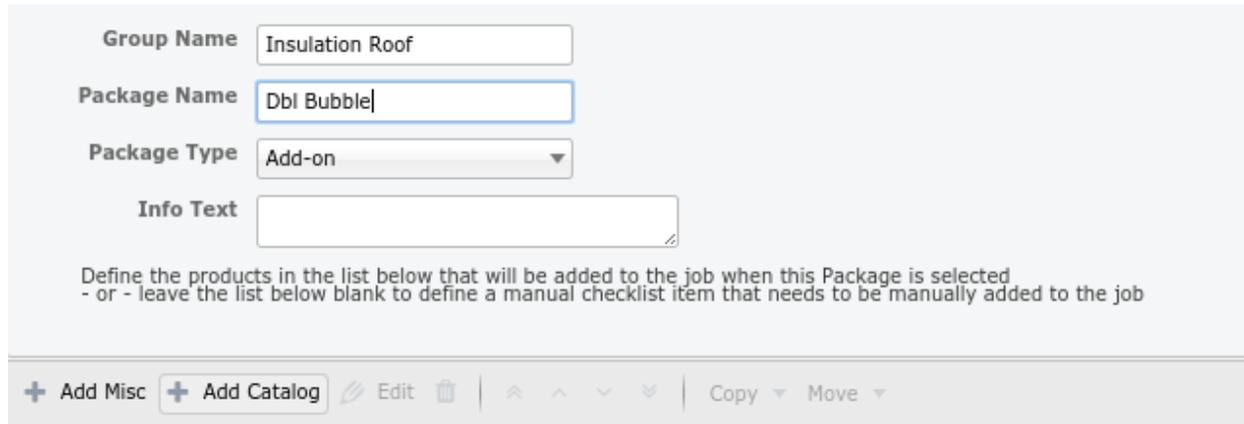


*Info Text can be accessed by clicking on the ‘i’ button next to any given package in a job*

Info Text is used to display notes, reminders and information for any package while modelling a job.

## Adding Materials to a Package:

Once you define the Package information then you can add materials to the package and define how those materials will be calculated and added to a job. A package can have one or more materials, each material is added to a package one at a time. To add a material to a package, select Add Misc or Add Catalog.



The screenshot shows a configuration form for a package. The fields are:

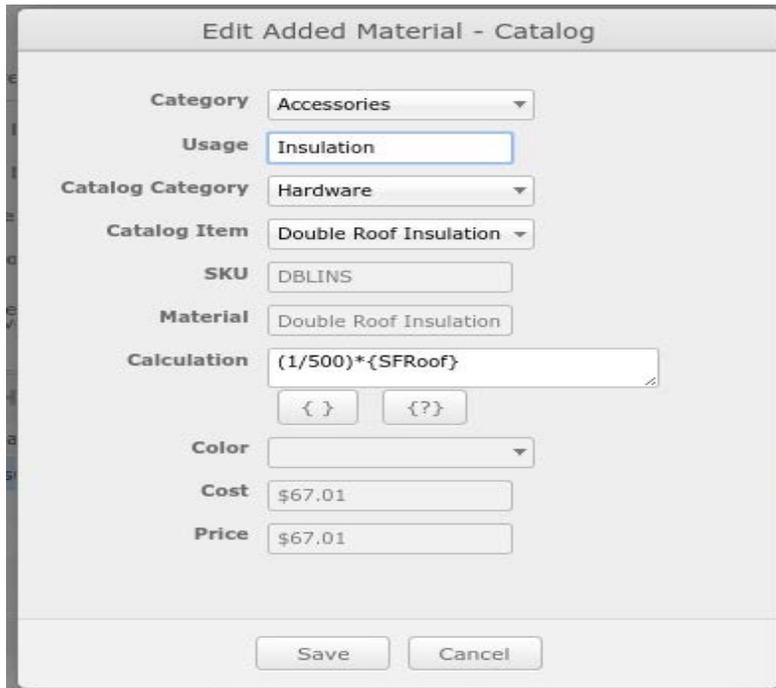
- Group Name:** Insulation Roof
- Package Name:** Dbl Bubble
- Package Type:** Add-on (dropdown menu)
- Info Text:** (empty text area)

Below the fields, there is a note: "Define the products in the list below that will be added to the job when this Package is selected - or - leave the list below blank to define a manual checklist item that needs to be manually added to the job".

At the bottom of the form, there is a toolbar with the following options: + Add Misc, + Add Catalog, Edit, a trash icon, a list of icons (up, down, left, right), Copy, and Move.

**Add Misc:** This will add a 'miscellaneous' or special order material to the package, you define this material upon adding it to the package. **NOTE:** Adding a material this way will only be used for the package it is added to, it is not connected to your master material database in any way. It will not be updated based on changes to pricing or anything else connected to your master material database. This material exists only as part of this package.

**Add Catalog:** This option will use a material from your existing master material database. When you use Add Catalog, the selected material is tied directly to your material database and used in the package. So, if you update the price of a material in your master material database, then the updated price will be reflected when the package is used in a job.



*This is the screen when Add Catalog is used to input a material into a package.*

The terms below are in order of the Add Catalog input.

**Category:** Specify which material category the calculated material will be placed within a job's material list. For example, if this is a framing member then you can choose Lumber from the drop down list, if it is a labor calculation then you can choose the Labor category. Once this material is added to a job, it will be listed under the selected category on the material list.

**Usage:** This is used to describe how this material is used in a job and can be anything you want. The Usage will be added, along with the parent Package name, to the Usage column in the job's material list.

**Catalog Category:** Narrow down the list of available 'Catalog Items' based on the material category. If you are estimating a framing member, then choose the Lumber category to select from the available lumber products.

**Catalog Item:** Select a material from your material database. This is the specific material that will be calculated and added to a job's material list based on the calculation defined.

**SKU:** Internal program SKU for selected Catalog item (automatically entered by program based on Catalog Item selected)

**Material:** Description of the selected Catalog Item (automatically entered by program based on Catalog Item selected)

**Calculation:** Formulas can be defined here to calculate quantities of the Catalog Item selected. You can use program data to help calculate material take offs, for example, square foot of roof or wall, lineal feet of different types of trim and quantities of things like trusses or posts. You can use standard addition,

subtraction, multiplication and division to calculate materials. You can also incorporate questions into calculations that will prompt the user for inputs to use in the calculation when added to a job (see Example 4 below for more details).

Follow these links to learn more about using Excel Functions in these calculations:

[Using Excel Functions in SmartBuild Package Calculations-2](#)

[SmartBuild IF Statements for Labor Calcs - Video](#)

**Test:** Use the Test button to check if the formulas are formatted correctly and verify that the expected amount of material results. This 'Test' mode saves significant time to verify the results without having to open a job.

**Color:** For materials with colors in the material database, this will allow you to select a color option for the material. You can either choose an exact color based on your color list, or match the roof or wall or trim color of the main building, or if you select 'Calc Base' then the program will apply the appropriate color based on the method of calculating the materials; for example, if you use 'SF of Wall Sheathing' in the calculation then the material will match the wall colors, even if you have more than one wall color in a job.

**Cost:** Cost of selected material from the material database (automatically entered by program based on Catalog Item selected)

**Price:** Cost of selected material from the material database (automatically entered by program based on Catalog Item selected)

## NOTE ON MATERIALS

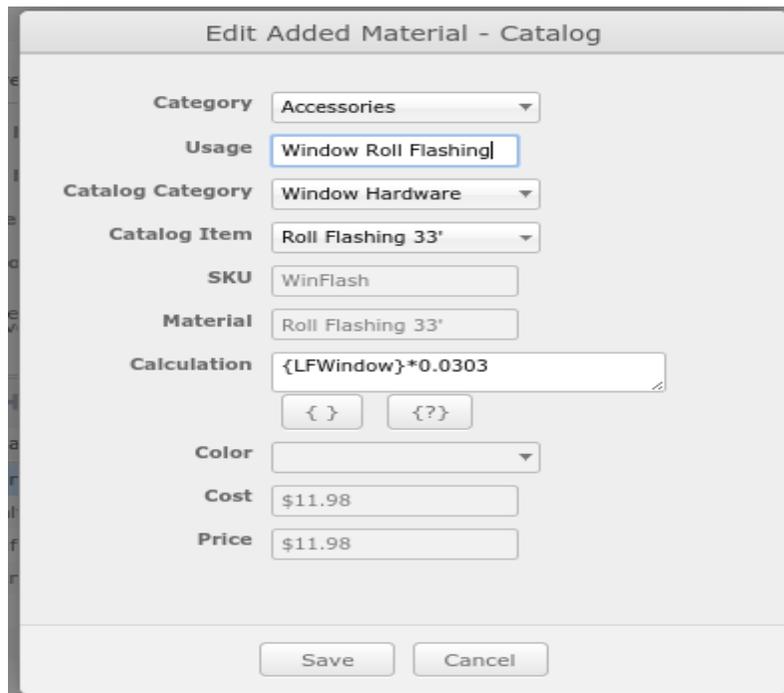
In order to estimate a material from your master material database, you need to first have the material added to your SmartBuild material database. See **Step 2: Setting up Material Databases** for more information on loading materials.

The way a material is entered into the system will affect how a Package is set up. If you set the price of a material by the roll (or box or bag...) then the Add-on will need to figure how many rolls are needed for a given job. To figure this, you need to find out what percentage of a roll is used based on your selected 'Calc Base', such as square foot of wall. If you don't want the program to call out a roll or box etc. but instead just want the lineal footage or square footage of material per job, then you would price the material based on square foot or lineal foot (not per roll, box....). So, if a 100 foot roll cost \$100 dollars, then the material would be priced as \$1.00 to get a cost per linear foot. So, the way a material is priced needs to coordinate with the way you want to report and estimate the material.

### Example 1: Estimate per roll based on Lineal foot

Let's say you use a roll on waterproof flashing for all windows. You need to have a material in your database to use. In your database, you add a 33' roll of flashing priced per roll in your 'Window Hardware' category. In this case, you want to figure out how many rolls to send out to any given job. So you create a 'Base Macro' to account for this flashing material. In this case, the best Calc Base available is 'Lineal Foot of Window Trim'. So, how do we figure out how many 33' rolls we need per job?

If you want to use 1 lineal foot of flashing for each 1' of window trim then you can use this formula: 1 lft divided by 33' of flashing (= .0303).



You could also use the calculation of:  $\{LFWindow\} * (1/33)$ , which would give the same result as the above calculation and is generally preferred as it provides more information about how it is calculated .

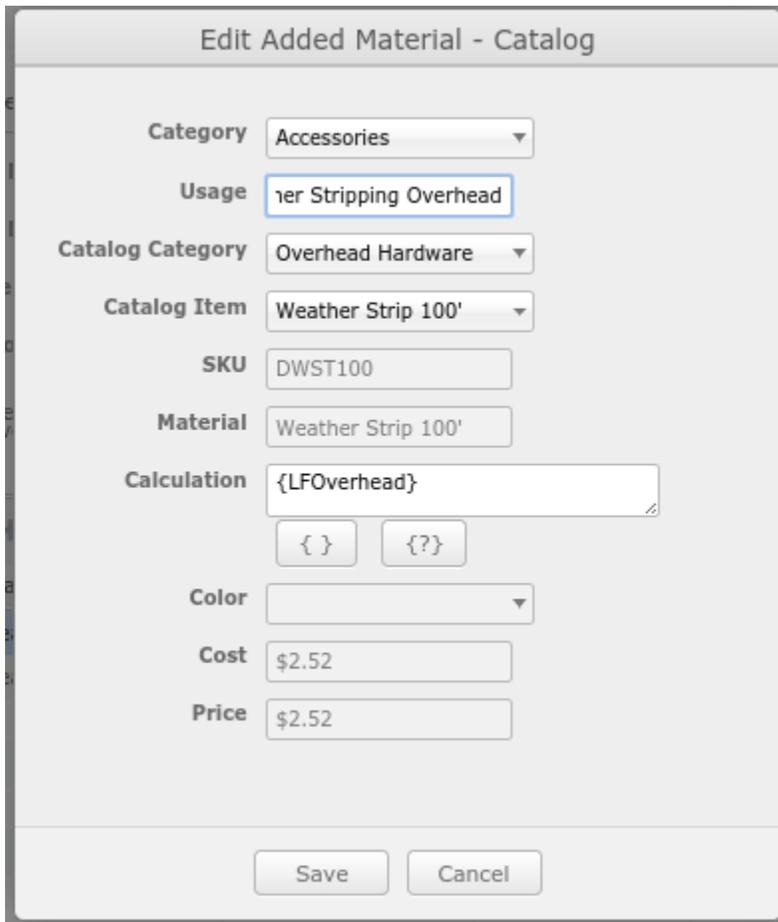
This means for every lineal foot of window trim for a given job, you will get 1 foot of window flashing, **but** it will only report the number of rolls required for the material take off. If a job has less than 33 lineal feet of window trim then one roll of 'Roll Flashing 33'' will be included and priced on the material take-off. As the lineal feet of window trim increases so does the number of rolls, but only when it reaches a point that requires a new roll. So, 33' will require 2 rolls (the program will round up when exactly 33'). 65' will require 2 rolls. 66' will require 3 rolls etc.

You can build waste factors into the calculations. For example, one way to handle this is to add 10% to the lineal footage of trim and then figure out the material based on actual lineal footage plus a 10% waste factor. The calculation would look like:  $((\{LFWindow\} * .1) + \{LFWindow\}) * .0303$ . This calculation finds 10% of the lineal footage of trim and then adds the actual lineal footage of window trim and then figures out how many rolls are required based on the waste adjusted lineal footage.

This is one example, but the same principles can apply to any type of material where you need to find the quantity of rolls, or bags or boxes to send out per lineal foot of something.

**Example 2: Priced per lineal foot (not per roll,box...)**

Let’s assume instead of figuring out the number of rolls to send out, you want a number of actual lineal footage required and priced per lineal foot (not per roll). In this case, you would set the cost of the material in your material catalog by the cost of material per lineal foot in a roll. If a roll of 100’ costs \$252.00 then the cost in your material catalog would be \$2.52 per lineal foot. In this case, you want one lineal foot of flashing for every lineal foot of window trim.



The screenshot shows a form titled "Edit Added Material - Catalog" with the following fields and values:

- Category: Accessories
- Usage: per Stripping Overhead
- Catalog Category: Overhead Hardware
- Catalog Item: Weather Strip 100'
- SKU: DWST100
- Material: Weather Strip 100'
- Calculation: {LFOverhead}
- Color: (empty dropdown)
- Cost: \$2.52
- Price: \$2.52

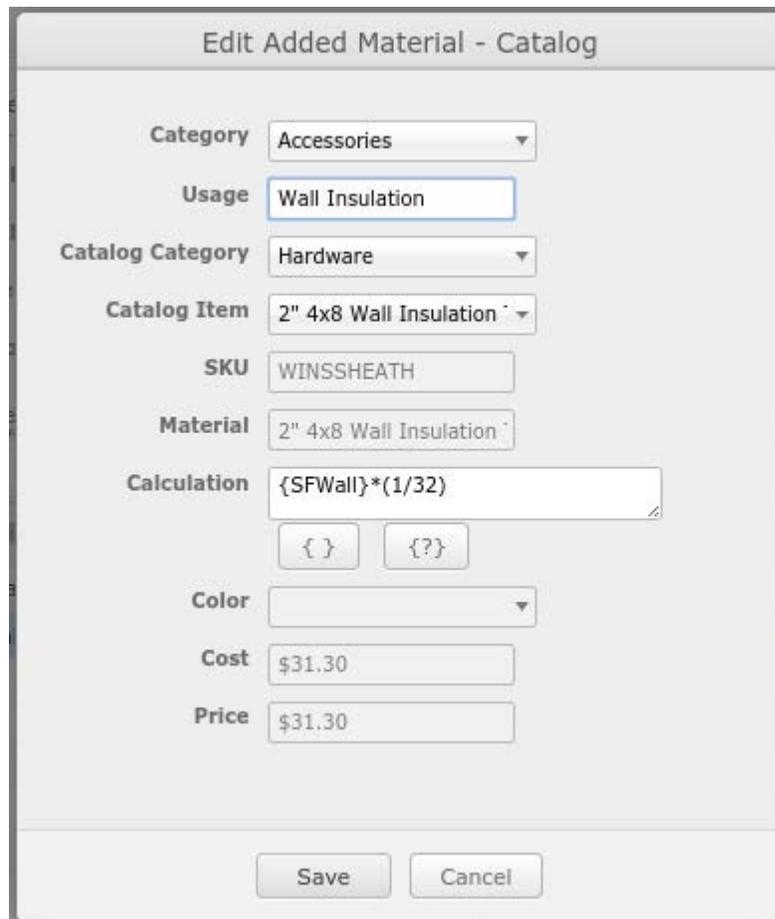
Buttons for "Save" and "Cancel" are located at the bottom of the form.

*The 100’ roll is priced per lineal foot.*

In the above example, the Calculation is just Lineal Footage of Overhead door trim, so one foot of weather strip for every lineal foot of overhead trim. The results per job on the material take-off will show the actual lineal footage required and it will give a price of the material per lineal foot.

### Example 3: Materials based on Square Footage

Using square footage as a Calc Base is similar to using lineal footage, except you need to figure out the total coverage of the material. For example, let's say you use a 4x8 insulation panel to insulate walls and you want the program to figure out how many panels you need for any given job. In the material database, you would add a 4x8 insulation panel with the cost/price per panel. Under packages, you would create an Add-on to account for this material. In this case, square footage of wall sheathing is a good Calc Base to use to figure out how many sheets are required. To do this you need to figure out the coverage of one sheet, so  $4 \times 8 = 32$  square foot per panel. Then you need to tell the program how much of a sheet is required for one square foot of wall sheathing. This calculation is  $1/32$ .



**Edit Added Material - Catalog**

Category: Accessories

Usage: Wall Insulation

Catalog Category: Hardware

Catalog Item: 2" 4x8 Wall Insulation

SKU: WINSSHEATH

Material: 2" 4x8 Wall Insulation

Calculation:  $\{SFWall\} * (1/32)$

Color: [Empty]

Cost: \$31.30

Price: \$31.30

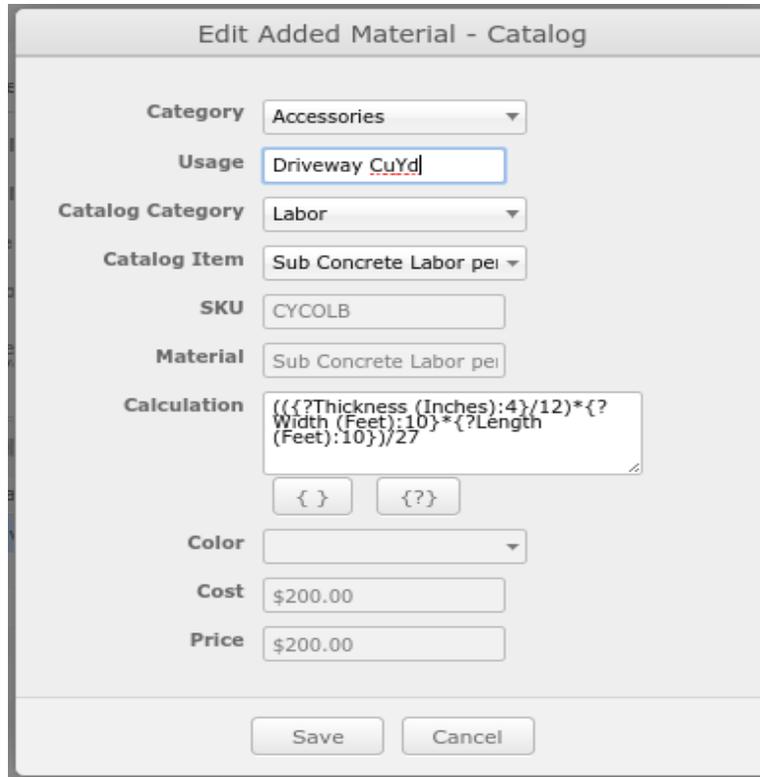
Buttons: Save, Cancel

In this example, the program will calculate how many sheets are required for any given job based on the job's total square foot of wall sheathing. The program will round up, but basically, for every 32 square foot of wall sheathing, the program will report 1 sheet of wall insulation. 330 square feet of wall sheathing would report 11 sheets.

### **Example 4: Finished floor cubic yards to square foot with questions**

For slabs, since we are using the square footage of floor in the program, we need to convert cubic yards to square feet. You could create a material under the Foundation category of '1 cubic yard of concrete' with a cost/price for 1 cubic yard of concrete.

You can add questions within a calculation to prompt a user of the program to enter job specific information to use in the calculation when applied to a job. Here is a sample set up to calculate:



**Edit Added Material - Catalog**

Category: Accessories

Usage: Driveway CuYd

Catalog Category: Labor

Catalog Item: Sub Concrete Labor per

SKU: CYCOLB

Material: Sub Concrete Labor per

Calculation: 
$$\frac{(((\text{Thickness (Inches):4})/12)*\text{Width (Feet):10})*\text{Length (Feet):10}}{27}$$

Color: [Dropdown]

Cost: \$200.00

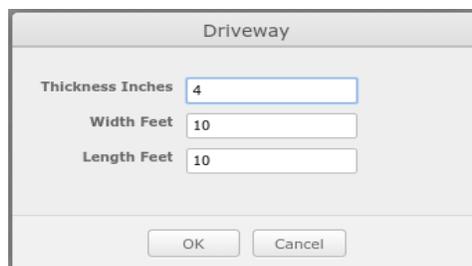
Price: \$200.00

Buttons: Save, Cancel

The calculation: 
$$\frac{(((\text{Thickness (Inches):4})/12)*\text{Width (Feet):10})*\text{Length (Feet):10}}{27}$$

Using this calculation, the program will prompt the user to enter a Thickness, Width and a Length. It will then calculate square footage and divide by 27 to get cubic yards and add the number of cubic yards to the quote with a price per cubic yard.

When the driveway is added to a job, the questions will be presented like this:



**Driveway**

Thickness Inches: 4

Width Feet: 10

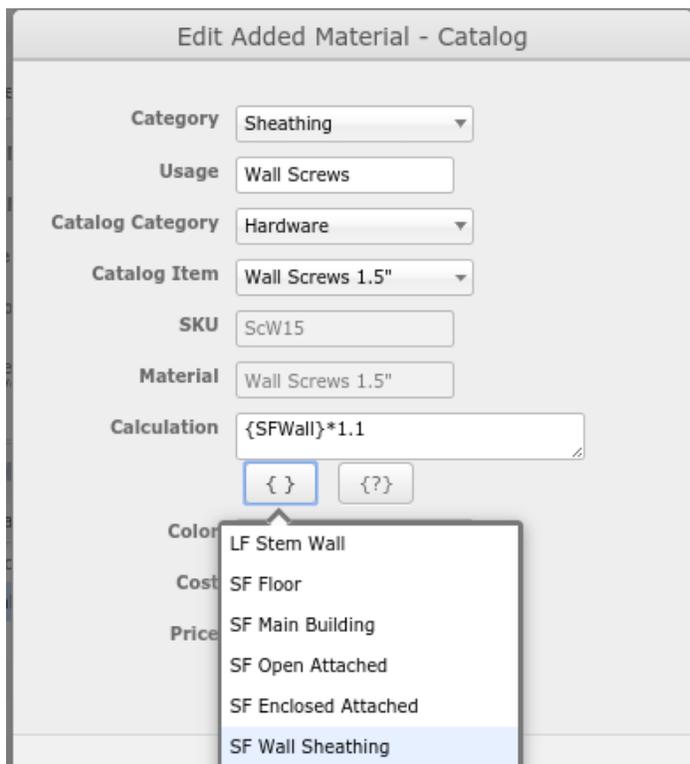
Length Feet: 10

Buttons: OK, Cancel

The program will calculate the cubic footage of concrete based on the answers to the Driveway questions. The defaults in this case are defined as 4, 10 and 10 but can be changed in a job.

### **Example 5: Screws**

Screws generally follow similar principles as above. If you want a count of screws per square foot of roof or wall sheathing then the calculation is pretty easy. In the Calculation, you just add “SF of wall Sheathing’ and multiply by the desired amount of screws per square foot of wall sheathing. If you use ‘1’ as the multiplier then you will get 1 screw for every square foot of wall sheathing. If you use 2 then you will get 2 screws for every square foot, if you use .5 then you will get ½ a screw for every 1 square foot (though you can’t get half a screw so it is more accurate to say you will get 1 screw for every two square feet). You can increase or decrease the amount per square foot as you like.



The screenshot shows a form titled "Edit Added Material - Catalog". The fields are as follows:

- Category: Sheathing
- Usage: Wall Screws
- Catalog Category: Hardware
- Catalog Item: Wall Screws 1.5"
- SKU: ScW15
- Material: Wall Screws 1.5"
- Calculation: {SFWall}\*1.1

Below the Calculation field, there are two buttons: { } and {?}. A dropdown menu is open below the { } button, showing the following options:

- LF Stem Wall
- SF Floor
- SF Main Building
- SF Open Attached
- SF Enclosed Attached
- SF Wall Sheathing (highlighted)

*Example of getting 1.1 screws for every square foot of wall sheathing*

Calculating screws per square foot to get a count of the number of boxes is a bit more difficult.

#### **Here is a formula that you can use:**

The number of screws per square foot you want to use, divided by the total number in a box, multiplied by the actual square footage in the job.

In the example below, we are using the same screw for roof and wall so the calculation combines roof and walls screws into one calculation. For this example, there are 250 screws per box, for the roof I used 1.4 screws for every square foot, divided by 250 and multiplied that by the actual square footage of wall sheathing. For the walls I used 1.1 screws per square foot. I added the roof and walls screws together to get a total number of boxes required for roof and wall screws. If the screw count is under 250 then I will have one box called out on the material list, if it is 250-499 then I will have two boxes and so on.

**Edit Added Material - Catalog**

**Category**

**Usage**

**Catalog Category**

**Catalog Item**

**SKU**

**Material**

**Calculation**

**Color**

**Cost**

**Price**

For trim screws, you can estimate based on square footage similar to the example above. You can also use the extensive list of different types of trim lineal footage to get a count. Using similar techniques as above, you can specify a multiplier based on lineal footage.

### Example 6: Nails

You can also use similar methods for nails as screws depending on how you want to calculate the counts. With nails you may be more likely to use other data to calculate quantities. For example, for girt nails, you could use # of post, along with the building ceiling height to calculate a quantity of girt nails. If you figure the number of girt nails per lineal foot of post (in the example below I used .25 girt nails per lineal foot of post) and then multiply that by the ceiling height (so a 14' post \* .25 would be 3.5 nails per post) and then multiply that by the total number of posts in the job. The calculation would look something like:

Edit Added Material - Catalog

Category	<input type="text" value="Accessories"/>
Usage	<input type="text" value="Main Building Girt Nails"/>
Catalog Category	<input type="text" value="Fastener"/>
Catalog Item	<input type="text" value="Gun Nails Box 3"/>
SKU	<input type="text" value="NailBox3"/>
Material	<input type="text" value="Gun Nails Box 3"/>
Calculation	<input type="text" value="({MainBuildingCeilingHeight}*.25) * {Post}/1000"/>
Color	<input type="text"/>
Cost	<input type="text" value="\$69.39"/>
Price	<input type="text" value="\$69.39"/>

*In this case, I am using a box of 1000 nails so the equation is divided by 1000 to get the number of boxes.*

For purlins, you could use a multiplier based on the '# of trusses' if you nail the purlins to the trusses. If you drop the purlins flush with the trusses then you could use '# of purlins' with a multiplier to figure the number of hangers required, for example.

**Package Name**  Save Canned  
**Package Type**   
**Info Text**

Define the products in the list below that will be added to the job when this Package is selected  
 - or - leave the list below blank to define a manual checklist item that needs to be manually added to the job

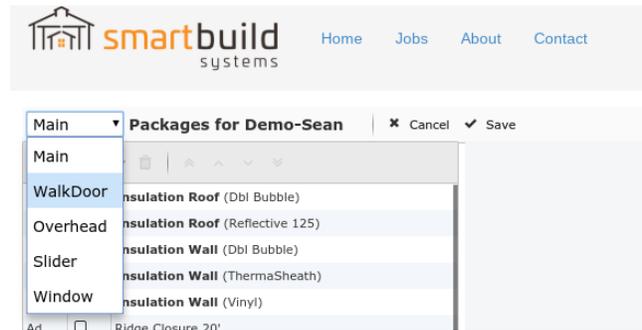
+ Add Misc   + Add Catalog   Edit   Delete   |     |   Copy   Move

Usage	SKU	Material	Length	Calc Base	Qty
Girt Nails Exterior	NailBox3"	Gun Nails Box 3"		SFWall	0.004
Purlin Nails	NailBox3"	Gun Nails Box 3"		SFRoof	0.004
Skirt Board Nails	PNail35GIV	Pole Nail 3 1/2 Galv		LFBBase	0.018
Truss to Post Nails	PNail4	Pole Nail 4"		Truss	0.3
Header Nails	PNail4	Pole Nail 4"		Post	0.004
Windows Nails	CapNail1.51	Cap Nails 1 1/2 #1		Window	0.096

*Example of a nail Base Macro with multiple types of nails calculated in different ways.*

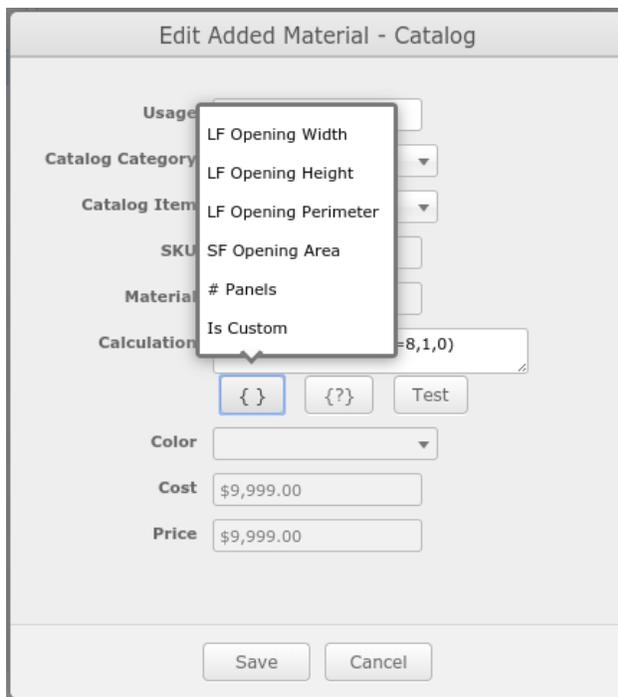
## Door and Window Packages

The same functionality described above is available specifically for doors and windows. You can create a Package for a Walkdoor, Overhead, Slider or Window. Door and window packages are specific to the door and window type.



These package will apply only when that type of opening has been input into a job. So, the Overhead Door packages will not apply unless you input an Overhead door. And the packages will apply individually to each Overhead door input into a job. The package calculations are based on the specifications of the specific opening such as the width, height, perimeter and square footage. Door and Window packages can be used to calculate and add materials for individual openings for things like weather stripping, openers, rails and slider parts.

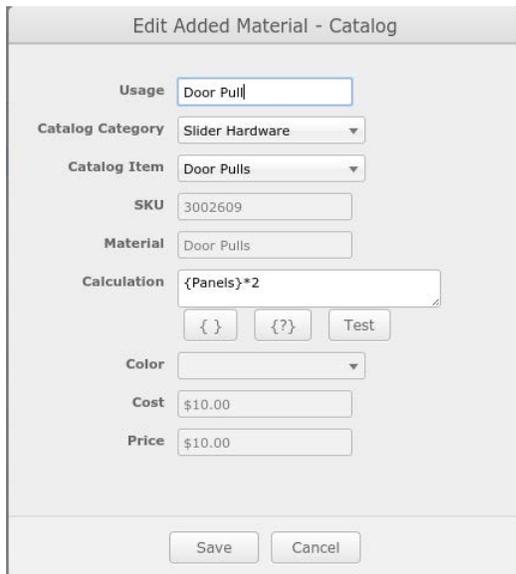
Each opening type has its own set of 'Calc Bases' to use to calculate materials for that opening type.



'Is Custom' is used to get a quantity of Custom openings (as opposed to doors from you material catalog), and can be used to calculate different materials and labor for custom openings. IF statements

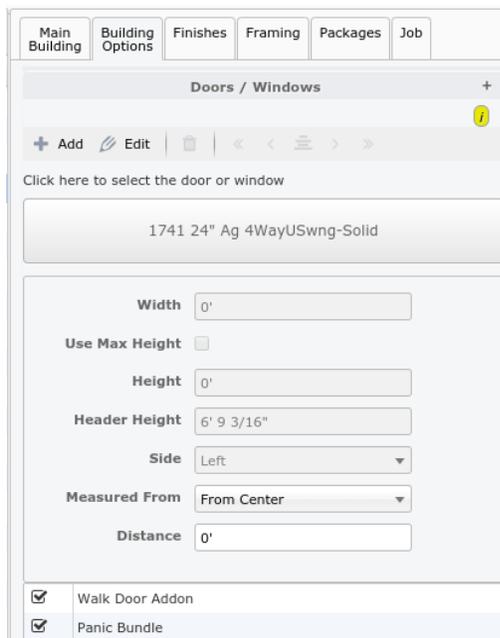
can be used to apply, or not apply materials based on the presence (or absence) of custom openings in a job.

For Sliders, the '# of Panel' {Panels} Calc Base represents the number of panels in a slider door. One panel for a Left or Right Slider, and 2 panels for a Split slider. You can use this to add materials based on if the door is split or not



In the example above, the Calculation: {Panels}\*2 add 2 Door Pulls to the material list for a Left or Right Slider or it add 4 'Door Pulls' if it is a Split Slider.

In a job, Door and Window packages are displayed at the bottom of the Door/Window input screen, depending on which type of opening you have selected to input.



Door and Window package set-up, best practices and application follow the same rules as the 'Main' packages (See Main packages section for additional documentation).

## Using Excel Functions in SmartBuild Package Calculations

You can use many of the functions available in Excel within the calculation used to call out materials in SmartBuild (see end of this document for a full list of available Excel functions). If you have an Excel expert then they would be a good resource to help create these types of packages for your business.

### IF Function

The most valuable function is the IF function. You can use IF functions within package calculations to evaluate certain conditions, and then perform different calculations depending on whether the test was TRUE or FALSE. These are very similar to the IF functions used in Excel. The only difference, unlike Excel, SmartBuild can not reference other cells in a spreadsheet. Instead, SmartBuild can reference 'Calc Bases' which represent information from the job like total square footage, total weight and many more.

Note: the purpose of an individual calculation is to add a calculated quantity (and therefore a total cost/price) of a single material to a job. So, it is important to understand that the way the material is added in the Pricing database will affect how the calculations is set up.

### Example 1:

You can use a single IF functions, but the most value comes from 'nested' IF functions. A "nested IF" refers to a formula where more than one IF function is nested inside another to check more than one conditions. The first function found to be true will be used for the calculation.

General Syntax:

IF(logical\_test, value\_if\_true,IF(logical\_test, value\_if\_true ))

Example IF statement:

if({TotalWeight} <=3000,1,if({TotalWeight} <=6000,2,if({TotalWeight} <=9000,3)))

In this example, say I have a delivery fee in my material database of \$100. The way this is set up, if the total weight of the job is equal to or less than (<=) 3000 pounds, then I will get a quantity of 1 delivery fee, so \$100. If the statement is not true (i.e. the total weight is more than 3000) then it will move on to the next If statement. If the total weight is less than or equal to 6000 pounds then I will get a quantity of 2, so \$200 will be placed on the job's material list. (Note: since the function already determined that <= 3000 was false, so even though this 2nd function includes anything below 6000, we know it is not below 3000 already). If the total weight is less than or equal to 9000 then I will get a quantity of 3 delivery fees (or \$300). We could continue to nest more total weights to make sure we cover all the possibilities.

Each IF statement needs to be carefully "nested" inside another so the calculation will execute correctly. It is required to include the correct amount of parenthesis in the function. For each nested IF statement, an opening and a closing parenthesis is required. Notice in the above 'Example 2', each IF statement has an open parenthesis before the test and then all three are closed off at the end with 3 closing parenthesis. Also, be careful to check the commas. Commas are used to separate the test from the value:

e.g. {TotalWeight} <=3000,1.

And a comma is used to separate each nested If statement:

e.g. {TotalWeight} <=3000,1,if({TotalWeight} <=6000,2....

**If any statement has incorrect parentheses and/or commas then all packages in the system will not function and they will all report a quantity of 1. The program will give you an error message in Test Mode and point you to the error.**

**Example 2:**

This example uses the same principles as above, but it is set up different. In this example, I have a General Labor material in my pricing database with a price of \$1.00. I use the If statement below to charge a specific amount per square foot depending on the size of the building. *NOTE: There is a video that goes into more detail and demonstrates how to set up and use this IF function within a labor package.*

```
{SFMain}*
if({SFMain} <= 1000,2.50,
if({SFMain} <= 1500,2.25,
if({SFMain} <= 2500,2.15,
if({SFMain} <= 3000,2.05,
if({SFMain} <= 3500,1.95,
if({SFMain} <= 4000,1.75,
if({SFMain} <= 4001,1.70,
if({SFMain} > 4002,1.75,
))))))
```

In this example, the top {SFMain} represents the total square footage of a building and it will be multiplied (\*) by whichever following IF statement is true first. So, if the building is equal to or less than 1000 square foot then the square footage will be multiplied by 2.50. Because I am using a general labor material of \$1.00 in my database, this equation will multiply \$1.00 \* 2.50 per square foot. So, practically, I am charging \$2.50 per square foot if the building is less than or equal to 1000 square feet.

If the building square footage is less than or equal to 1500 (and not less than or equal to 1000) then I will charge \$2.25 per square foot and so on.

Comparison operator	Meaning	Example
=	equal to	A1=D1
>	greater than	A1>D1
>=	greater than or equal to	A1>=D1
<	less than	A1
<=	less than or equal to	A1<=D1
<>	not equal to	A1<>D1

*Comparison operators that can be used in If statements*

In addition to the IF statement, other Excel functions can be used. The IF statement has proven the most useful so far, but we will update documentation as we find valuable functions. And feel free to experiment and let us know if you find any useful functions.

Here is a full list of the functions available to be used in package calculations (See MicroSoft's Excel help documentation for more details on these functions).

ABS	TAN	AND	SQRT	AVERAGE	CEILING
SIGN	TANH	NOT	FACT	MEDIAN	FIXED
	DEGREES	OR	LN	SUM	FLOOR
ACOS	PI	TRUE	LOG	MAX	INT
ACOSH	SQRTPI	FALSE	LOG10	MIN	ROUND
ASIN			EXP	PRODUCT	ROUNDDOWN
ASINH	IF		POWER	QUOTIENT	ROUNDUP
ATAN	IFERROR		MOD		TRUNC
ATAN2	IFNA				
ATANH					
COS					
COSH					
SIN					
SINH					

## Recommendations (do's and don'ts):

Below is a list of recommendations for Packages.

- DON'T create a Group if there's only one package. This simply confuses the user by implying that they have a choice.
- DON'T repeat the Group name in each Package. This just wastes space in the interface.
- DON'T require the user to select or type in a qty that is available as a calc base. If the user has a chance to answer a question wrong, they will.
- DO use the calc bases and the IF function liberally. This is particularly helpful when there are scenarios like varying labor rates for different ranges of square footage.
- DON'T use Miscellaneous materials with prices in your packages. By adding a Material to your database, all pricing changes can be handled in one place. You can use Miscellaneous entries when you just want to verify a quantity (see the tip below about "dummy" entries).
- DON'T make the group names or package names too long. Test the package to make sure none of the text is getting truncated.
- DO include Info Text, especially if you needed to shorten the name. This is also useful for "checklist" packages, to explain to the user what they should be looking for.
- DON'T add '?' to the end of a question. It won't appear in the dialog.
- DO test each package using the Test button when creating the calculation.
- DO arrange your calculations so that you can easily tell what they're supposed to be doing. Instead of  $\{SF\text{Roof}\} * 0.002$  for a product that is 4' wide and 125' long, use  $\{SF\text{Roof}\} / (4 * 125)$ . You WILL look at this in 6 months and scratch your head.
- DO make sure your familiar with ALL of the available calc bases. The best way to do this is to add the Calc Bases default package and review the items it adds to your Accessories. It's also a good idea to delete this package and re-add it each time we update the web site, since we are adding new calc bases all the time. As with "dummy" entries, remove this package when you're done.
- DO let us know if there's a calc base you'd like to have. We can usually get these added in a week or so.

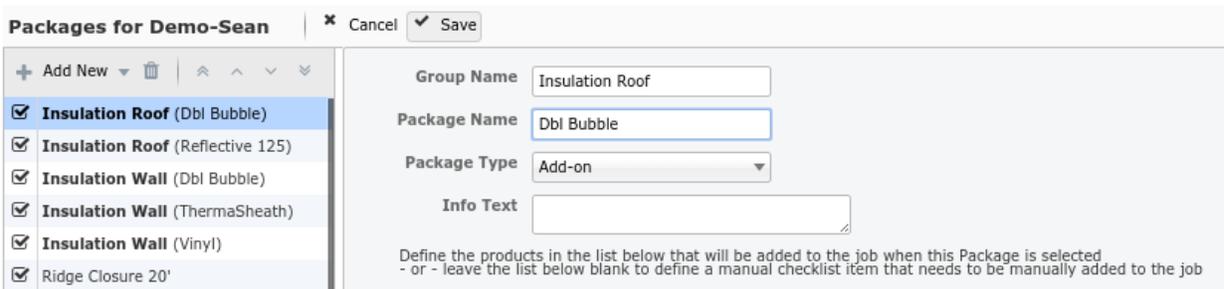
## Conclusion:

Packages take preparation and may require some trial and error testing. You can always add, edit and delete, so feel free to do some experimenting and check jobs for accurate material counts. If you need additional help, please call our help line or send us an email. Also, we can add more Calc Bases, so if you do not see a Calc Base that you would like to use then please let us know.

Follow this link to additional information about defining packages:

<http://support.smartbuildsystems.com/support/solutions/folders/36000197590>

**Note: Make sure to hit 'Save' before you exit the Packages input screen if you have made any changes to any of the packages!**



The screenshot shows a software interface titled "Packages for Demo-Sean". At the top right, there are "Cancel" and "Save" buttons. On the left, there is a list of packages with checkboxes:

- Insulation Roof (Dbl Bubble)
- Insulation Roof (Reflective 125)
- Insulation Wall (Dbl Bubble)
- Insulation Wall (ThermaSheath)
- Insulation Wall (Vinyl)
- Ridge Closure 20'

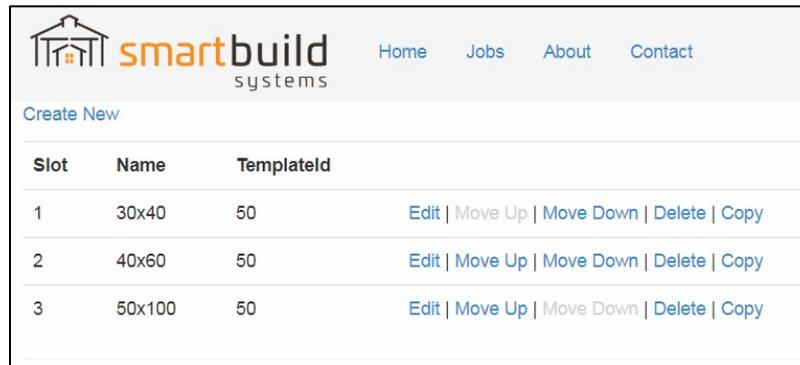
On the right, there is a configuration form for the selected package:

- Group Name:
- Package Name:
- Package Type:
- Info Text:

Below the form, there is a note: "Define the products in the list below that will be added to the job when this Package is selected - or - leave the list below blank to define a manual checklist item that needs to be manually added to the job".

## Step 5: Setup Model Templates Library

In the SmartBuild Templates Library, you will create a collection of models that your customers can use as a starting point for creating their own custom designs. These models are displayed on the Home Page visited by your customers. Models can differ in their size, framing rules, building styles, and basic materials. There is no limit to the number of model templates you can create.

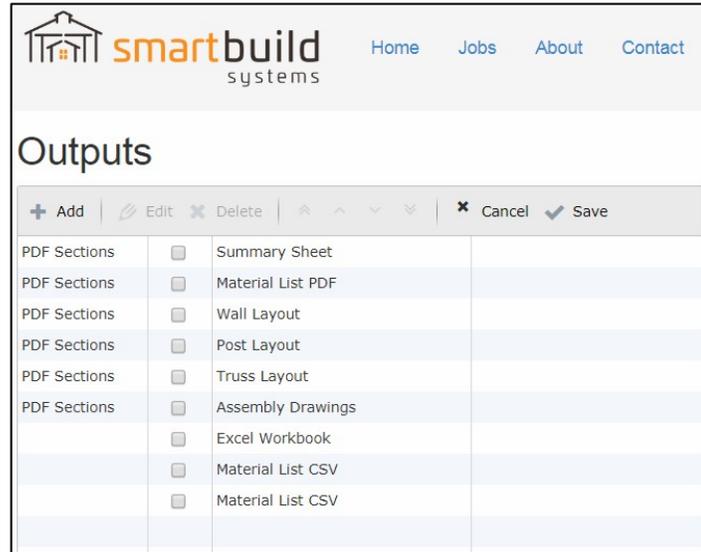
A screenshot of the SmartBuild Templates Library interface. It shows a header with the SmartBuild Systems logo and navigation links (Home, Jobs, About, Contact). Below the header is a "Create New" link. The main content is a table with three columns: Slot, Name, and TemplateId. Each row represents a template and includes a set of action links: Edit, Move Up, Move Down, Delete, and Copy.

Slot	Name	TemplateId	
1	30x40	50	<a href="#">Edit</a>   <a href="#">Move Up</a>   <a href="#">Move Down</a>   <a href="#">Delete</a>   <a href="#">Copy</a>
2	40x60	50	<a href="#">Edit</a>   <a href="#">Move Up</a>   <a href="#">Move Down</a>   <a href="#">Delete</a>   <a href="#">Copy</a>
3	50x100	50	<a href="#">Edit</a>   <a href="#">Move Up</a>   <a href="#">Move Down</a>   <a href="#">Delete</a>   <a href="#">Copy</a>

***We are currently working on expanding this section.***

## Step 6: Customize Outputs

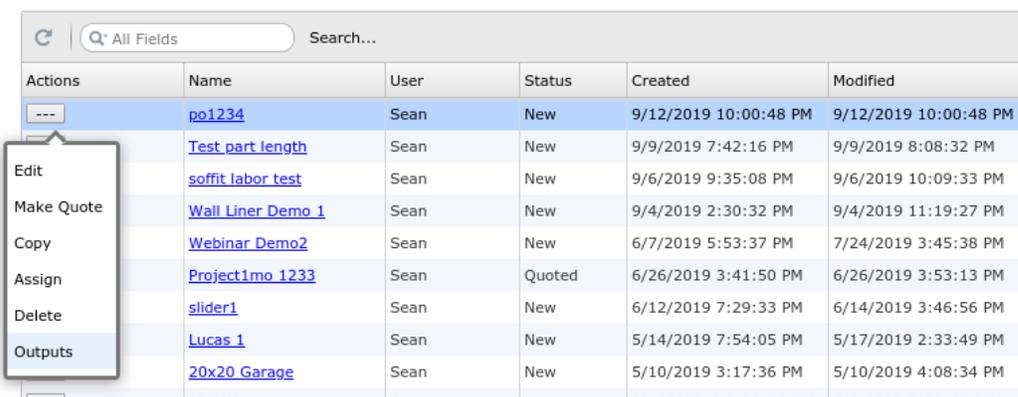
The process of setting up your SmartBuild outputs is dedicated to the customization of your materials lists, layout diagrams, assembly diagrams and other materials. Outputs can be provided in PDF, Excel, Word, DXF, and Sketchup formats.



## SmartBuild Outputs

To access the job outputs available in the system for any given job, either click on 'Outputs' for a job from the Home page. Or click on the Jobs page, find the job and choose Outputs from the Actions drop down.

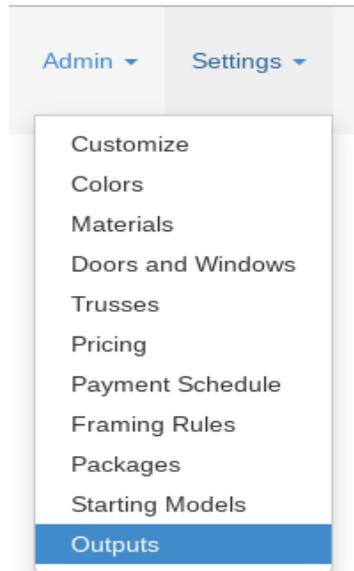
## Jobs



Actions	Name	User	Status	Created	Modified
---	<a href="#">po1234</a>	Sean	New	9/12/2019 10:00:48 PM	9/12/2019 10:00:48 PM
	<a href="#">Test part length</a>	Sean	New	9/9/2019 7:42:16 PM	9/9/2019 8:08:32 PM
	<a href="#">soffit labor test</a>	Sean	New	9/6/2019 9:35:08 PM	9/6/2019 10:09:33 PM
	<a href="#">Wall Liner Demo 1</a>	Sean	New	9/4/2019 2:30:32 PM	9/4/2019 11:19:27 PM
	<a href="#">Webinar Demo2</a>	Sean	New	6/7/2019 5:53:37 PM	7/24/2019 3:45:38 PM
	<a href="#">Project1mo_1233</a>	Sean	Quoted	6/26/2019 3:41:50 PM	6/26/2019 3:53:13 PM
	<a href="#">slider1</a>	Sean	New	6/12/2019 7:29:33 PM	6/14/2019 3:46:56 PM
	<a href="#">Lucas 1</a>	Sean	New	5/14/2019 7:54:05 PM	5/17/2019 2:33:49 PM
	<a href="#">20x20 Garage</a>	Sean	New	5/10/2019 3:17:36 PM	5/10/2019 4:08:34 PM

## Customize System Outputs

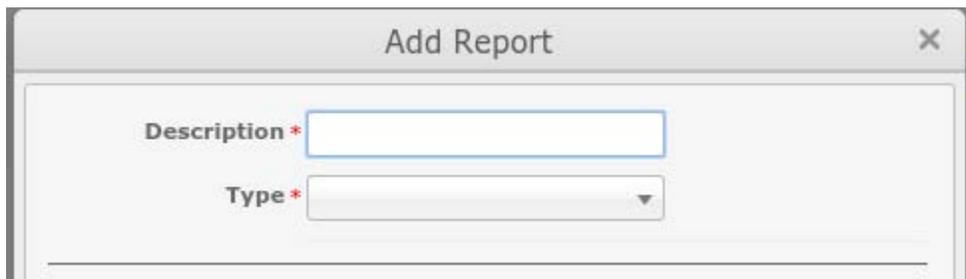
The job outputs available in the system can be customized at the Administrative level. To access the customization of system Outputs go to Settings/Outputs:



To make an Output available in the system, click on the 'Add' button.



You can choose a Type of Output (see below for full list) and you can either use the system default Description or enter your own unique description for the Output.

A screenshot of a dialog box titled 'Add Report'. It contains two fields: 'Description \*' with a text input box, and 'Type \*' with a dropdown menu.

Once you select a Type and give the output a Description click Save, then it will be added to the list of available outputs, and once you Save the Output List then the output will show up system wide as an available job output. In the Settings Output list, if you check the box next to an output, then that output will be checked on by default when you choose to Download Outputs for a job (if not checked then the output type will need to be manually checked on when outputting for a job).

+ Add   Edit   Delete   ^ ^ v v   * Cancel   Save			
PDF Sections	<input checked="" type="checkbox"/>	Cross Sections	
PDF Sections	<input type="checkbox"/>	Sheathing Drawings	
PDF Sections	<input type="checkbox"/>	Wall Layout	
PDF Sections	<input type="checkbox"/>	Post Layout	
PDF Sections	<input type="checkbox"/>	Assembly Drawings	
PDF Sections	<input type="checkbox"/>	Summary Sheet	

There are several different Types of Outputs. Depending on the type of output, you can customize the file type and the information that is included with the output. See below for details on each type. You can add zero or as many outputs as you like.

## SmartBuild Output Types

Summary Sheet- A single page PDF output with Job Information and 3-d Images

Job Data PDF- The is a PDF output of all Job Data in a grid format. You can customize what is included in this grid by checking boxes and defining specifications according to the following options available for customization:

- If 'Include Job Infos' is checked then the Job Information tab will be included in the output.
  - In the 'JobInfos' text box you can customize which Job Info fields are output, their order and the heading.
  - If you leave 'JobInfos' blank then all Job Information will be included as shown in the Job Information tab with the field names as the heading,
- If 'Include Materials' is checked then the file will include job materials (if uncheck job materials will not be included).
- Checking 'Ignore Usage' will consolidate like job material entries regardless of their usage (i.e. a pick list). If unchecked then job materials will be consolidated by Usage.
- 'Omit Category Groups' will combine all entries into one list. If unchecked then materials will be separated by material group (like Framing, Sheathing, Trim....)
- 'Group Addons' will keep materials input with a Door, Window or Cupola through the Add-ons feature (items like locks, door knobs, hardware etc.) grouped with the Door, Window or Cupola. If unchecked the 'Addons' materials will listed separately as individual material items.

Wall Layout- PDF and/or DXF output available

Post Layout- PDF and/or DXF output available

Truss Layout- PDF and/or DXF output available

Cross Sections- PDF and/or DXF output for all eave walls

Assembly Drawings - Wall and Roof framing drawings. PDF and/or DXF output available

Sheathing Drawings -Wall and Roof siding drawings. PDF and/or DXF output available

Excel Workbook - Outputs an Excel file format with 3-d images, categorized total costs/price and a breakdown of cost and price for all materials in a job.

Job Data CSV - This operates similar to the Job Data PDF output (see above for all customization options). In addition the CSV has the following option:

- 'Omit Header Row' This will leave out the header row, so the only output will be the entries themselves (this is required for interfacing with some accounting systems)

Epicor Output will output two files, a DMT import file and a CSV configurator file. This file can be customized with the following options:

- '*Epicor Columns*' text box allows you to enter the columns required for the Epicor DMT file output. Customize columns, their order and their headings with a comma-separated list in the format of: field:heading,field:heading<optional>,....
  - Example:  
Company,CustomerCustID:CustomerCustID,OrderNum,ProjectName:PONum,RequestDate,NeedByDate,linenum:OrderDtl#OrderLine,fullSku:OrderDtl#PartNum,description:OrderDtl#LineDesc,qty:OrderDtl#SellingQuantity
- '*Configurator Columns*' allows you to define columns for the sheathing details list in the configurator file output. Customize columns, their order and their headings in the format of: field:heading,field:heading,....
  - Example:  
fullSku:Sku,description:Description,colorName:Color,qty:Qty,lengthStr:Length
- '*Header Columns*' allows you to define columns for the 'headers' section of the configuration file. (see Header SKU Prefix below). Customize columns, their order and headings in the format of: field:heading,field:heading,...

- Example: description:Description,extPriceStr:Price
- *'Header SKU Prefix'* allows you to exclude materials from outputting to the DMT file but included in the configurator file. These materials will show up in the 'Headers' section of the Configurator file output. If you append any material SKU in your database with MISC, INFO or SPEC then this material will be excluded from the DMT file and be listed in the 'Headers' section of the Configurator file.
  - Example: MISC\_,SPEC\_,INFO\_

Document Template- Word compatible job file generated from a Word generated template document uploaded into SmartBuild. This allows you to upload one or many Word generated templates that will output Word compatible job documents like proposals, quotes or any other documents. The template can include logos, formatting and integrate special place holders for Total Price, Job Information, many building specifications, 3-D images and more. The template is used to generate job specific document outputs. (See Video for details on set-up, upload and download of document templates).

JSON file- Job data export in Json format. The file can be used to communicate with other web based applications.

EZM file- SmartBuild compatible job file.

SketchUp .SKP- Full job 3-d geometry output in SketchUp compatible file output.

**Below are links to some SmartBuild Training Videos dedicated to this process.**

[SmartBuild Systems - Customize output lists and file types - Duration: 2 minutes..](#)

[SmartBuild Systems - Configure Material Lists - Duration: 6 minutes, 20 seconds.](#)

[SmartBuild Systems - Customize Document Outputs - Duration: 6 minutes, 17 seconds.](#)