



System Administrator's Guide

Populating the Supplier Materials Database

Table of Contents

Purpose	3
The Four Steps	3
How Long Will It Take	3
A Note about Maintenance	4
Classification of Materials.....	4
Material Types and Categories	4
Opening the Template File.....	5
Required vs. Optional Data	6
Worksheets in the Template.....	7
A Final Note about Planning	7
Deciding on Scope.....	7
Identifying Sources & Gathering Data	8
Understanding SKU Codes	9
Roofing Passport SKU.....	10
Vendor SKU	10
Populating the Roofing Passport Sku Columns.....	10
Good News / Bad News	11
Starting With Your Vendor SKU	11
For materials that come in multiple <i>COLORS</i>	12
For materials that come in multiple precut <i>LENGTHS</i>	12
For materials that come in multiple <i>COLORS *AND* LENGTHS</i>	13
Best Practices for Creating SKUs from Scratch	13
Systems Tab	14
Colors Tab	15
Sheathing Tab	17
Trim Tab	20
Connectors Tab	22
Fasteners Tab.....	24
Hardware Tab.....	26
Labor Tab	28
Freight Tab	30
The Upload Process.....	32

Purpose

The purpose of this document to assist new Roofing Passport Systems Administrators in setting up the *Supplier Materials Database* using the provided Microsoft Excel Workbook entitled [Materials Setup Template.xlsx](#). When the process outlined here has been completed, Roofing Passport will have all of the materials data required to produce highly accurate job quotes and material takeoffs.

CRITICAL – HEADS UP SYSTEMS ADMINISTRATORS! Populating the *Supplier Materials Database* is a detail-oriented operation that requires planning and precision. Much like constructing the foundation of a new building, if you do it right, it will speed all of the other tasks that follow and your outcomes will be great. If you do it incorrectly, absolutely nothing else is going to work out well. TAKE YOUR TIME! DO IT RIGHT! This document, and the *Materials_Setup_Template.xlsx* will provide you with everything you need to be successful. As always, ASK US IF YOU NEED HELP at support@keymark.com

The Four Steps

There are four basic steps to complete in order to populate the *Primary Supplier Materials Database*. This is the database that sits at the top of your Roofing Passport hierarchy, and that will feed all of the other *Builders* and/or *Suppliers* below it. We suggest that you complete each of these steps in the order presented.

- STEP 1:** Understand data and process requirements by reading this ENTIRE document FIRST!
- STEP 2:** Identify and gather the needed data from existing sources within your organization.
- STEP 3:** Copy and paste the gathered data into the *Materials_Setup_Template* and groom.
- STEP 4:** Upload completed template files to Roofing Passport.

How Long Will It Take

When it comes to setting up your *Supplier Materials Database*, the question we most often hear from System Administrators (and their supervisors) is, “How long will it take?” As with all things in life, it depends. Here are the principle factors that will affect your implementation time:

- **Number of Materials** – Obviously, the greater the number of materials offered by your company, the greater amount of time it will take to collect, organize, and transfer their associated data into the *Materials Setup Template*.
- **Feature Set** – The Roofing Passport *Materials Database* includes both required data, and optional data that can be implemented at the user’s discretion. The more comprehensive the data set to be implemented, the longer that implementation will take. We will discuss feature options a little later in this document to help you decide the approach that is best achieves your organization’s identified goals for Roofing Passport.
- **Previous Experience** – The more familiar the Systems Administrator is with basic spreadsheet operations (navigation, copy, paste, etc.) the faster and easier it will be to get the needed data into the *Materials Setup Template*.

- **Degree of Organization** – If your organization’s materials-inventory data is currently well organized and maintained, the process of transferring that data into the *Materials Setup Template* will be relatively easy and straightforward. If, however, your materials-inventory data is poorly organized and/or maintained, it could require you to address these issues before you begin.

A Note about Maintenance

It is worth mentioning here that materials can be added to your *Materials Database* one at a time. You can also **Edit** and **Delete** materials once they have been entered into the database. These are considered “maintenance functions.” It is neither efficient nor cost effective to attempt to populate your entire *Materials Database* one object at a time. For further information on these maintenance functions, please see *Maintaining Your Materials Database*.

Classification of Materials

Before beginning the process of populating your *Supplier Materials Database*, it is important to understand how materials will be organized and classified. To help users locate materials quickly and easily within the Roofing Passport interface, all materials entered into the *Materials Database* are classified by both **Type** and **Category**. Each material is assigned to one of three potential *Material Types*, and these three *Material Types* are further subdivided into seven different *Material Categories*, as outlined in the following paragraphs.

MATERIAL TYPES AND CATEGORIES

Base Materials – *Base Materials* include all **Sheathing** and **Trim**. In Roofing Passport, these are the materials that are displayed within the 2D and 3D renderings of a model. A model cannot be displayed within the Roofing Passport interface until *Base Materials* have been added to the *Materials Database*. **Sheathing** and **Trim** (*Base Materials*) may be grouped together for use as a **System**. (More on **Systems** later in this document.)

MATERIAL TYPE	MATERIAL CATEGORY
Base Materials	Sheathing
	Trim
Ancillary Materials	Fasteners
	Connectors
	Hardware
Material Services	Labor
	Freight

Table 1: The classification of materials in Roofing

Ancillary Materials – All physical materials other than **Sheathing** and **Trim** are classified as *Ancillary Materials*.

Ancillary Materials include all **Fasteners**, **Connectors** and additional **Hardware**.

Material Services – These are services that may add to the calculation of your material costs. *Material Services* include **Labor** and **Freight**.

With this system of classification in mind, let’s take a quick look at the *Materials Setup Template* to see directly how these *Material Categories* will come in to play as we populate the *Materials Database*. If you have your computer handy, please go ahead and open up the *Materials Setup Template* now by clicking [here](#). If you don’t have your computer handy, not to worry. You can easily follow along using the illustrations provided in this document.

Opening the Template File

When you first open the *Materials Setup Template* file (Figure 1 below), you will see that it contains nine worksheets, indicated by the nine tabs at the bottom of the window. *Seven of these nine tabs map directly back to the seven Categories used to classify materials in Roofing Passport* (Sheathing, Trim, Fasteners, Connectors, Hardware, Labor and Freight), as discussed in the previous section. The other two tabs (Colors and Systems) will be used to enter “metadata” – that is, data that applies to materials across multiple *Material Categories* (tabs). More on this metadata in a bit.

NOTE – This document assumes that the user (Systems Administrator) has at least some minor degree of knowledge about how to navigate and enter data into a spreadsheet. If this is not the case, we suggest that you enlist the services of someone within your organization who is familiar with these basic spreadsheet functions. Populating your *Materials Database* with the *Materials Setup Template* is not the appropriate time or place to attempt to gain these skills.

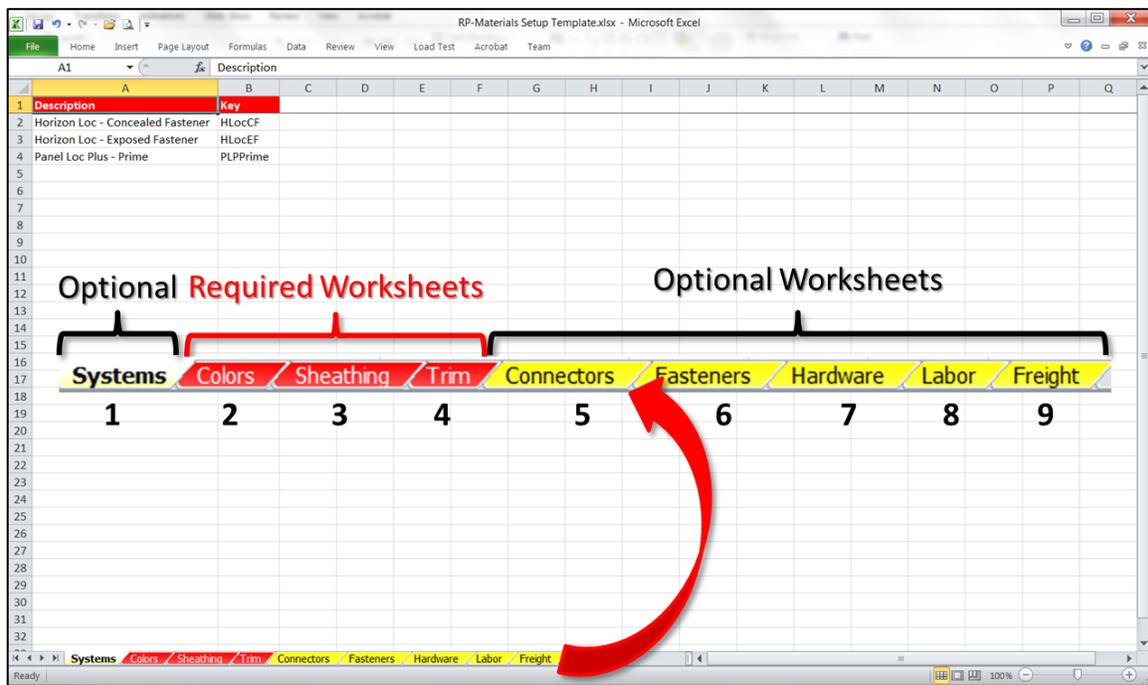


Figure 1: The *Materials Setup Template* with nine worksheets (tabs).

As you can see in Figure 1 (above) the nine worksheets (tabs) are color coded, **red** and **yellow**. To get up and running with Roofing Passport you will need to enter data into the three **red** tabs at a minimum. These represent the minimum feature set for a *Materials Database*, and include the two required *Categories of Base Materials* (Sheathing and Trim) along with metadata about the various *Colors* in which each of these materials is provided.

As we will discuss a little later, entering data in the six **yellow** tabs (Figure 1) will further increase the accuracy and efficiency of your Roofing Passport outputs. For example, your takeoffs and price quotes will be more accurate and complete if they include the required *Fasteners* and other *Hardware*, let alone calculations for *Labor* and *Freight* costs. However, once again, this data is not required for Roofing Passport to function. The data in the three **red** tabs is!

As can be seen in Figure 1 (previous page), five of the six yellow tabs (Fasteners, Connectors, Hardware, Labor, and Freight) relate directly back to the *Material Categories* outlined in the table on page 4. The other yellow tab (Systems) is metadata that is used to group Sheathing and Trim materials that, at a minimum, share the same material profile. We will cover the contents of each tab in the *Materials Setup Template* later in this document.

Required vs. Optional Data

As discussed above, the tabs in the workbook template are color coded; the red tabs are required and the yellow tabs are optional. This same color-coding scheme is used within each tab in the workbook to identify the columns of data that are required, versus those that are optional. As you can see in Figure 2 below, the Sheathing tab contains 20 columns of data – the most of any tab in the template. Of these 16 columns, nine are required (red) and 11 are optional (yellow). As with the TABS themselves, the red COLUMNS are required for the proper functioning of Roofing Passport, while the optional (yellow) columns are not.

ALERT – If you elect to add one of the OPTIONAL Categories (tabs) of data to your *Materials Database* you must, at a minimum, enter data into the required columns for that tab. Failure to do so will result in errors during the process of uploading your template file into Roofing Passport

1	Skus	Description	CoverageWidth	FullWidth	Texture	Systems	Usages	SupplierId	ColorCode	PartLength	VendorSku	Cost	Price	Taxable	Weight	LockMarkup
2	SH16R-24-(CC)	16" Ribbed 24 Gauge	16.0	16.5	standingseam	SS1624G	RoofMaterial	MM232	WT		SH16R-24-GR	\$3.00	\$3.00	1	16.0	false
3	SH16R-24-(CC)	16" Ribbed 24 Gauge	16.0	16.5	standingseam	SS1624G	RoofMaterial	MM233	CP		SH16R-24-GR	\$3.00	\$3.00	1	16.0	false
4	SH16R-24-(CC)	16" Ribbed 24 Gauge	16.0	16.5	standingseam	SS1624G	RoofMaterial	MM234	EV		SH16R-24-GR	\$3.00	\$3.00	1	16.0	false

Figure 2: The Sheathing tab has 20 columns of data; nine required and 11 optional.

NOTE – The figures presented throughout this document provide some examples of the types of data to be entered into the *Materials Setup Template*. The template with which you have been provided is blank.

Worksheets in the Template

Before we turn to details about working with each tab in the template, please take a moment to review the information presented in Table 2. It provides an overview of the total contents of the *Materials Setup Template*, and should give you a better sense of the scope of the task at hand:

TAB NAME	Required Tab?	# Required Columns	# Optional Columns	# Reserved Columns	Total Columns
Systems	No	2	0	0	2
Colors	Yes	3	1	1	5
Sheathing	Yes	11	9	0	20
Trim	Yes	8	8	0	16
Connectors	No	5	4	0	9
Fasteners	No	5	6	0	11
Hardware	No	5	4	0	9
Labor	No	4	4	0	8
Freight	No	4	4	0	8
9 TABS		47	40	1	88

Table 2: Overview of the tabs and columns in the *Materials Setup Template*.

A Final Note about Planning

When it comes to planning the implementation of your *Supplier Materials Database*, Table 2 gives you a good sense of the potential range scope and effort involved:

- **Minimum Implementation** – The absolute minimum implementation requires completion of three *required* tabs with a total of 22 *required* columns of data.
- **Full Implementation** – A full implementation of all nine tabs of data, including *Optional* columns, would total 88 columns of data.

Suffice it to say that most implementations of the *Supplier Materials Database* fall somewhere between the extremes of *minimum* and *full*. In the following pages, we will provide additional details about each tab in the *Materials Setup Template*. With this information in hand, you can then track down your information sources and get a much better sense of the *Materials Database* options you want to consider, and the amount of time and effort likely to be involved in their implementation.

Deciding on Scope

Now that you know the minimum requirements to implement your *Materials Database*, you can work with your employer to define an implementation plan. In no particular order, here are some things to consider:

- Initially, you want to focus on adding optional *Material Categories* based on the immediate demands of your “downstream” users. Remember that the *Builders* and/or *Suppliers* that you add to Roofing Passport later will receive a copy of this, your original *Supplier Materials Database*.

- You can implement your *Supplier Materials Database* in multiple phases, adding *Material Categories* as you go. If you do, we highly recommend that you commit your proposed implementation schedule to writing and do your best to stick to it.
- Though we would argue that the benefits far outweigh the costs, implementing additional features will, by definition, add to the initial time and cost of your implementation.
- The sooner you adopt additional functions (that is, add additional *Material Categories* to your *Materials Database*), the sooner and greater the benefit that will be achieved from your investment in Roofing Passport.
- When it comes to the *Supplier Materials Database*, sometimes it is easiest to simply get it all done “while you are at it.”
- The demands of a productive workplace may prevent or interrupt your progress. Do your best to plan accordingly.

Identifying Sources & Gathering Data

After you have read document *in its entirety*, the second step in populating your *Supplier Materials Database* is to identify the sources of data within your organization that will be needed to populate the database. Depending on the size and structure of your organization, this may be an activity you can pursue on your own, or it may require the participation of multiple people and/or departments. At a minimum, you are going to be seeking out information about your materials inventory; all of the *Sheathing, Trim* and various other materials you offer to your customers. In addition to this, if you elect to add *Labor* and *Freight* data, you will need access to financial data that may be held by your Accounting Department.

We suggest that, as you read through this document and decide on an implementation plan, you write down the specific tabs of data you will be populating in the *Materials Setup Template* AND the specific columns of data within each tab you will include. With this list in hand, you can go shopping around the office to discover where the needed nuggets of information are currently stored. You may find that the needed data is currently stored in multiple software programs, or you may get lucky and find most of what you need in one spot. Likely software candidates for your source data may include *Microsoft Excel, Microsoft Access, QuickBooks, Spruce, Paradigm, Epicor*, etc.

Regardless of your software source(s), the objective is to export the target data (copy, save, export – whatever it takes) and get it loaded (pasted) into the *Materials Setup Template* file. Exactly how System Administrators get this job done will vary greatly by company, depending on the software products serving as data sources. It is, therefore, extremely difficult to provide guidance on the specific steps you will need to undertake. Here are some basic options and suggestions to consider when gathering data from your sources:

- We suggest you work with filling out and uploading ONE TAB of data at a time. This approach will:
 - ✓ Break the project down into smaller, more manageable tasks
 - ✓ Increase your efficiency at each stage, once you understand the overall process
 - ✓ Build confidence with each successive, successful upload
 - ✓ Provide you with an opportunity to modify your implementation plan if you find things either easier or more challenging than you anticipated

- ✓ Make it easier to know exactly where you left off (in case you get interrupted)
 - ✓ Keep any one portion of the task from becoming too boring or intimidating
- While working on a single tab in the template, **Copy** and **Paste** data from your source into the template **ONE COLUMN AT A TIME** – from top to bottom! Whether you have the computer skills to copy an entire column of data with a couple of mouse clicks, or you require a more “methodical” approach, **DO NOT** start on that next column of data until you have finished the one you are on.
 - If you are **exporting** data from a source application, save the exported file in CSV or XLSX format, as these file formats are unlikely to introduce unwanted formatting code when copying and pasting the data into the *Materials Setup Template*.
 - If you are **copying** data from a source application and pasting it into a temporary file (for collection and consolidation purposes) before transferring it to the *Materials Setup Template*, consider using a spreadsheet or another application that can save the temporary file in CSV or XLSX format. (Once again, for data-format compatibility reasons.)
 - If you are **copying** data from a source application and pasting it directly into the *Materials Setup Template*, you may want to consider the interim step of pasting the data into *Microsoft Notepad* first, and **THEN** copying and pasting the data from *Notepad* into the template. This will strip out any unwanted formatting from the source application that may otherwise interfere with the proper **Upload** of the data into Roofing Passport.
 - You are going to be dealing with a lot of data and, most likely, multiple source files. **MAKE YOUR LIFE EASIER** and manage your source-data files aggressively:
 - ✓ Keep your source files organized. Give them logical, informative names and store them together in a location on your computer that is easy to access.
 - ✓ Keep a clean ***EXTRA*** copy of each source file until you have successfully uploaded the associated tab(s) of information into Roofing Passport. That will keep you from having to go all the way back to the data source for another copy if something fails to go as planned.
 - ✓ Delete your used source files when you are done. Once their data has been copied into the *Materials Setup Template* and uploaded to your *Roofing Passport Materials Database*, these files are no longer needed and can only serve to take up space and confuse matters as you go to work on that next tab of materials in the template.

Understanding SKU Codes

Before we dive into the particulars of a tab-by-tab, column-by-column review of the *Materials Setup Template*, we must first mention a few words about *Stock Keeping Unit* codes. Better known as *SKUs*, these are the unique codes manufacturers and suppliers assign to their products so that those products can be quickly identified and retrieved both electronically (from computer systems), and physically (from the warehouse).

Different organizations implement different SKU-coding systems, depending on individual needs. Generally speaking however, SKUs are alpha-numeric codes composed of multiple segments, with each different segment representing a specific property of the product being described. The *Materials Setup Template* includes three different types of SKU codes: *Roofing Passport SKU* and *Vendor SKU*.

ROOFING PASSPORT SKU

Tabs: Sheathing, Trim, Fasteners, Connectors, Hardware, Labor, Freight

In order to generate highly detailed and accurate *Material Lists*, Roofing Passport uses its own special SKU code. Listed in the *Materials Setup Template* as “Sku”, **this required column of data includes specific segments of code that allow Roofing Passport to differentiate among otherwise identical materials that are offered in a variety of Colors and/or precut Lengths.** (More on this later.)

VENDOR SKU

Tabs: Sheathing, Trim, Fasteners

The template’s VendorSku column is used to list the SKU code your organization uses to identify each unique piece of material in its inventory. The VendorSku column is optional wherever it appears in the template, however, most *Suppliers* find it extremely helpful to map their Roofing Passport *Materials List Outputs* right back to their parts in the warehouse. Therefore, as you are gathering data in-house for the *Materials Setup Template*, it is a good idea to include the SKU information your organization uses for each material. Adding VendorSku information will also make it easier to populate the Roofing Passport Sku columns in the template. (More on this below.)

What if I don’t have an existing VendorSku? A company that earns its bread and butter supplying materials to other companies is bound to use some form of control number for accounting, invoicing and/or inventory purposes. If you think your company does not use some kind of SKU code, think again. (Or maybe just stop thinking of it as a SKU code, and ask the boss what kind of code your company uses to manage its materials inventory. No matter what your company calls it, we will call this data your VendorSku in Roofing Passport.)

SUPPLIER SKU

Tabs: Sheathing, Trim, Connectors, Fasteners, , Hardware, Labor, Freight

If your organization purchases some of its materials from a third party (i.e. outside supplier) the template’s SupplierSku column can be used to record the SKU code used by that supplier in reference to its own materials. This information can increase the speed and accuracy with which needed materials can be ordered from an outside supplier.

Populating the Roofing Passport Sku Column

As a new Systems Administrator using the *Materials Setup Template*, you should know that the Roofing Passport Sku column (Sku for short) is important for several reasons:

- The Roofing Passport Sku includes special segments of code that MUST be included for ALL materials that come in multiple Colors and/or precut Lengths
- The Roofing Passport Sku column appears on seven out of the nine tabs in the *Materials Setup Template* (more than any other column in the template)
- The Roofing Passport Sku column is required on every tab within the template on which it appears
- Roofing Passport Sku data does not exist until you create it (although you will be able to make short work of the task with a little copy and paste work)

GOOD NEWS / BAD NEWS

As stated above, the Roofing Passport *Sku* column “includes specific segments of code that allow Roofing Passport to differentiate among otherwise identical materials that are offered in a variety and Colors and/or precut Lengths.” The BAD news is you will be responsible for creating your Roofing Passport *Sku* codes. That said, there is GOOD news on several fronts:

1. Two of the nine tabs in the template (Colors and Systems) DO NOT include a *Sku* column, so you can go ahead and cross these two off your list.
2. Four of the seven remaining tabs in the template represent *Categories of Ancillary Materials* (Connectors and Hardware) and *Material Services* (Labor and Freight) that DO NOT include – and/or are not managed for – Colors or precut Lengths. For these tabs, you can simply copy your existing *VendorSku* data into the Roofing Passport *Sku* column. (This may seem redundant, however, bear in mind that the *VendorSku* data is there for your organization’s reference and convenience, whereas the Roofing Passport *Sku* is needed by the application itself to generate all of its outputs.)
3. That leaves just three tabs (Sheathing, Trim and Fasteners) on which you will need to create a Roofing Passport *Sku* that, by definition, includes specific code segments for Color {CC} and precut Length {LF}. Your *VendorSku* will come in handy here too, because you can use it as the foundation for creating your new Roofing Passport *Skus*.

STARTING WITH YOUR VENDOR SKU

As mentioned above, what makes the Roofing Passport *Sku* both unique and required is its use of computer-code placeholders for a material’s Color and precut-part Length {LF}. Assuming you have a viable *VendorSku* available, the only thing you need to do in order to convert it for use as a Roofing Passport *Sku* is to add the placeholders for Color {CC} and precut Length {LF} as outlined below.

NOTE – The instructions below provide examples of what different *VendorSkus* might look like. These are good examples, in that they are clear, concise, and convey a great deal of information with a minimal number of characters. That said however, Roofing Passport does not care what your *VendorSku* looks like, or how it is constructed. If you want to assign a material a *VendorSku* of “Bob-Trim-12” because Bob out there in the warehouse handles all of the 12’ Trim parts, that’s on you. Roofing Passport will work with whatever code you put in a *VendorSku* column. The only restriction on *VendorSku* is a prohibition on the use of the special characters: < > &. If any of these three characters are used as part of your existing *VendorSku* system, you must replace them with a different character before your template files are uploaded into Roofing Passport.

For materials that come in multiple **COLORS**

For the purpose of this example, we will use the VendorSku **SH16R-24-GR**, where:

- **SH16R** = Sheathing, 16' Width, Ribbed
- **24** = 24 Gauge
- **GR** = Gray Color

Using the example VendorSku above for a given piece of Sheathing material (**SH16R-24-GR**), since this Sheathing does not come in precut Lengths, we will not need the **{LF}** placeholder. The only thing we need to change is the Color code information, so that:

VendorSku: **SH16R-24-GR** *becomes...*[Roofing Passport] Sku: **SH16R-24-{CC}**

As you can see in this example, the original VendorSku code used for Color **GR** has been deleted and replaced by Roofing Passport's required placeholder for ALL Colors – **{CC}**. When the **{CC}** placeholder is added to your Sku codes, Roofing Passport will create a unique entry in your *Materials Database* for that material – *in every available color!* It will then use this information to generate all of your Outputs, including all quotes and *Materials Takeoffs*.

TIP – It does not matter where the **{CC}** placeholder appears within the Roofing Passport Sku codes you create. Beginning, end, or somewhere in the middle – all will work equally well. That said, the *Best Practices* outlined on pages 13-14 would place this Color data somewhere near the end of a well-structured Sku code.

For materials that come in multiple precut **LENGTHS**

To convert an existing VendorSku for materials that come in multiple precut Lengths to a Roofing Passport Sku, you must replace any Length data in the original VendorSku with Roofing Passport's placeholder **{LF}** for Linear Feet. For example, let's say you have an existing VendorSku of **HVT-26-10**, where:

- **HVT** = Horizontal Valley Trim
- **26** = 26 Gauge
- **10** = 10' Precut Length

To convert this VendorSku to a Roofing Passport Sku, we will replace the existing precut Length value to Roofing Passport's placeholder for this information **{LF}**, as follows:

VendorSku: **HVT-26-10** *becomes...*[Roofing Passport] Sku: **HVT-26-{LF}**

When the **{LF}** placeholder is added to this Sku as shown, Roofing Passport will create a unique entry in the *Materials Database* for that material – in every available Color AND every available Length!

TIP – It does not matter where the **{LF}** placeholder appears within the Roofing Passport Sku codes you create. Beginning, end, or somewhere in the middle – all will work equally well. That said, the *Best Practices* outlined on pages 13-14 would place this data somewhere near the end of a well-structured Sku code.

For materials that come in multiple COLORS *AND* LENGTHS

To convert a VendorSku for materials that come in both multiple Colors AND precut Lengths you must use both of the Roofing Passport placeholders: **{CC}** AND **{LF}**. Any specific designation of Length in your original VendorSku must be deleted and replaced with Roofing Passport's placeholder code **{LF}** for Linear Feet. Any reference to Color must be deleted and replaced by the placeholder **{CC}**. For example, let's say you have an existing VendorSku of **EaveEdge-BL-10**, where:

- **EaveEdge** = Trim Type
- **BL** = Color (Black)
- **10** = Precut Length (10')

To convert this VendorSku to a Roofing Passport Sku, we will replace both the existing Color and precut Length values to Roofing Passport's placeholders for this information: **{CC}** and **{LF}** as follows:

VendorSku: **EaveEdge-BL-10** becomes...[Roofing Passport] Sku: **EaveEdge{CC}{LF}**

When the **{CC}** and **{LF}** placeholders are added to this Sku as shown, Roofing Passport will create a unique entry in your *Materials Database* for that material – in every available color AND every available length!

TIP – It does not matter where the **{CC}** and **{LF}** placeholders appear within the Roofing Passport Sku codes you create. Beginning, end, or somewhere in the middle – all will work equally well. That said, the *Best Practices* outlined below would place this data somewhere near the end of a well-structured Sku code..

BEST PRACTICES FOR CREATING SKUS FROM SCRATCH

We have yet to encounter the situation, however, it is theoretically possible that the control codes (SKUs) your organization uses internally to manage materials in its accounting and inventory control systems could prove entirely unworkable for Roofing Passport's purposes (e.g. poorly organized or structured, problematic in your existing systems, and so on). If, for any reason, you find the need to create your Roofing Passport Sku and/or VendorSku codes from scratch, you would be well advised to adhere to the following best practices:

1. Make your SKUs easy to understand. Consider including information that will identify the type, size, dimensions, color, etc. of the material being described.
2. Arrange the segments of your SKU code in order of importance from a “search and retrieval” perspective. (e.g. Category, Gauge, Size, Color, etc.)
3. Keep SKUs as short as is practicable. DO NOT include irrelevant or tangential information in your SKU codes. If your SKU codes become overly cluttered and difficult to comprehend, they will become unusable.
4. DO NOT use spaces, accent marks or symbols (!@#%\$%^&*) as part of your SKU codes, as these may interfere with the proper functioning of Roofing Passport.
5. DO NOT use letters that look like numbers, as they will be hard for users to identify quickly.
6. Use a single character like a dash, period or underscore, to separate the various segments of your SKU code. This will make it easier for users to identify the specific segments of code they may be looking for.

7. DO NOT use more than five characters in a row per segment in your SKU code. Human beings have a hard time reading and remembering more than five characters at a time (+/-2).
8. Only use alphanumeric characters in your SKU codes and start SKUs with letters. (This will make sorting within spreadsheets more user friendly.)

With the project requirements and SKU codes now defined, next we will turn to a closer examination of each tab in the *Materials Setup Template*, and the requirements of each.

Systems Tab

The optional *Systems* tab in the *Materials Setup Template* is used to identify collections of *Sheathing* and *Trim* that are sold and used together as a single unit. Defining *Systems* in your *Materials Database* will make it easier for your users by limiting the material choices they must search through when designing a structure.

The *Systems* you define can be based on a single material property, such as metal profile (*Ribbed*, *Smooth*, etc.), material quality (*Standard*, *Prime*, *Deluxe*, etc.) or you can define *Systems* using a combination of multiple properties (e.g. *Profile plus Texture*). In short, you can define *Systems* based on any conceptual structure that works for your company. The *Systems* tab itself is not required however, if you elect to use it, you must include data in both of the columns provided (*Description* and *Key*).

	Description	Key
1	Horizon Loc - Concealed Fastener	HLocCF
2	Horizon Loc - Exposed Fastener	HLocEF
3	Panel Loc Plus - Prime	PLPPrime
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		

Figure 3: The *Systems* tab has just two columns of data; both are required.

- A. **Description [REQUIRED]** – Use this column to enter a brief, informative description of each different *System* to be created in Roofing Passport. Be sure that your descriptions are sufficient to distinguish each unique *System* from the rest.
- B. **Key [REQUIRED]** – Enter an alpha or alphanumeric code that you will use as an abbreviated identifier to search for or refer to this *System*. The form and format of this *Key* is entirely up to you.

Colors Tab

One of three required tabs of information, when completed, the *Colors* tab (Figure 2 below) must contain information about every color that is specified for building materials in your Roofing Passport database (Sheathing, Trim, and Fasteners). The number of colors offered obviously varies by organization, but a half dozen to a couple dozen different entries for Colors is typical.

Unique ID	Color Name	HEX Code	Color Code	Systems
	Gray	#817e74	GR	S51626G,S52026G
	Red	#99000a	RD	S51626G,S52026G
	Copper	#b87333	CP	S51626G,S52026G

Figure 4: The *Colors* tab has 5 columns of data; 3 required, 1 optional, and 1 (Unique ID) to be left blank.

The following paragraphs provide details on the data to be entered into each column of the *Colors* tab.

- A. **Unique ID** [AUTO] – Leave this column blank in your template. Roofing Passport will automatically assign a *Unique ID* number to each entry in your *Colors Table*.
- B. **Color Name** [REQUIRED] – The *Color Name* represents the term human beings will use to refer to a given color (as opposed to *Hex Code* and *Color Code*, which are the options preferred by computers).
- C. **HEX Code** [REQUIRED] – This is the 6-character (hexadecimal) code that computer systems use to define a given color. If you do not already have the hexadecimal codes for the colors used in your materials inventory, there are a number of free tools on the internet you can use to identify the appropriate codes. We like the one at <https://htmlcolorcodes.com/>. All *Hex Codes* entered into the *Hex Code* column of the *Materials Setup Template* must be preceded by the hashtag symbol (#). DO NOT leave a space between the hashtag symbol and the *Hex Code* itself (e.g. #AF1192).

NOTE – A second option is to leave the *Hex Codes* column blank when you upload *Colors* from the *Materials Setup Template* into Roofing Passport. You can then add *Colors* later, using the Roofing Passport's own color-selection tool, as outlined in the document entitled *Maintaining Your Materials Database*.

- D. **Color Code** [REQUIRED] – The `Color Code` is a short, unique identifier assigned to every color that is used in your materials inventory. It is often a worthwhile practice to include `Color Codes` as part of your `Roofing Passport SKU` numbers for `Sheathing`, `Trim` and `Fasteners`, since these materials all come in a variety of colors. If your current `VendorSkus` have a `Color Code` embedded in them, then use that same code. (See *VendorSkus* on page 10 for further information.)
- E. **Systems** [OPTIONAL] – In `Roofing Passport`, collections of `Sheathing` and `Trim` that are frequently used together can, at your discretion, be organized as `Product Systems` (`Systems` for short). Organizing `Sheathing` and `Trim` together as `Systems` will make it easier for users to locate needed materials within `Roofing Passport` as quickly and efficiently as possible. It will also make it easier for you, as the `Roofing Passport Systems Administrator`, to maintain the *Materials Database*.

If you elect to include the definition of `Systems` as part of your initial *Materials Database* implementation, we suggest that you complete the `Systems` tab in the *Materials Setup Template* first. You can then return to the `Colors` tab in the template, and provide a value for the `Systems` column. The other option is to leave this column blank for the time being. If you decide to define `Systems` at a later date, you can always associate your `Colors` with `Systems` directly from within the `Roofing Passport` interface. (See *Maintaining Your Materials Database*.)

NOTE – If a `Color` is associated with multiple `Systems`, separate each `System` by a semicolon WITHOUT the addition of any extra spaces.

(For more details on `Systems`, please see page 14.)

Sheathing Tab

The required *Sheathing* tab is used to record data about all of the paneling materials in your inventory. Sheathing material can be sold by the piece (precut-part lengths), by the foot (random lengths), and in multiple colors. Below are details about the data to be entered into each column.

1	Sku	Description	CoverageWidth	FullWidth	Thickness	Systems	Usages	SupplierId	SupplierSku	Orientation	Texture	Bump Map	ColorCode
2	SOFFIT(CC)	Soffit Metal Perforated	36.00	37.00	0.25	PLPPrime	GableSoffitPanelMaterial				Smooth		WT
3	HR+B(CC)	Panel-Loc Plus, 26 Gauge, Ultra	36.00	38.00	0.25	PLPPrime	RoofMaterial				Ribbed		BG
4	HRH(CC)K	Horizon-Loc, 26 Gauge, Prime	16.00	16.75	0.25	HLocCF;HLocEF	RoofMaterial				Ribbed		BL
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													

Figure 5: The *Sheathing* tab has 20 columns of data; 11 required and nine optional.

- A. **Sku** [REQUIRED] – The Roofing Passport Sku column is used to uniquely identify every piece of material in the *Materials Database*. Every piece of material (i.e. every row in your template) must have a unique Roofing Passport Sku. (Please see pages 11-14 for information about how to create your Roofing Passport Sku codes.)
- B. **Description** [REQUIRED] – Use this column to enter a brief, informative description of each different type of Sheathing available in your inventory. Be sure that your descriptions are sufficient to distinguish each unique Sheathing type from the rest.
- C. **CoverageWidth** [REQUIRED] – Enter the Width, in decimal inches, of the surface area covered by the given Sheathing material.
- D. **FullWidth** [REQUIRED] – Entered in decimal inches, this column is used to record the Width of Sheathing, along with the addition of any material used for overlaps. (That is, CoverageWidth plus overlap.)
- E. **Thickness** [OPTIONAL] – Enter the Thickness of the given material in decimal inches. The minimum value is 0.25.
- F. **Systems** [OPTIONAL] If you elect to implement the option to define and include collections of Sheathing and Trim that are used together (as a “System”) you will enter the appropriate Systems code for each line item in this column. If an item is included in more than one System, separate each System by a semicolon. For more details on Systems, please see page 14.

- G. **Usages** [OPTIONAL] – This column is used to identify where a given type of *Sheathing* material is to be applied on a model. At this time, the only option for this column in Roofing Passport is *RoofingMaterial*. For the time being, we suggest that you leave this field blank.
- H. **SupplierId** [OPTIONAL] – This column is used to identify the *Supplier* of any *Sheathing* material that your organization acquires from an outside source. You can simply leave this field blank for all *Sheathing* materials that are manufactured in-house.
- I. **SupplierSku** [OPTIONAL] – This column is used to list the SKU code for any *Sheathing* material that your organization acquires from an outside source.
- J. **Orientation** [OPTIONAL] – This column is used to identify whether a given material is to run vertically or horizontally. For the time being, we suggest that you leave this field blank.
- K. **Texture** [REQUIRED] – Use this column to enter a value for the *Texture* (feel, appearance, or consistency of the surface) associated with your *Sheathing*. There are three potential values you can use here: *Standingseam*, *Corrugated* or *Agpanel*. Leave this column blank for any material that does not have an applied texture (i.e. that is “smooth”).
- L. **Bump Map** [OPTIONAL] – This column is used to define texture=spacing requirements that do not currently apply tom Roofing Passport. Please leave this field blank.
- M. **ColorCode** [OPTIONAL] – This column is used to record the *Color* of a given *Sheathing* material, using the *Color Code* values you created on the *Colors* tab of the *Materials Setup Template*. If a given *Sheathing* material is offered in six different *Colors*, you will need to add six rows to the *Sheathing* tab; one for each different *Color* in which the *Sheathing* is made available.
- N. **PartLength** [OPTIONAL] – This column is used to record the *Length* of a given *Sheathing* material that is offered in a variety of precut measurements. If a given *Sheathing* material is offered in six different *Lengths*, you will need to add six rows to the *Sheathing* tab; one for each different precut *Length* in which the *Sheathing* is made available. For the time being, we suggest that you leave this field blank.
- O. **VendorSku** [OPTIONAL] – The *VendorSku* column is used to list the SKU code your organization uses to identify each unique type of *Sheathing* in its inventory. The *VendorSku* column is optional, however, most *Suppliers* find it extremely helpful to map their Roofing Passport *Materials List* outputs right back to parts in the warehouse.
- P. **Cost** [REQUIRED] – Enter the amount that your organization must pay to produce or acquire a given *Sheathing* material. If you are uncertain of this value for some or all of your materials, you can enter a value of “0” (zero), and then go back and change the *Cost* data when it becomes available.
- Q. **Price** [REQUIRED] – This is the amount that your organization will charge customers for a given *Sheathing* material. If you are uncertain of the *Price* your company will charge, you can enter a value of “0” (zero), and then go back and change this *Price* from within the Roofing Passport interface when the data becomes available.
- R. **Taxable** [REQUIRED] – This column is used to indicate whether a material is subject to some form of tax (Federal, State, local or other). Enter a “0” (zero) for nontaxable items, and a “1” (one) for taxable items.
- S. **Weight** [REQUIRED] – This column is used to record the *Weight* of a given material in decimal pounds. *Weight* values are used to calculate the weight of an entire job/order. If you are

uncertain of a material's *Weight*, or if you elect not to use *Weight* values in Roofing Passport, you must enter a value of "0" (zero) in this column for each material.

- T. **LockMarkup** [OPTIONAL] – If you wish to prevent "downstream" users from changing the *Markup* your organization charges for a *Sheathing* material, lock this field in the *Pricing Tables* by entering a "1" (one) in this column. If you wish to keep pricing *Markup* information unlocked (i.e. capable of being changed), enter a "0" (zero) here. For the time being, we suggest that you leave this field blank.

Trim Tab

The required *Trim* tab is used to record information about every type of *Trim* that is specified for building materials in your Roofing Passport database. The following provides details on the data to be entered into each column of the *Trim* tab.

1	Sku	Description	Width	Height	Systems	Usages	SupplierId	ColorCode	PartLength	VendorSku	Cost	Price	Taxable	Weight	LockMarkup
2	ST[CC]	Snow Stop	3.00	2.00	n/a	SnowStop		WT	1.00	n/a	1.50	1.50	1	0.25	
3	PT-60[CC]	Peak Trim 6"	3.00	0.60	S2P14	PeakTrim		SB	10.00	n/a	2.00	2.00	0	1.00	
4	MRDC[CC]{LF}	26 Gauge, Drip Edge	3.00	1.25	PLPStandard;PLPUltra	EaveEdgeMaterial		BG	16.00	MRDCBG122	19.17	19.17	1	2.75	

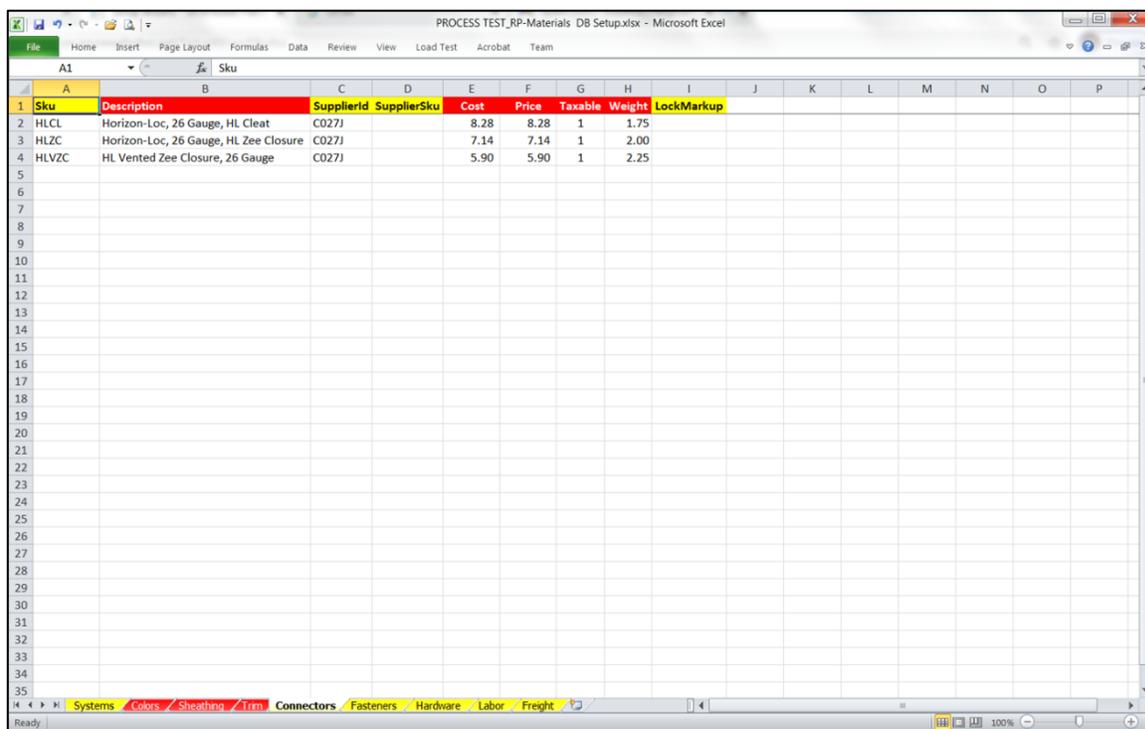
Figure 6: The *Trim* tab has 16 columns of data; 8 required and 8 optional.

- A. **Sku** [OPTIONAL] – The Roofing Passport *Sku* column is used to uniquely identify every piece of material in the *Supplier Materials Database*. Every piece of material (i.e. every row in your template) may be assigned a unique Roofing Passport *Sku*. (Please see pages 11-14 for information about how to create your Roofing Passport *Sku* codes.)
- B. **Description** [REQUIRED] – Use this column to enter a brief, informative description of each different type of *Trim* available in your inventory. Be sure that your descriptions are sufficient to distinguish each unique *Trim* type from the rest.
- C. **Width** [REQUIRED] – Using decimal inches, enter the measured *Width* of each different type of *Trim* available in your materials inventory.
- D. **Height** [REQUIRED] – Using decimal inches, enter the measured *Height* of each different type of *Trim* available in your materials inventory.
- E. **Systems** [OPTIONAL] – If you elect to implement the option to define and include collections of *Sheathing* and *Trim* that are used together (as a “System”) you will enter the appropriate *Systems* code for each line item in this column. If an item is included in more than one *System*, separate each *System* listed by a semicolon. For more details on *Systems*, please see page 14.

- F. **Usages** [OPTIONAL] – This column is used to identify where a given type of `Trim` material is to be applied on a model. There are 13 potential values you can list in this column:
`RidgeCapMaterial`, `HipCapMaterial`, `ValleyMaterial`, `GambrelTransitionMaterial`,
`WesternTransitionMaterial`, `EaveEdgeMaterial`, `GableEdgeMaterial`,
`AngledEdgeMaterial`, `HighEaveEdgeMaterial`, `RoofWallTrimMaterial`,
`GableAngledRoofWallMaterial`, `ShedRoofWallTrimMaterial`,
`ShedAngledRoofWallMaterial`.
- G. **SupplierId** [OPTIONAL] – This column is used to identify the *Supplier* of any `Trim` material that your organization acquires from an outside source. You can simply leave this field blank for all `Trim` materials that are manufactured in house.
- H. **SupplierSku** [OPTIONAL] – This column is used to list the SKU code for any `Trim` material that your organization acquires from an outside source.
- I. **ColorCode** [OPTIONAL] – This column is used to record the `Color` of a given `Trim` material, using the `Color Code` values you created on the `Colors` tab of the template. If a given `Trim` material is offered in six different `Colors`, you will need to add six rows to the `Trim` tab; one for each different `Color` in which the `Trim` is made available.
- J. **PartLength** [REQUIRED] – This column is used to record the `Length` of a given `Trim` material that is offered in a variety of precut measurements. If a given `Trim` material is offered in six different `Lengths`, you will need to add six rows to the `Trim` tab; one for each different precut `Length` in which the `Trim` is made available. Please enter whole numbers only.
- J. **VendorSku** [OPTIONAL] – The `VendorSku` column is used to list the SKU code your organization uses to identify each unique type of `Trim` in its inventory. The `VendorSku` column is optional, however, most *Suppliers* find it extremely helpful to map their Roofing Passport *Materials List* outputs right back to parts in the warehouse.
- K. **Cost** [REQUIRED] – Enter the amount that your organization must pay to produce or acquire a given `Trim` material. If you are uncertain of this value for some or all of your materials, you can enter a value of “0” (zero), and then go back and change the `Cost` data when it becomes available.
- L. **Price** [REQUIRED] – This is the amount that your organization will charge customers for a given `Trim` material. If you are uncertain of the `Price` your company will charge, you can enter a value of “0” (zero), and then go back and change this `Price` from within the Roofing Passport interface when the data becomes available.
- L. **Taxable** [REQUIRED] – This column is used to indicate whether a material is subject to some form of tax (Federal, State, local or other). Enter a “0” (zero) for nontaxable, and a “1” (one) for taxable.
- M. **Weight** [REQUIRED] – This column is used to record the `Weight` of a given material in decimal pounds. `Weight` values are used to calculate the `Weight` of an entire job/order. If you are uncertain of a material’s `Weight`, or if you elect not to use `Weight` values in Roofing Passport, you can enter a value of “0” (zero) into this column for each material.
- N. **LockMarkup** [OPTIONAL] – If you wish to prevent “downstream” users from changing the `Markup` your organization charges for a `Trim` material, lock this field in the *Pricing Tables* by entering a one (1) in this column. If you wish to keep pricing *Markup* information unlocked (i.e. capable of being changed), enter a “0” (zero) here.

Connectors Tab

The optional *Connectors* tab is used to record information about every type of *Connector* that is specified for building materials in your Roofing Passport database. The following provides details on the data to be entered into each column of the *Connectors* tab.



1	Sku	Description	SupplierId	SupplierSku	Cost	Price	Taxable	Weight	LockMarkup
2	HLCL	Horizon-Loc, 26 Gauge, HL Cleat	C027J		8.28	8.28	1	1.75	
3	HLZC	Horizon-Loc, 26 Gauge, HL Zee Closure	C027J		7.14	7.14	1	2.00	
4	HLVZC	HL Vented Zee Closure, 26 Gauge	C027J		5.90	5.90	1	2.25	
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Figure 7: The *Connectors* tab has 9 columns of data; 5 required and 4 optional.

- A. **Sku** [OPTIONAL] – The Roofing Passport Sku column is used to uniquely identify every piece of material in the *Materials Database*. Every different type of *Connector* (i.e. every row in your template) may be assigned a unique Roofing Passport Sku. (Please see pages 11-14 for information about how to create your Roofing Passport Sku codes.)
- B. **Description** [REQUIRED] – Use this column to enter a brief, informative description of each different type of *Connector* available in your inventory. Be sure that your descriptions are sufficient to distinguish each unique *Connector* type from the rest.
- C. **SupplierId** [OPTIONAL] – This column is used to identify the *Supplier* of any *Connectors* that your organization acquires from an outside source. You can simply leave this field blank for all *Connectors* that are manufactured in house.
- D. **SupplierSku** [OPTIONAL] – This column is used to list the SKU code for any *Connectors* that your organization acquires from an outside source.
- E. **Cost** [REQUIRED] – Enter the amount that your organization must pay to produce or acquire a given type of *Connector*. If you are uncertain of this value for some or all of your *Connectors*, you may enter a value of “0” (zero) for the time being and then go back and change this *Cost* data when it becomes available.

- F. **Price** [REQUIRED] – This is the amount that your organization will charge customers for a given type of *Connector*. If you are uncertain of the *Price* your company will charge, you can enter a value of “0” (zero), and then go back and change this *Price* from within the Roofing Passport interface when the data becomes available.
- G. **Taxable** [REQUIRED] – This column is used to indicate whether a *Connector* is subject to some form of tax (Federal, State, local or other). Enter a “0” (zero) for nontaxable items, and a “1” (one) for taxable items.
- H. **Weight** [REQUIRED] – This column is used to record the *Weight* of a given material in decimal pounds. *Weight* values are used to calculate the *Weight* of an entire job/order. If you are uncertain of a material’s *Weight*, or if you elect not to use *Weight* values in Roofing Passport, you must enter a value of 0 (zero) into this column for each *Connector* listed.
- I. **LockMarkup** [OPTIONAL] – If you wish to prevent “downstream” users from changing the *Markup* your organization charges for a *Connector*, lock this field in the *Pricing Tables* by entering a “1” (one) in this column. If you wish to keep pricing *Markup* information unlocked (i.e. capable of being changed), enter a “0” (zero) here.

Fasteners Tab

The optional *Fasteners* tab is used to record information about every *Fastener* that is specified for building materials in your Roofing Passport database. The following provides details on the data to be entered into each column of the *Fasteners* tab.

1	Sku	Description	SupplierId	SupplierSku	ColorCode	VendorSku	Cost	Price	Taxable	Weight	LockMarkup
2	112[CC]MW	112WMW,Screws,Wood,1.5" (250 per bag)	WIL01		BR	112HBMW	17.91	23.28	1	3.75	
3	78[CC]LAP	78WLAP,Screws,Lap,.875" (250 per Bag)	WIL01		GR	78HBLS	23.46	30.50	1	3.50	
4	POP[CC]	POPW,Pop Rivet,.125",100/bag			LN	4PWSP	5.84	5.84	1	1.85	

Figure 8: The *Fasteners* tab has 11 columns of data; 5 required and 6 optional.

- A. **Sku** [OPTIONAL] – The Roofing Passport Sku column is used to uniquely identify every piece of material in the *Supplier Materials Database*. Every different type of *Fastener* (i.e. every row in your template) may be assigned a unique Roofing Passport Sku. (Please see pages 11-14 for information about how to create your Roofing Passport Sku codes.)
- B. **Description** [REQUIRED] – Use this column to enter a brief, informative description of each different type of *Fastener* available in your inventory. Be sure that your descriptions are sufficient to distinguish each unique *Fastener* from the rest.
- C. **SupplierId** [OPTIONAL] – This column is used to identify the *Supplier* of any *Fasteners* that your organization acquires from an outside source. You can simply leave this field blank for all *Fasteners* that are manufactured in house.
- D. **SupplierSku** [OPTIONAL] – This column is used to list the SKU code for any *Fasteners* that your organization acquires from an outside source.
- E. **ColorCode** – This column is used to record the *Color* of a given *Fastener*, using the *Color Code* values you created on the *Colors* tab of the template. If a given *Fastener* is available in six different *Colors*, you will need to add six rows to the *Fasteners* tab; one for each different *Color* in which the *Fastener* is made available.
- F. **VendorSku** [OPTIONAL] – The *VendorSku* column is used to list the SKU code your organization uses to identify each unique type of *Fastener* in its inventory. The *VendorSku* column is

optional, however, most *Suppliers* find it extremely helpful to map their Roofing Passport *Materials List Outputs* right back to parts in the warehouse.

- G. **Cost** [REQUIRED] – Enter the amount that your organization must pay to produce or acquire a given *Fastener*. If you are uncertain of this value for some or all of your *Fasteners*, you can enter a value of “0” (zero), and then go back and change the *Cost* data when it becomes available.
- G. **Price** [REQUIRED] – This is the amount that your organization will charge customers for a given type of *Fastener*. If you are uncertain of the *Price* your company will charge, you can enter a value of “0” (zero), and then go back and change this *Price* from within the Roofing Passport interface when the data becomes available.
- H. **Taxable** [REQUIRED] – This column is used to indicate whether a material is subject to some form of tax (Federal, State, local or other). Enter a “0” (zero) for nontaxable items, and a “1” (one) for taxable items.
- I. **Weight** [REQUIRED] – This column is used to record the *Weight* of a given material in decimal pounds. *Weight* values are used to calculate the weight of an entire job/order. If you are uncertain of a *Fastener’s Weight*, or if you elect not to use *Weight* values in Roofing Passport, you must enter a value of “0” (zero) into this column for each *Fastener*.
- J. **LockMarkup** [OPTIONAL] – If you wish to prevent “downstream” users from changing the *Markup* your organization charges for a *Fastener*, lock this field in the *Pricing Tables* by entering a “1” (one) in this column. If you wish to keep pricing *Markup* information unlocked (i.e. capable of being changed), enter a “0” (zero) here.

Hardware Tab

The optional *Hardware* tab is used to record information about every type of *Hardware* that is specified for building materials in your Roofing Passport database. The following paragraphs provide details on the data to be entered into each column of the *Hardware* tab.

1	Sku	Description	SupplierId	SupplierSku	Cost	Price	Taxable	Weight	LockMarkup
2	UF1.5	Universal Foam 1.5"x50'	TH0047		150.00	150.00	0	22.50	
3	RB-6	#6 Roof Boot	TH0047		44.00	56.00	1	4.00	
4	UL25	25 Yr Hydrashell	WI0012		96.00	96.00	1	12.75	
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

Figure 9: The *Hardware* tab has 9 columns of data; 5 required and 4 optional.

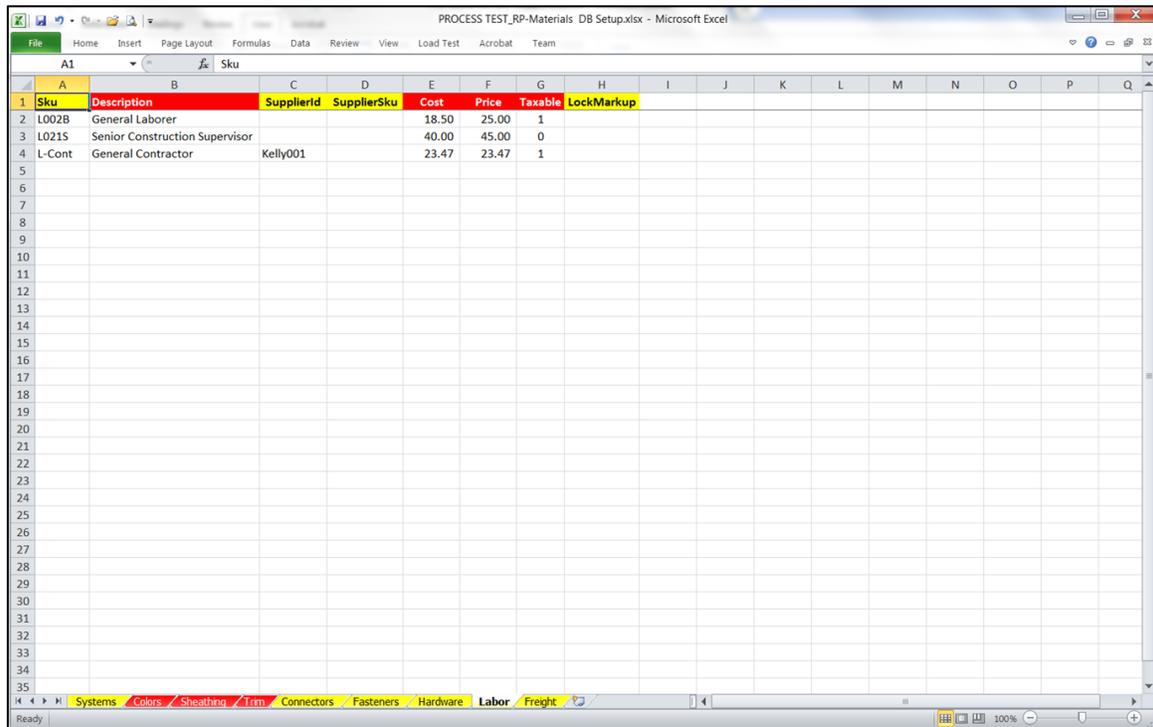
- A. **Sku** [OPTIONAL] – The Roofing Passport Sku column is used to uniquely identify every piece of material in the *Supplier Materials Database*. Every type of *Hardware* (i.e. every row in your template) may be assigned a unique Roofing Passport Sku. (Please see pages 11-14 for information about how to create your Roofing Passport Sku codes.)
- B. **Description** [REQUIRED] – Use this column to enter a brief, informative description of each different type of *Hardware* available in your inventory. Be sure that your descriptions are sufficient to distinguish each unique type of *Hardware* from the rest.
- C. **SupplierId** [REQUIRED] – This column is used to identify the *Supplier* of any *Hardware* materials that your organization acquires from an outside source. You can simply leave this field blank for all *Hardware* materials that are manufactured in house.
- D. **SupplierSku** [OPTIONAL] – This column is used to list the SKU code for any *Hardware* that your organization acquires from an outside source.
- E. **Cost** [REQUIRED] – Enter the amount that your organization must pay to produce or acquire a given type of *Hardware*. If you are uncertain of this value for some or all of your *Hardware* materials, you can enter a value of “0” (zero), and then go back and change the *Cost* data when it becomes available.
- F. **Price** [REQUIRED] – This is the amount that your organization will charge customers for a given *Hardware* item. If you are uncertain of the *Price* your company will charge, you can enter a

value of “0” (zero), and then go back and change this *Price* from within the Roofing Passport interface when the data becomes available.

- G. **Taxable** [REQUIRED] – This column is used to indicate whether a given type of *Hardware* is subject to some form of tax (Federal, State, local or other). Enter a “0” (zero) for nontaxable items, and a “1” (one) for taxable items.
- H. **Weight** [REQUIRED] – This column is used to record the *Weight* of a given material in decimal pounds. *Weight* values are used to calculate the *Weight* of an entire job/order. If you are uncertain of a material’s *Weight*, or if you elect not to use *Weight* values in Roofing Passport, you must enter a value of “0” (zero) for each line item.
- I. **LockMarkup** [OPTIONAL] – If you wish to prevent “downstream” users from changing the *Markup* your organization charges for a type of *Hardware*, lock this field in the *Pricing Tables* by entering a one (1) in this column. If you wish to keep pricing *Markup* information unlocked (i.e. capable of being changed), enter a “0” (zero) here.

Labor Tab

The optional *Labor* tab is used to record information about every type of *Labor* that is to be included in the calculation of job *Pricing*. The following paragraphs provide details on the data to be entered into each column of the *Labor* tab.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Sk	Description	SupplierId	SupplierSku	Cost	Price	Taxable	LockMarkup									
2	L002B	General Laborer			18.50	25.00	1										
3	L021S	Senior Construction Supervisor			40.00	45.00	0										
4	L-Cont	General Contractor	Kelly001		23.47	23.47	1										
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
32																	
33																	
34																	
35																	

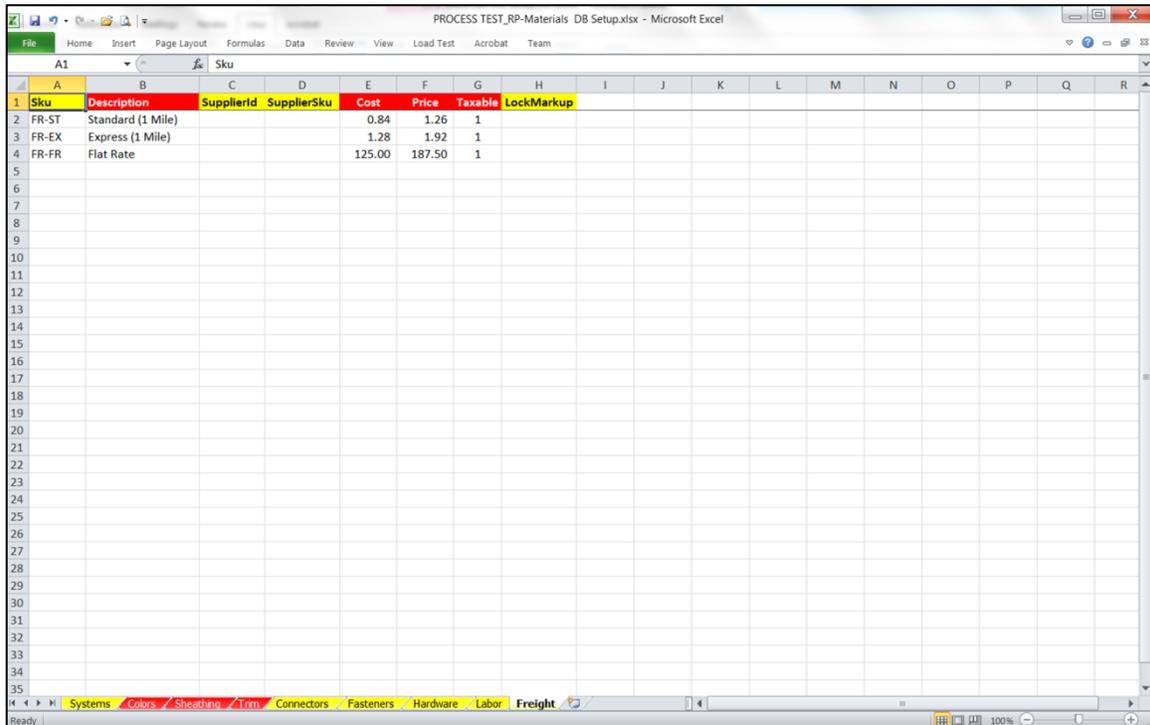
Figure 10: The *Labor* tab has 8 columns of data; 4 required and 4 optional.

- A. **Sk** [OPTIONAL] – The *Roofing Passport Sk* column is used to uniquely identify every unique type of *Labor* in the *Materials Database*. Every type of *Labor* (i.e. every row in your template) may be assigned a unique *Roofing Passport Sk*. (Please see pages 11-14 for information about how to create your *Roofing Passport Sk* codes.)
- B. **Description** [REQUIRED] – Use this column to enter a brief, informative description of each different type or class of *Labor* used in construction. Be sure that your descriptions are sufficient to distinguish each unique *Labor* type from the rest.
- C. **SupplierId** [OPTIONAL] – This column is used to identify the *Supplier* of any *Labor* that your organization hires from an outside source. You can simply leave this field blank for all *Labor* that is sourced in house.
- D. **SupplierSku** [OPTIONAL] – This column is used to list the SKU code for any *Labor* that your organization acquires from an outside source.
- E. **Cost** [REQUIRED] – Enter the amount that your organization must pay for a given type of *Labor*. If you are uncertain of this value for some or all of your *Labor*, you can enter a value of “0” (zero), and then go back and change the *Cost* data when it becomes available.
- E. **Price** [REQUIRED] – This is the amount that your organization will charge customers for a given unit of *Labor*. If you are uncertain of the *Price* your company will charge, you can enter a value of “0” (zero), and then go back and change this *Price* from within the *Roofing Passport* interface when the data becomes available.

- F. **Taxable** [REQUIRED] – This column is used to indicate whether a given form of Labor is subject to some form of tax (Federal, State, local or other). Enter a “0” (zero) for nontaxable Labor, and a “1” (one) for taxable Labor.
- G. **LockMarkup** [OPTIONAL] – If you wish to prevent “downstream” users from changing the Markup your organization charges for Labor, lock this field in the *Pricing Tables* by entering a “1” (one) in this column. If you wish to keep pricing Markup information unlocked (i.e. capable of being changed), enter a “0” (zero) here.

Freight Tab

The optional *Freight* tab is used to record information about every type of *Freight* charge that is to be included in the calculation of job *Pricing*. The following paragraphs provide details on the data to be entered into each column of the *Freight* tab.



1	Sku	Description	SupplierId	SupplierSku	Cost	Price	Taxable	LockMarkup
2	FR-ST	Standard (1 Mile)			0.84	1.26	1	
3	FR-EX	Express (1 Mile)			1.28	1.92	1	
4	FR-FR	Flat Rate			125.00	187.50	1	
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								

Figure 11: The *Freight* tab has 8 columns of data; 4 required and 4 optional.

- A. **Sku** [OPTIONAL] – The *Roofing Passport Sku* column is used to uniquely identify every type of *Freight* charge in the *Materials Database*. Every type of *Freight* (i.e. every row in your template) may be assigned a unique *Roofing Passport Sku*. (Please see pages 11-14 for information about how to create your *Roofing Passport Sku* codes.)
- B. **Description** [REQUIRED] – Use this column to enter a brief, informative description of each different type of *Freight* charge your organization incurs or charges in the acquisition and/or shipping of materials. Be sure that your descriptions are sufficient to distinguish each unique *Freight* charge from the rest.
- C. **SupplierId** [OPTIONAL] – This column is used to identify the *Supplier* of any *Freight* services that your organization acquires from an outside source. You can simply leave this field blank for all *Freight* services are sourced in house.
- D. **SupplierSku** [OPTIONAL] – This column is used to list the SKU code for any *Freight* that your organization acquires from an outside source.
- E. **Cost** [REQUIRED] – Enter the amount that your organization must pay for a given type of *Freight* charge. If you are uncertain of this value for some or all *Freight* charges, you can enter a value of “0” (zero), and then go back and change the *Cost* data when it becomes available.
- F. **Price** [REQUIRED] – This is the amount that your organization will charge customers for a given type of *Freight* service. If you are uncertain of the *Price* your company will charge, you can

enter a value of "0" (zero), and then go back and change this *Price* from within the Roofing Passport interface when the data becomes available.

- F. **Taxable** [REQUIRED] – This column is used to indicate whether a *Freight* charge is subject to some form of tax (Federal, State, local or other). Enter a "0" (zero) for nontaxable items, and a "1" (one) for taxable items.
- G. **LockMarkup** [OPTIONAL] – If you wish to prevent "downstream" users from changing the *Markup* your organization charges for a material, lock this field in the *Pricing Tables* by entering a "1" (one) in this column. If you wish to keep pricing *Markup* information unlocked (i.e. capable of being changed), enter a "0" (zero) here.

The Upload Process

Once you have gathered the needed data for a given tab in the *Materials Setup Template*, the final step is to transfer that data into Roofing Passport (As stated previously, we suggest that you complete and Upload the tabs in your *Materials Setup Template* **one tab at a time!**) The following describes the process of Uploading your data using *Microsoft Excel*; please adjust as necessary when using another spreadsheet application to perform this process:

1. Open the *Materials Setup Template* and select the tab at the bottom of the workbook that contains the data you wish to upload into your *Materials Database*.
2. Next, right click on the selected tab, and choose Move or Copy from the available options. A Move or Copy dialog box like the one pictured in Figure 12 at right will open.
3. In the Move selected sheets To book field, click on the down-arrow and select (new book) from the list of options (as pictured in Figure 12). Also place a check in the Create copy checkbox at the bottom of the dialog. This will keep Excel from deleting the tab in your original (source) file.
4. Now click on the OK button at the bottom of the Move or Copy dialog box. Your selected tab will now open as its own Excel file, with no other tabs from the *Materials Setup Template* present.

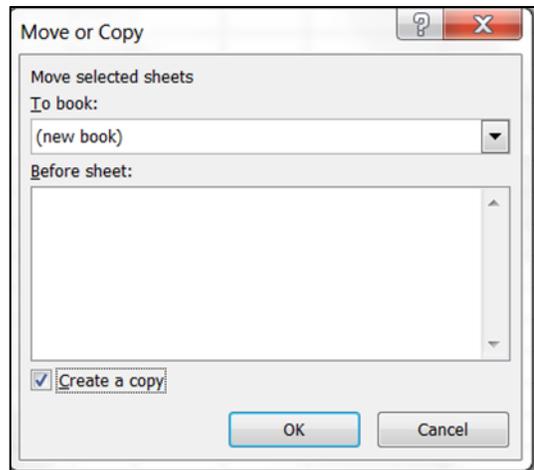


Figure 12: Excel's Move or Copy dialog box.

5. Save your new Excel file to a location on your computer where you can find it easily for the next step, which is to Upload the file into Roofing Passport. The particular name you assign to this file is of no consequence (as long as you can remember it).
6. Next, open Roofing Passport and, from the Settings menu, click on Setup Wizard. The first page of the Setup Wizard will open, as pictured in Figure 13 below. From the menu at the top of this page (red box in Figure 13), click on the *Materials Category* (tab) that you wish to Upload.

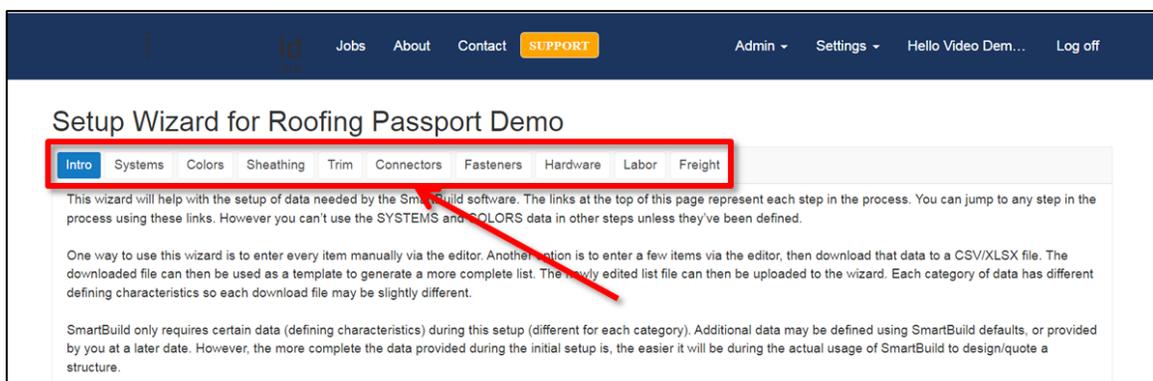


Figure 13: The top of Roofing Passport's Setup Wizard window.

7. The page for that *Materials Category* will open in the Setup Wizard. (See Figure 14 at right.) Locate the Upload button in the upper right-hand corner of this window and click on it. Now click on the Choose File button.

8. A dialog box will open that allows you to navigate to the target file on your computer. Click on the materials file you just created in Step 5 to select it, and then click on the Open or OK button (depending on your computer platform) at the bottom of the dialog box to close it.

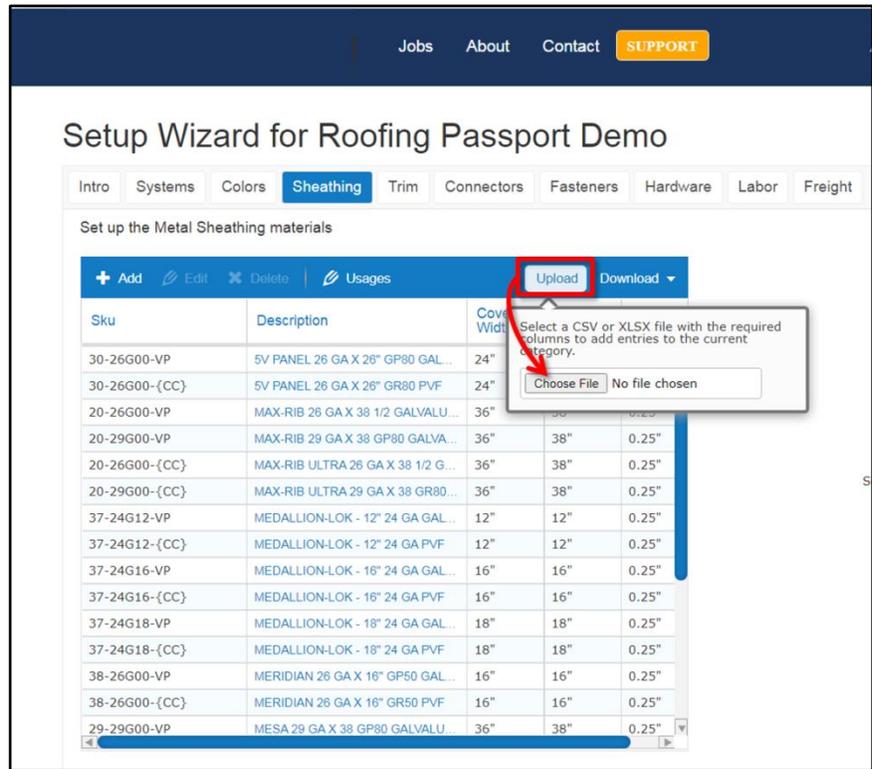


Figure 14: Initiating the file Upload process using the Roofing Passport Setup Wizard.

9. Once your file has been selected (Step 8), Roofing Passport's Upload process will initiate automatically. Upload times will vary depending on file size.

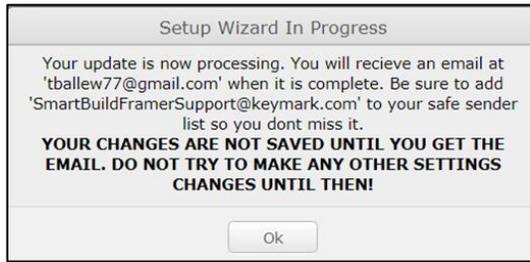


Figure 15: Upload confirmation message.

10. If your Upload process has been successful, the message box pictured in Figure 15 will appear. As indicated, DO NOT make any additional changes to your *Materials Database* until this email message has been received and reviewed.

11. If you receive an error message during your Upload process, or if you have any questions about the confirmation email that you receive, please contact support@keymark.com.