



Stone & Tile



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Need Statement

Document	CCDA
<p>ACMEco imports and sells granite slabs. Granite is shipped in a Bundle, which contains a number of Slabs granite where the total square footage contained in the Bundle is about 300 square feet. A Slab is approximately 126 inches by 54 inches, or about 50 sq ft, so there is usually about 6 or 7 Slabs in a Bundle. The between-Slab variation in dimensions can be about +/- 10 IN.</p> <p>Most granite is imported, and a Packing Slip will be received about 3 weeks prior to receipt of the granite. The Packing Slip details the number of Bundles, Slabs, and the Slab Dimensions. The producer usually measures the Slabs in CM, so ACMECO needs to convert to IN, however some manufacturers do provide measurements in IN.</p> <p>During receipt each Slab is measured. ACMECO tends toward using a “generous” measurement. The difference in measuring techniques between the producer and ACMECO usually results in a variance between the received quantity and what is on the Packing Slip.</p> <p>ACMECO will have an Item Number for each type or style of granite, such as Classico or New Venetian Gold. It is further assumed that there will be a separate Item Number for each Thickness—so 2cm Classico has a different number than 3cm Classico.</p> <p>The Item Numbers will be Lot Controlled, and the base Unit of Measure is a square foot (SQFT). There will be one Lot Numbered generated for each Slab. For example, if a Slab were received with 126x54 IN, LOT123 would appear in the system as having 47.25 SQFT On Hand.</p> <p>Since a Lot Number is a “group” of square feet of granite, which is actually a single Slab, a key requirement is the ability to store the actual dimensions of the slab attached to the Lot Number. This requirement has effects that flow from PO receiving, to Inventory maintenance, through to Sales Orders, fulfillment, and warranty claims.</p> <p>The following sections describe in more detail the impact of Slab Dimensions in each area of the Dynamics GP inventory system, and present the proposed solution in each area.</p>	



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Design Features

Summary	CCDA
<p>Material Specific Features</p> <p>The current requirements and design features described below are intended to handle Granite/Stone Slabs. In the near future ACMECO will also need to process Tile in Dynamics GP, and this product group will require some features that do not overlap with Slabs.</p> <p>The Lot Category Setup window has been added to provide the ability to:</p> <ol style="list-style-type: none"> 1- tie a set of Material Specific Features to a group of item numbers 2- provide for turning the Material Specific Features on/off so that “other” items can be handled using the normal Dynamics GP functionality. In other words, the Material Specific Features are NOT enabled when creating a purchase order for office supplies. <p>In the Design Features described below “MSF” denotes a feature that is tied back to the Lot Category Setup window. These features will only be activated when the selected Item Number’s Lot Category exists in the Lot Category Setup window.</p> <p>Lot Category Setup</p> <p>In addition to the features required to process Slabs, in the near future ACMECO will need to handle Tile. Most of the current design is intended to handle the requirements of Slabs, some of which may or may not overlap with the requirements for handling Tile.</p> <p>The Lot Category field is used to create the Lot Attribute field labels, which will be specific to Slabs, or Tiles. The Lot Category Setup window will provide for associating one or more Lot Categories with a Feature Set.</p> <p>The window will consist of:</p> <ul style="list-style-type: none"> - A Feature Set drop-down list. For now it will contain only one option: Slabs - A scrolling window to enter Lot Categories. It can contain 1 or more Lot Categories. 	



<p>At this time, the Lot Category Setup will be used by the Purchasing and Sales modifications. If the Item Number chosen on the PO Receipt has a Lot Category in the "Slabs" setup, the Slabs customization will be activated. Otherwise normal GP functionality will be observed. Similarly, the Slabs functionality will only be activated in SOP for Items that have the Lot Category indicated in Lot Category Setup for "Slabs".</p>	
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Purchasing Enhancements	CCDA
<p>Purchasing</p> <p>Slab Receiving (MSF-Slabs) The normal function of Dynamics GP during PO Receiving of Lot Numbered material is that you first must enter the total quantity received, and then enter the lot details. For example, if one is receiving vials of lot numbered vaccines, you would first enter the total count—such as 200 vials. The Purchasing Lot Number Entry window then pops open and requires entry of the lot details—such as 100 vials of LOT123 and 100 vials of Lot124. The total lot quantity must exactly match the Item quantity on the PO receiver.</p> <p>For ACMECO the total quantity is not known until each Slab is measured. So, ideally the user should be able to record the lot details first, and use that information to calculate the total quantity received.</p> <p>Also, ACMECO has a “logical” lot numbering scheme. The Lot Number for each Slab will be comprised of the PO Number + Block Number + Bundle Number + Slab Number. The Lot Number will be generated in the following manner:</p> <ul style="list-style-type: none"> - The PO Number field will pull from the PO Number on the Receiving Transactions. This field will display the last four characters of the PO Number. - Block Number is 4 characters and will default to “0001” - Bundle is 1 character and will default to “1” - Slab is 2 characters and will default to “01” <p>The Slab field will auto-increment each time the user adds a slab. If the Block Number or Bundle is changed, the Slab will reset to “01”. Each segment of the Lot Number will be separated by a dash “-”.</p> <p>We will create a new window, Lot Receiving, that is accessible from the PO Receiving window. After selecting the Purchase Order to receive and marking which line item is being received, the user will use Lot Receiving to enter each Lot Number and the Dimensions.</p> <ul style="list-style-type: none"> - Dimensions can be recorded in either Inches or CM. If recorded in CM the system 	

will automatically convert to IN. The dimensions will be used to calculate Square Feet.

- The dimensions will be stored in User Defined Field #1 on the Lot Attributes
- The Lot Receiving window will display the total square feet as each Lot Number is recorded.
- Weight will be calculated and stored in User Defined Field #2 on the Lot Attributes. The Weight per Sq Ft will be stored in the Shipping Weight field on the Item Master.
- The Lot Receiving window will assist in automatically generating Lot Numbers. It will pull in the PO Number, and provide fields for entering a Block Number, Bundle Number and Slab Number. It will combine these fields and show the single value in the Lot Number field, which will be editable by the user. As each Slab (Lot) is saved in the Lot Receiving window, the system will increment the Slab Number field. If the user changes the Bundle Number, it will reset the Slab Number to 1.
- When the user clicks the Receive button on Lot Receiving it will update the Qty Shipped field on the receiver (Receivings Transaction Entry window), and then automatically populate Purchasing Lot Number Entry when it pops open.
- Bar Code Report – ACMECO plans to attach bar code labels to each slab that indicate the Item Number, Description, Lot Number and Dimensions. The Lot Receivings window will have a Bar Code report specifically designed for the purpose of printing these labels. ACMECO will need to purchase a Bar Code font.

POP Lot Receiving Bar Code Report (MSF-Slabs)

The Bar Code Report must combine the Item Number and Lot Number into a single scannable barcode. It will concatenate the two fields and use “+” as a separator. During the imports (described in the Inventory section), the system will look for the separator to determine how to parse the bar code. **The plus symbol cannot be used as part of the Item Number or Lot Numbering scheme as this would confuse the software’s ability to correctly parse the Item Number and Lot Number.**

<i>Inventory Enhancements</i>	CCDA
<p>Inventory</p> <p>Slab Physical Inventory (MSF-Slabs) Most inventory will be in Consignment sites, which will be Inventory Locations in Dynamics GP. Since the Lot (Slab) Dimensions and Weight are stored in the Lot Attributes, this information is carried through from PO Receiving into the Inventory module and will be visible in Inquiries.</p> <p>ACMECO will conduct periodic physical inventory counts at the consignment sites. The count will be conducted with a bar code scanning device. The barcode label will have a single bar code that contains Item Number and Lot Number concatenated into a single string. The two elements will be separated by the plus (“+”) symbol.</p> <p>The physical count will be compared with Inventory in Dynamics GP, and the resulting variance are Slabs sold by the consignment site. These need to be invoiced.</p> <p>We will create a new window, Slab Physical Inventory, that:</p> <ul style="list-style-type: none"> - Allows selection of the Inventory Site - Imports the CSV file - Reconciles the file to On Hand inventory in the selected site - Generates a report showing the variances <p>The import will assume item numbers and lot numbers are valid. It will confirm the imported data matches information in the system, and will indicate any errors to the user, but will not attempt to resolve them. The user must manually resolve any error conditions by editing the import file, or perhaps performing inventory adjustments to account for a missing Lot Number. Since the utility is only generating a report from the import that shows the variances, corrupt or inaccurate data in the import file are not critical.</p> <p>Optionally, this utility could also convert the variance directly into a Sales Invoice. If this feature is provided, creation of the sales order will only be allowed if the import was completed successfully—no data errors.</p>	

Sales File Import (MSF-Slabs)

In addition to the Physical Inventory file (which will show what is present in the consignment inventory), ACMECO will also receive a Sales File, which will contain only the barcodes of sold items. A new window, Sales File Import, will allow the user to import this file and create a sales order. It will have the following features:

- select a customer number
- import the file. During import item numbers and lot numbers will be validated against the master records, and also against what the system thinks is currently in inventory. Any discrepancies will result in an error report, and the user will need to manually reconcile the problems and manually create the sales order.
- Automatically create a sales order for the customer from the imported lines.

This process will use the same “sales document” engine used by the Physical Inventory module.

Slab Inquiry (MSF-Slabs)

ACMECO needs the ability to query lots to locate lots with particular dimensions, and/or from a particular PO or Block. The scenario is that a customer will call looking for slabs with particular dimensions, and/or from a particular Lot. We will create a new window, Slab Inquiry, that has the following features:

- Select Item Number
- Restrict display of available Lot Numbers by any of the following: PO Number, Block Number, Bundle Number, Slab Number, Dimensions, Square Footage, and Weight.
- For numeric fields (Dimensions, Square Footage, Weight), selections can be made using =, =>, =<, <, >. For example, show me all lots where one of the dimensions is >= 145 inches.
- Display Location of the Slab
- Display Allocations, and allocation information (Sales document and customer that are allocating the slab)

Lot Attribute Edit

Two additional pieces of information need to be captured for each slab: Group and Quality. These attributes are usually not known until after receiving when the bundle is opened and each slab examined individually. This information will be stored in Lot Attribute #3, however these characteristics are not normally editable in Dynamics GP unless you are doing an inventory transaction. A new window, Lot Attribute Edit, will allow the user to pick the Item Number and Lot Number, and edit Lot Attribute #3—the other fields will be displayed, but

not be editable.

Slab Transfer (MSF-Slabs)

After receiving Slabs into the main location, ACMECO will use an Inventory Transfer to move the Slabs to consignment sites. The transfer process has the same requirements around Slab Lot Numbers as seen in POP and SOP—they need to select the Slabs (and lot quantities) before they can enter a line quantity for the transaction. This is the reverse of how Dynamics GP normally works—which requires entering the total line quantity first, and then selecting Lot quantities.

The Inventory Transfer process will be modified to support the following:

- After picking the Item Number to transfer and entering transfer from/to sites on Item Transfer Entry, the user will be able to pick Lots (slabs). The total of the selected Lots will be entered automatically into the Transfer Line.

Sales Enhancements	CCDA
<p>Sales Order Processing</p> <p>Slab Fulfillment (MSF-Slabs) When taking a Sales Order the customer will provide the desired type of stone (item number) and the total quantity of square feet required. The granite inventory is tracked in square feet, but in reality there are limitations imposed by the fact that the square feet are actually contained in Slabs of fixed dimensions.</p> <p>If a customer needs 100 sq ft, they might need to purchase a 50 sq ft Slab and a 60 sq ft Slab. Normally Dynamics GP requires entering the total sale quantity first, then selecting the Lot Numbers to fulfill the order. Ideally the user should be able to pick the Item Number, and then select the available Lot Numbers that have the correct dimensions needed by the customer. The selected Lot Numbers should then provide the total square footage being sold.</p> <p>We will create a new window, Slab Fulfillment, that opens from Sales Transaction Entry immediately after selecting the Item Number. Features of the Slab Fulfillment window:</p> <ul style="list-style-type: none"> - Show all Lots with On Hand inventory quantities for the selected Item - Show allocated quantities. For these Lots it will also show which Customer and Sales Order are allocating the inventory, and allow drill-down to the document (see Sales Drill-Down below). - Allow selecting multiple Slabs - Show total square footage selected - Return the total to the Quantity field on Sales Transaction Entry and automatically populate the Sales Lot Number Entry window. <p>The Sales Order, Picking Ticket, and Invoice reports need to be modified to show:</p> <ul style="list-style-type: none"> - Lot Dimensions - Slab Weights <p>Both of these values will be pulled from the Lot Attributes.</p> <p>Sales Drill-Down</p>	



<p>The allocation drill-down described above will open the document in Sales Transaction Inquiry. Normally this window is not editable. We will provide a method for un-allocating inventory from this window so that the original transaction can remain open in Sales Transaction Entry.</p>	
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CHANGE REQUEST 1			
Client Name		Date	
Project Name			
Change Request #			
Description of Change			
<ol style="list-style-type: none"> 1) Sales Lot Entry: add ability to select multiple lots at the same time. User should be able to mark all the Slabs they want, then click the Insert button. Window should display Dimensions and Quality. 2) Sales Lot Entry: Make scrolling window that shows available lots display more lines. Display Dimensions in place of Bin on the scrolling window. 3) Slab Inquiry: add Item Description as a searchable field. 4) PO Receiving: Have Quality field default to 1. 5) PO Receiving: Slab "auto add" feature. User wants to enter dimensions once, and a "Qty of Slabs" value, then have the system automatically add that number of Slabs with new Lot Numbers. 6) PO Receiving: add a Comment field to describe why a particular Quality Code was assigned. Possibility of needing to include more fields add slight incremental cost. 7) PO Receiving: sort Selected Lots screen from Highest to Lowest, so most recently entered slab is on the top of the scrolling window. –Revised: just make scrolling window show more lines. 8) PO Receiving: after selecting lots, the focus returns to the Qty field on the PO receipt line. User would like to automatically start new line. If starting new line is not possible, place focus in last editable field so user only has to tab once to get to new line. 			



CHANGE REQUEST 2			
Client Name		Date	
Project Name			
Change Request #			
Description of Change			
<p>Purpose: ACMECO needs functionality to support return of slabs through Sales Transaction Entry. A key requirement is to maintain the integrity of the Lot Numbering, so that the original lot numbers used to fulfill and invoice are returned to inventory. Re-keying of lot numbers should be avoided.</p> <p>The ACMECO Custom module contains a window called Slab Inquiry. This window shows all available Slabs, and allows selecting multiple slabs (for the same Item Number) and adding all of the selections to a Sales Order line. A similar type of "multi-select" functionality is desired for the returns process.</p> <p>The proposed solution would add a new window called Slab Return Entry, accessible from and Extras menu option when Sales Transaction Entry is open.</p>			

X
Returns

Return

② *Originating Invoice STDINV2263 ①

X	Line	Item Number	Qty	Lot Number	Dimensions	Quantity
	1	ASDF1234	235	001-123-001	150x100	
X	2	JHGF8989	210	001-123-002	100x110	

“*” = user entered field

“Z” = zoom field

“L” = Lookup

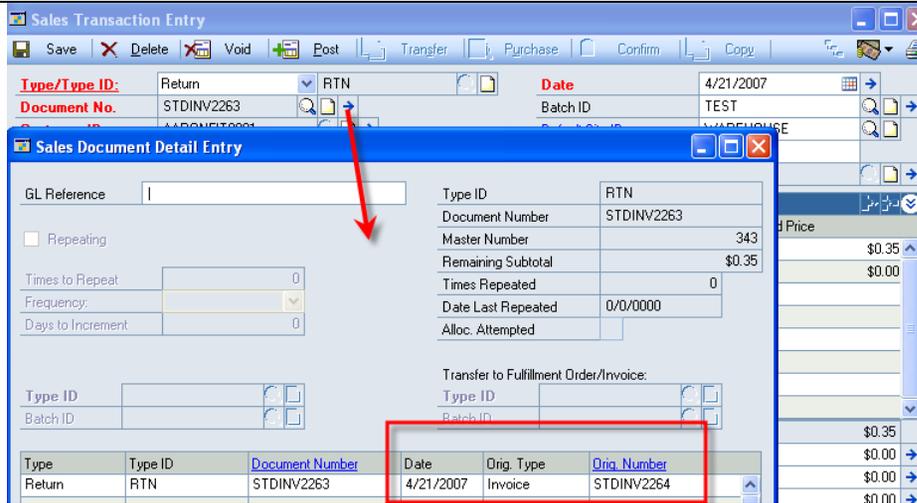
The user will either type-in or select the Originating Invoice from a Lookup. The Lookup will display posted transactions for the customer.

The left hand list window will show line items for the selected invoice. After selecting a line to return, the right-hand window will show the Lot Numbers used to fulfill the line. Multiple Lots can be selected in the right-hand window.

When the RETURN button is clicked, the selected Item Number and Lot Numbers will be returned to the Sales Transaction Entry window.

The unit cost and price from the originating invoice will be copied to the return document.

The originating invoice number will be added to the Sales Transaction Header record so that the Return and the Invoice are linked. This will then be available in the Sales Document Detail Entry window:



NOTE: Dynamics GP stores the lot attributes (dimensions, quality) for all lot numbers that are ever entered into the system. When a lot number is returned, and the exact same lot number is entered on the return as the lot that was sold, the returning lot will have the lot attributes already attached to it. The do not need to be “re-copied” from the originating invoice.