

## MvLink

MvLink automatically sends information from a Microvellum work order to a ShopPAK work order. This eliminates the manual process of updating ShopPAK work order products, product labels, and material based on approved shop drawings and final “bill of materials” (BOMs).

Because MvLink automates the process of moving engineering information into ShopPAK, it cuts down on data entry errors, it significantly decreases the time to identify and order materials, and it ensures that products listed on the work order match current engineering product definitions and attributes (e.g. width, height, and depth). This makes generating product labels and verifying shipments much easier.

## Installation

### MvLink Requirements

MvLink reads and writes to the shared ShopPAK database. Thus, before using MvLink, you must have the ShopPAK shared database installed and running on your network.

**Note:** It doesn't matter if you install ShopPAK on the PC that you install MvLink upon.

MvLink requires that the Microsoft .NET version 4.0 framework and SQL Server Compact Edition 4.0 Runtime are installed on your PC. These applications are needed in order to read information from the Microvellum work order database.

If you are installing MvLink on a PC that already has Microvellum, then you already have .NET and SQLCE runtime installed. However, if you install MvLink on a PC that doesn't have Microvellum, you'll need to download and install Microsoft .NET version 4.0 framework and SQL Server Compact Edition 4.0 on that PC.

Since MvLink accesses the shared ShopPAK database across the network, the PC needs to have a network card and be able to access the PC or Server running the shared ShopPAK database.

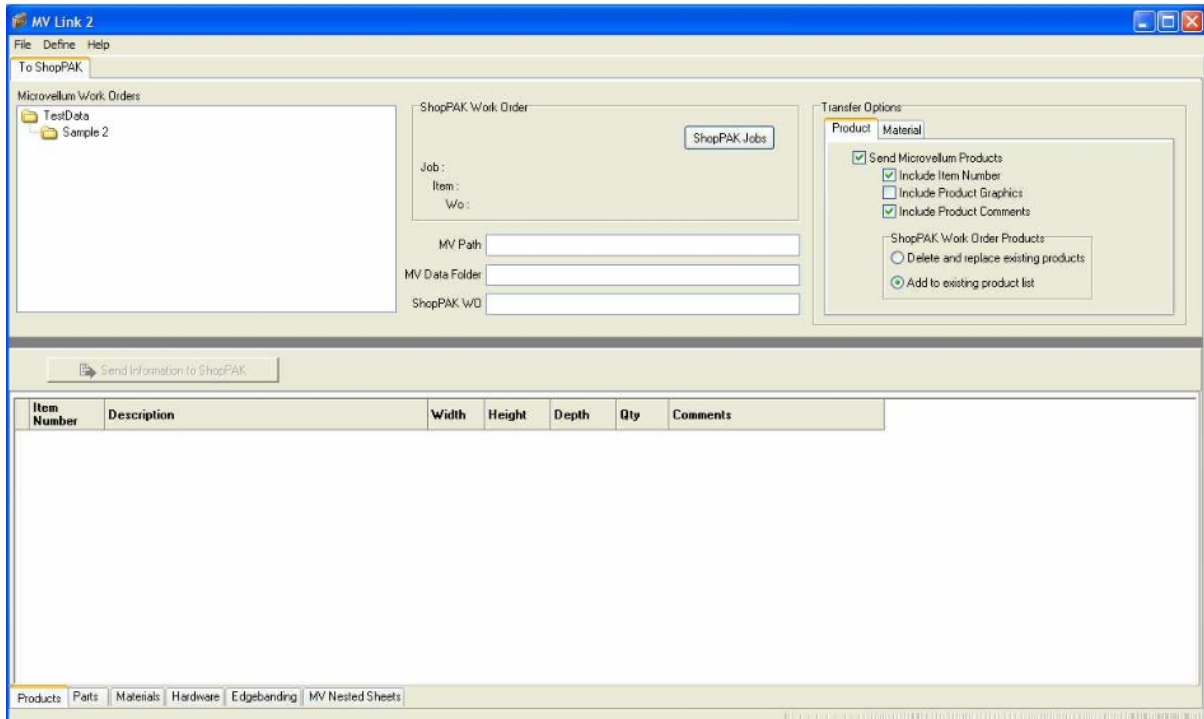
### Installing MvLink

1. Insert the Installation CD into the PC you want to install MvLink upon. Make sure you are logged on to the PC with the same Logon ID that will be using MvLink.
2. Double-click the “My Computer” icon. Locate the CD drive icon and double-click it.
3. Open the “MvLink” folder by double-clicking it.
4. Double-click Setup.exe. This program installs MvLink on the PC. Follow the instructions on the screen. We recommend keeping the installation defaults. Close the installation window when it finishes installing MvLink.

The Installation routine installs MvLink and creates a Program Group called **MvLink 2**. It installs files into **C:\Program Files\TradeSoft\MvLink2**.

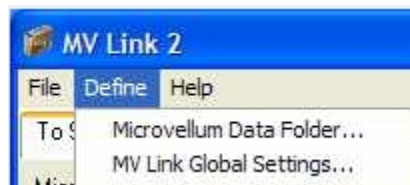
## Starting MvLink

1. Select **Start | All Programs | MvLink2 | MvLink 2**.
2. A “Sign On” dialog displays. Enter your ShopPAK user name and optional password. Click OK. This displays the MvLink main window:



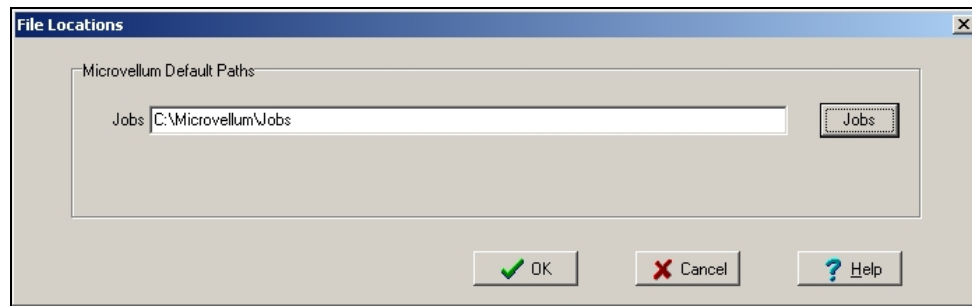
## Set Up

Defining MvLink default settings is easy. Under the Define menu you'll find two items:



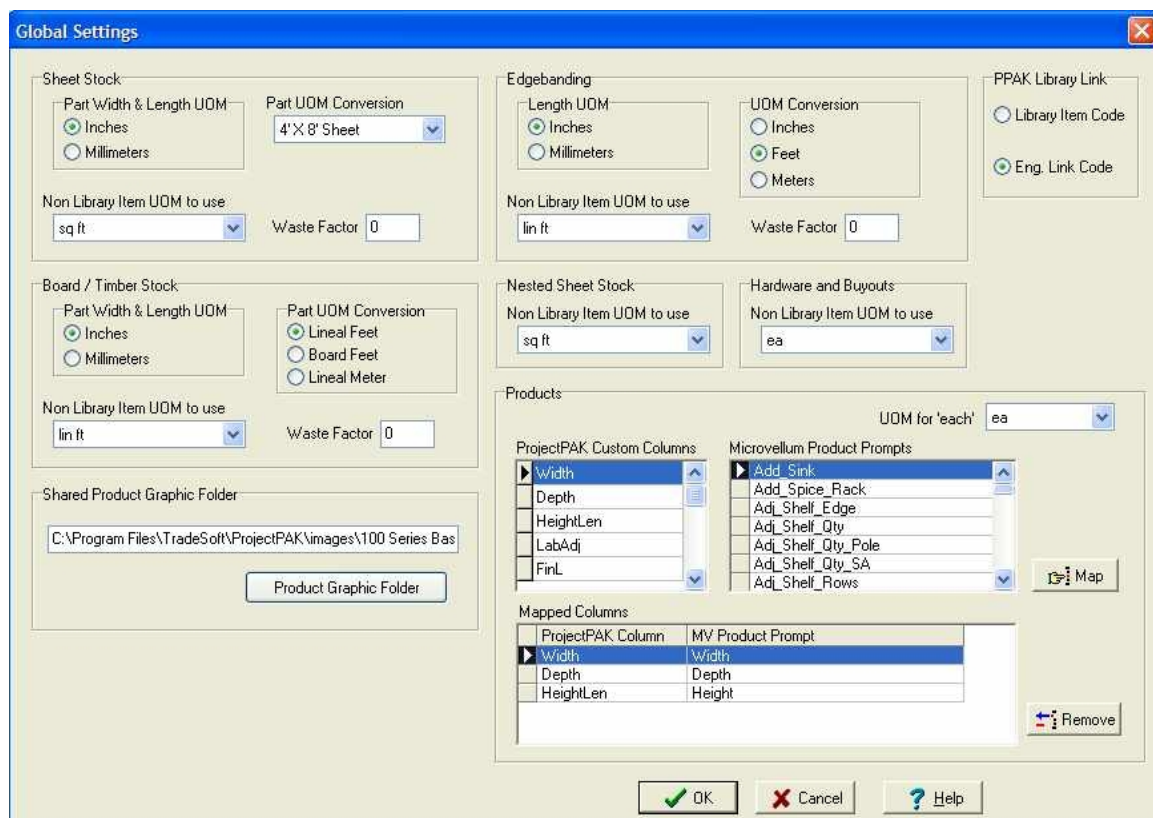
### Microvellum Data Folder

To speed finding the Microvellum work order you want to send to ShopPAK, indicate where you store Microvellum work orders on your PC.



## MvLink Global Settings

Whereas the Microvellum Data Folder is specific to an individual MvLink user PC, the MvLink Global Settings are stored in the database and used by all MvLink users.



### Sheet Stock

Define how to interpret Microvellum sheet stock materials.

#### Part Width & Length UOM

Indicate if Microvellum parts are measured in inches or millimeters.

#### Non Library Item UOM to Use

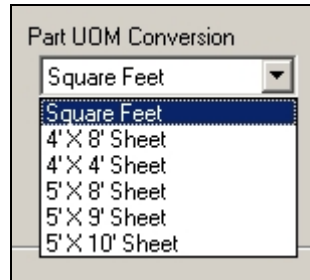
When MvLink sends sheet stock material to ShopPAK, it attempts to match the Microvellum material to a corresponding ProjectPAK library item. If it finds a match, then the matching

ProjectPAK unit of measure is used. However, if it doesn't find a match, MvLink uses the unit of measure you choose here.

Note: The unit of measure values come from the ProjectPAK UOM definition list. Use ProjectPAK if you need to add additional items.

#### Part UOM Conversion

MvLink determines overall sheet stock quantity by adding up all the parts for a given material based on how you want it to aggregate part area.



Choose the conversion size you want MvLink to use when calculating a particular material's quantity.

#### Waste Factor

If you wish, you can have MvLink adjust sheet good quantity to take a waste factor into account. The adjusted quantity is used when sending material requirements to ShopPAK. To add a 30% waste factor, enter 30 into the edit box.

### **Board / Timber Stock**

Define how to interpret Microvellum board stock materials.

#### Part Width & Length UOM

Indicate if Microvellum parts are measured in inches or millimeters.

#### Non Library Item UOM to Use

When MvLink sends board stock material to ShopPAK, it attempts to match the Microvellum material to a corresponding ProjectPAK library item. If it finds a match, then the matching ProjectPAK unit of measure is used. However, if it doesn't find a match, MvLink uses the unit of measure you choose here.

Note: The unit of measure values come from the ProjectPAK UOM definition list. Use ProjectPAK if you need to add additional items.

#### Part UOM Conversion

MvLink determines overall board stock quantity by adding up all the parts for a given material based on your choice of lineal feet or board feet.

#### Waste Factor

If you wish, you can have MvLink adjust board stock quantity to take a waste factor into account. The adjusted quantity is used when sending material requirements to ShopPAK. To add a 30% waste factor, enter 30 into the edit box.

#### **Edgebanding**

Define how to interpret Microvellum edgebanding entries.

#### Length UOM

Indicate if Microvellum edgebanding is measured in inches or millimeters.

#### Non Library Item UOM to Use

When MvLink sends edgebanding material to ShopPAK, it attempts to match the Microvellum edgebanding material to a corresponding ProjectPAK library item. If it finds a match, then the matching ProjectPAK unit of measure is used. However, if it doesn't find a match, MvLink uses the unit of measure you choose here.

#### UOM Conversion

MvLink determines overall edgebanding quantity by adding up all 'like' edgebanding material based on your choice of inches, feet or meters.

#### Waste Factor

If you wish, you can have MvLink adjust edgebanding quantity to take a waste factor into account. The adjusted quantity is used when sending material requirements to ShopPAK. To add a 30% waste factor, enter 30 into the edit box.

#### **Nested Sheet Stock**

If you use Microvellum optional nesting module, you can send ShopPAK the optimized sheet stock that it determines best addresses part placement and material yield.

#### Non Library Item UOM to Use

When MvLink sends nested sheet stock material to ShopPAK, it attempts to match the Microvellum sheet stock material to a corresponding ProjectPAK library item. If it finds a match, then the matching ProjectPAK unit of measure is used. However, if it doesn't find a match, MvLink uses the unit of measure you choose here.

#### **Hardware and Buyouts**

Define how to interpret Microvellum hardware and buyout items.

#### Non Library Item UOM to Use

When MvLink sends hardware or buyout items to ShopPAK, it attempts to match the Microvellum hardware or buyout item to a corresponding ProjectPAK library item. If it finds a match, then the matching ProjectPAK unit of measure is used. However, if it doesn't find a match, MvLink uses the unit of measure you choose here.

#### **ProjectPAK Library Link**

A very important feature of MvLink is linking a Microvellum material with its corresponding ProjectPAK library item. This guarantees that you pick up important ProjectPAK attributes like material unit cost, vendor information, conversion factors, etc. when sending material to ShopPAK. If you choose → Library Item Code, MvLink uses Library Item Code to match against the Microvellum material code. If you choose → Eng Link Code, MvLink uses the Library Item Engineering Link Item Code to match against the Microvellum material code. If

you need to define ProjectPAK Library Item Codes that differ than how you've defined your Microvellum material codes, use the ProjectPAK Library Item Engineering Link Item Code for material matching.

Refer to **Mapping Materials** presented later in this chapter for instructions on linking Microvellum materials to ProjectPAK library items.

## Products

### UOM For 'Each'

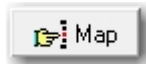
Identify the UOM that corresponds with 'each'. MvLink uses the 'each' unit of measure when it sends products to ShopPAK and creates a new product row under a work order.

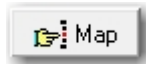
### Custom Column Mapping

Microvellum has a number of product attributes that you can map to the corresponding ProjectPAK custom column. MvLink uses this information to populate ShopPAK product custom columns with the correct information from Microvellum.

To map a ProjectPAK custom column to a corresponding Microvellum product attribute:

- 1) Select a ProjectPAK custom column from the list of custom columns.
- 2) Select the corresponding Microvellum product attribute.



- 3) Click the map button . MvLink move the mapping to the Mapped Columns grid.

## Mapping Width, Height, and Depth (REQUIRED)

**MvLink *requires*** that you **map ProjectPAK Width, Height, and Depth** custom columns to **corresponding Microvellum Width, Height, and Depth** product prompts. These columns are used when sending products, hardware, and nested sheets to ShopPAK.

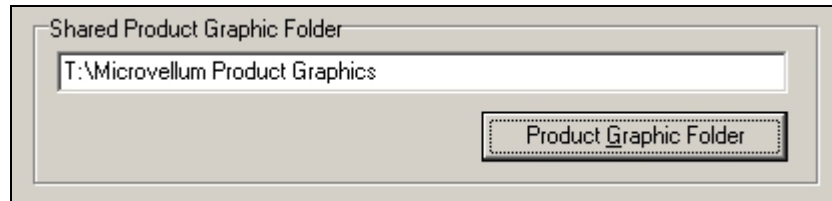
## Shared Product Graphic Folder

MvLink can send product label graphics to ShopPAK. This is handy if you want to generate product labels in ShopPAK that have a picture of the product. Product labels are used to verify the right products are shipped, as well as, track products as they are assembled.

ShopPAK doesn't store a graphic image in its database. This would take up too much space. Instead, we store the directory and file name and read the graphic when generating a product label. Since most ShopPAK customers have several ShopPAK users, and many have more than one person using and generating job information with Microvellum Overdrive Pro, you must establish ONE shared folder on ONE networked PC to store the graphic images that ShopPAK requires when generating labels with pictures.

**IMPORTANT:** Each Microvellum user and each ShopPAK user must map the PC that has the shared graphics folder *WITH THE SAME MAPPED DRIVE letter*. This is the only way

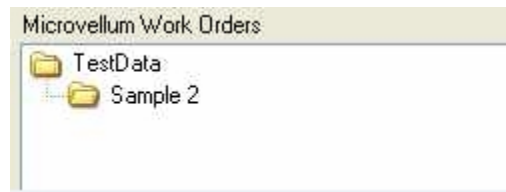
that ShopPAK will be able to find and generate labels with pictures, regardless of which ShopPAK user is generating labels.



In the example above, we've mapped our file server as the "T" drive on every PC in the office. We've also created a 'shared' folder on this PC called 'Microvellum Product Graphics'. This is where all of the job product graphics will be stored when you request MvLink send job information to ShopPAK.

## Identifying the Microvellum Work Order

The first step when sending job information to ShopPAK is identifying the Microvellum work order that contains the information you want to send.



On the left hand side of the MvLink window, you'll see a directory tree that points at your Microvellum data folder. See page 2 and 3 – Microvellum Data Folder – for instructions on setting this default for your PC.

Navigate through the directory tree and choose the work order that you want to send to a corresponding ShopPAK work order.

Notice that when you select a folder from the Microvellum Work Order area, MvLink updates the "MV Path" and the "MV Data Folder" accordingly.



## Microvellum Work Order Data

Selecting a Microvellum work order folder triggers MvLink to read the associated data from the Microvellum SQLCE database and display it across the bottom of the window.

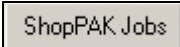
Item Number	Description	Width	Height	Depth	Qty	Comments
103.05	Die Wall w Skins		40	876	590	1
103.06	Finished Leg		40	724	590	1
103.07	223-300 2 Drawer Base		914	724	565	1
103.08	Die Wall w Skins	1529.999999999994		724	76	1
103.10	Die Wall w Skins		1351	724	76	1
103.11	230-100 3 Drawer Base		356	724	565	1
103.13	223-000 2 Drawer Base		356	724	565	1
103.14	Finished Leg		40	724	590	1
103.15	EGR Straight Countertop		1975	38	635	1
103.17	EGR Straight Countertop		2153	38	635	1
103.18	EGR Straight Countertop		3353	38	635	1
103.19	EGR Straight Countertop		3518	38	635	1
103.20	EGR Straight Countertop		2718	38	635	1
103.21	230-300 3 Drawer Base		356	724	592	1
103.22	223-300 2 Drawer Base		914	724	592	1
103.24	223-100 2 Drawer Base		356	724	592	1
103.25	230-200 3 Drawer Base		356	724	592	1

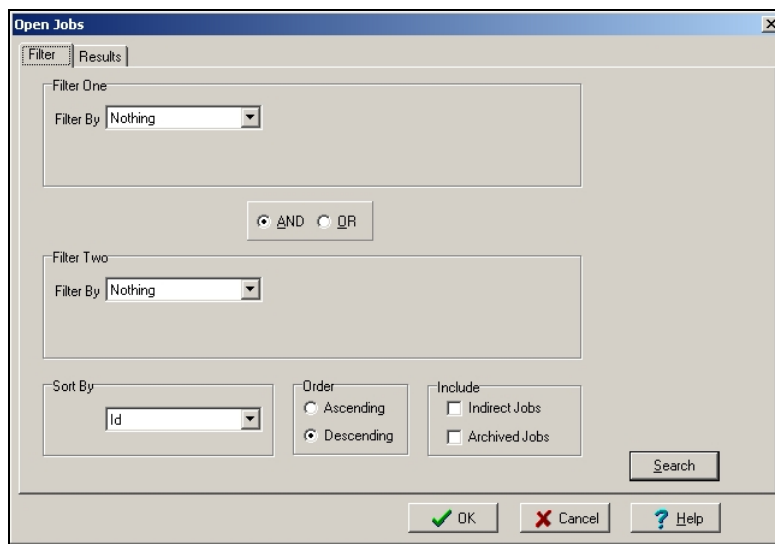
Products | Parts | Materials | Hardware | Edgebanding | MV Nested Sheets

Note: The data grid area is sizable should you want to see more rows of data. Move your mouse to the horizontal scroller that separates the window panes.

Make sure that you've picked the right Microvellum work order by browsing the Microvellum work order information.

## Identifying the ShopPAK Work Order

- Click the ShopPAK Jobs button . This displays the "Open Jobs" dialog box:

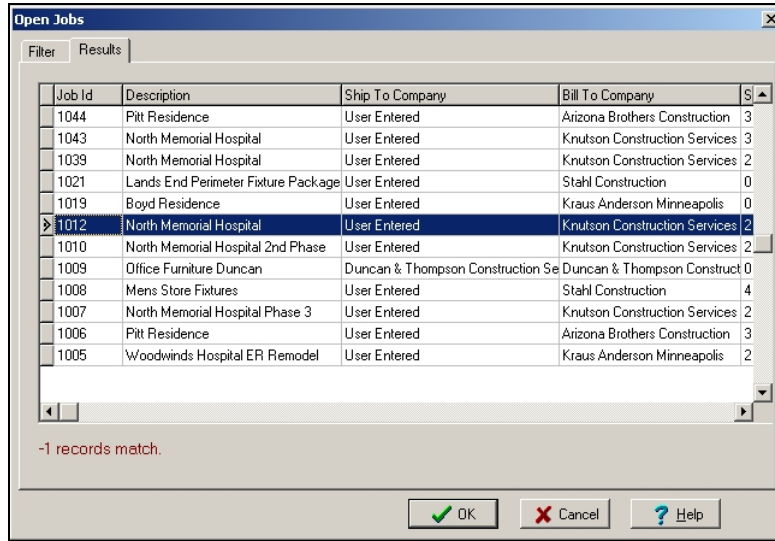


The "Open Jobs" dialog box is shown with the following fields and controls:

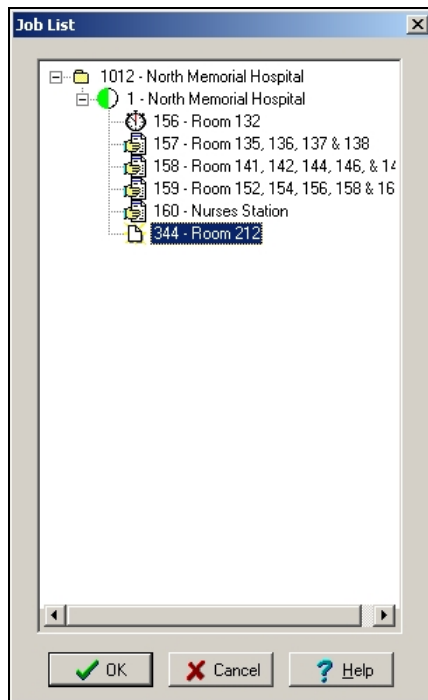
- Filter** and **Results** tabs.
- Filter One** section:
  - Filter By:
- Filter Two** section:
  - Filter By:
- Sort By** section:
  - Sort By:
- Order** section:
  - ☒ Ascending
  - ☒ Descending
- Include** section:
  - ☐ Indirect Jobs
  - ☐ Archived Jobs
- Search** button.
- OK**, **Cancel**, and **Help** buttons at the bottom.



- Use the “Filter” controls to find the ShopPAK job you want to update and click the “Search” button.



- Double click the job you want or select the job and click the OK button. This displays the ShopPAK job hierarchy of the selected job.



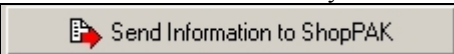
- Select the work order you want to send Microvellum work order information to and click the OK button. This closes the dialog box and updates the selected ShopPAK Job, Job Item, and Work Order as shown on the next page:

ShopPAK Job

Job : 1012 - North Memorial Hospital  
Item : 1 - North Memorial Hospital  
Wo : 344 - Room 212

MV Path C:\Microvellum\Jobs\Sample Job 1\Manufacturing Data  
MV Data Folder Manufacturing Data  
ShopPAK WO 344 - Room 212

ShopPAK Jobs

Once you've identified the Microvellum work order and you've also identified the target ShopPAK work order, the  button is enabled.

Use this button to actually send the Microvellum information to ShopPAK.

But first, make sure you've identified exactly what information you want MvLink to send and how you want to update the corresponding ShopPAK work order. This is done via the "Transfer Options" and the "MvLink Global Options" dialog box previously covered on pages 3 – 6.

## Transfer Options

Transfer Options

Product Material

☒ Send Microvellum Products  
☒ Include Item Number  
☐ Include Product Graphics  
☒ Include Product Comments

ShopPAK Work Order Products  
☐ Delete and replace existing products  
☒ Add to existing product list

## Product

Product transfer options tell MvLink if you want to send product information to ShopPAK, and if so, how you want to update the work order product information.

### **Send Microvellum Products**

If you want to send product information to ShopPAK, place a check into the “Send Microvellum Products” checkbox.

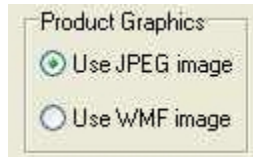
### **Include Item Number**

Microvellum gives every product in a job a unique Item Number. If you want to create a distinct ShopPAK product row for each Microvellum product, place a check into “Include Item Number”. However, if you want MvLink to combine ‘like products’ into a single ShopPAK work order product row, leave the “Include Item Number” checkbox blank. A ‘like product’ has the same description, width, height, and depth. MvLink determines the correct quantity when combining products.

Depending on your choice, MvLink refreshes the Products sub-tab accordingly. The products you see listed on this sub-tab are the product rows that MvLink sends to ShopPAK.

### **Include Product Graphics**

Place a check into this checkbox if you want to send product graphics to ShopPAK. If you select this option, MvLink displays a control so you can choose which graphic format you want to send. Microvellum apparently stores both JPEG and WMF product images.



MvLink copies the product graphic files to the shared MvLink / ShopPAK graphics folder and updates ShopPAK product rows accordingly.

### **IMPORTANT**

Remember to identify the shared graphic folder location before sending product graphic folder information to ShopPAK. This is explained on page 6 & 7 – Shared Graphic Product Folder.

### **Include Product Comments**

Place a check into this checkbox if you want to send product comments over to ShopPAK. MvLink adds comments as a ShopPAK product note.

### **ShopPAK Work Order Products**

Tells MvLink how you want to update ShopPAK. You have two choices:

#### Delete and Replace Existing Products

Tells MvLink that you want to delete any ShopPAK products that currently exist under the target work order, replacing them with the list of Microvellum products shown on the Products sub-tab.

#### Add To Existing Product List

Tells MvLink that you want to append the list of Microvellum products to the end of the target work order’s existing product list.

## Material

Material transfer options tell MvLink if you want to send materials to ShopPAK, and if so, how you want to update the work order material information.

Transfer Options

Product Material

☒ Send Microvellum Materials

ShopPAK Work Order Materials

☒ Replace and update existing materials

☐ Add to existing material list

Microvellum Materials To Send

☒ Materials (sheet, board, and buyout items)

☒ Hardware

☒ Edgebanding ☒ MV Nested sheet stock

### Send Microvellum Materials

If you want to send materials to ShopPAK, place a check into the “Send Microvellum Materials” checkbox.

### ShopPAK Work Order Materials

Tells MvLink how you want to update ShopPAK. You have two choices:

#### Replace and Update Existing Materials

Tells MvLink that if it finds an existing ShopPAK material, replace its ‘Estimated Quantity’ with the Microvellum material quantity. If MvLink doesn’t find an existing ShopPAK material that matches the Microvellum material, it creates a new ShopPAK material row. Since existing ShopPAK materials may have a ProjectPAK estimated quantity and cost, it never deletes an existing ShopPAK material row. Instead, it updates estimated quantity or adds a new material row. This keeps ProjectPAK estimated budget quantities and cost intact for job cost variance tracking.

#### Add To Existing Material List

Tells MvLink that you want to append the list of Microvellum materials to the end of the target work order’s existing material list.

### Microvellum Materials To Send


Place a check into each material type that you want MvLink to send to ShopPAK. The different material types correspond with the materials found on each material oriented sub-tab at the bottom of the MvLink window.

Note: Make sure you set the global options correctly before exporting Microvellum data to ShopPAK. The global options work in tandem with your transfer options. Global options are explained on pages 3 – 6.

Note: MvLink remembers the last set of transfer options you've chosen between sessions.

## Sending Microvellum Job Information to ShopPAK

Once you've identified the Microvellum Job, or section of the job you want to send to ShopPAK, and you've also identified the target ShopPAK work order,

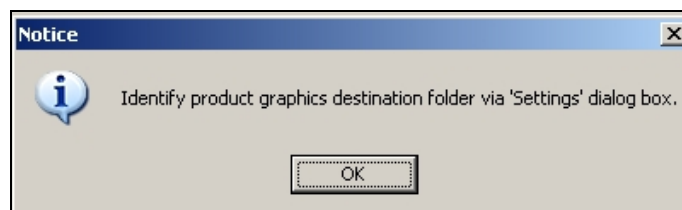
the  button is enabled.

Click this button to start copying Microvellum job information over to the target ShopPAK work order. What information gets transferred, and how that information is copied over to ShopPAK, depends on the global options you've set up and how you've configured your transfer options for the current run.

## MvLink Error Messages

Before sending job information to ShopPAK, MvLink checks your global options and transfer options to make sure all the necessary directives are present. If not, it displays an error message and terminates the transfer.

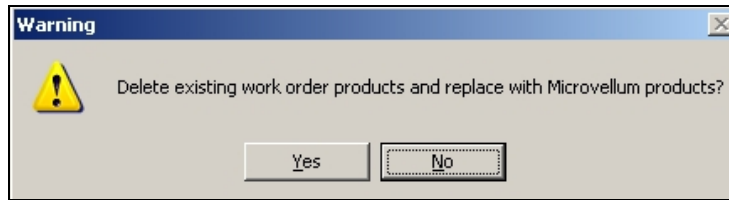
For example, if you've requested product information be sent along with product graphic label files, but you failed to identify the shared destination graphics folder, MvLink displays the following error message and terminates the run.



Error messages are self-explanatory. If you get one, simply correct the problem and click the "Send Information to ShopPAK" button again.

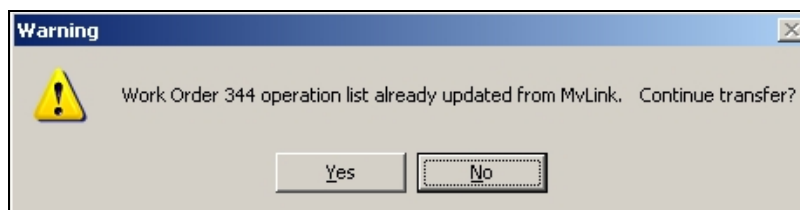
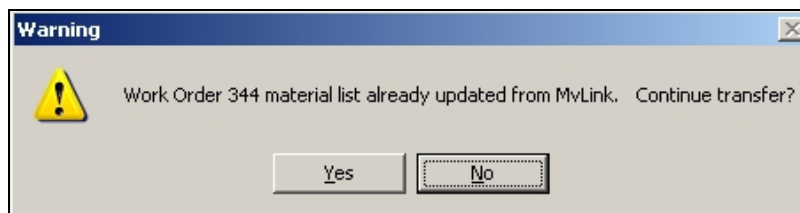
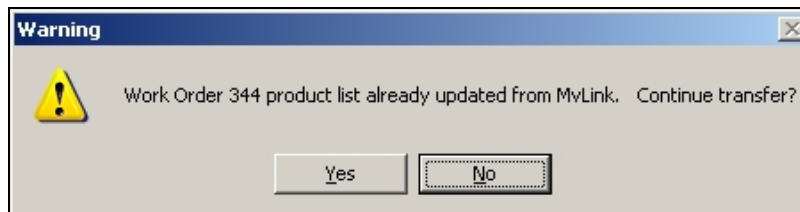
## MvLink Warning Messages

If you request that MvLink deletes existing work order products, it always displays the following warning message to make sure you really want to do this:



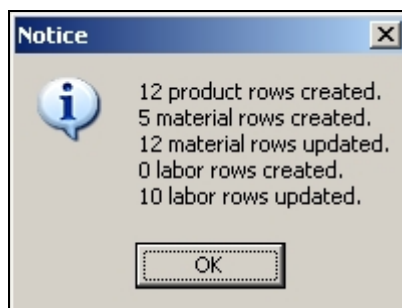
Click "Yes" to continue with the transfer. Click "No" to abort the transfer.

The other warning messages that MvLink presents is when it detects that the target work order has already been updated with Microvellum information. This may indicate that the user is simply sending additional Microvellum job information to the same work order. However, it could also indicate that the user picked the wrong work order to update.



Click "Yes" to continue the transfer. Click "No" to abort the transfer.

At the end of the transfer, MvLink presents the total number of ShopPAK records that were created or updated.



## ShopPAK Work Order Updates

### Products

If you send products via MvLink, it creates ShopPAK products based on the information present in the Microvellum Access database tables.

Print Label	Label Qty	Type	Level	Description	Notes	Ref No	Order Qty	UOM	WD Item	Ship Item	Width	Depth	HeightLe n	Created By	Create Date
<input checked="" type="checkbox"/>	1	Product		Base Filler	<input type="checkbox"/>	1	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.5	24	34.5	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		2 Horiz Door Upper	<input type="checkbox"/>	10	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30	12	30	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		Upper Filler	<input type="checkbox"/>	11	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.5	12	30	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		1 Door Base	<input type="checkbox"/>	12	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	24	24	34.5	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		1 Door Base	<input type="checkbox"/>	2	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	24	24	34.5	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		2 Door 1 FF Sink Base	<input type="checkbox"/>	3	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	36	24	34.5	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		3 Drawer Base	<input checked="" type="checkbox"/>	4	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	19	24	34.5	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		1 Door Base	<input type="checkbox"/>	5	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	18	24	34.5	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		Base Filler	<input type="checkbox"/>	6	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.5	24	34.5	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		Upper Filler	<input type="checkbox"/>	7	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.5	12	30	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		2 Horiz Door Upper	<input type="checkbox"/>	8	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30	12	30	MvLink - Russ Wheelock	2007/08/19
<input checked="" type="checkbox"/>	1	Product		2 Horiz Door Upper	<input type="checkbox"/>	9	1	ea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	37	12	30	MvLink - Russ Wheelock	2007/08/19

Notice that description, reference number, quantity, UOM, width, depth, and height are all filled in. MvLink also updates the 'Created By' and 'Create Date' audit information so ShopPAK users can tell who created the product row and when it was created. (If MvLink changes an existing row, it fills in the 'Changed By' and 'Change Date' audit information).

If a Microvellum product has a comment, MvLink attaches the comment as a ShopPAK product row note. In the above example, notice "3 Drawer Base" has a generated row note:

Notes

Only 3 drawer cabinet in job.

OK

Cancel

MvLink creates product nodes for every product it sends to ShopPAK:

The screenshot displays the ShopPAK software interface with the 'Product Details' tab selected. The left sidebar shows a tree view of products under '1012 - North Memorial Hospital', with '3 Drawer Base' highlighted. The main form contains the following fields and values:

- Description: 3 Drawer Base
- Width: 19
- Depth: 24
- HeightLen: 34.5
- Type: Product
- Inventory Code:
- Level:
- Location:
- Ref No: 4
- Product ID:
- Order Qty: 1
- Make Qty: 1
- UOM: ea
- Unit Price:
- Price:
- Shop Drawing:
- Sales GL Code:
- Shipper No:
- Date Shipped:
- Qty Shipped: 0
- Workgroup 1:
- Workgroup 2:
- Workgroup 3:
- Workgroup 4:
- Workgroup 5:
- Product Drawing: T:\Microvellum Product Graphics\ShopPAK Job 1012\Work Order 34

The 'Product Drawing' field is circled, and the 'Drawing' button is visible below it.

If you request MvLink send product graphic information, it updates the product form accordingly with the directory and file name of the attached product label graphic.

The screenshot displays the ShopPAK software interface with the 'Drawing' tab selected. The left sidebar is the same as the previous screenshot. The main area shows a product drawing of a three-drawer unit. The file path 'File: T:\Microvellum Product Graphics\ShopPAK Job 1012\Work Order 345\3 Drawer Base.wmf' is displayed at the top of the drawing area.



## Materials

If you send materials via MvLink, it creates ShopPAK material rows based on the information present in the Microvellum Access database tables.

	Type	Inventory Code	Material Code	Description	UOM	Ppak Unit Price	Unit Price	Ext Price	Width	Depth	Created By	Create Date
	Material		PLYMPL3/4	3/4 maple ply	sheet	0.00	31.36	31.36			MvLink - Russ Wheelock	2007/08/19
	Material	PARTBD3448	PB3/4-4X8	3/4 pb	sheet	0.00	19.36	19.36			MvLink - Russ Wheelock	2007/08/19
	Material	WM3448GS	MELW253/4-4X8	3/4 white mel 2s	sheet	0.00	20.80	124.80			MvLink - Russ Wheelock	2007/08/19
	Material		MELW255/8-4X8	5/8 mel wht 2s	sheet	0.00	0.00	0.00			MvLink - Russ Wheelock	2007/08/19
	Material		ALDER4/4	CAL DOOR 4/4 Alder	lin ft	0.00	1.43	52.27			MvLink - Russ Wheelock	2007/08/19
	Hardware		DGBLUMTAND	drawer guide Blum Tandem	pr	0.00	7.90	47.40	0	21	MvLink - Russ Wheelock	2007/08/19
	Hardware	125BLUM	HINGEBLUMOLAY	Hinge BLUM Overlay SCMC	ea	0.00	1.39	27.80	0	0	MvLink - Russ Wheelock	2007/08/19
	Hardware	PULL4BR	PULLWIRE	pull 3-5 wire epco	ea	0.00	0.451	5.86	0	0	MvLink - Russ Wheelock	2007/08/19
	Material		ALDER3MM	3mm Alder EB	lin ft	0.00	0.31	13.53			MvLink - Russ Wheelock	2007/08/19
	Material			Extra for Rail Length	lin ft	0.00	0.00	0.00			MvLink - Russ Wheelock	2007/08/19
	Material			Extra for Rail Width	lin ft	0.00	0.00	0.00			MvLink - Russ Wheelock	2007/08/19
	Material			Extra for Raised Panel	lin ft	0.00	0.00	0.00			MvLink - Russ Wheelock	2007/08/19
	Material			Extra for Stile Length	lin ft	0.00	0.00	0.00			MvLink - Russ Wheelock	2007/08/19
	Material			Extra for Stile Width	lin ft	0.00	0.00	0.00			MvLink - Russ Wheelock	2007/08/19
	Material		FACE	face color pvc	lin ft	0.00	0.122	11.01			MvLink - Russ Wheelock	2007/08/19
	Material	MAPLE3448	MLMP3/4*48X96	3/4 Mel maple	sheet	0.00	68.16	68.16	48		MvLink - Russ Wheelock	2007/08/19
	Material		MLMP3/4*49X60	3/4 Mel maple	sheet	0.00	76.80	76.80	49		MvLink - Russ Wheelock	2007/08/19

Material Notes

WO Details
Products
Scheduling
Operations
Materials
Ship To
Job Costs
Drawings
Notes

Notice that type, inventory code, material code, description, estimated quantity, UOM, width, and depth are all filled in. MvLink also updates the 'Created By' and 'Create Date' audit information so ShopPAK users can tell who created the material row and when it was created. (If MvLink changes an existing row, it fills in the 'Changed By' and 'Change Date' audit information).

## Mapping Microvellum and ProjectPAK Items

A powerful feature of MvLink is its ability to not only send "text" from a Microvellum job over to ShopPAK, but to recognize 'linked' library items and inventory items.

For example, in the material grid shown above, notice how several generated material rows have a ShopPAK inventory code and/or a ProjectPAK library item material code. MvLink uses the Microvellum material code to look for a matching code in the ProjectPAK library. If it finds one, it knows that the two materials are 'linked' and uses information from the ProjectPAK library item when creating the material row, including material code and whether or not the material is also an inventory item.

## Mapping Materials

You have two choices for mapping a ProjectPAK library item material to a corresponding Microvellum material. Either enter the corresponding material code into the library item Code, or enter it into the library item Engineering Link Item Code. If you've already coded your ProjectPAK library items, and you don't want to change them to match codes that you've created in Microvellum, we recommend using the Engineering Link Item Code. This gives you the best of both worlds: ProjectPAK library item codes that address ProjectPAK needs, while still allowing you to link ProjectPAK materials with Microvellum materials.

Make sure your Microvellum Link Global Options settings match your choice.

**Library Item Details**

Description: Pb 3/4 X 4 X 8 ind. grade

General | Custom Columns | ShopPAK | Graphic | LEED

Code: PB3/4-4X8 (Red arrow points here)

Type: Material

Unit of measure: sq ft

Unit cost: 0.669

Overhead mu:

Profit mu:

Adjusted price:

Margin:

Price: 0.67

Cost Last Changed By: Not Assigned 11/06/09

GL Account: COGS - Casework

Cost Type:

Adjust. type: None

Adjust. amount: 0

Work Order Seq:

Labor Card:

Type:

Workgroup 4:

Workgroup 5:

Formula:

Notes:

Weight:

Cubic Space:

Engineering Link Item Code: (Red arrow points here)

☐ Override Eng. Link

New | Make Copy | Delete | Prev | Next

Supplier	Phone	Primary	Price	Stock No.	Date
Liberty Hardwoods, Inc.	(888) 908-0852	<input checked="" type="checkbox"/>	0.67		11/06/09

Supplier: Add Remove

OK Cancel Help

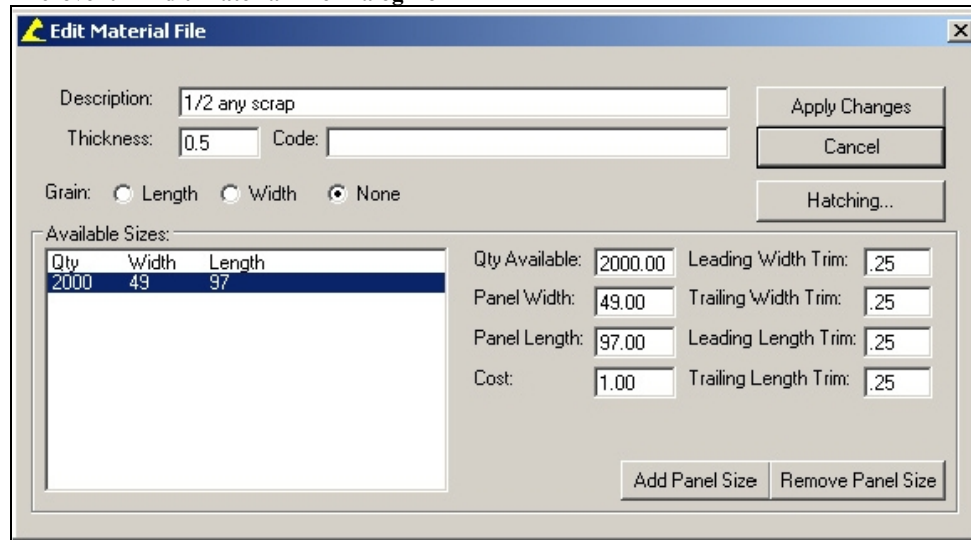
In the example above, we've defined a unique code → "PB3/4-4X8" for the 3/4" thick, 4 X 8 sheet of particle board. To link the ProjectPAK library item to a corresponding Microvellum particle board material, enter "PB3/4-4X8" into the Microvellum's material "Code" field via the Microvellum "Edit Material File" dialog box. See the Microvellum User's Guide for instructions on editing their materials.

## Mapping Materials With Different Sheet Sizes

**This section only applies to materials identified by the Microvellum Nesting Program.**

The previous section describes how to map a ProjectPAK library item to a corresponding Microvellum material. This approach works well when there is one instance of the common material on both the ProjectPAK side and the Microvellum side. But what about mapping a material that may have different sheet sizes defined in Microvellum? *For example, when running the Microvellum nesting module, it determines not only the quantity of sheets required, but the best sheet sizes to purchase and their counts based on optimizing sheet usage.*

**Microvellum Edit Material File Dialog Box**



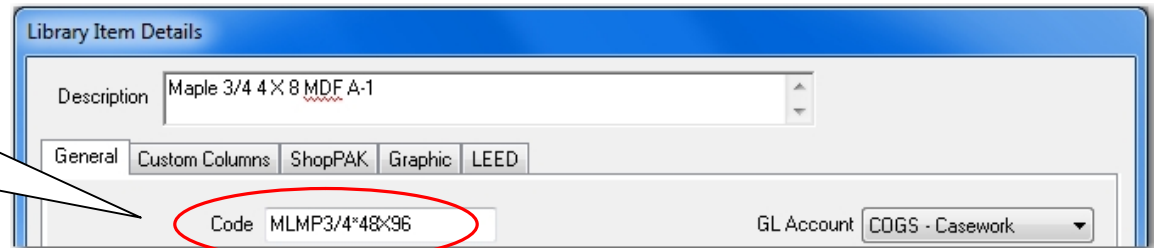
The dialog box is titled "Edit Material File". It contains the following fields and controls:

- Description: 1/2 any scrap
- Thickness: 0.5
- Code: (empty)
- Grain: ☐ Length ☐ Width ☒ None
- Buttons: Apply Changes, Cancel, Hatching...
- Available Sizes table:
 

Qty	Width	Length
2000	49	97
- Qty Available: 2000.00
- Panel Width: 49.00
- Panel Length: 97.00
- Cost: 1.00
- Leading Width Trim: .25
- Trailing Width Trim: .25
- Leading Length Trim: .25
- Trailing Length Trim: .25
- Buttons: Add Panel Size, Remove Panel Size

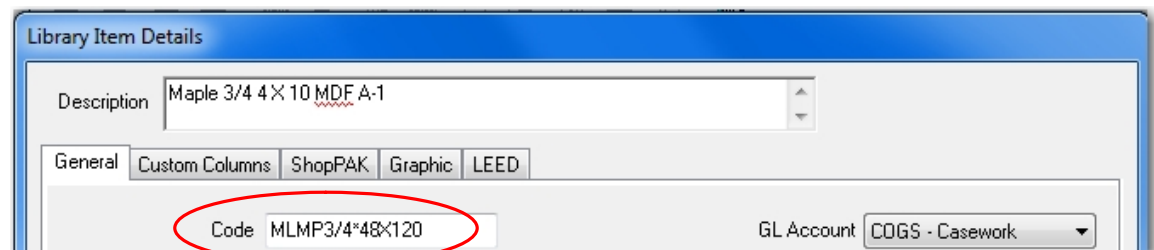
In the Microvellum "Edit Material File" dialog box above, a Microvellum user can define several different sheet sizes for a given material. Since we don't have this capability in ProjectPAK, MvLink uses the following convention to match a ProjectPAK library item material to a corresponding Microvellum material / sheet size combination:

Use either the Library Item Code or Engineering Link Item Code for mapping.



The "Library Item Details" dialog box shows the following information:

- Description: Maple 3/4 4 X 8 MDF A-1
- Code: MLMP3/4\*48\*96 (circled in red)
- GL Account: COGS - Casework



The "Library Item Details" dialog box shows the following information:

- Description: Maple 3/4 4 X 10 MDF A-1
- Code: MLMP3/4\*48\*120 (circled in red)
- GL Account: COGS - Casework

Notice the ProjectPAK library item codes we've defined for the two different sheet sizes of maple:

- MLMP3/4\*48X96
- MLMP3/4\*48X120

The characters up to the asterisk are identical for the two related library items. MvLink uses this part of the library item code when matching back to a Microvellum library item that has multiple sheet sizes. In this example, you would enter MLMP3/4 into the Microvellum material's code field to associate it with the set of ProjectPAK library items that represent this particular material.

When adding the associated sheet sizes under the Microvellum material, use the numbers to the right of the asterisk. In our example, we've defined two different sheet sizes for maple MDF → 4' X 8' and 4' X 10'. The library code we created uses inches for dimension, so that's what we use when defining the two sheet sizes in Microvellum. (The dimensions must match exactly in order for mapping to work properly).

So....in Microvellum's "Edit Material File" dialog box, you would enter the following:

Description: Maple ¾ MDF (or whatever you like....)  
Code: MLMP3/4

Available Sizes:	Width	Length
	48	96
	48	120

Note: ProjectPAK Library Item Code and Engineering Link Item Code have a limit of 25 characters. When defining Microvellum material codes, leave enough room past the asterisk to put in the matching width and length dimension.

## Mapping ProjectPAK Custom Columns

Microvellum uses 'Width', 'Depth', 'Height' and a number of other attributes to help describe products, as well as, to help describe certain materials and hardware items. In order for MvLink to create product and materials that have dimensions placed in the correct ProjectPAK / ShopPAK custom columns, you need to map the ProjectPAK custom columns to their corresponding Microvellum column names.

Earlier in the chapter we described how we map ProjectPAK custom columns to their corresponding Microvellum custom prompts. See page 6 for instructions.