FlashPoints Help

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1. Welcome to FlashPoints

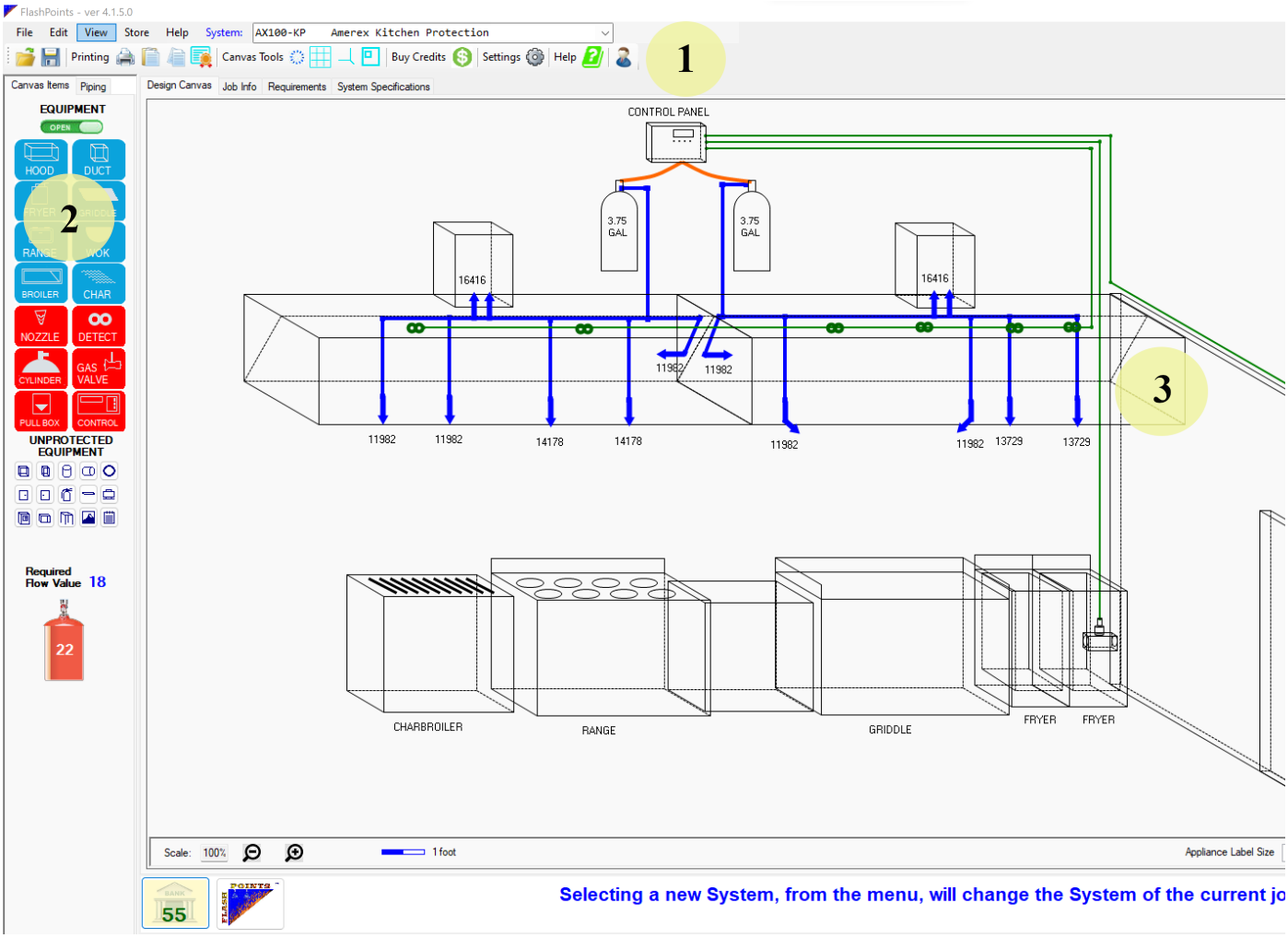
Next

Design, draw, and price fire suppression systems and fire scenes quickly with FlashPoints SuppressionCAD. As a fire suppression installation professional you spend countless hours planning, costing, and drawing each fire suppression system you bid on. FlashPoints SuppressionCAD reduces all of this effort to minutes!

This Help file is designed to guide you through using FlashPoints SuppressionCAD. Feel free to check Help often to learn a new feature, or just refresh your memory. But if you run into trouble, or need more assistance than this Help file has to offer, please visit our website at http://www.flash-soft.com

NOTICE: Please remember that FlashPoints is meant to be a tool to assist in the design of fire suppression systems. It is not meant to replace the knowledge and expertise of a trained fire suppression professional. Although FlashPoints will attempt to provide accurate results, the fire suppression system designer/installer is ultimately responsible for the final system design. Every effort has been made to make FlashPoints flexible and user-friendly. If information or documents, produced by FlashPoints are not correct, it is the designer's responsibility to correct any errors prior to system installation. Flash-Soft, Inc. shall not be liable for improper fire suppression system design and/or installation.

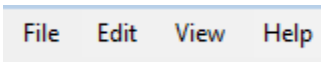
2. The Screen Layout



FlashPointsuses a simpleuser interfacethat puts the tools you need rightat your fingertips. The FlashPointsscreen i

1) the Menu
2) the Tool Panel
3) the Canvas
4) the Status Bar.

2.1. The Menu



The Menu is a normal Windows text menu that provides drop-down lists of features, options, and commands availa within FlashPoints Suppression CAD.

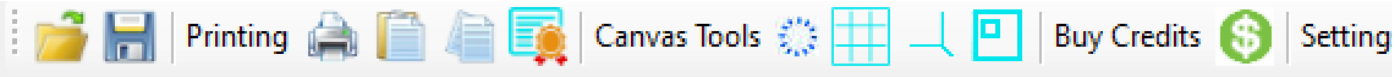
Immediately, below the Menu is a Menu Toolbar with shortcut buttons for commonly used items.

The Menus are arranged as follows:

File	Load or Start a Job	Starts a new job or Loads a saved FlashPoints job from the database
	Save Job	Saves the current job to the database
	Print Drawing	Printout of the job drawing (uses credits)
	Print Drawing with Submittal Pages	Printout of the job drawing, notes, material requirements, and mfg specs (uses credits)
	Print Job Materials and Notes	Printout of the notes and material requirements for a job.
	Print Job Costs Report	Printout of the costs of materials, labor, discounts, taxes, and fees
	Print System Spec Sheets	Print manufacturer specification Sheets
	Import	Load data from an export file into the FlashPoints database.
	Export	Save the contents of the FlashPoints database to a text file.
	Exit	Ends FlashPoints and returns to the Windows desktop
Edit	Copy a Job	Copy a job from another one customer to another, or from the same customer, rather than start from scratch
	Delete a Job	Permanently delete a job from the database
	Delete a Customer	Permanently delete all of the jobs associated with a customer and all of the information for that customer from the database
	Clear Canvas	Erase the drawing canvas
	Settings	Set file paths and other default settings to customize FlashPoints
View	Guidelines	Room Guide - display a room guide on the Canvas to make it easier to lineup th equipment in a drawing
		Grid - display a graph paper-like grid on the Canvas
	Reframe Drawing	Reposition the entire drawing at the upper left corner of the drawing canvas.
	Automatic Placement	Turn Automatic Placement on and off
	Job Settings	A submenu containing additional settings that can be applied specifically to the current job.
	Language	Select the Language used to display all text in FlashPoints (currently English or

2.2. The Toolbar

The Toolbar



The Toolbar is designed to be a Quick Access Menu. Commonly used features of FlashPoints on the Toolbar can b
instantly for an improved user experience.
Simply click an icon and the feature will run, as if it were selected from the menus.

Toolbar icons:

- Load or Start a Job
- Save a Job
-
- Print Drawing
- Print Notes and System Material List
- Print Specification Sheets
- Print Completion Certificate
-
- Clear Canvas
- Toggle Grid
- Toggle Room Guide
- Reframe Drawing
-
- FlashPoints Store (Buy Credits)
-
- Settings
-
- FlashPoints Help (the manual)
-
- About FlashPoints (license profile)

2.3. The Tool Palette

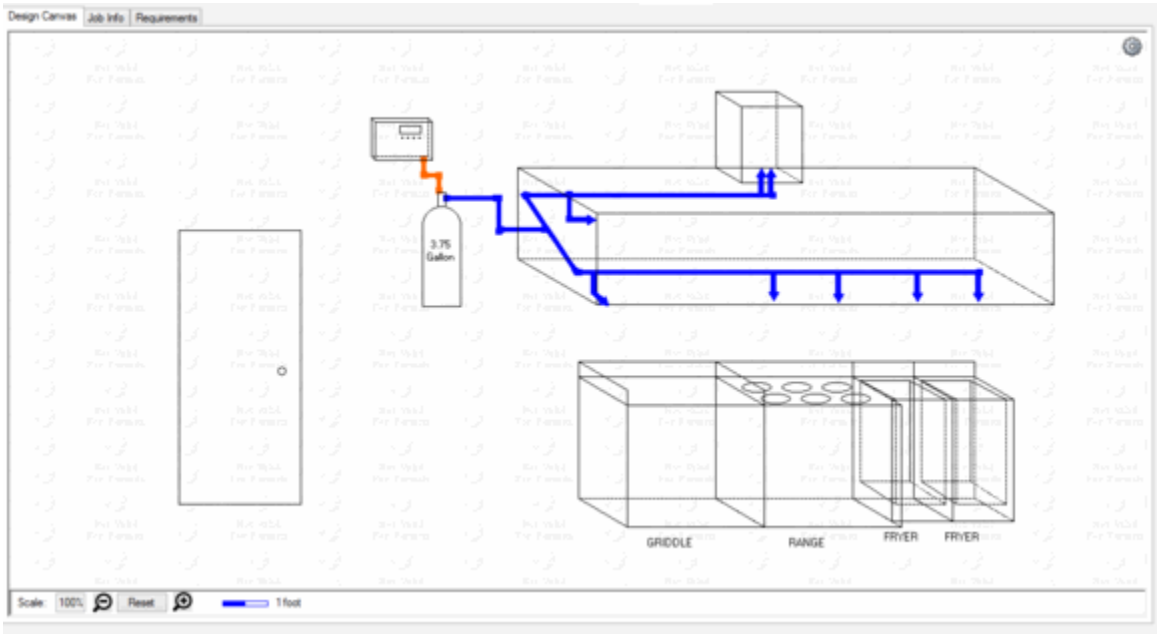
The Tool Palette is used to add a new item to the drawing canvas. Clicking one of the equipment buttons will create an object on the drawing palette that can be moved, changed, and manipulated. Each new object added to the drawing canvas will be displayed in the upper right corner of the drawing canvas. From there the object can be dragged, using the mouse, to anywhere on the drawing canvas. In this way, an entire kitchen can be laid out on the screen in a matter of minutes.

As each appliance is placed on the canvas, FlashPoints Suppression CAD will look up what types of nozzles are required and will use the Hazard Area dimensions of each object to determine the number of nozzles needed. The nozzles are placed on the drawing as needed. Nozzles will become visible on the canvas when an appliance has been unselected.

Any item on the equipment tab can be selected and modified at any time. If items overlap one another, it may be necessary to click in the same spot more than once. FlashPoints 'Click-Thru™ technology allows it to cycle through each of the items in a particular part of the canvas, allowing you to select the one that you want. Simply keep clicking to highlight the appliance or protection item you wish to modify.

Each time an appliance is selected it's color is changed to red and any nozzles that FlashPoints has placed over it are removed. When the item is unselected FlashPoints will change the appliances color to black and will once again display nozzles over that particular appliance. FlashPoints removes nozzles when an item is being moved or modified so that the protection can be recomputed if the dimensions or type of the appliance are changed.

2.4. The Canvas



The Canvas is your workspace in FlashPoints Suppression CAD. The drawing and system requirements for each job are entered on The Canvas. The Canvas is designed to be easy to use and completely customizable to meet all of your system design needs.

The Canvas has 3 tabs in the upper left corner: Design Tab, Job Info, and Requirements.

· The Design tab always returns you to the system drawing workspace.
· The Job Info tab replaces the drawing workspace with a form to enter information about the job. Here such information as the name and address of the customer, initials of the system designer, and miscellaneous job notes are entered.
· The Requirements tab contains an accounting of the job. Nozzles and Links from the drawing workspace are itemized, tanks and other equipment are chosen, and job costs are entered and computed on this screen. [Fire Equipment Dealer VERSION ONLY]

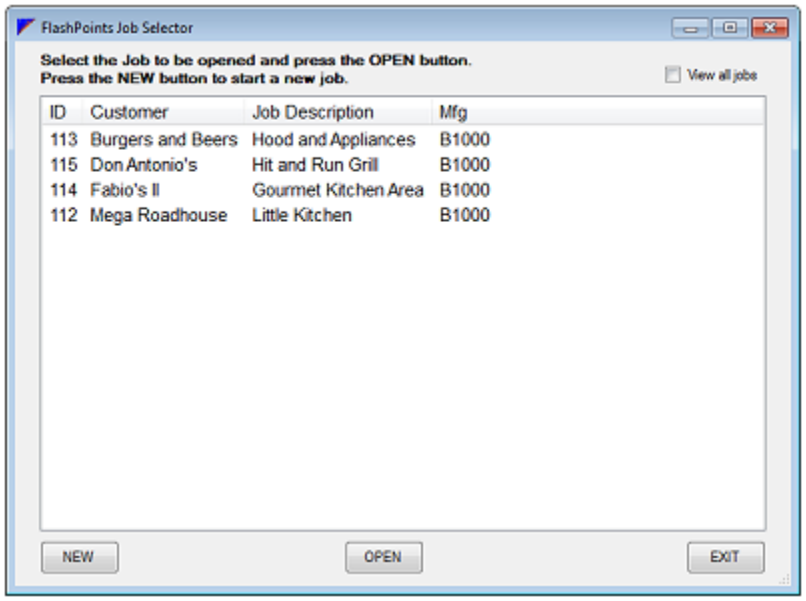
The toolbar at the top of the Canvas is an equipment toolbar. This toolbar is only visible when an equipment object is selected and highlighted in red on the drawing canvas. The equipment toolbar contains the following items:

· Equipment Item Name - FlashPoints Suppression CAD displays this automatically. It represents the type of object currently selected.
· Equipment Style - Most equipment types have multiple styles to choose from. This drop-down list allows the designer to choose the desired style.
· Size - the dimensions of the selected item are displayed in inches and can be changed by clicking in one of the three boxes and typing a new value. As the dimensions are changed, the picture on the canvas will be changed automatically.
· Hazard Area - the hazard area is the surface area of the selected item that needs to be protected. These dimensions are used by FlashPoints Suppression CAD to determine the number of nozzles needed to protect the item. If the Hazard Area is not properly defined, FlashPoints will not correctly compute the number of nozzles.
· Text Button - this is a toggle button that turns on and off the display of the selected item's name on the drawing canvas.
· Dimensions Button - this is a toggle button that turns on and off the display of the selected item's dimensions on the drawing canvas.

2.5. The Status Bar

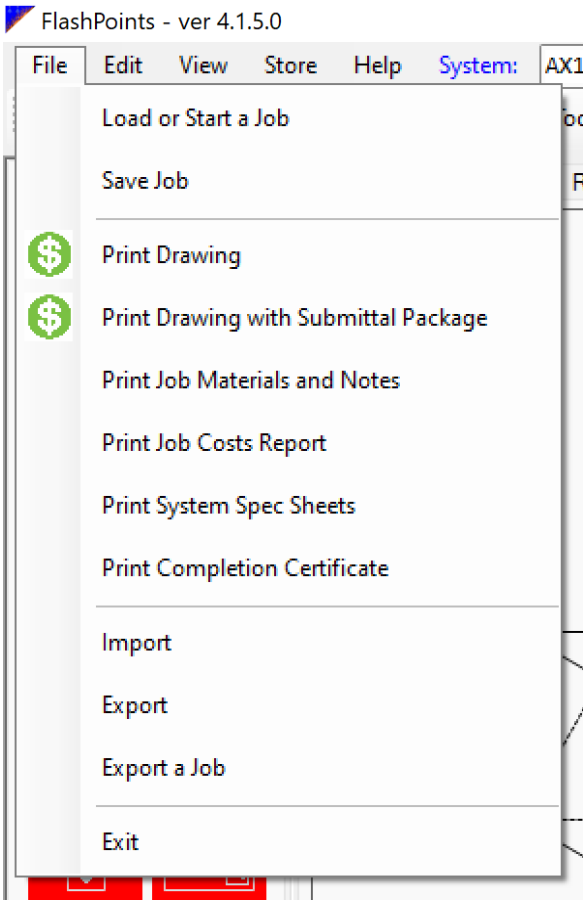
FlashPointsSuppressionCADuses the Status Bar, at the bottom of the window, to displaytips, information, and messages. Check thisbar oftenfor valuableinformation.

3. Starting a New Job



Each time FlashPoints Suppression CAD is started it is ready to begin a new job. The drawing canvas and the job information are automatically reset when the program is started.

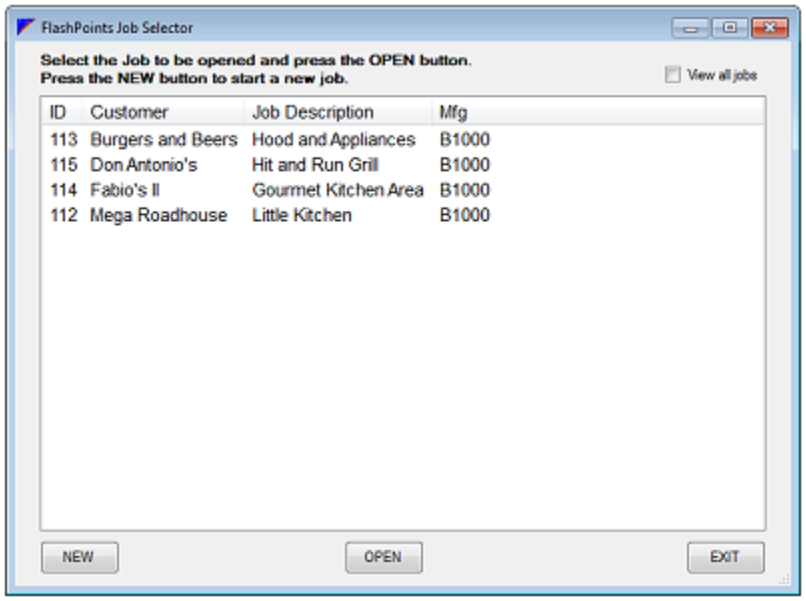
Select a customer name and job from the drop down list and click OPEN, or click NEW to enter a new customer and/or job.



To begin a new job after you have been working on a job, select FILE | Load or Start a Job from the menu at the top of the screen. This will clear the drawing canvas and the job info, and will display the customer and job selection windows shown at the top of this page.

NOTE: Remember to save your current job before starting a new one. If you forget to save a job, FlashPoints Suppression CAD will remind you before loading a new one or exiting the program.

3. Starting a New Job



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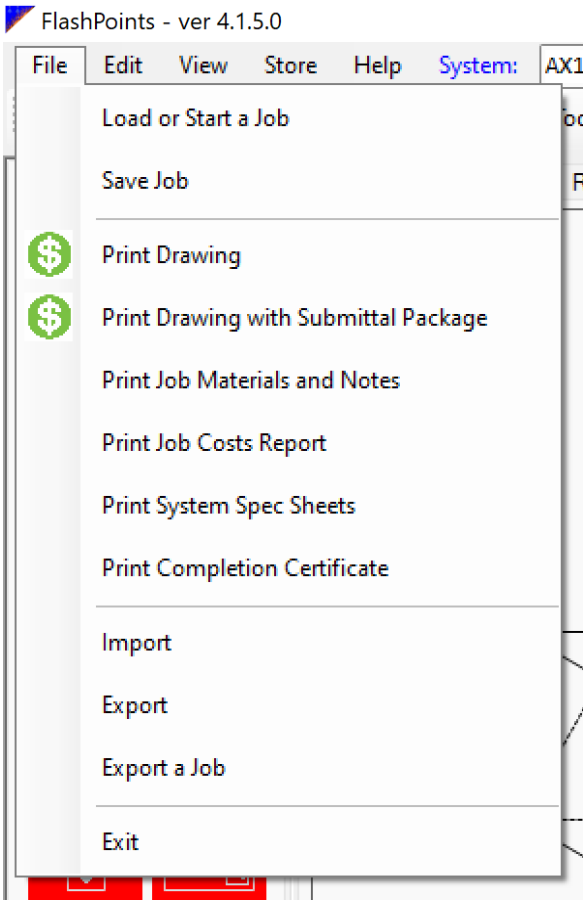

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3.1. The FlashPoints Design Process

To create a FlashPoints Suppression CAD job as quickly and efficiently as possible follow these simple steps:

- Draw the kitchen equipment or industrial space.
  - Use the pre-drawn objects to layout the equipment to be protected.
- Add additional nozzles and fusible links, if desired, to protect the kitchen equipment in your drawing.
- Piping and detection lines are added from the Piping Panel.
- Enter job information.
  - Notes, names, addresses, and designer initials are all entered on the Job Information screen.
  - Boilerplate notes are also available on the Job Info screen.
- Enter the job requirements.
  - Select cylinders, hangers, seals, and other equipment from the supplied database.
  - Enter job costs, fees, and miscellaneous items.
- Print Drawing

3.2. Printing a Job

FlashPointsreports are selected fromthe FILE menu. The Job Design Plan is only availablewhen the Design Canva Job Design Plan option is grayed out on the menu. The reason for this is to prevent a report frombeing printedwith is printed, FlashPointsSuppressionCAD takes a snapshot of the drawingcanvas and sends the snapshot to the print

The Job Design Plan is the report that prints the drawing, design notes, and a list of job materials. This report is also Fire Marshall's require a system design plan prior to installation. [To ensure that a drawing is visible on the screen, F tab be clicked before the Job Design Report can be printed.] An authentication watermark is added to all FlashPoi

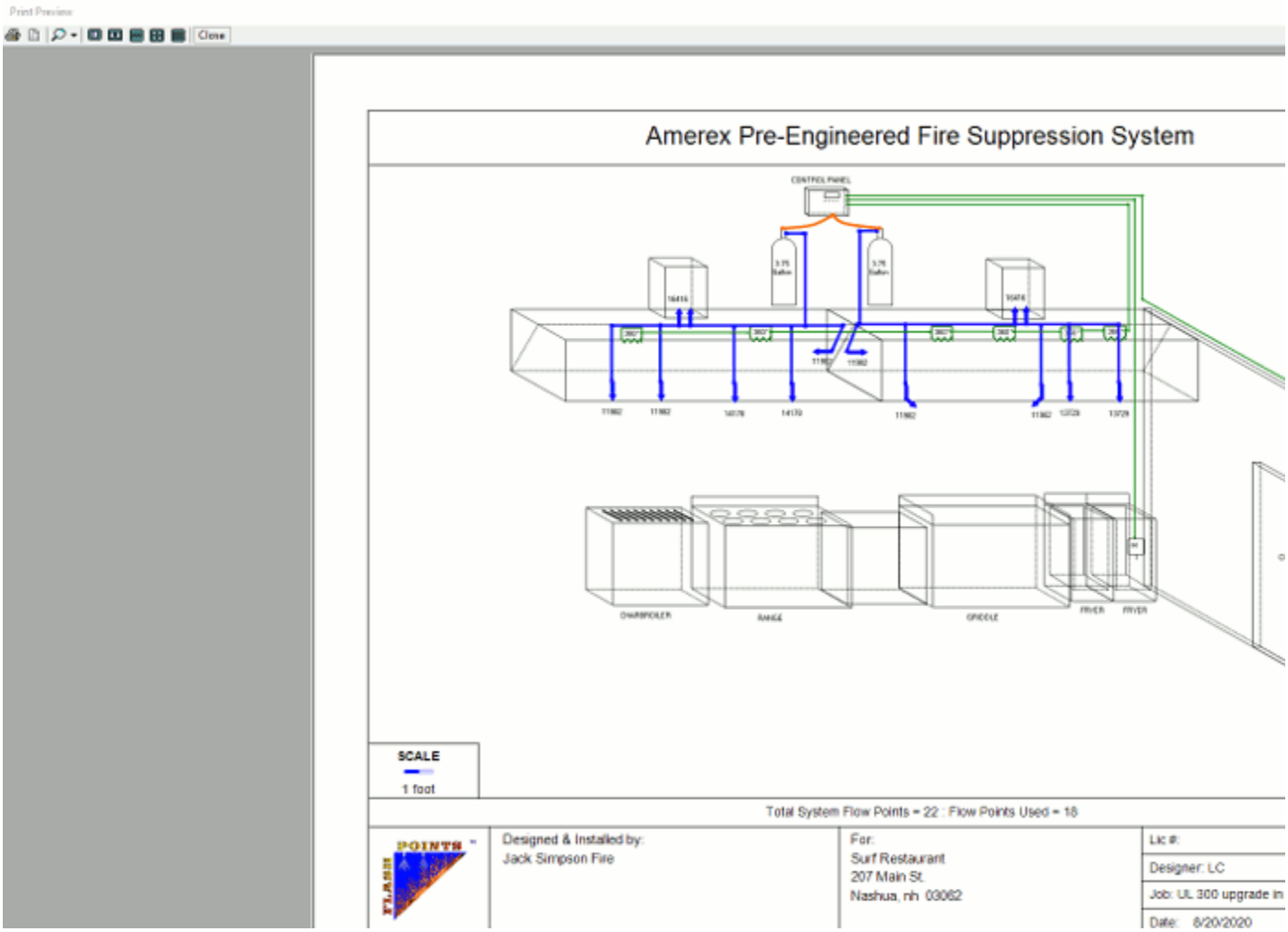
The Job Cost Report (not available in the Fire Scene and AHJ versions) is a Bill of Materials for the job. Materials this report.

When a report is printed, it is first displayed on the screen as a print preview. The print preview is useful for saving p printermight not be available. Clicking the printer icon on the print preview will open the printer setup display. This and other printer functions (such as specifying the number of copies). When the Print button is clicked on the printe The printer setup icon is labeled 'A' on the image below.

Clicking on the page setup icon opens the page setup display. Paper size can be selected from the page setup displ image below. FlashPointsreports can be printed in a variety of sizes, including 8 ½ x 11, 8 ½ x 14, and 11 x 17.

For best results, select the page size from the page setup screen, then open the printer setup display to choose the p

All FlashPointsreports are intended for the system installer's internal use. It is NOT recommended that any of these



3.3. Saving a Job

Computers are unpredictable and saving your work is an essential part of using any computer program.

Select FILE | Save to save the current job to the database.

If a new job is loaded or the program is exited without saving the current job, FlashPoints Suppression CAD will pop up a window that will ask if you want to save the current job, before you leave it.

4. Making a Drawing

All FlashPoints Suppression CAD projects begin with a drawing. Drawing the layout of the equipment to be protected helps the designer conceptualize the job and provides FlashPoints with the necessary information to compute the necessary protection.

Making a drawing in FlashPoints is easy. Simply select the objects from the Tool Palette and drag them around the screen to assemble the picture. Other drawing programs provide the tools to draw each object from scratch, but they also require a lot of artistic talent. The predefined shapes provided by FlashPoints reduce the tedium of drawing and allow the designer to focus on the "big picture".

When working with FlashPoints drawings there are some basic functions to remember:

· Click on an object to select the object. The object will change from black to red to indicate that it has been selected and the Minibar will be displayed next to the image.
· Click on a selected object to unselect it. The Minibar will disappear and the color of the image will change from red to black.
· Only the selected object can be moved, resized, deleted, rotated, or otherwise manipulated.

4.1. Starting with a Hood

Since all kitchens require a hood, this is the best place to begin when creating a FlashPoints Suppression CAD kitchen drawing. Press the HOOD button 

on the Tool Palette to add a hood to the drawing canvas. The Tool Bar above the drawing canvas will instantly change to show the options available for the new hood.

The type of hood can be selected from the drop-down list at the left of the menu bar. FlashPoints has several types of hoods to choose from: Sloped, Box, Low Clearance, and Island. Selecting a hood type will instantly change the picture of the hood displayed on the canvas to the selected style.

Move the hood to the desired location on the canvas by clicking on the picture of the hood, holding down the left mouse button, and dragging the picture around the canvas. Release the mouse button to drop the hood. The arrow keys on the keyboard can also be used to move the hood.

The size of the hood can be changed by typing new values for the three dimensions in the menu bar. Click in any of the three text boxes to change the value of the dimension. As the length, width, and height are changed the image on the canvas will instantly change. (Note: Click the Convert button to toggle the units between inches and feet.) If an entered dimension would cause the appliance to extend past the edge of the canvas, the dimension is automatically changed to the value it was before any changes were made. In addition, the value of the dimension can be reverted to its original setting by pressing the ESCAPE key on the keyboard.

The hazard area of the hood is determined by the Hazard Area values in the menu bar. The length and width of the hazard area are used to determine the number of nozzles required to protect the area. The hazard area values are changed each time the size of the hood is changed. The hazard area may be set independently of the size of the hood, if required. However, bear in mind that each time the size of the hood is changed the hazard area will be changed to match the size dimensions. The hazard area dimensions are provided as an "override" to the size dimensions so that the actual hazard area can be specified by the system designer.

Once the hood has been placed on the canvas it can be annotated using the TEXT and DIMENSIONS buttons. The TEXT button will toggle the display of the hood type under the picture of the hood. Click on the text and drag it to the desired location. Text can be moved to any position on the appliance. Text can only be moved while an appliance is "selected".

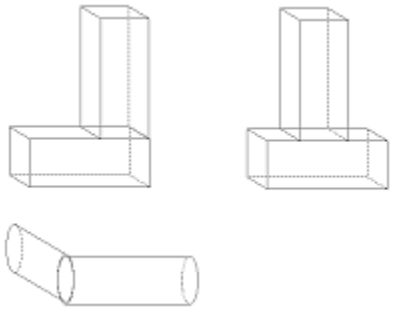
The DIMENSIONS button will toggle the display of the length, height, and width values on the picture of the hood.

Finally, the Minibar, attached to the upper right corner of the hood image can be used to rotate the hood sideways or to remove the hood from the canvas. For more information about the Minibar see the MiniBar topic.

4.2. Drawing Ducts

Ducts are an essential part of any ventilation system. FlashPoints Suppression CAD makes it simple to add ducts to your drawings. Round and square ducts are available by pressing the DUCT button on the tool palette.

By combining duct segments with different height and width dimensions it is possible to make some interesting drawings. For example, a duct with a long height dimension set on top of a duct with a long width dimension could be used to represent a duct that bend upward. Move the taller duct to the middle of the other and a T shaped configuration can be drawn. See the images below for some examples of possible ductwork.



In addition to standard ductwork, FlashPoints also recognizes Upper Plenums. To create an Upper Plenum, start drawing a duct and choose the Upper Plenum type. This will allow FlashPoints to compute the necessary protection based on the manufacturer's rules for Upper Plenum coverage.

NOTE: Upper plenums and upper ductwork do not normally require protection, but FlashPoints may protect these areas. If this protection is not necessary, use the Minibar on each nozzle to remove the nozzle from the drawing.

4.3. Adding Appliances

Use the six appliance buttons to add appliances to your drawing. Fryers, griddles, titling skillets, ranges, woks, broilers, and charbroilers may all be added to your drawing with just a few mouse clicks.

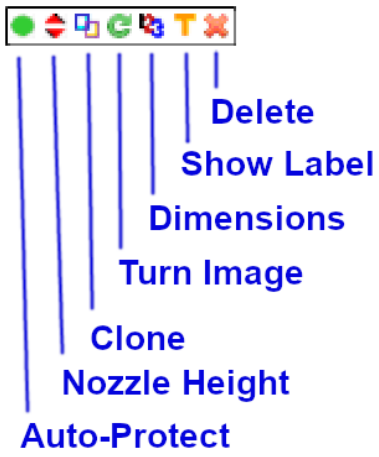
Appliances are added to your drawing exactly the same way that hoods and ducts are:

1. Select the appliance type.
2. Set the appliance dimensions.
3. Set the appliance hazard area.
4. Move the appliance into position.

All appliances are available in front view and side view to make it easy to layout a corner kitchen.

A text label and dimensions can be added to any appliance on the screen. But be careful, adding too much text to the screen will make the drawing look busy and difficult to understand. Text and dimensions should only be added to the drawing if they are absolutely necessary.

4.4. The Minibar



The Minibaris a collectionof tools that are availablefor each object on the screen. The Minibarremains invisibleuntilthe mouse pointeris moved onto a selected item. When an itemis selected the Minibarappears just above the top rightcorner of the object. Placingthe mouse pointerover any of the Minibarbuttons and lettingithover willcause a tooltipmessage to be displayed. The tooltipwillidentifythe functionof the Minibar button.

For non-protectionitems(appliancesand equipment),the Minibarprovides6 valuablefunctions:

AUTOPROTECT TOGGLE - (appliancesonly)turnautoprotecton and off.

NOZZLE HEIGHTTOGGLE - (appliancesonly)turnthe nozzleheightlabelon and off.

CLONE - clickingon the CLONE toolwillcreate anotherobject exactlylikethe currentlyselected item. This is usefulfor creatingmultipleappliancesina drawingthat are exactlythe same. For example,you mightneed to draw eighthibachigrillsina Japanese restaurant,each turned sidewayswithspecial dimensions. Afterthe first one has been setup, the clone buttoncan be used to produce each of the other grills. Cloned itemsappear in the upper leftcorner of the drawingcanvas.

TURN - clickthe TURN buttonto togglethe selected imagebetween frontviewand side view. The side view is an isometricrepresentationof the object turned 90 degrees to the left.

SHOW DIMENSIONS - displaythe height,width,and depth of the selected object (ininches) on the drawing.

SHOW LABEL - displaythe name of the selected object on the drawing.

DELETE - to removethe selected itemfromthe drawingcanvas, clickthe DELETEbutton. Thisactioncannot be undone. Onlyclickthe DELETEbuttonwhen you are sure you want to permanentlyremove the selected itemfromthe drawingcanvas.

For Hoods ONLY:

DISPLAY FILTER - togglesa filterbank on and offinsidethe displayedhood. In the case of an Island Hood, the filterbank is a V-Bank, centered insidethe hood.

For protectionitems(nozzlesand fusiblelinks),the Minibaronlyprovides4 functions:

4.5. Keyboard Shortcuts

For your convenience, several keyboard keys can be used as shortcuts when working in FlashPoints:

ESC - when drawing pipe the ESCAPE key can be used as a "start over" key. After the first point has been clicked and a red circle is on the canvas, pressing ESCAPE will remove the red circle and reset the drawing mode to start a fresh pipe segment.

DELETE - pressing DELETE will remove the currently selected item from the canvas (equipment or pipe). This is the same as using the X on the Minibar.

ARROW KEYS - the LEFT, RIGHT, UP, and DOWN ARROW KEYS can be used to move the currently selected item. Each time one of these keys is pressed the item is moved one pixel in the keys direction. This is a good way to "fine tune" the placement of items on the canvas.

CTRL - holding down the CONTROL KEY while drawing pipe will force FlashPoints to draw the pipe segment as a diagonal piece of pipe. This overrides the default horizontal/vertical pipe drawing.

4.6. Automatic Placement

With Automatic Placement, FlashPoints tries to place appliances and ducts where they belong. Instead of placing new appliances in the upper left corner of the drawing canvas, Automatic Placement centers ducts above the hood and places appliances next to each other under the hood.

At least one hood has to be on the drawing canvas for Automatic Placement to work. Each appliance added to the canvas will be placed under the hood starting from the right side of the hood. Each subsequent appliance is aligned to the left of the appliance before it.

Automatic Placement can be turned off and on by clicking the menu option under the Tools menu. For complex drawings with multiple hoods it might be a good idea to turn off the Automatic Placement feature. When Automatic Placement is turned off, each appliance or duct added to the drawing will be placed in the upper left corner of the drawing canvas.

Automatic Placement only computes the beginning location of each appliance. The mouse and arrow keys may be used to move objects on the drawing canvas to any desired location.

4.7. Selecting Items

When working on a drawing, FlashPoints Suppression CAD follows a very simple rule: Only one object can be worked with at a time. It doesn't matter if the object is an appliance or a protection device, all objects must be selected before anything can be done with them and only one object may be selected at a time.

To select an object, simply click on it. Clicking on an object that is not selected will change the color of the object from black to red and will change the menu bar to the appropriate information for the newly selected item.

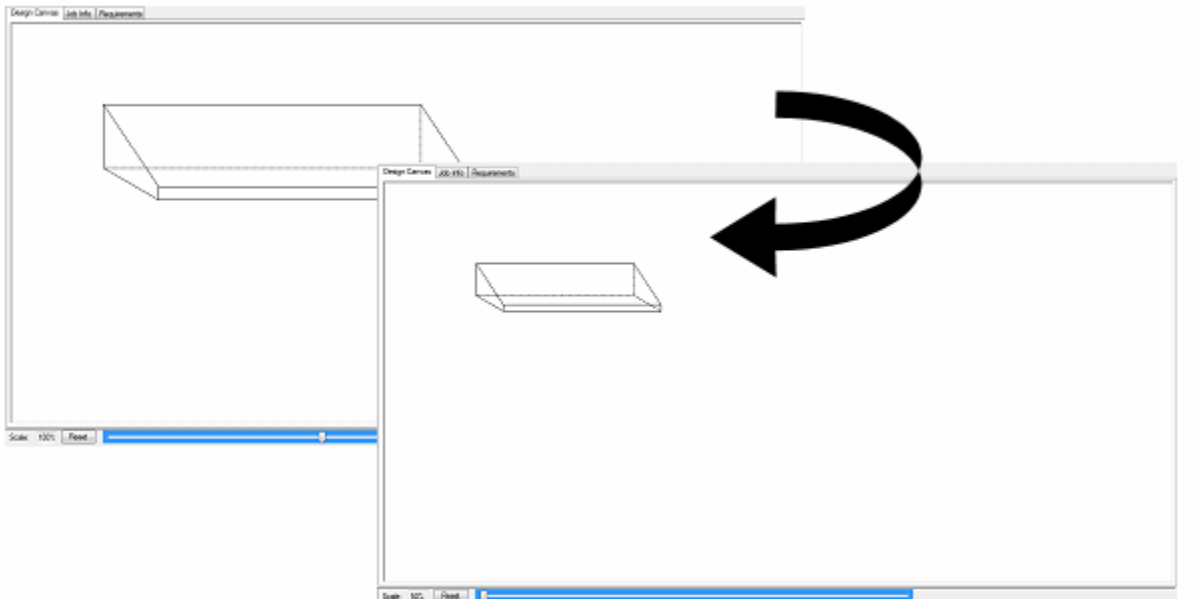
Selected items can be dragged around the screen, resized, turned, annotated, or deleted.

To unselect an item, simply click on it. Clicking on an object that is selected will change the color of the object from red to black and will clear the menu bar.

A fast way to switch from one object to another, after you have selected an object, is to click on another (unselected) object. This will unselect the old object and select the new object in a single click.

Objects that are covered, or overlapped, by other objects can be selected using FlashPoints' Click-Thru™ technology. Each time an image location is clicked the objects at that location will be selected and deselected in turn. Cycling through the objects will eventually select the desired object. In other words, just keep clicking in the same spot until the desired object is selected.

4.8. Scaling the drawing



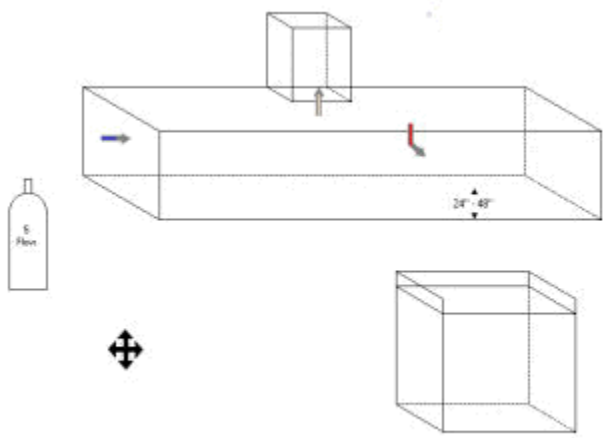
Occasionally it will be necessary to change the size of the objects on the canvas to make room for more items. The objects on the canvas can be scaled up or down using the slide bar located just below the drawing canvas. Sliding the bar to the left will make the items on the canvas smaller. This will allow more objects to be displayed on the canvas. Sliding the bar to the right will make the items on the canvas bigger. This will fill up the canvas with just a few objects.

Resized objects can be returned to their original size by pressing the RESET button to the left of the slider bar.

Scaling has no affect on text size. Text size can be changed in the Job Settings window, if necessary.

NOTE: Because appliances and piping are drawn differently, it is strongly recommended that drawings containing pipe NOT be scaled after the pipe has been added.

4.9. Reposition Drawing



The entire drawing can be repositioned on the Canvas by clicking on an empty part of the canvas and dragging the mouse in the direction that the drawing is to be moved. When an empty part of the Canvas is clicked the cursor will change into a four point move icon. While holding the mouse button down, drag the mouse around and the entire drawing will move around with it.

If the drawing is moved off of the canvas, it can easily be recovered. Under the VIEW menu, click the menu item called REFRAME DRAWING. This will reposition the drawing at the top left corner of the Canvas.

Use the LEFT mouse button (a normal click) to move the entire drawing around on the screen. Use the RIGHT mouse button to move just the pipe on the screen. The ability to move just the pipe is very useful if the pipe should happen to move out of place on the drawing (this can happen when scaling a drawing).

4.10. Labels and other Job Settings

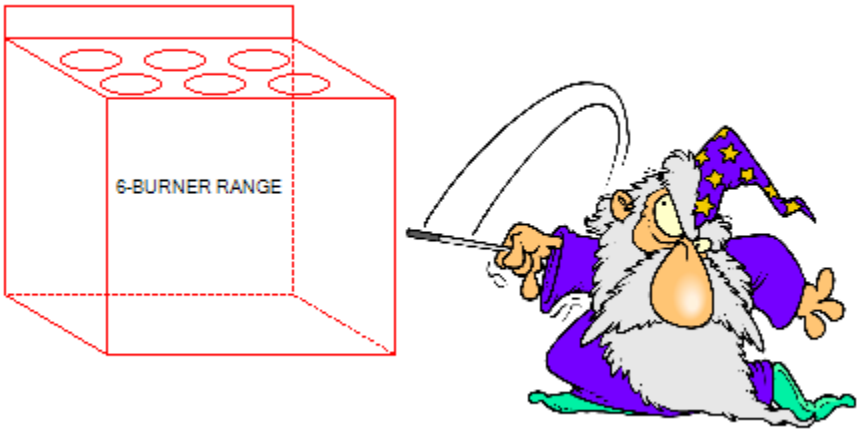
Job Settings can be found under the VIEW menu.

FlashPoints Suppression CAD makes labeling drawings a breeze. The Minibar can be used to turn labels on or off for each item on the drawing, or the Job Settings panel can be used to turn labels on or off for all items.

The Show Protection Labels checkbox will toggle all labels on protection items.
Please note that if a few labels have been turned on using the Minibar, these checkboxes will override their settings. Similarly, the Minibar can be used to override the settings of these checkboxes. For example, if all appliance labels except one should be turned on, check the Show Appliance Labels checkbox, then use the Minibar for the one appliance to be turned off.

Nozzle Height labels, Nozzle Height label decorations, and Text Item decorations can be turned on and off using the appropriate checkboxes.

4.11. Moving Labels



By default, appliance and protection labels appear below each item. However, labels can be moved anywhere on or around an object.
To move a label, click on the object to select it (it will turn red). Then click and drag the label to the desired position.
Unselect the item to lock the label into the new location.
At any time the item can be selected again and the label can be moved to a new location.

4.12. Nozzle Height Labels

Nozzle Height Labels can be toggled on an off using the icon provided on the Mini bar of most appliances. A setting in the Preferences screen can be used to toggle the display of Nozzle Height Labels off and on. Also, an option in the Job Settings window can be used to turn the Nozzle Height Labels on and off for the current job.

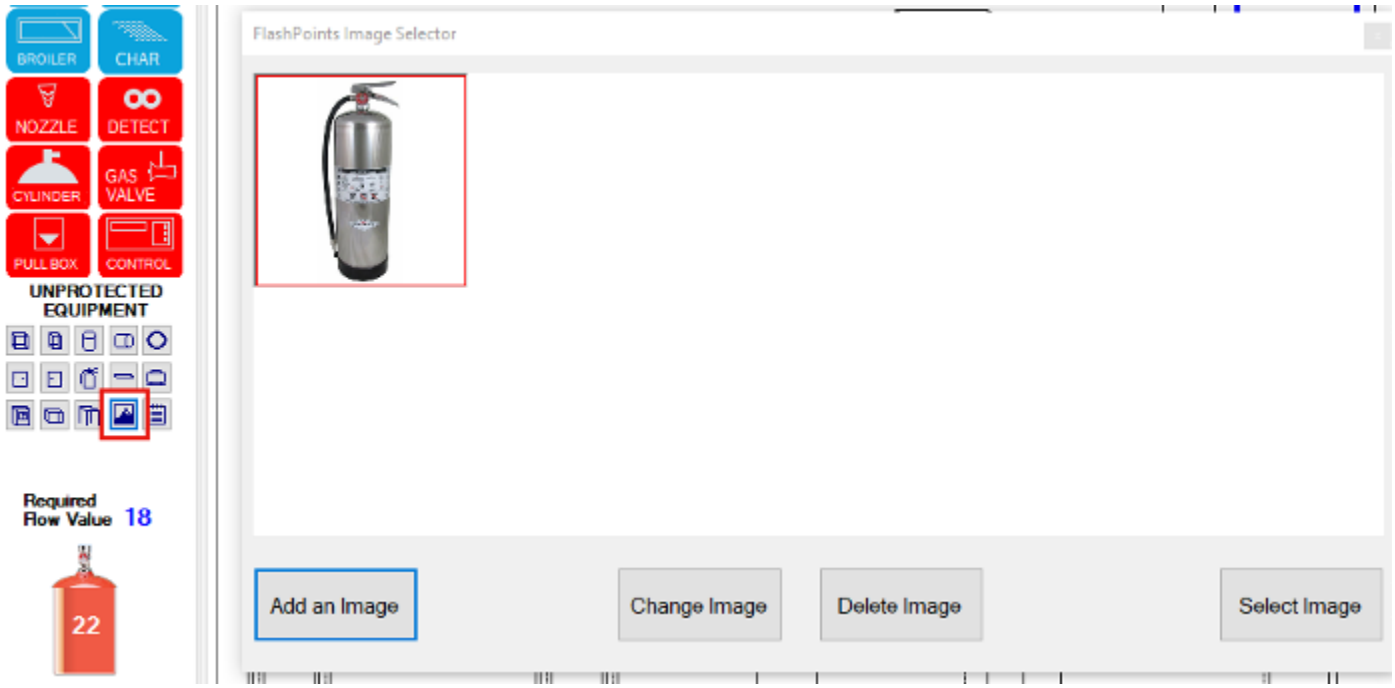
As with other objects on the Flash Points Suppression CAD drawing canvas, Nozzle Height Labels have several features built into them. Nozzle Height Labels can be selected by clicking on the arrows above and below the label text. Once selected a Nozzle Height Label can be moved by dragging it with the mouse.

Text on Nozzle Height Labels can be changed by double clicking on the text. The text will turn into a textbox that can be changed. To exit change mode, simply click on one of the arrows of the Nozzle Height Label or unselect the Nozzle Height Label by selecting another object.

Nozzle Height Labels share the same font settings as other labels on the drawing. When the font size is changed by the font size tool on the Job settings window, the size of the Nozzle Height Label text will change accordingly

If the scale bar, at the bottom of the drawing canvas, is used to scale the drawing, the arrows on the Nozzle Height Label will scale with the rest of the drawing. However, as with other labels, the text will not scale unless the font size tool in the Job settings window is used to change it.

4.13. Add an Image



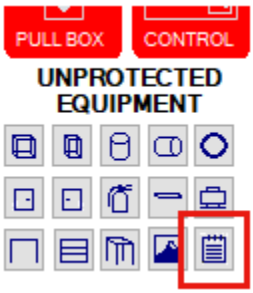
Click the IMAGE button, in the third row of the Unprotected Items buttons on the tool panel, to add an outside image to a drawing. The FlashPoints Image Selector will open. Any images currently stored in FlashPoints will be displayed in this window and will be available to use in a drawing. If there are no images available, a message will be displayed in the large window that says, "No Images Available".

Add images to FlashPoints using the Add an Image button. This will store an image in the FlashPoints database and it will appear in the selector window. Images added to FlashPoints are available for use in other drawings.

Click on an image to Change it, Delete it or Select it.

When an image is selected using the Select Image button the image will be displayed on the canvas. A red border will appear around the image to indicate it has been selected. The canvas image follows the same rules as other canvas items. It can be dragged and it has a Minibar that can be used to resize the image, display a label, or remove the image from the canvas.

4.14. Text Notes



Notes can be added to the drawing canvas using the Notes button beside the Unprotected Items buttons on the tool palette.

Text Notes can be selected by clicking on the text of the Note. Once selected the note can be moved to any location on the drawing canvas.

To change a text note, double click the text and enter the new text. If the new text is longer than the current note text, the Text Note will be resized automatically. There is, however, a limit to the size of the text note. When this limit is reached the note will be truncated at that point. The size limit varies with the size of the text font.

Multiple line text notes can be created by pressing the ENTER key at the end of each line. A new line will be added to the note so more text can be added on the next line. Paragraphs are created by pressing the ENTER key twice. This leaves a blank line in the note to separate the paragraphs.

Text Notes have a Minibar that appears when a selected Text Note is moused over. This Minibar features the same delete button as other Minibars. To remove a text note from a drawing click the delete button in the Minibar.

The text in Text Notes can be resized using the font size tool in the Job Settings window. The Text Note will resize along with other text on the drawing.

Multiple Text Notes can be placed on the drawing and arranged as desired to form blocks of text or a variety of comments and notes.

4.15. Using Room Guides

FlashPointsSuppressionCADprovidestwo sets of guidesto assist withcreatingprofessionaldrawings.

The RoomGuidedisplays3 lightblue lineson the drawingcanvas. The 3 linesrepresent the corner of a room. To layouta kitchen,place appliancesalongthe lines.

GridGuidelinesare availablefor people who preferto work on graph paper. The evenlyspaced lightblue lines make iteasy to alignobjects witheach other. Each square inthe gridrepresents 1 foot. The gridautomatically adjusts when the drawingis scaled.

Both guidesare accessed by selectingVIEW | GUIDELINESfromthe MainMenu at the top of the screen. The menu selectionsfor the guidesact as toggles. Clickonce to turnon a guide,then clickagainto turnitoff. Clickingthe other guidewhen one is inuse willswitchto the other guide.

A NOTE ABOUT PRINTING: When FlashPointsprintsa drawingittakes a snapshot of the imageon the screen. Anythingon the canvas, includingguidelines,willbe includedinthe printout. For thisreason, itis a good ideato turnoff any guidelinesbefore printinga job.

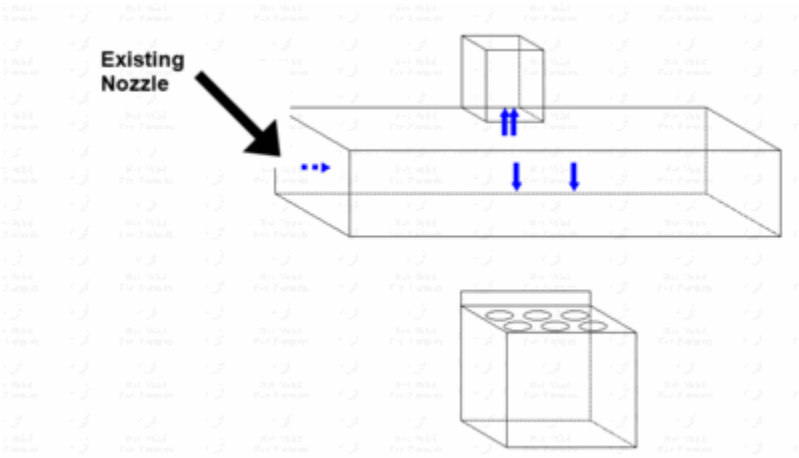
4.16. Protecting the Appliances

When a selected appliance is unselected FlashPoints Suppression CAD will use the information provided by the drawing to determine the type and number of nozzles needed to protect the equipment in the drawing. FlashPoints will only add nozzles automatically; fusible links must be added to the drawing by using the FLINK button. If a nozzle is not displayed in the correct location, simply click on it and move it. If too many nozzles are on the screen, click on the ones to be removed and delete them.

Additional nozzles and fusible links can be added to the drawing by pressing the NOZZLE or FLINK buttons. The type of each nozzle or fusible link can be specified and it can be moved to any position on the drawing. The MiniBarT button can also be pressed to toggle the display of the type of nozzle on the drawing.

Existing Protection

When designing a system upgrade to an old or existing system, there will often be equipment that can be reused. To mark a nozzle as existing, click the EXISTING button on the nozzle's Minibar. FlashPoints will redraw the nozzle using dashed lines to indicate that it is existing. The existing nozzle will be shown on the final report, but it will be removed from the overall cost of the job since it is being reused.



NOTICE: Please remember that FlashPoints is meant to be a tool to assist in the design of fire suppression systems. It is not meant to replace the knowledge and expertise of a trained fire suppression professional. Although FlashPoints will attempt to provide accurate results, the fire suppression system designer/installer is ultimately responsible for the final system design. Every effort has been made to make FlashPoints flexible and user-friendly. If information or documents, produced by FlashPoints are not correct, it is the designer's responsibility to correct any errors prior to system installation. Flash-Soft, LLC shall not be liable for improper fire suppression system design and/or installation.

4.16.1. Specifying Adequate Protection

A cylinder is displayed in the Tool Panel on the left side of the screen. This cylinder is a gauge that keeps track of the protection flow values (nozzles) on the drawing and the flow value of the cylinders. When enough cylinders have been specified to satisfy the flow value of the nozzles the cylinder-gauge will appear full and will show the total flow value on it.

There are two ways to specify protection in FlashPoints SuppressionCAD. One way is to place protection items on the drawing canvas. The other was is by using the Requirements screen [Fire Equipment Dealer Version Only], which will be explained later. Objects specified on the Requirements screen do not appear on the drawing canvas. This is a handy way to specify items for a job without showing them on the drawing.

4.16.2. Overriding Protection

By default, FlashPoints uses Automatic Protection to compute the nozzles needed to cover an appliance. This means that when a selected appliance is unselected FlashPoints will compute the type and number of nozzles necessary to provide coverage and will display them on the canvas.

A toggle button has been provided on the Minibar of each appliance that allows the Automatic Protection of the appliance to be turned off and on. When the button is green, Automatic Protection is turned on. When the button is red, Automatic Protection has been turned off. In the off position, FlashPoints will NOT calculate nozzle coverage and will NOT display nozzles automatically. With Automatic Protection turned off nozzles can be placed manual over an appliance to override FlashPoints' protection.

When Automatic Protection is turned off, an appliance's nozzles are "sticky". They stay where they are positioned and the type of nozzle is not changed by FlashPoints if the item is resized or moved. In fact, moving the appliance across the page brings the nozzles along for the ride, too! Nozzles can also be added to Miscellaneous items and Images to protect user drawn items that require coverage.

With the Automatic Protection toggle on each appliances' Minibar, the setting of Automatic Protection can be set for each appliance, individually. The value of the setting (on or off) is saved for each appliance in the FlashPoints database.

4.17. Locking Appliances

FlashPoints'"Click-Thru"technologymakes iteasy to select itemsthat are stacked on top of each other, such as nozzlesand ducts. Usually,ifan applianceis selected and unselected,FlashPointswillsimplyremove and redisplaythe protectionas itwas originally.However, ifthe dimensionsof an applianceare changed, ifthe type of applianceis changed, or ifthe applianceis moved, FlashPointswillreset the appliance'sprotect and remove any changes that have been applied. To move protectionitems(nozzlesand fusiblelinks)withoutselecting appliances,lock the appliances.

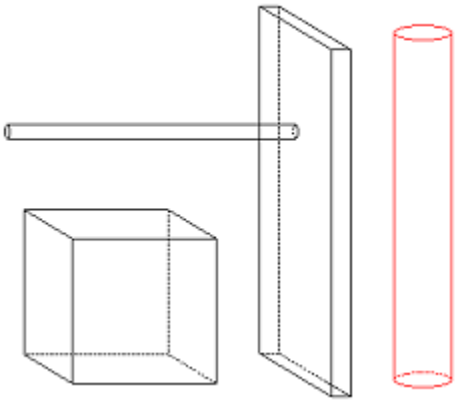
Clickthe SlideLock at the very top of the ApplianceTool Panel. Thiswilldisableallof the appliancebuttons and willpreventthe selectionof any applianceson the drawing. Now nozzles,fusiblelinks,shelves, and other itemscan be selected and rearrangedwithease.

When done workingon Protectionand Miscellaneousitems, or ifnew appliancesneed to be added to the drawing,Clickthe SlideLock to "open"it. Thiswillreenablethe appliancebuttons and allowappliancesto be selected again.

4.18. Adding Other Objects

In addition to appliances and protection objects, FlashPoints Suppression CAD provides other objects that might be needed to fill-out a drawing. With a little imagination these objects can be used to add cabinets, tables, counters, columns, rods, doors, and walls to a drawing.

FlashPoints Suppression CAD is able to distinguish between appliances and other objects so that it only applies protection to the objects that need it.



Here are just a few things that can be drawn using FlashPoints Miscellaneous objects:

Windows: Using the cabinet object, set the depth to 0 and set the width and height to the proper dimensions. Then change the text label to "WINDOW".

Duct openings and access panels: Using the cabinet object, set the height to 0 and set the width and depth to the proper dimensions.

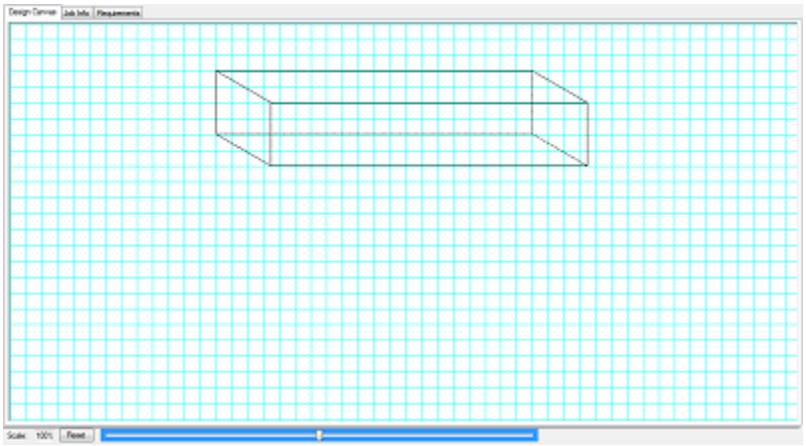
Walls: Using the square column, set the depth to 3, the width to 48, and the height to 96. Turn it to the side and you have a wall. Reduce the height to 36 inches to create a knee wall.

With a little imagination these tools can be used to draw control boxes, cylinders, pull stations, gas valves, smoke houses, bread ovens, toasters, floor plans and many other items.

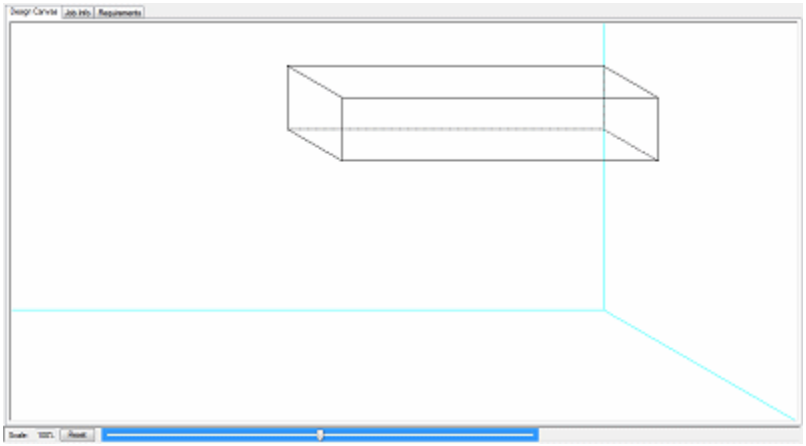
4.19. Using Guides

FlashPointsSuppressionCADofferstwo kindsof guidesto assist withscreen layout. Each guideis designedto be a backgroundpatternand willautomaticallybe removedfromthe drawingbefore printing. Both guidescan be accessed fromthe menubar, under the VIEWtab. Onlyone type of guidecan be activeat a time. Selecting one guidewillturnoffthe other guide. Selectingthe activeguidewillturnoffallguides.

The Gridis simulatedgraph paper. Each square represents a foot or a meter, dependinguponthe measurement system inuse:



The RoomGuideis an isometricrepresentationof the rightcorner of a room:



5. Entering Job Information

The Job Information tab provides a place where descriptive information about a job and job notes can be entered. Click the Job Information tab above the drawing canvas to remove the drawing canvas and replace it with the Job Information screen.

5.1. Customer Information

Customer information, such as name and address, will be printed on all reports that FlashPoints SuppressionCAD produces for a job. The customer information screen is also a good place to store customer contact information, too. All customer information entered on the screen will be saved with the job.

To enter or change customer information, click the EDIT button. After making the desired changes, click the SAVE button.

5.2. Job Notes

The Job Notes area on the Job Information screen is a "free form" text box where any and all notes and miscellaneous information about a job can be entered. Comments entered in the Job Notes box will be printed on the data sheet that prints with the drawing. Please remember that there is a 4000 character limit to these notes. Anything entered after 4000 characters will be excluded from the job notes.

Examples of some Job Notes:

"Installation must conform to the manufacturers specifications and guidelines."

"All nozzles will be hand-tightened prior to system inspection. Fire Marshal will tighten each nozzle as inspected."

Boilerplate job notes have been provided to speed up the entry of job notes. Simply check the box next to each pre-written note to add it to the job. To view the text that will be printed on the final report, click on the title of the note. The full text of the note will be displayed in the preview area. To include all boilerplate notes, click the Check All button. To remove all boilerplate notes, click the Uncheck All button.

In addition to Job Notes, the NOTE button on the design Canvas toolbar makes it easy to put paragraphs of text directly on the drawing. In addtion, text notes can be enlarged and reduced as needed. An option on the Mini bar of the note allows you surround text notes with a box.

5.3. Job Identification

Space is provided on the Job Information screen for a job identification number and the initials of the designer(s) of the job. This information will be printed on the bottom of the drawing.

To enter or change the job identification information, click the EDIT button. After making the desired changes, click the SAVE button.

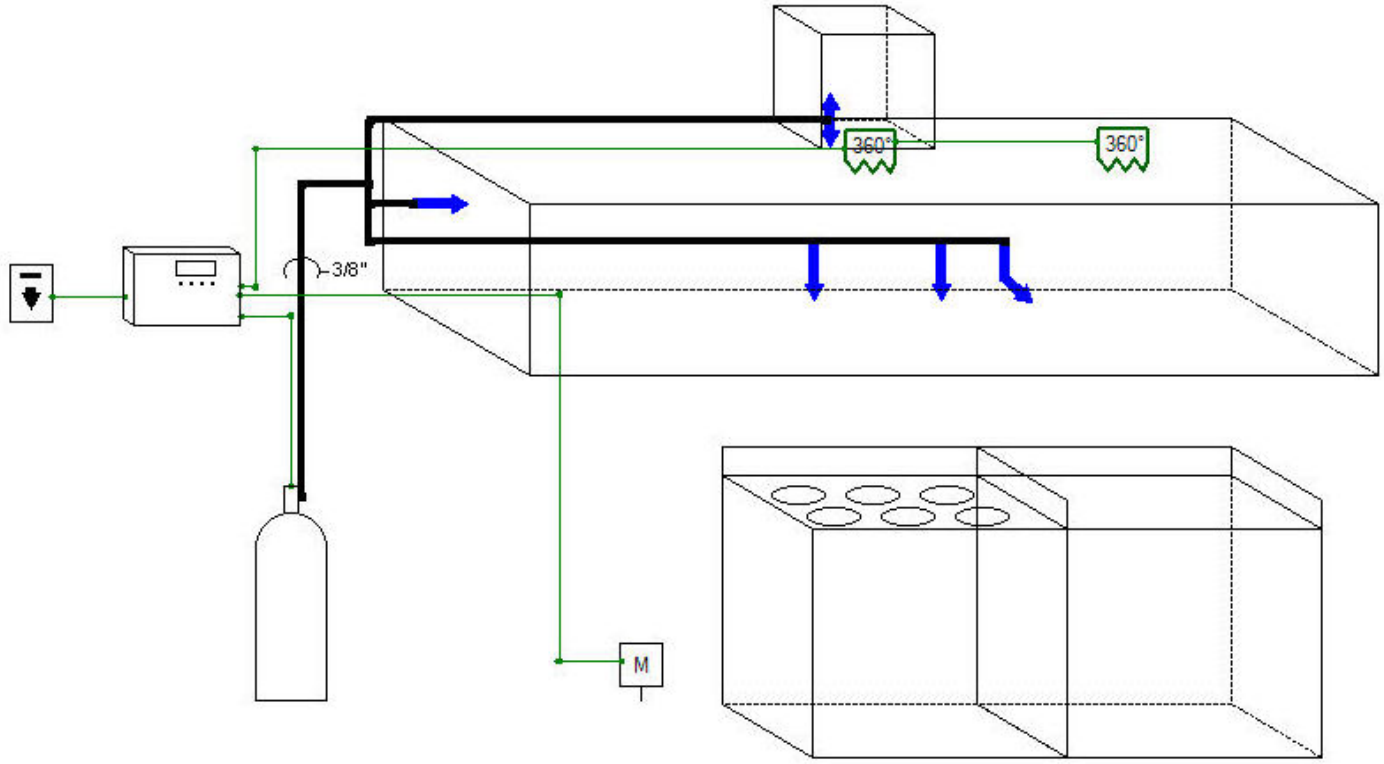
5.4. Installation Company Information

Space is provided for the entry of Installation Company information. However, this is NOT a place to enter the company information of the FlashPoints licensee. When each copy of FlashPoints is activated the name and address of each licensee is automatically transfered to FlashPoints. There is no need to enter YOUR company name and address.

FlashPoints customers are allowed to make drawings and sell them to other fire equipment companies. The purpose of this section is to enter the name and address of ANOTHER company. When drawings are made for other companies FlashPoints blocks the licensee's name, address, and logo and replaces them with the name address, and logo provided in this space.

ONLY ENTER INFORMATION IN THIS SECTION IF YOU ARE MAKING DRAWINGS FOR ANOTHER FIRE EQUIPMENT COMPANY.

6. Piping the System



FlashPointsSuppressionCAD featuresa special set of tools for adding pipe to a drawing. Select the Piping tab on the Tool panel to switch the drawing to Piping mode. While in Piping mode appliances and protection apparatus cannot be moved or changed. This allows you to work with piping without worrying about changing other elements of the drawing.

The Piping screen has two modes, drawing mode and tool mode. As the names imply, drawing mode is for drawing pipe and tool mode is for moving, labeling, and removing pipe. Use the tool selection button to choose the desired mode. This button acts as a toggle between the two modes. When in tool mode the pencil will be colored to indicate that clicking the button will change to draw mode. When in draw mode the wrench will be colored to indicate that clicking the button will change to tool mode. The cursor tooltip also indicates what mode will be enabled when the button is clicked.

When the mouse cursor is over the drawing canvas, it will look like a cross-hairs when in drawing mode. In tool mode the cursor will change to a pipe wrench. Moving the cursor off of the drawing canvas will change the cursor back to an arrow to make it easier to interact with the buttons of the Tool panel and the FlashPoints menus.

When the Piping tab is clicked to enter the Piping screen, FlashPointsSuppressionCAD sets the mode to drawing mode. The cursor changes to cross-hairs to make it easier to locate the ends of each pipe segment.

Before drawing any pipe, 3 settings should be checked to make sure the pipe will appear as desired. The Pipe sample at the top of the Tool panel shows how the pipe will appear when drawn. The three settings that can be changed are: the pipe thickness, the end caps of the pipe, and the pipe color.

There are 9 pipe thicknesses available in FlashPoints. To change the pipe thickness click the up and down arrows next to the number to the right of the pipe sample. Each time a change is made it will be instantly reflected on the pipe sample. With a little practice you will quickly find which pipe settings work the best for your needs. Flash-Soft recommends using a pipe thickness of 4 for piping and a setting of 1 for detection lines.

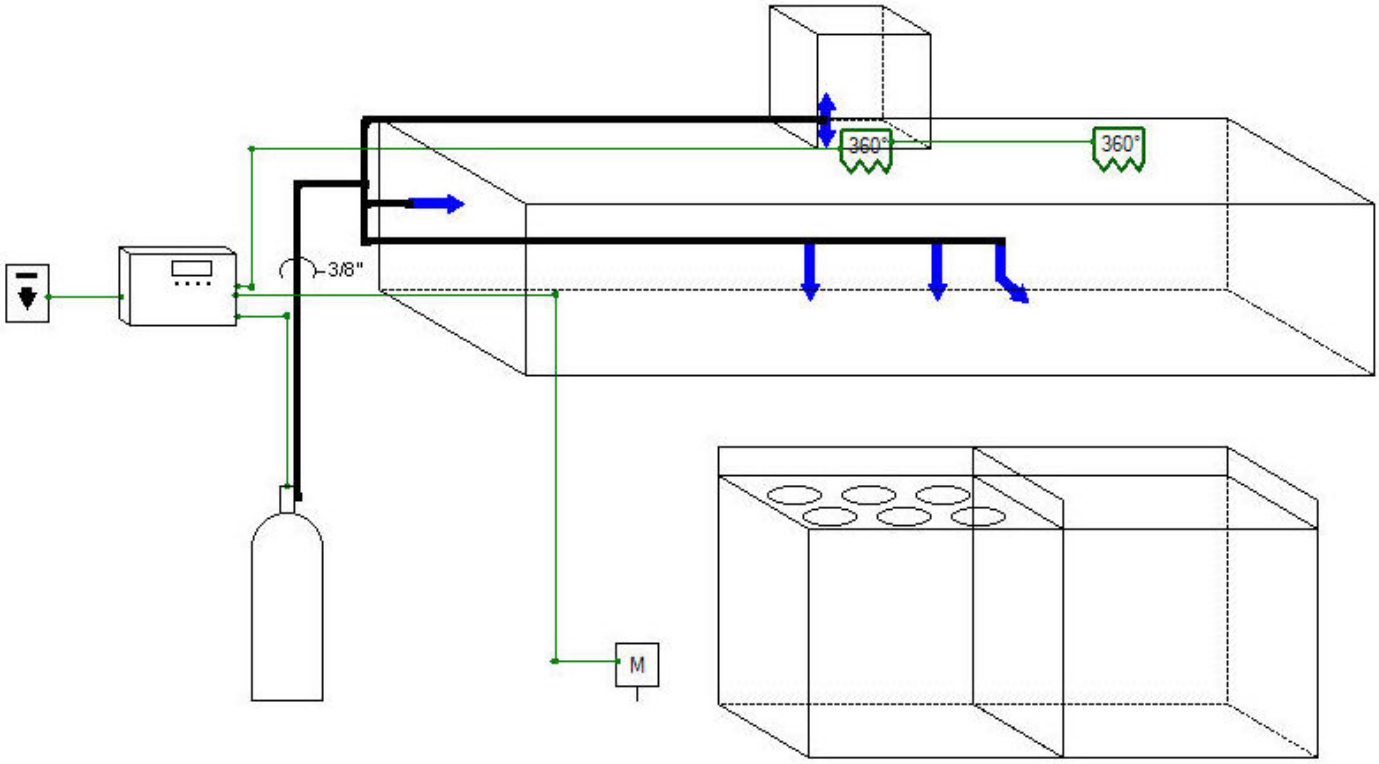
The end caps of the pipe can be changed to represent pipe fittings (for pipe) and corner pulleys (for detection lines). Pipe fittings are represented by square end caps and corner pulleys are represented by round end caps.

Pipe and detection lines can be BLACK (the default color) or changed to a different color to make them easier to follow. Press the Color Selection button to bring up a palate of 30 colors to choose from.

Each time any of these settings are changed the effect is applied to the next pipe segment drawn. This means that a wide variety of piping can be added to any drawing.

The last tool available on the Tool panel is the PIPE CLEAR buttor. Pressing this button will erase all pipe and detection lines from the drawing. This is useful if it becomes necessary to clear all of the pipe and start drawing the piping over again. It is much easier to clear all of the pipes than to click on each pipe and remove them one at a time.

6. Piping the System



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6.1. Drawing Pipe

In drawing mode, pipe is drawn by clicking at each end of the pipe segment. To start drawing pipe, position the cross-hairs where you want the pipe segment to begin. Use the center of the cross-hairs to position where the pipe will begin. Click the mouse button to mark the start of the pipe. A small red circle will appear on the drawing to indicate the starting point. Move the cross-hairs (mouse) and click to draw the pipe.

Piping can be drawn in three directions: diagonally, horizontally and vertically.
Horizontal and Vertical Pipe: FlashPoints measures the distance that the mouse is moved away from the starting point to determine which direction the pipe will be drawn. Pipe will always be drawn in a straight line, in the longest direction that the mouse is moved from the starting point.
Diagonal Pipe: To draw diagonal pipe, begin as you would any other pipe; click once at the starting location to place a small red circle on the drawing. To complete the pipe segment, move the mouse to the location of the other end of the pipe, hold down the Control (CTRL) Key, and click the mouse again. The pipe will be drawn as a straight line between the two points.
To cancel pipe drawing, after the starting point has been marked with a red circle, RIGHT-CLICK the mouse. This will remove the red circle and cancel the line drawing.
Pipe drawing tools are available to draw pipe (with pipe fittings on the ends), detection lines (with corner pulleys), arrows (for annotating), and broken pipe to indicate very long runs of pipe or detection lines.

6.2. Using the Pipe Tool

When the cursor looks like a pipe wrench the program is in tool mode. Click on a segment of pipe to work with that section of pipe. The pipe section will turn red to indicate that it has been selected. Mousing over a selected pipe segment will make the Minibar appear above the pipe. The Pipe Minibar has 4 buttons: one to move the pipe label (when visible) to the opposite side of the pipe, one to turn the pipe label on or off, one to change or enter the pipe label, and one to erase the selected pipe segment.

Diagonal pipe minibars only have one button, the erase button. Labels are not available for diagonal pipe.
Press the A button to type a label for the pipe segment. Pipe labels are automatically positioned at the middle of the pipe segment. Labels can be moved from one side of the pipe to the other by pressing the arrow button on the MiniBar. Each time the label moves, the arrow button changes to point in the opposite direction to indicate where the label can be moved to if the button is pressed again. Please note that pipe labels are limited to the number of characters that can comfortably fit along the length of the pipe segment. Labels are not available for diagonal pipe.
Toggle pipe labels off and on by pressing the T button on the Minibar.
Labels can be moved along the pipe by positioning the pipe wrench (mouse pointer) at the position that the label is to be moved to and RIGHT-CLICKing the mouse. The label will instantly move to the new location.
To move a pipe segment, click on a red pipe segment and drag it to its new location. Alternatively, selected pipe can be moved with the arrow keys on the keyboard.
As with other FlashPoints objects, press the X button on the Minibar to remove the selected pipe segment from the drawing.
Clicking on a selected pipe will unselect it and return it to its original color.

To bend a segment of pipe, Click the CURVE icon on the Minibar. A blue square will appear in the middle of the pipe. Click and drag the blue square to another location, then release the mouse button. FlashPoints will redraw the pipe segment with a bend at the location of the blue square. When the pipe is unselected the blue square will be removed.

The MODIFY PIPE icon on the Minibar brings up a window that will allow changes to be made to the pipe thickness, the type of pipe, and the pipe color.

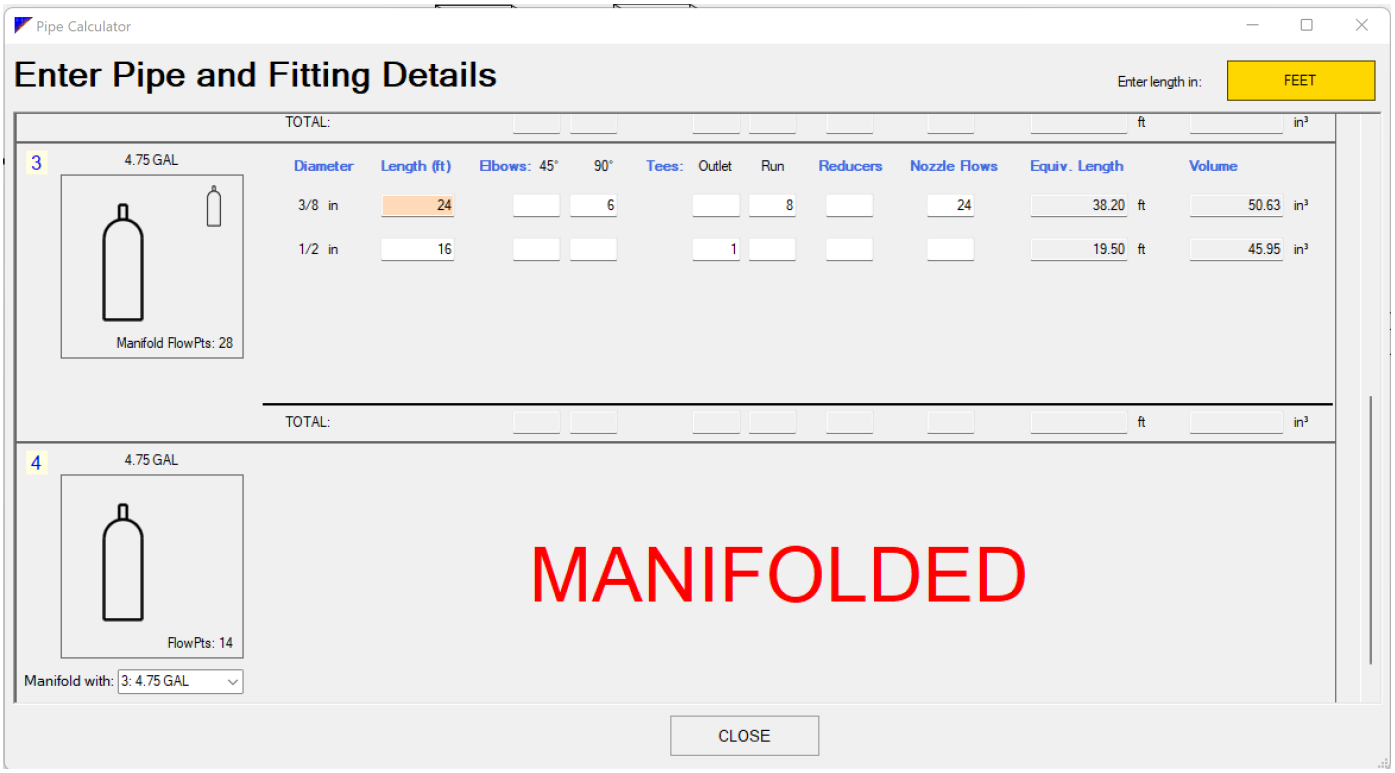
6.3. Piping Tips

As you use the FlashPoints piping tools you will discover the easiest ways to add pipe to your drawings. The tips below are provided to give you a jumpstart.

1. Start laying pipe by connecting nozzles. Begin with the nozzle farthest from the cylinder and work toward the cylinder.
2. Don't worry about trying to click at the exact position where a pipe segment will end. Just try to click at the length that you want the pipe segment to be. FlashPoints will automatically draw a straight piece of pipe, unless the control key has been pressed to draw a diagonal pipe segment.
3. FlashPoints does not always place nozzles in a straight line. It is easiest to draw a pipe segment along a series of nozzles, then switch to the drawing canvas [by CLICKing the Canvas Items tab on the Tool panel] and moving the nozzles so they are lined up along the pipe.
4. Pipe segments cannot be resized. If a segment does not work out, erase it using the Minibar.
5. Choose the correct type of pipe so you can be sure the drawing will work with the Pipe Diagram option later.
   - Pipe connected to cylinders and nozzles should use Pipe Fittings.
   - Detection Lines should use Corner Pulleys.
   - Use the plain Line for Actuation tubing and roof lines.

PRO-TIP: Clicking the RIGHT mouse button will toggle between the drawing tool and the monkey wrench.

6.4. Pipe Calculator



Enter pipe lengths, number of fittings, and nozzle flow points on the Pipe Calculator and let FlashPoints compute the pipe equivalent lengths and volumes for you.

Each cylinder in the system will be pictured in the Pipe Calculator. Scroll to the desired cylinder and enter the values in the white text boxes. After entering each value, press ENTER, TAB, or click the next box to instantly compute the equivalent length and volume. All values are automatically saved to the FlashPoints database.

To indicate that a cylinder is manifolded with another cylinder, select the "manifold mate" in the drop down list. The cylinder will be marked as "MANIFOLDED" and the flow points of the "manifold mate" will be updated to include the flow points of the selected cylinder and a miniature representation of the manifolded cylinder will appear beside the "manifold mate".

Cylinders that are added or removed from the drawing are automatically added/removed from the Pipe Calculator.

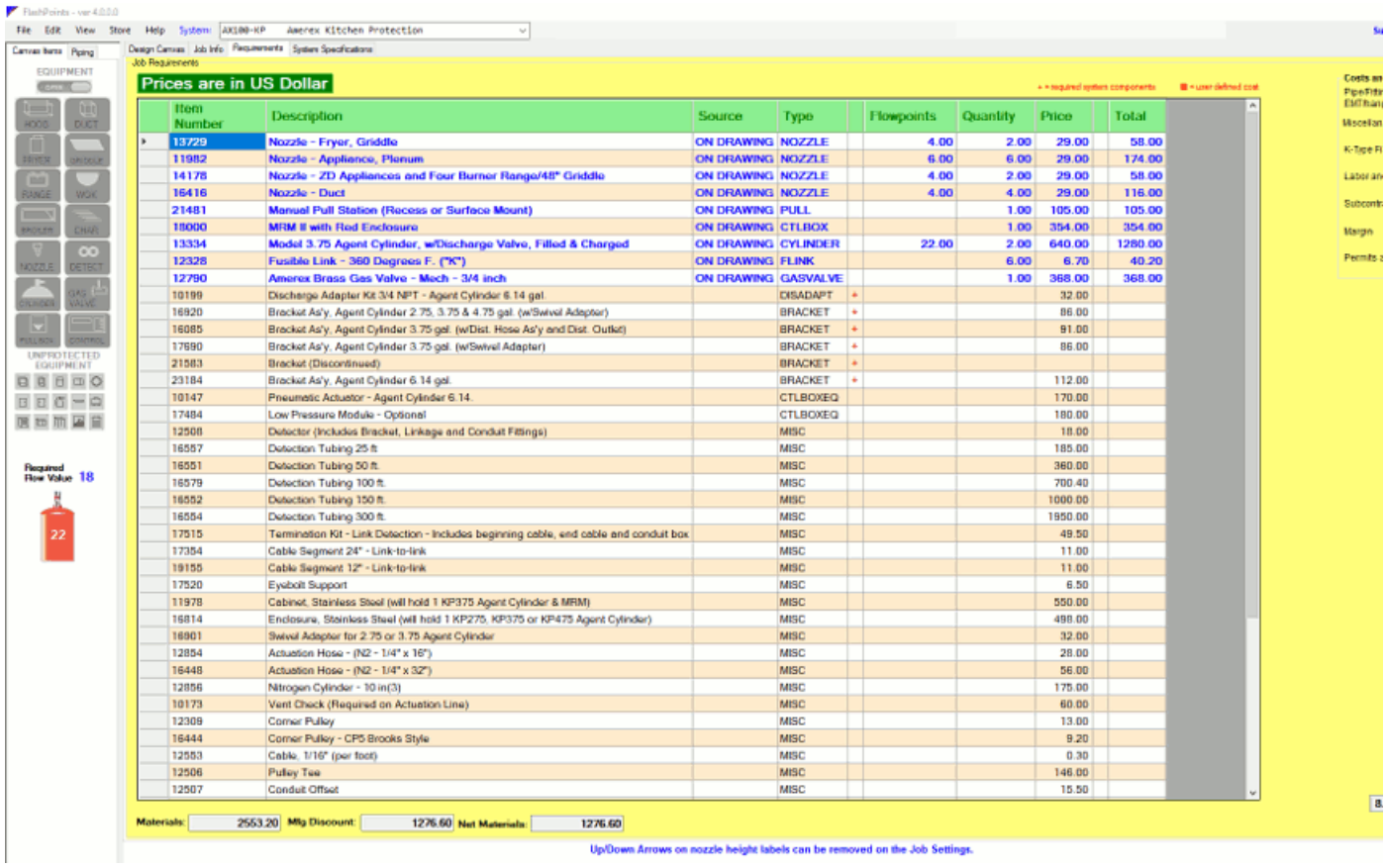
The Pipe Calculator uses the number system of the job to determine the values entered and shown. Imperial (US) values are in feet, inches, and cubic inches; Metric values are in meters, centimeters, and cubic centimeters. A button in the upper right corner can be used to switch entry between feet and inches, or meters and centimeters.

Values entered into the Pipe Calculator can be printed as a CYLINDER PIPING CHART in the B or C areas of the Printing Templates.

7. Completing the System [Fire Equipment Dealer Version Only]

Now that the drawing is complete and the job information and notes have been entered, it is time to enter the materials and costs of the job. This next step will use information from the FlashPoints Suppression CAD drawing to assist with building a bill of materials and help you compute the cost of the job.

7.1. Specifying Materials [Fire Equipment Dealer Version Only]



Clicking the Requirements tab above the drawing canvas will display the Requirements screen. A grid-like box and text boxes make up this screen. Protection apparatus from the drawing appears in blue at the top of the grid. The d can only be changed by changing the drawing.

The remainder of the grid is the Additional Items section. Here you can select items from the manufacturer's catalog to your job, double-click the quantity box next to the desired item. Then type the quantity of that item. Pressing EN another box will save your entry and compute the cost of that item. If it is necessary to change a quantity, double cli box and enter a new value. Entering a zero (0) in a box will remove that item from your inventory.

The cylinder-gauge, displayed on the Tool panel on the left side of the screen, is provided as a reminder of the syste requirements. The flow values of the nozzles on the drawing are used by FlashPoints to determine if enough cylinde selected. Each time you enter a quantity next to a cylinder item in the part list; FlashPoints will fill the picture of a cyl display the total flow value of the chosen cylinders. Until the cylinder is full, it will fill with BLUE liquid. When the cy filled, its color will change to RED to indicate that sufficient cylinders have been selected. The flow value displayed c the actual flow value of the chosen cylinders. This is helpful for ensuring that a system is designed for expansion, if d

If items, such as cylinders or gas valves, were placed on the drawing canvas, they will not be available for selection c requirements screen. Likewise, items that are selected on the requirements page will cause the corresponding button Tool panel to be disabled. This is to help prevent unwanted duplication of protection items. The basic rule of thumb protection items on the drawing canvas if they are to appear on the drawing, otherwise select them from the Require to include them in the job costs without showing them on the drawing.

To assist with item selection, FlashPoints places a star ★ next to items that are required system components. This is drawing your attention to certain items in the list. For example, all of the cylinders will have a star next to them, beca a required component of the job. There is no need to choose all of the cylinders. Just choose what is needed for th

The third section on the Requirements screen is for entering costs and discounts. There are two kinds of values that

7.2. Costing the Job [Fire Equipment Dealer Version Only]

Design Canvas | Job Info | Requirements | System Specifications

Job Requirements

Prices are in US Dollar

\+ = required system components

Item Number	Description	Source	Type		Flowpoints	Quantity	Price	Total
13729	Nozzle - Fryer, Griddle	ON DRAWING	NOZZLE		4.00	2.00	29.00	58.00
11982	Nozzle - Appliance, Plenum	ON DRAWING	NOZZLE		6.00	6.00	29.00	174.00
14178	Nozzle - ZD Appliances and Four Burner Range/48" Griddle	ON DRAWING	NOZZLE		4.00	2.00	29.00	58.00
16416	Nozzle - Duct	ON DRAWING	NOZZLE		4.00	4.00	29.00	116.00
21481	Manual Pull Station (Recess or Surface Mount)	ON DRAWING	PULL			1.00	105.00	105.00
18000	MRM II with Red Enclosure	ON DRAWING	CTLBOX			1.00	354.00	354.00
13334	Model 3.75 Agent Cylinder, w/Discharge Valve, Filled & Charged	ON DRAWING	CYLINDER		22.00	2.00	640.00	1280.00
12328	Fusible Link - 360 Degrees F. ("K")	ON DRAWING	FLINK			6.00	6.70	40.20
12790	Amerex Brass Gas Valve - Mech - 3/4 inch	ON DRAWING	GASVALVE			1.00	368.00	368.00
10199	Discharge Adapter Kit 3/4 NPT - Agent Cylinder 6.14 gal.		DISADAPT	+			32.00	
16920	Bracket As'y, Agent Cylinder 2.75, 3.75 & 4.75 gal. (w/Swivel Adapter)		BRACKET	+			86.00	
16085	Bracket As'y, Agent Cylinder 3.75 gal. (w/Dist. Hose As'y and Dist. Outlet)		BRACKET	+			91.00	
17690	Bracket As'y, Agent Cylinder 3.75 gal. (w/Swivel Adapter)		BRACKET	+			86.00	
21583	Bracket (Discontinued)		BRACKET	+				
23184	Bracket As'y, Agent Cylinder 6.14 gal.		BRACKET	+			112.00	
10147	Pneumatic Actuator - Agent Cylinder 6.14.		CTLBOXEQ				170.00	
17484	Low Pressure Module - Optional		CTLBOXEQ				180.00	
12508	Detector (Includes Bracket, Linkage and Conduit Fittings)		MISC				18.00	
16557	Detection Tubing 25 ft		MISC				185.00	
16551	Detection Tubing 50 ft.		MISC				360.00	
16579	Detection Tubing 100 ft.		MISC				700.40	
16552	Detection Tubing 150 ft.		MISC				1000.00	
16554	Detection Tubing 300 ft.		MISC				1950.00	
17515	Termination Kit - Link Detection - Includes beginning cable, end cable and conduit box		MISC				49.50	
17354	Cable Segment 24" - Link-to-link		MISC				11.00	
19155	Cable Segment 12" - Link-to-link		MISC				11.00	
17520	Eyebolt Support		MISC				6.50	
11978	Cabinet, Stainless Steel (will hold 1 KP375 Agent Cylinder & MRM)		MISC				550.00	
16814	Enclosure, Stainless Steel (will hold 1 KP275, KP375 or KP475 Agent Cylinder)		MISC				498.00	
16901	Swivel Adapter for 2.75 or 3.75 Agent Cylinder		MISC				32.00	
12854	Actuation Hose - (N2 - 1/4" x 16")		MISC				28.00	
16448	Actuation Hose - (N2 - 1/4" x 32")		MISC				56.00	
12856	Nitrogen Cylinder - 10 in(3)		MISC				175.00	
10173	Vent Check (Required on Actuation Line)		MISC				60.00	
12309	Corner Pulley		MISC				13.00	
16444	Corner Pulley - CP5 Brooks Style		MISC				9.20	
12553	Cable, 1/16" (per foot)		MISC				0.30	
12506	Pulley Tee		MISC				146.00	
12507	Conduit Offset		MISC				15.50	

Materials: 2553.20 Mfg Discount: 1276.60 Net Materials: 1276.60

As the costs of materials, labor, fees, and discounts are added to the Requirements screen, FlashPoints Suppression the job. The job cost is shown in the lower right corner of the Requirements screen. By updating this value each tim FlashPoints gives you the ability to make adjustments to the job in real time.

The Requirements screen is made up of 3 parts: The product list, other costs, and sales tax and totals.

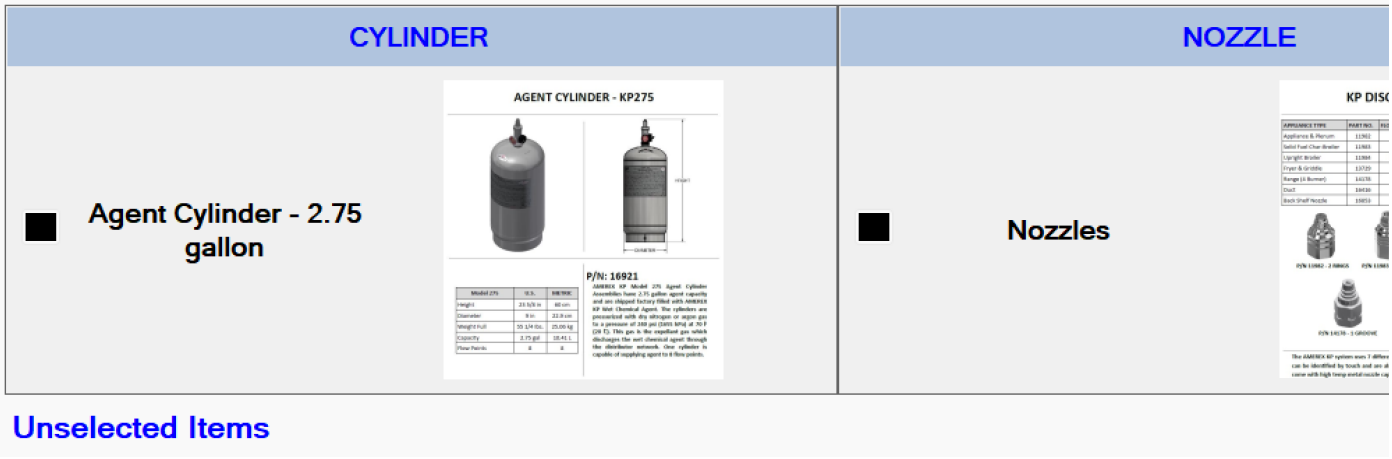
The Product List is a table of system parts and their list prices. Systems parts that are added to the drawing are auto top of the list. Other items may be selected by clicking in the Quantity column and entering the required quantity of t displayed in the Total column.

The prices in the Product List are manufacturer list prices that are updated by Flash-Soft. If a price is not available, for the item and type a new price, then press ENTER. The new price will be saved in the FlashPoints database and that the price has been overridden, a green square will appear in the column to the right of the price column. To rem price, blank out the price and press ENTER. FlashPoints will bring back the list price.

Costs and Fees are entered in the upper right corner of the Requirements screen. Enter the cost of each item and th to take. After all costs are entered, enter the Margin Percentage that you hope to make on the job. Knowing your p give you an advantage while negotiating the price of the job with the client.

Sales Tax and Totals for the job are displayed in the lower left corner of the Requirements screen. The final total at customer.

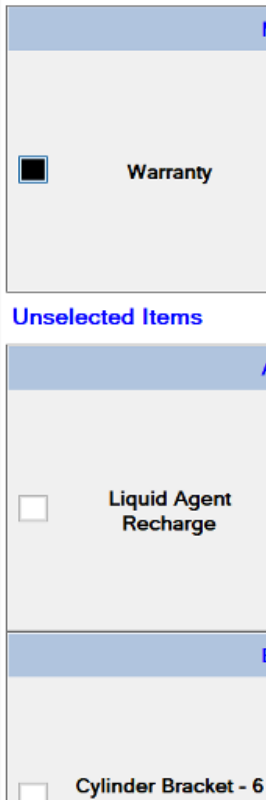
7.3. Submittal Pages



SubmittalPages are typicallypages of informationand specificationdata that is suppliedby the manufacturerof the s drawingand notes to make up a SubmittalPackage.

FlashPointscontainssome submittalpages that can be used rightaway. In fact, the submittalpages that come withF so FlashPointscan automaticallyselect them. The black square to the leftof each submittalitemis a checkbox. Wh package. When the box is white,it is unselected. Check or uncheck itemsto add or remove them fromthe submitt

There are 3 buttonsinthe upper rightcorner of the screen that are used to manage a submittalpackage. From leftt RESETbutton.
The GROUP/UNGROUP buttonis used to remove the SELECTEDITEMS/UNSELECTEDITEMS groups and j selected withoutstoppingto sort and regroup them aftereach selection. The ADD buttonis used to add submittalp the Windows SnippingTool, or scanned intoa computer, to the FlashPointsdatabase.



The Add Page Windowhas a buttonto Selecta Picture. There are also 3 pieces of informationthat must be entered: Manufacturer,Item Category, and Description. The first2 have drop down boxes witha listof itemsthat can be selected. For Manufacturer,the optionsare the currentmanufactureror ALL. SelectingALL willmake the page availableto every job you create. The Descriptioncan be anythingthat describesthe page. It is recommended to keep thisbrief.

Once a new page has been added itwilllook likethe firstiteminthe pictureon the right. A gold star willbe displayedinthe upper rightcorner to identifyitas a user added page. An edit buttonwillbe displayedinthe lowerrightcorner. The edit buttonis used to change the pictureor informationsaved withthe page. The edit buttoncan also be used to remove the page fromFlashPoints.

Submittalpages added to FlashPointsare stored inone of FlashPoints'databases. They are

8. Printing Reports

FlashPoints reports are selected from the print menu (FILE| PRINT). The Job Design Plan is only available when the Design Canvas is visible on the screen. At all other times the Job Design Plan option is grayed out on the menu. The reason for this is to prevent a report from being printed without the drawing on the screen. When the drawing is printed, FlashPoints Suppression CAD takes a snapshot of the drawing canvas and sends the snapshot to the printer.

The Job Design Plan is the report that prints the drawing, design notes, and a list of job materials. This report is also known as the Fire Marshall report, because most Fire Marshall's require a system design plan prior to installation. [To ensure that a drawing is visible on the screen, FlashPoints requires that the DESIGN CANVAS tab be clicked before the Job Design Report can be printed.]

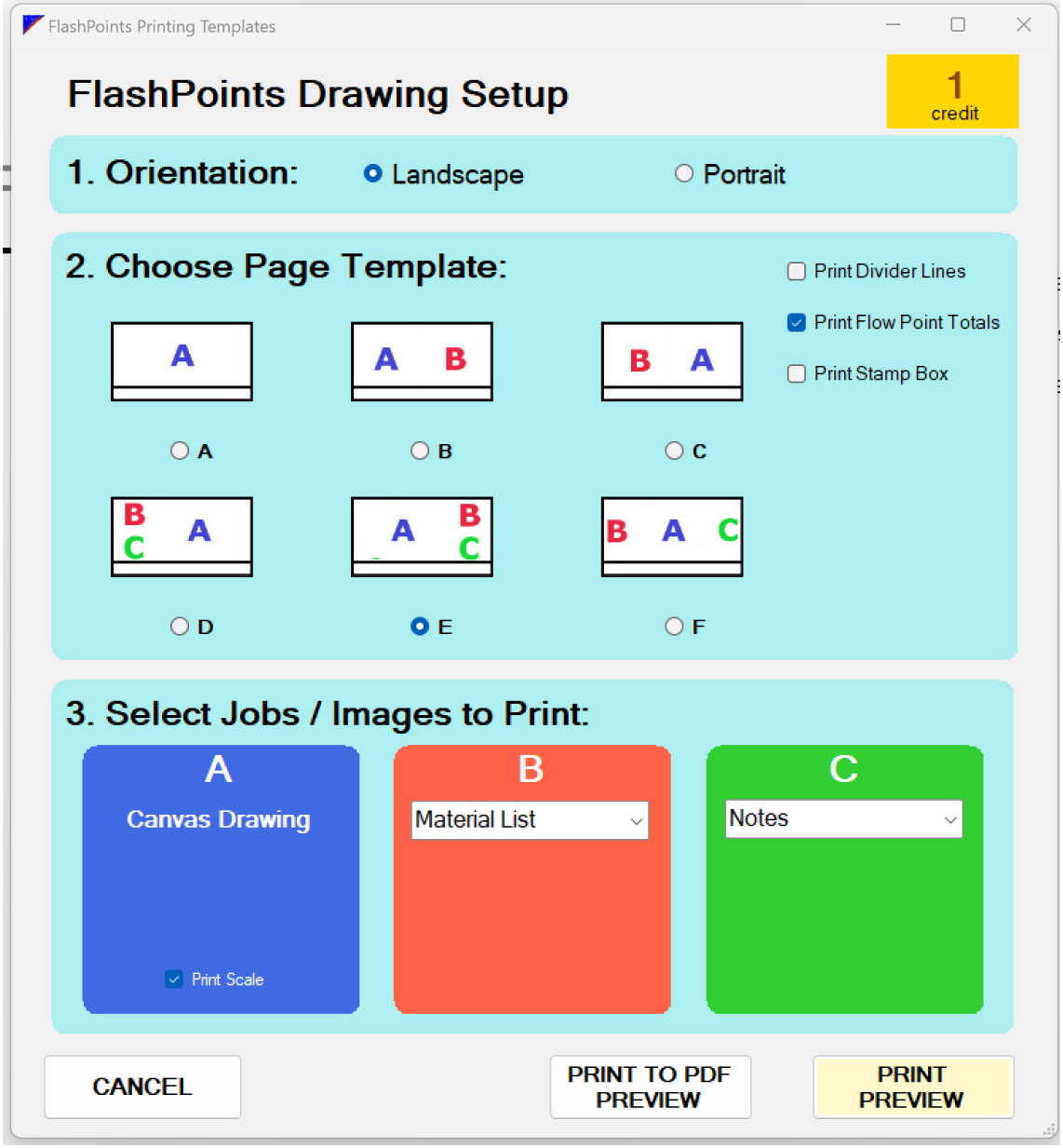
The Job Cost Report [Fire Equipment Dealer Version Only] is a Bill of Materials for the job. Materials, costs and discounts for the job are itemized on this report.

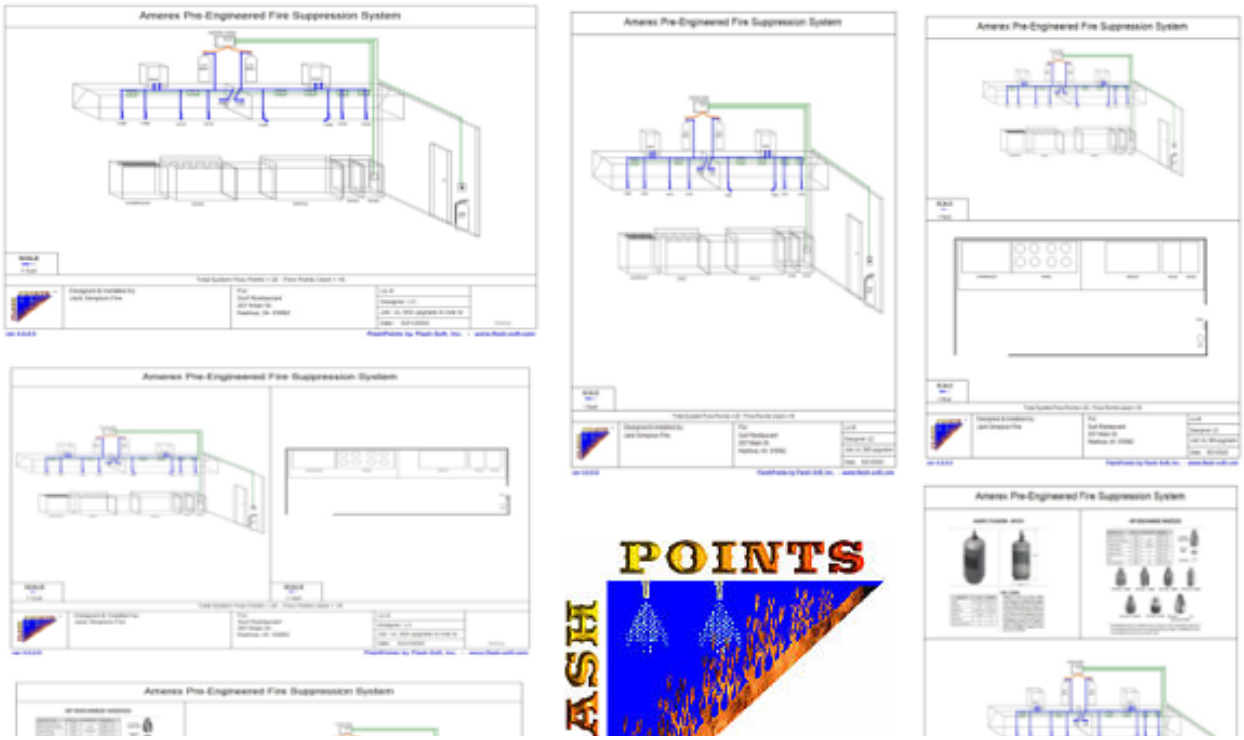
When a report is printed, it is first displayed on the screen as a print preview. The print preview is useful for saving paper or reviewing the output in the field where a printer might not be available. Clicking the printer icon on the print preview will open the printer setup display. This display allows the selection of a specific printer and other printer functions (such as specifying the number of copies). When the Print button is clicked on the printer setup screen the report will be sent to the printer.

FlashPlan Credits are required to print FlashPoints drawings. Prints require 1 credit. Once a job has been printed, it may be edited and reprinted within a specified time period (the remaining time is displayed in the Status Area of the Main Screen). However, if the customer name or job description are changed the remaining free time will be cleared and the next print will require a credit.

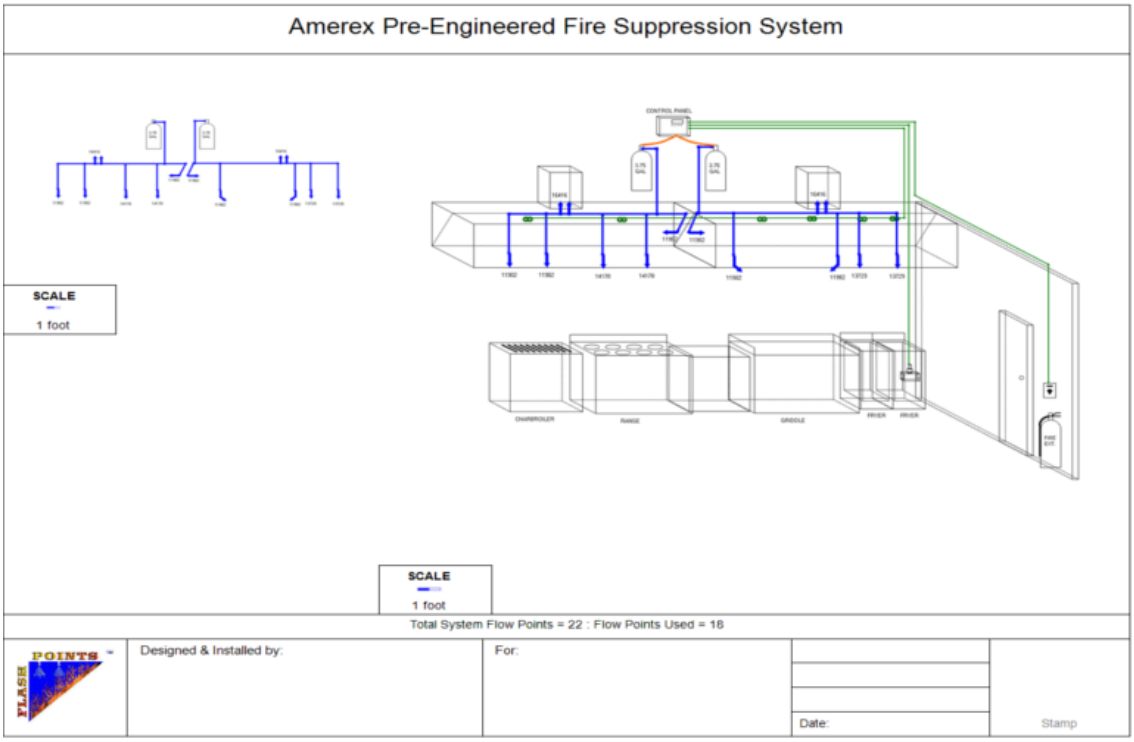
Additional FlashPlan Credits are available from FlashPoints in lots of 10, 30, and 50 Credits.

8.1. Enhanced Printing



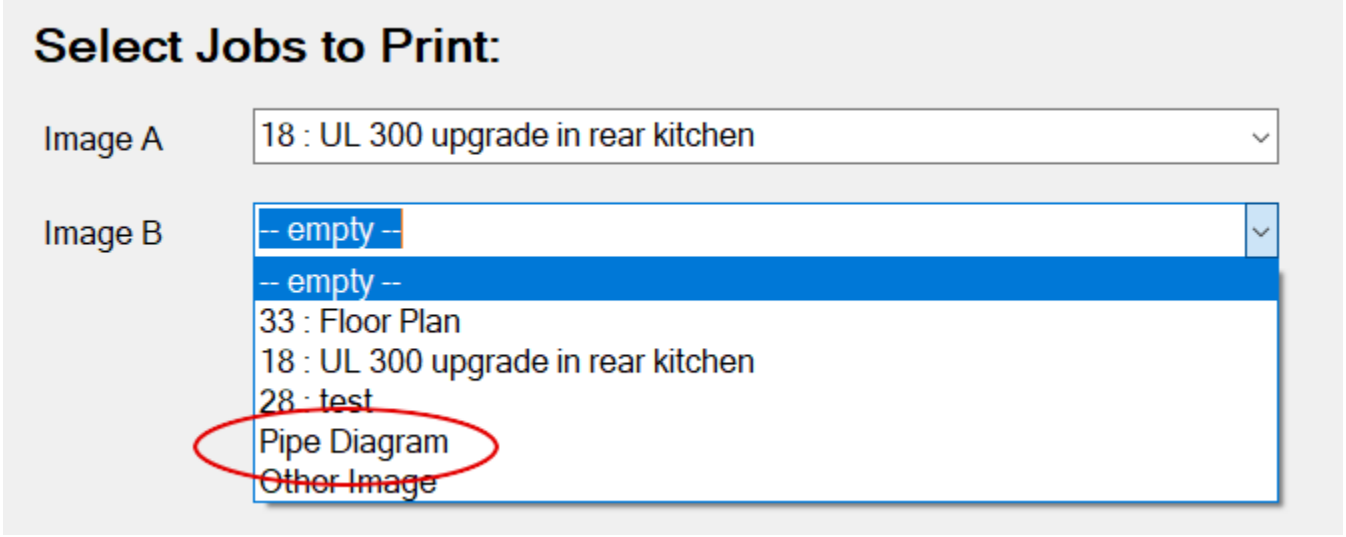


8.1.1. Pipe Diagram



Pipe Diagrams present a view of the suppression system that contains the system cylinders, pipe, and nozzles. All appliances and other features of a drawing are removed to give a clear view of the system piping.

There is no need to make a separate drawing to add a pipe diagram. Simply choose the A-B or A-B-C template from the Printing Template screen. Pipe Diagrams can be displayed in the B or C positions. Choose Pipe Diagram from the drop-down list for Image B or Image C and FlashPoints will do the rest.

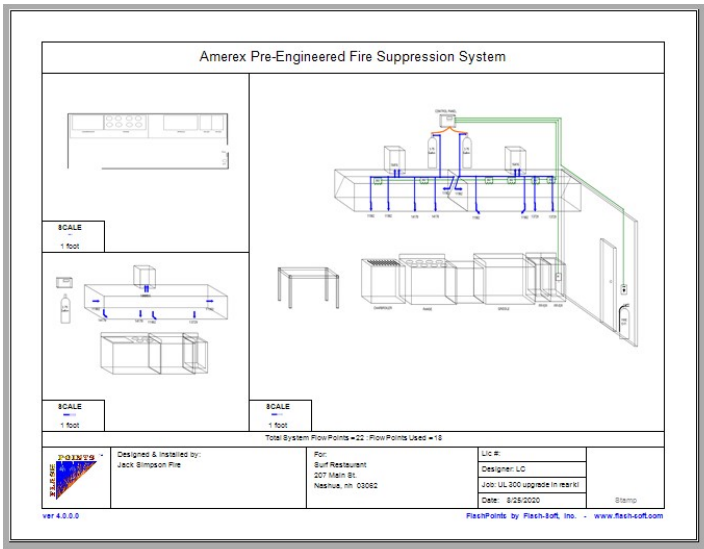


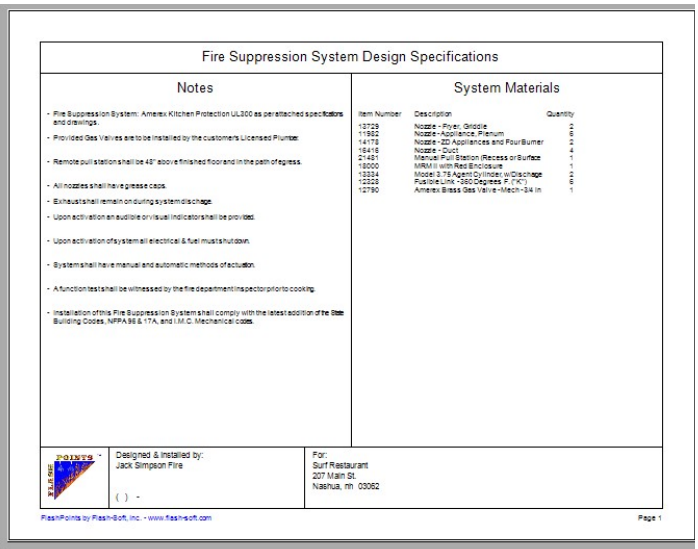
RECOMMENDATIONS FOR IMPROVED PIPE DIAGRAMS:

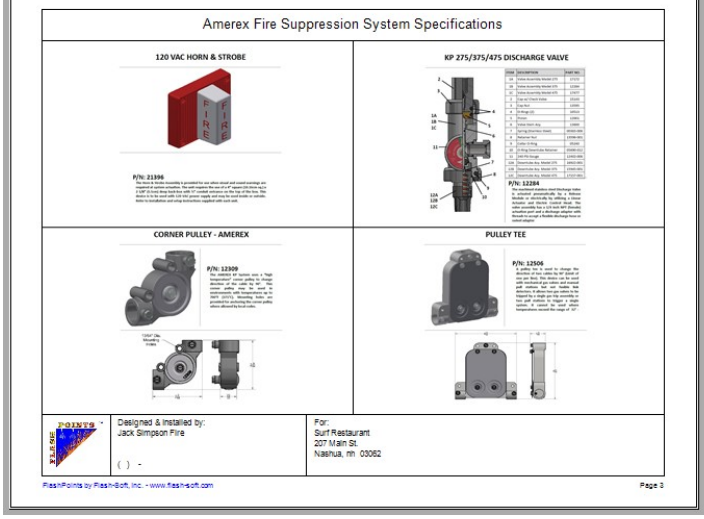
FlashPoints will use all pipe that has pipe fittings in pipe diagrams. Therefore, it is best to use pipe fittings for pipe, corner pulleys for detection lines, and plain lines or arrows for all other drawn lines. Broken pipe are also excluded from pipe diagrams.
Actuation lines, the copper tubing from the control head to the cylinders, should be drawn using the LINE. This will cause them to be excluded from pipe diagrams.

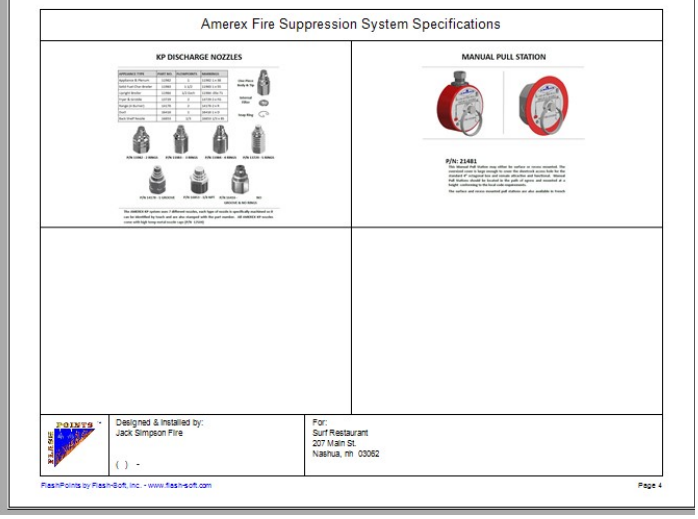
Nozzle and pipe labels are displayed on the pipe diagram exactly as they appear on the system drawing. It is best to label nozzles and pipe so the labels will appear on the pipe diagram.

8.2. Printing a Submittal Package



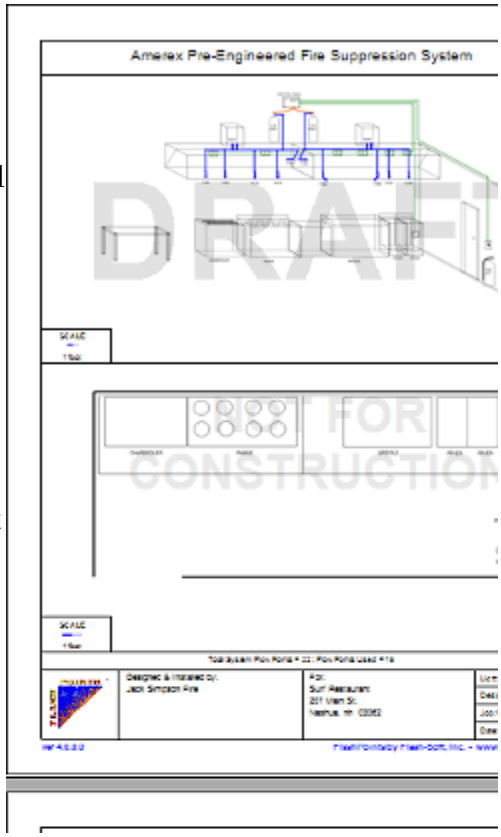






The Package Setup screen allows the drawing to be customized as needed (See Enhanced Drawing). Additionally, the Cover Page, Notes, and Specification Sheets can be selected and customized for the Submittal Package. This is especially convenient if the package is being printed to a PDF for electronic submission to the AHJ.

Orientation plays an important role in the creation of a submittal package. The Package orientation (Landscape or Portrait) that is selected on the Package Settings tab is used for all of the pages in the submittal package. However, the drawing pages have an orientation setting that can be used to override the package setting. For example, setting the package setting to Portrait would print all of the pages in the package in Portrait mode, but the drawings could be set to print in Landscape (or Portrait) using the buttons on the drawing tabs.



8.3. Managing Credits

Flash Plan Credits are used to print drawings. All credits are stored in a database online, this is known as "The Bank".

A button at the bottom of the Flash Points Tool Panel displays the number of credits in each customer's bank. Since the bank is located online, Flash Points needs to be connected to the internet to see the bank. If Flash Points is not connected to the internet, the button will display a question mark (?) to indicate that Flash Points does not know how many credits are in the bank.

As credits are used, the new total in the bank will be reflected on this button. When it is time to refill the credit bank, the button may be clicked to go to the Flash Points Store.

NOTE: Flash Plan credits are ONLY required for printing drawings. They are not required to print Notes, Cost Reports, or Submittal Pages.

8.4. Printing a Completion Certificate

FIRE & SAFETY

Installer:

Fire & Safety
123 Secret Road
Anytown, MA 02703

Printed by:
FlashPoints SuppressionCAD
www.flash-soft.com

Certificate of Fire System Compl

Fire Suppression System:	Pyro-Chem Pre-Engineered Fire Suppression Sy
Fire System Type:	Wet Chemical - Kitchen System
Installation Location:	Mid City Grill 106 S Main St Anytown, MA 02707
Drawing ID:	100013-003-20211221-1000001

This is to certify that the above fire suppression system has been ins per the referenced drawing.

Installer's Signature:

Installation Date:

Providing a certificate of completion is a great way to inform AHJs and insurance companies that the fire suppressio installed according to the approved plans. The customer's name and address, and the unique id of the drawing is pri certificate to identify the referenced plans.

9. Importing and Exporting

Occasionally, it may be necessary to copy the contents of the FlashPoints database for backup purposes or to copy the data to another computer. The Import and Export options on the FILE menu were created for this purpose.

To Export the FlashPoints database to a file, click on the Export item in the FILE menu. Then follow the instructions on the screen to save the contents of the database to a file. Files exported from FlashPoints will automatically have the extension .fpd added to the filename.
To Export the currently displayed FlashPoints job to a file, click on the Export the Current Job item in the FILE menu. Then follow the instructions on the screen to save the contents of the database to a file. Files exported from FlashPoints will automatically have the extension .fpd added to the filename.
To Import data from a file into the FlashPoints database, click on the Import item in the FILE menu. Follow the instructions on the screen to select the file to be imported. Only files with the .fpd extension can be imported into FlashPoints.
The Import feature should only be used to import a data file into an empty FlashPoints database. Since FlashPoints is unable to tell of the data being imported already exists in the database, it is possible to create duplicate items if jobs already exist in the database.
NOTE: Due to variations in database design from version to version of FlashPoints, an export file created in one version of FlashPoints may not import into a FlashPoints program with a different version number.
WARNING: The layout of the data in a .fpd file is very specific to FlashPoints. Any attempt to change or tamper with the data in a FlashPoints export file could result in the corruption of the FlashPoints database. Files exported from FlashPoints may only be imported into the same version of FlashPoints.

10. Setting Preferences

The Settingsscreen allowsyou to customizecertainfeaturesof FlashPointsSuppressionCAD. These changes are saved inthe FlashPointsdatabase and reappliedeach timeFlashPointsis run.
To open the Settingsscreen select EDIT| Settingsfromthe Menu Bar.
The followingitemscan be set inthe Settingsscreen:

1. DisplayNozzleLabels: FlashPointscan automaticallydisplayNozzleLabels as nozzlesare placed on the drawingcanvas.
2. PrintFire EquipmentDealer Phone Number: The phone numberof the fireequipment company willbe printedbelowthe name and address of the company.
3. PrintScale Legend on Drawings: A legendcan be added to each drawingto indicatethe scale of the drawing.
4. PrintSystem Flow Points: The numberof system flowpointsand actual flowpointsused are printedbelowthe drawing.
5. PrintManufacturername on Drawings. Text willbe added to the upper rightcorner of printed drawingsto indicatethe manufacturerof the completedsystem.
6. Discountrate: [FireEquipmentDealer VersionOnly] Enterthe discountthat you receivefrom your manufacturer. Typicalvaluesmightbe 25+5+5 or 20+10. FlashPointswillapplythisdiscountto all manufacturer'sitemsautomatically.
7. PricingCurrency: Choose the localcurrencythat you willbe usingto price jobs. The price of allappliancesand protectionitemswillbe converted to thiscurrency.
8. Labor rate: [FireEquipmentDealer VersionOnly] Thisis your hourlylaborcharge. It willbe used inthe requirementsscreen when you enter the numberof hours of laborfor a job.
9. Sales Tax: [FireEquipmentDealer VersionOnly] Enterthe sales tax rate for your jurisdiction.
10. Applysales tax to labor: [FireEquipmentDealer VersionOnly] If you are requiredto collect sales tax for labor, inadditionto goods, check thisbox.
11. ApplyMarginto Materials,Labor, Subcontractor: Check the box or boxes that shouldbe includedinthe Margincalculationson the Requirementsscreen.

After you have made changesto the Preferencewindow,clickthe OK buttonto instantlyapplythe changes. If you do not want to save your changes, press the Cancel buttonto exitthe Preferenceswindowwithoutsaving.

10.1. Sharing a Database

When FlashPoints is installed on a computer, it creates a database to hold customer and job information. This is the default database that FlashPoints uses.

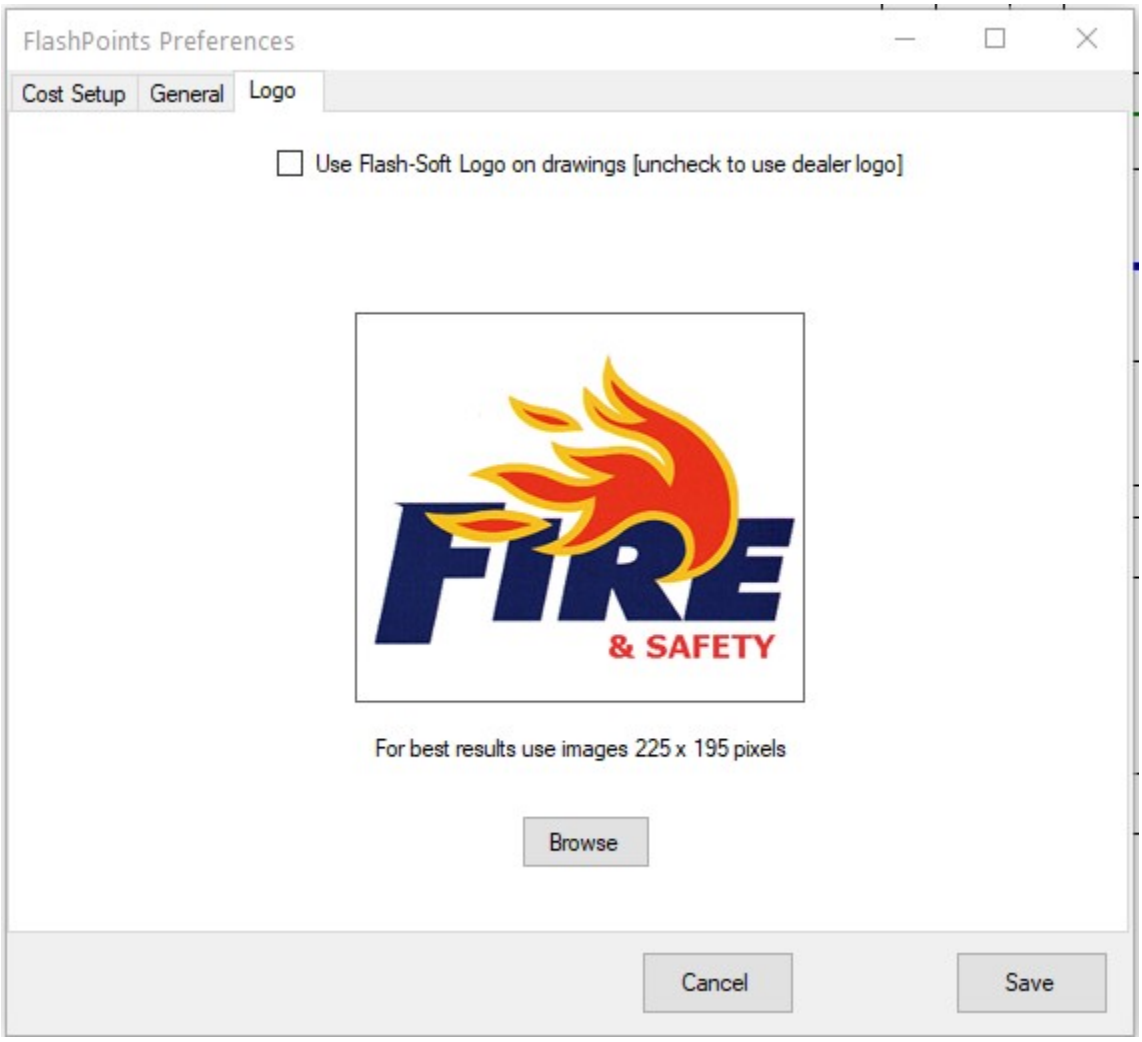
However, it is possible to create a database on another location, for example on a file server or a cloud drive (like Dropbox). Keeping the database on these locations makes it easier to backup FlashPoints data.

Additionally, if the database is on a location that is shared with other computers, like a file server, and the other computers have FlashPoints installed on them, they can all share the jobs and customers in the database. This allows multiple people to collaborate on jobs or finish jobs that are started by someone else. Using a shared database also makes it easier to start a job in the office and finish it at home, or vice versa.

To use a shared database, click the BROWSE button next to the icon on the GENERAL tab of the Settings window. Choose the location where the database is to be stored from the list that pops up. If the database does not exist, FlashPoints will create it and copy the jobs in the local database to the newly created remote database. If the database already exists, FlashPoints will switch to that database and start using it (jobs will not be copied to an existing database).

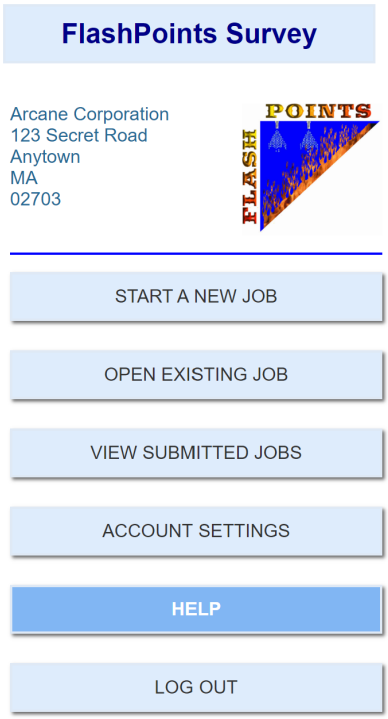
To change back to the local database, check the box next to the . FlashPoints will forget the remote database and will use just the local database.

10.2. Adding a Company Logo



Use the LOGO tab in the Settings window to add a logo to FlashPoints. If no logo is added or if the checkbox at the top of the logo page is checked, FlashPoints will use the FlashPoints logo on all drawings and reports. Clicking the BROWSE button allows any image on the computer to be added to FlashPoints as the dealer's logo. The logo will only be saved to the FlashPoints database after the SAVE button is clicked.

11. FlashPoints Survey



FlashPointsSurvey is a web-based add-on to FlashPoints SuppressionCAD. What that means is that the applicationdoes not need to be installed. It willrun ina web browser on a computer, phone, or tablet. In order to run the application,an account must be created to allow the user to login. Since thisis an ADD-ON to FlashPoints,accounts must be purchased inthe FlashPointsstore before they can be created. The completesteps for creatingan account are outlinedinthe "SettingUp a SurveyUser" topic.

Please note: itis necessary to purchase an account for each person that willbe usingFlashPointsSurvey.

11.1. Setting Up a Survey User

Settingup a new user account is a very simpleprocess. If you have ever setup an onlineaccount, likeon Amazonor Facebook, you are way ahead of the game.

Followthese steps to setup your FlashPointsSurveyusers:

1. Purchase the desired numberof user accounts inthe FlashPointsStore. You willneed 1 account for each person who willbe usingFlashPointsSurvey.

2. Open the SurveySetup window(shown at right)inFlashPoints. It is located under the Surveymenu at the top of the FlashPointsscreen.

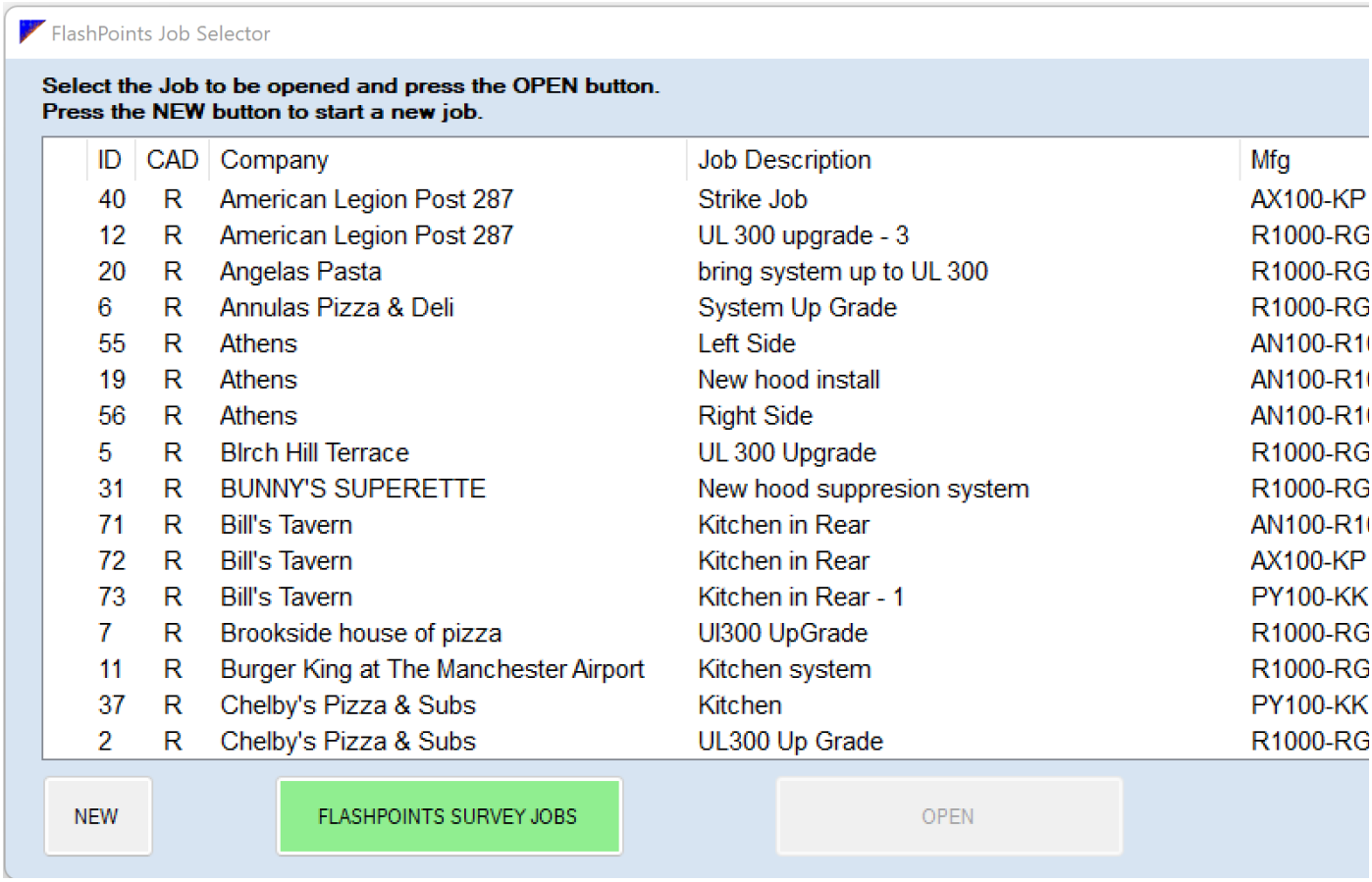
3. Have each user scan the barcode withtheirsmartphone or tablet. Alternatively,the web address belowthe barcode could be entered intoa web browser on a laptop. However, a smartphone is the recommended device.

ON THE PHONE:

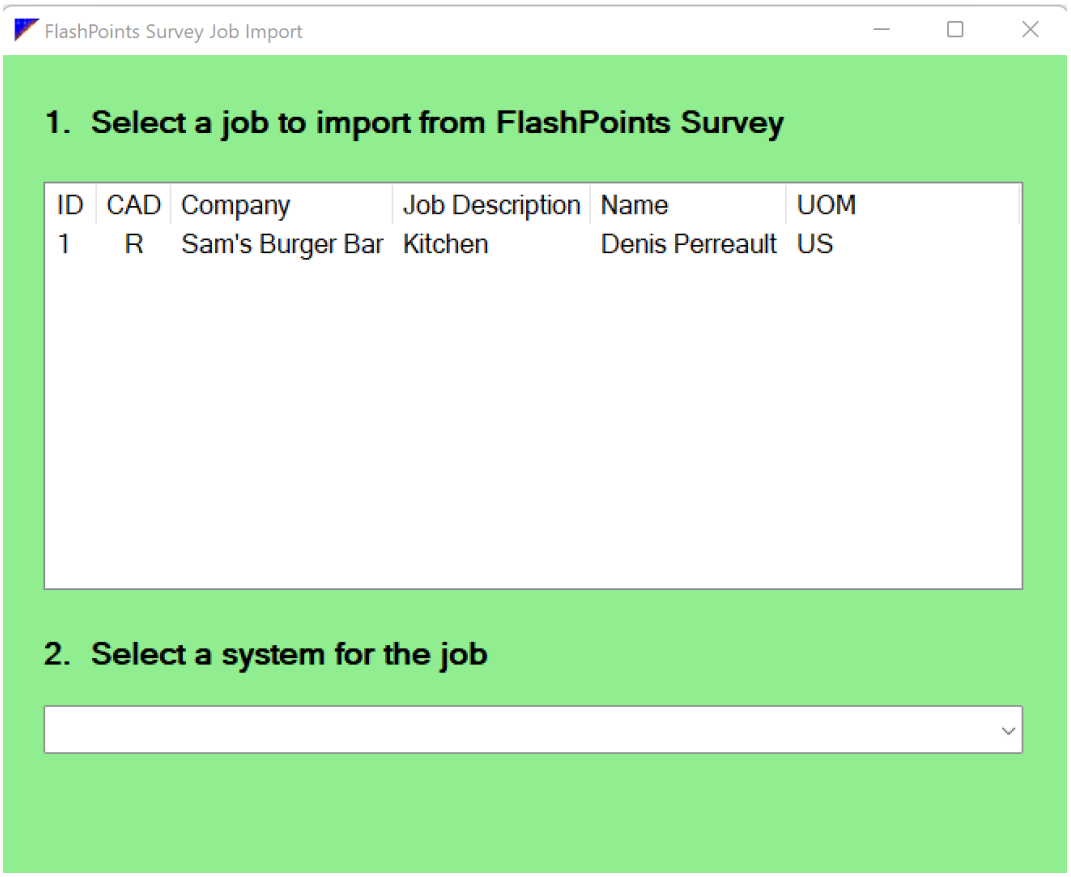
1. Clickthe CREATE A NEW USER button.

11.2. Importing a Survey

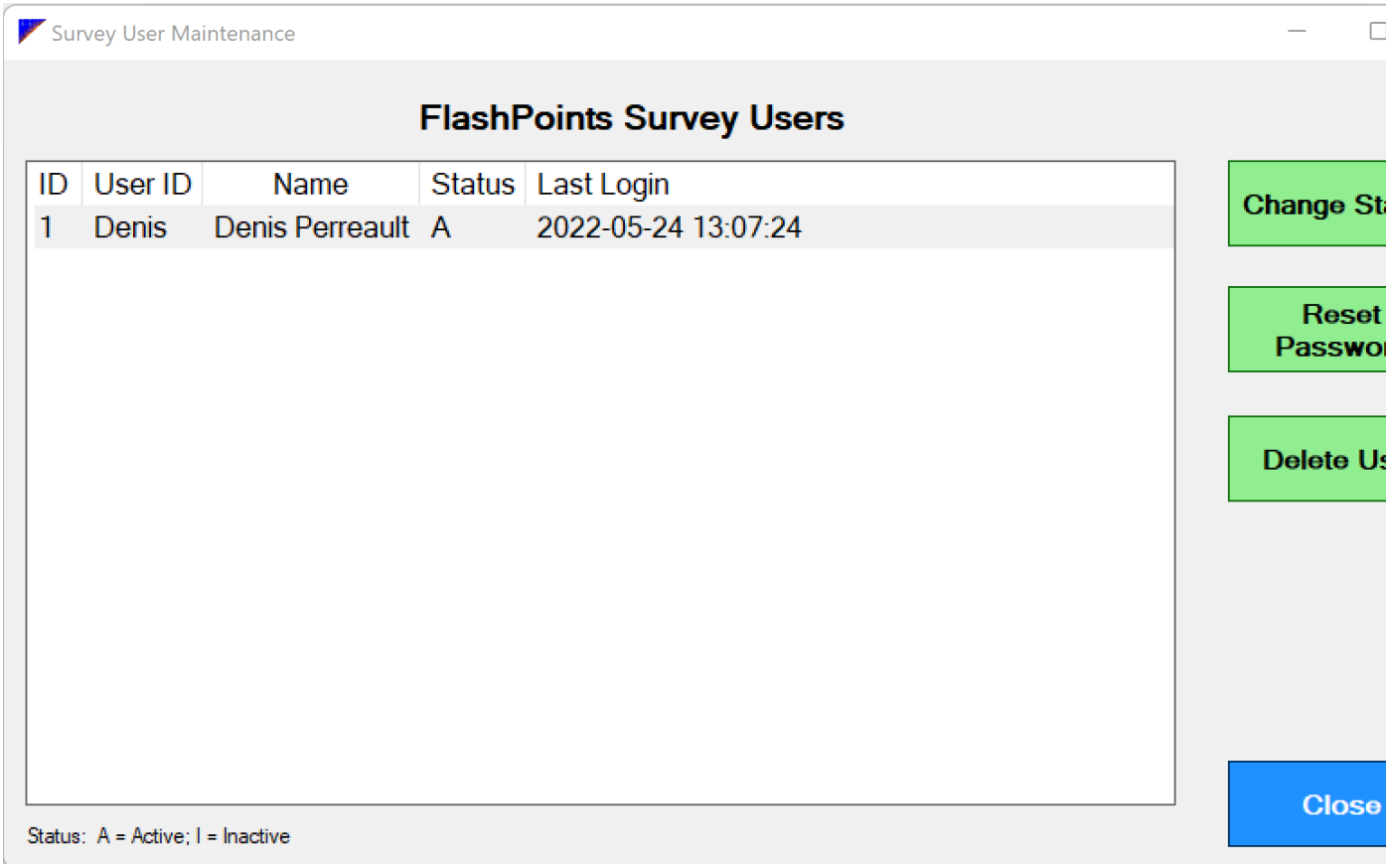
Importinga survey is a easy as openinga job in FlashPoints. In fact, they are both done fromthe FlashPointsJob Se importing,a green buttonwillappear on the FlashPointsJob Selector. Clickthe green buttonto open the importwi



Selectthe survey to be importedand choose the firesuppression system to be installed,then clickthe IMPORT butt



11.3. Managing Survey Users



The Survey User Maintenance screen allows you to manager your user account right in FlashPoints. Click on a user choose one of the buttons on the right to apply the button's function to that user.

Change Status - toggle the user between Active and Inactive status. An active user can log into FlashPoints Survey. inactive user cannot login. This will not affect surveys that have been submitted by the user.

Reset Password - passwords in FlashPoints Survey are encrypted. If a person forgets their password, this button w password to their User Id. After the password has been reset they will be able to login and change the password in FlashPoints Survey app.

Delete User - completely delete a user from FlashPoints Survey. This option will not only delete the user, but it will delete all of the jobs they have in FlashPoints Survey. It is a good idea to process any submitted jobs before using t function. Deleting a user may be required if the user has left the company and you wish to assign the account to ano person.

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