

Fire Zone Training Outline

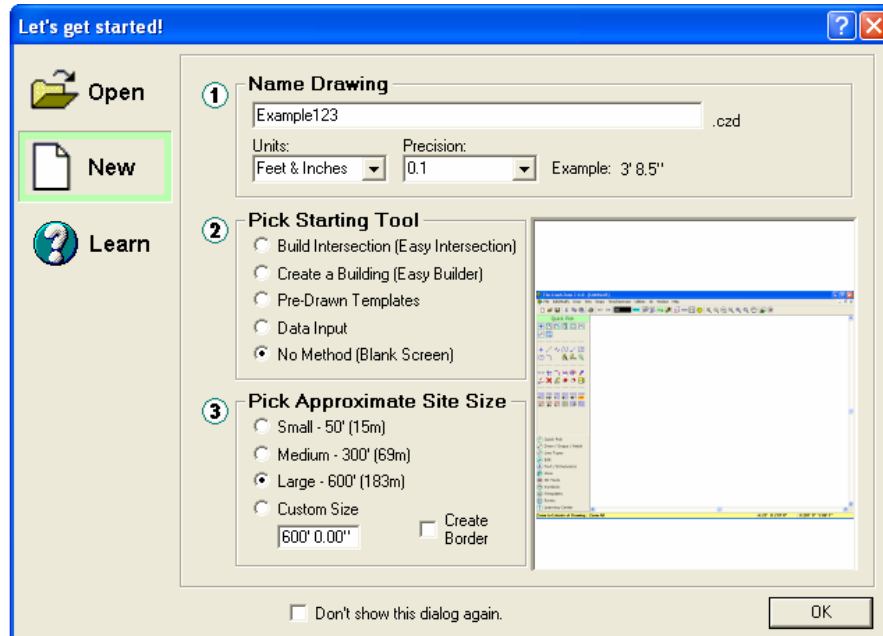
Lesson 1: Diagram Program Work Environment

OPENING SCREEN – “Let’s Get Started” DIALOG OPTIONS:

OPEN: Open existing drawing

NEW: Start a new drawing

LEARN: Learning center with tutorials, movies, manual, etc.



Auto Backup (found on the Settings Dialog from the Utilities pull-down menu) –

When the new diagram option is used, the auto backup command is automatically activated. Auto Backup settings can be changed by selecting the check box by the “Backup” option to turn automatic backup on/off. Set the time interval for backup to 5 minutes. When Auto Backup is turned on, the system will create a backup file under the same name with a .bak extension.

FILE SAVE LOCATION:

Factory Default for version 7.5 saves drawings to:

C:\Documents and Settings\Your Name\My Documents\My Cad Zone\Diagrams

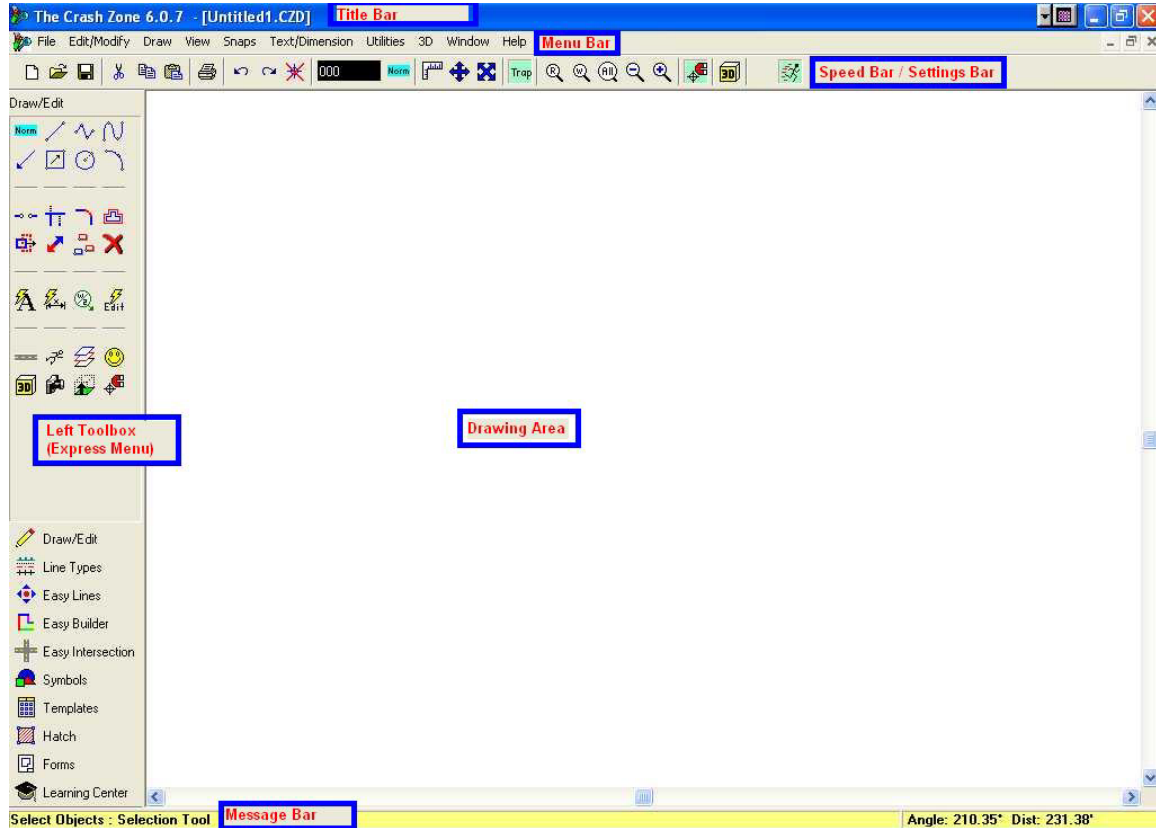
To change file save location: Go to UTILITIES pull-down > SETTINGS > PATHS

At the bottom, UNCHECK “Use Special Folders” box to save under Program folders or else use the “Save to Original Folder” check box for your own save locations.

With ‘Use special folders’ everything is saved in your user profiles. We recommend this if the user is NOT the Administrator to their local machine. Other than that, our

pathing, without any of the options checked, works just like any other program. We open and save in the last location you opened a document.

The Fire Zone Program Screen



Title Bar – current version and drawing name

Menu Bar – all commands available on the pull-down menus

Speed Bar / Settings Dialog Bar – command shortcuts and settings dialog

When Icons (Commands) that require additional settings are selected on the Tool Bars, the **Settings Bar** will pop-up in the window. After the Settings have been completed for the command and the OK option is selected, the Settings Bar disappears and the Speed Bar reappears.

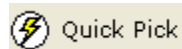
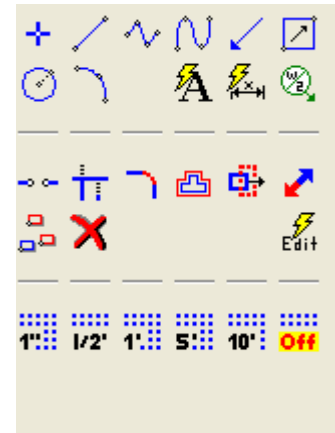
Tool Bins - these are located on the **lower left side bar** to allow easy access your drawing commands and functions. Once you select an option on the lower left, your tools appear directly above on the upper left side bar.

NOTE: commands can also be accessed from the pull-down menus, right mouse click menu options or by typing the corresponding 2-letter short cut commands.

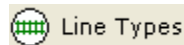
Left Tool Boxes:



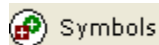
Quick Pick Main Options:



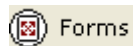
The most commonly used commands in one easy location shown above.



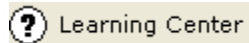
Over 60 **custom line types** made specifically for collision and crime scenes including: lane markings, double lines, dividers, guard rails, skids, trajectory, fences, etc. (specific line types: medians, fence, raised reflector, etc. appear in 3D also).



Symbol Library: includes Fire, NFPA, and Marine complete libraries



Place a border or add a simple form – automatic sizing to 8 ½ x 11



Help system with manual, training movies, tutorials, etc.

SELECTING COMMANDS - three methods:

1. **Pull Down menus**
2. **Left Toolbox and Speed Bar buttons**
3. **Typed Keyboard Shortcuts:** there are two-letter codes for every command in the program. (The appear beside the command. When typing you can see the letters appear in the command line down in the lower left corner of the screen.)

Command Line (Yellow Toolbar)

The **Command Line** at the bottom left provides 2 main functions:

- 1.) Information – displays information and properties of a selected object such as symbol name, layer, scale, and any 3D properties.
- 2.) Instructions – Displays step-by-step command prompts to tell you what to do when using various functions.

DRAWING AREA – or computer paper

The Drawing Window is the area that covers the center portion of the screen. This is the area where you make your scaled diagrams.

There are Scroll Bars at the right and bottom of the Drawing Window that enable you to scroll (move up/down or side-to-side) when the drawing is too large to fit in the viewing area. There are also Viewing Tools at top Speed bar to help you maneuver about.

SETTINGS TO WATCH:

Ortho (Angle Draw), Ortho Trap and Auto Snaps options in speed bar:



Ortho Icon looks like a small carpenter's square so you can think of it for drawing straight lines and perfect 90 degree corners and 45 angles.




Ortho Trap will “trap” your mouse movement when drawing a line at: 0, 45 or 90 degrees when your mouse gets close (not as restricting as the ortho mode).



Auto Snaps Icon looks like a Horseshoe Magnet. It allows precise drawing and measuring to “Snap” onto a point or exact end of a line.

If these Icons are turned on, they will look “pressed in” and have a green background. If they are turned off they will have a gray background and look like the other Icons.

Useful Tips - The following is a list of useful keys on the Keyboard

1. The ESC key can be used to “back-up” or “back-out” when doing a command. Pressing the ESC key a few times will close out the command. Double Clicking or pressing the Enter button is required to finish some commands like continuous line or copy.
2. Pressing the Space Bar will REPEAT the previous CAD Zone command.
3. You can point to any Icon on a Toolbar with the mouse pointer, wait a few seconds and bubble help displays that describes the command for that Icon.
4. Remember to use the Undo and Redo  commands located on the Speed bar if you make a mistake.
5. Some of the Icons and the command associated with the Icon remain in effect once they have been selected. You can tell which commands perform this way because their Icon has a **green background** when the command is turned-on. Select the Icon a second time, it will be turned off and the Icon background will be gray.

MOUSE POINTER

Almost all operations you do will be with the **LEFT mouse button**. The Mouse Pointer starts as an Arrow Pointer but will change depending on which feature you are using.



The **Arrow Pointer** is the default and when your mouse pointer looks like an arrow, you are in “**selection mode**” which means you can **select an object** in the drawing or **select a command** Icon from the Toolbars.



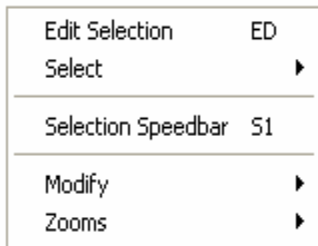
If the Mouse Pointer looks like a cross hair you **ARE** performing a command.



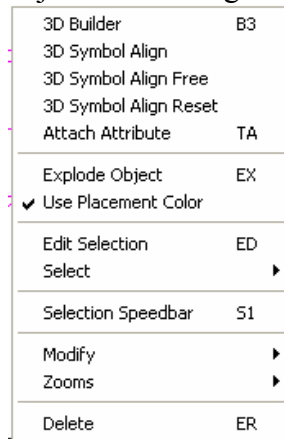
If the Mouse Pointer looks like a cross hair enclosed in a circle, Auto **Snap is turned on**. When you have Auto Snap turned on, the cursor will snap to a point, line or object within the Target circle so you can draw with. To turn Auto Snap on/off, select the **red magnet icon** on top speed bar.

RIGHT MOUSE Button Menus:

Main Menu (no object selected):



Object selected right click menu:

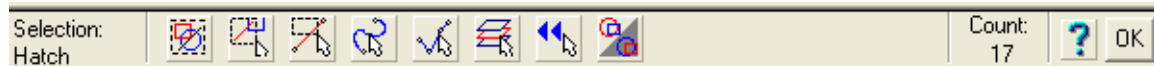


Lesson 2: Selecting Objects and Selection Tools

To modify objects on screen you need to select the object(s) first. You can click on them using your left mouse button or use a “window” to select multiple objects. The selected objects will highlight magenta in color so you can tell that have been selected.

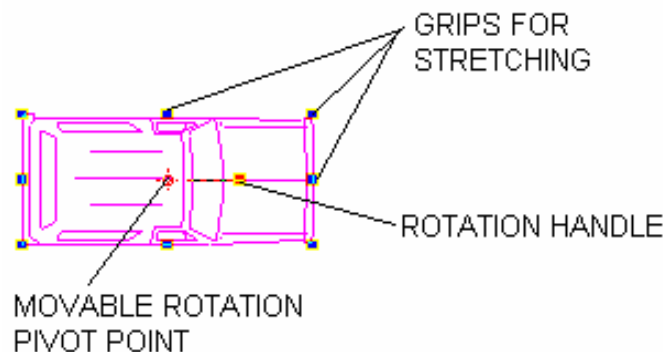
For **multiple selections**, hold down either the **Ctrl** or **Shift** button while using your left mouse to select or de-select objects.

If you forget to pick your object first and select an Edit or Modify command, a Selection Bar similar to this one below may appear prompting you with options on various ways of selecting your object. It can be a bit confusing when you are starting off, so try to remember to pick the object first before most of the commands:



EXERCISE: Load the **3D Building with Skybridge.CZD** from the sample drawings and perform the following concepts:

1. To edit (or modify) objects in your drawing, they must first be **selected**. Click on object to select it, click on “white space” to de-select.
2. Use a drag windows selection method to select objects:
 - **Left to Right window**: selects only the objects fully enclosed inside.
 - **Right to Left window** selects everything touched inside the window.
 - **Adding to the Selection – Ctrl and Shift keys**
3. When objects are selected they change to a magenta color and they are enclosed in eight blue Handles or Grips. Use handles to change the **SIZE** using the corners to change XY axis proportionally. The side grips stretch in one direction. (Make sure you are zoomed in close enough or they will not appear.)





Small blue boxes are **Grips** (handles) that allow you to **Stretch or Rotate** objects. (Must be zoomed in close enough to object for them to appear).

4.) To **ROTATE your object** you can use the Red Rotation handle that pivots around the red target point. You can drag the target (pivot) point to a corner if desired and the object can then be rotated around this point.



Red Rotation Handle is the square and the target is the pivot point.

5.) When you point to a selected object with the cursor, you will see a four-headed arrow attached to the cursor. When this happens, you can hold down the left mouse button and **MOVE** the object. Let go left mouse to drop into place.




The 4-sided arrow allows you to **MOVE** selected object (s).


Lesson 3: View Commands




There are also several different View commands available in the top speed bar to allow you to maneuver around as you work on your diagram. It is best to be zoomed in closer when you are working in an area to be more precise in what you are doing.


EXERCISE: With **3D Layout.czd** diagram loaded, practice the following concepts:


 Zoom Window – use your mouse to define the area you want a close up of to make object inside appear larger and hide the outside part from view.

 Zoom All – Causes all of the objects in your diagram to be displayed on the screen.

 Zoom In/Out – increases or decreases your screen view

 Refresh – Cleans up the screen by clearing up any stray marks or reference lines that were left by editing or erasing.

 Zoom Previous takes you back to the previous view

 Pan turns your mouse into a “Hand” to push your drawing easily around your screen (use Esc key or pick a drawing command to end this command).

Scroll Bars on side and bottom

If you have a MOUSE with a ROLLER WHEEL you can use the wheel to Zoom in and out very quickly. If your mouse does not have this active you can go to your Windows Control Panel and change the mouse settings to activate it for the CAD Zone program.

Lesson 4: Auto Snaps



Auto Snaps Icon looks like a Horseshoe Magnet. This feature allows you to make **precise and tidy** looking drawings. It is also used for dimensioning and allows you to “Snap” onto a point or exact end of a line. Snaps are also very important for doing 3D line work and surfaces.



You can always know when Auto Snaps is on, the cursor will be a cross-hair enclosed in a circle. When Auto Snaps is off, there will be no circle.

With Auto Snaps turned On, a snap is performed if there is any part of the object inside the target cursor (circle). If there is no endpoint or object within the Auto Snaps cursor, the point is placed at the cursor location without snapping.

EXERCISE:

Make sure that the Ortho draw Icon is turned off so you can move mouse freely again.

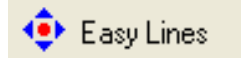
Use the Single Line command to create two separate lines aligned horizontally across from each other with space between them, example below:



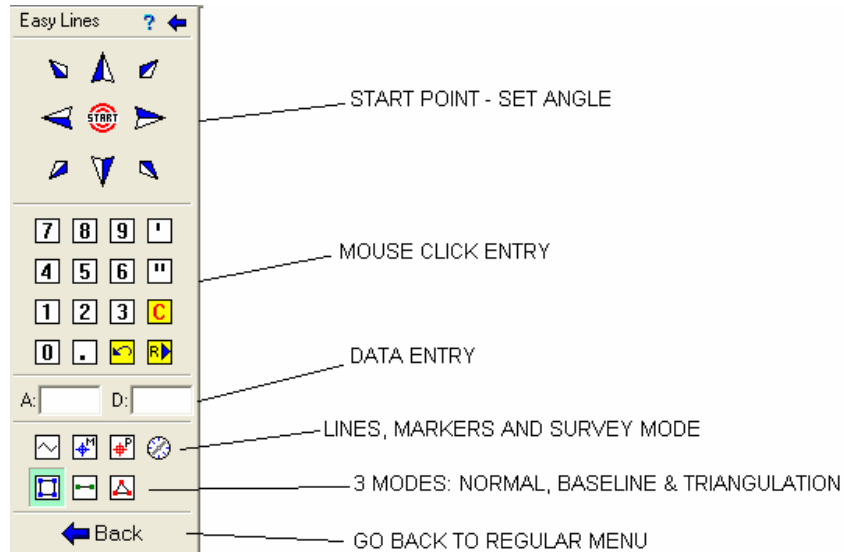
1. Turn-on the Auto Snap function.
2. Use Single Line command again. Click on one end of the line making sure the end is inside the Auto Snaps Target, then click on other line to join them.
3. The line should now look like it is one solid line, however, it is three separate lines connected together to form one line. Left click in different parts of the line to see the selection handles surround the different sections of the line.

Note: there are more **advanced** “snap” options in the Draw/Snaps/Hatch tool bin that include snapping to: mid-point, center of a circle, perpendicular, etc.

Lesson 5: Easy Lines



You can also use the **Easy Lines** method to draw lines to actual measurements, say for the walls of a building, and place markers for interior walls. Easy Lines lets you draw a continuous line by entering a direction and distance for each one, just as if you were pacing off the walls of a building.



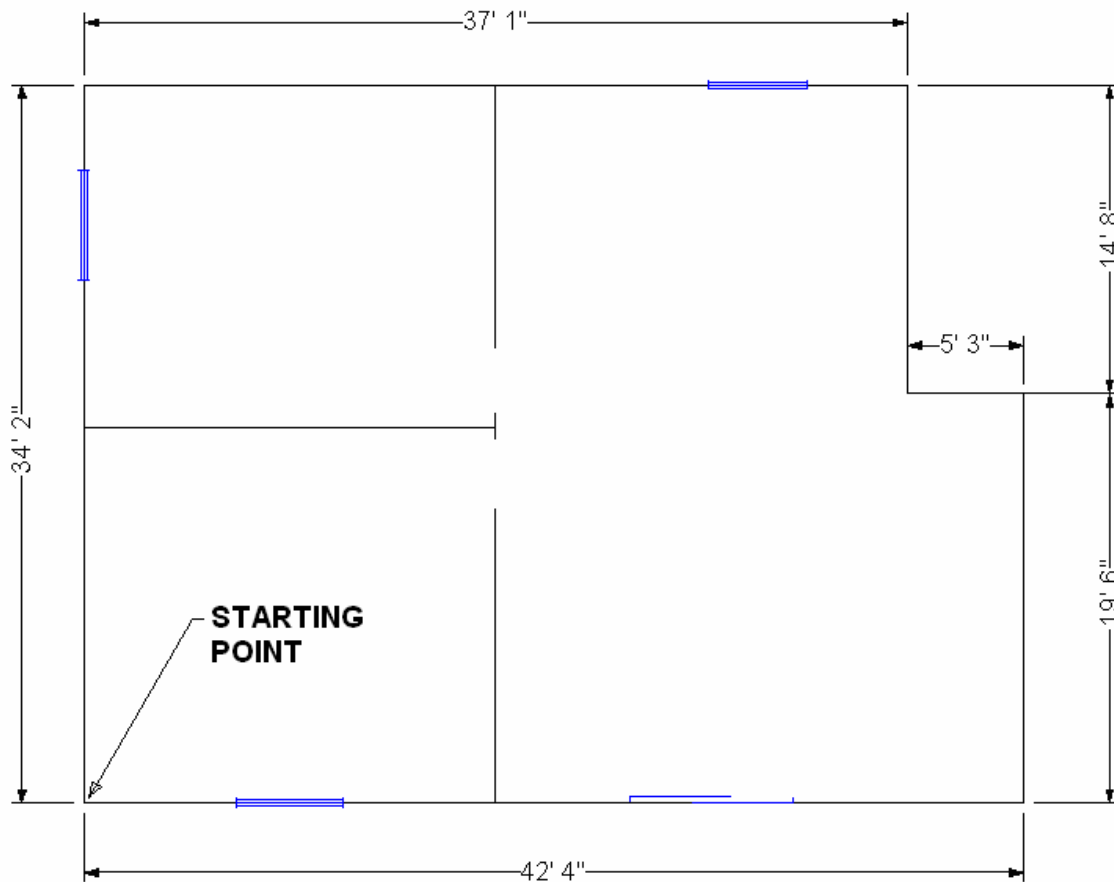
The angle and distance input can be input on either your keyboard or use the built in keypad and your mouse.

EXERCISE:

1. Open **NEW** drawing and name it "House 1" (Units "feet & Inches", precision 0)
2. Bring up the Easy Lines toolbox by selecting it from the left-hand toolbox
3. Check it is in Normal Mode
4. To establish the starting point, click on the Bulls-Eye icon in the center of the Easy Lines toolbox
5. Click near in the lower left of the screen for the starting point of the first line.
6. Click on the up direction arrow on the Easy Lines Toolbox.
7. Click 34'2" on the numeric keypad on the toolbox.
8. Click on the Line draw button in the lower-left of the toolbox and the line is drawn on the screen.
9. Now click the right arrow to establish a new direction and type the length for the next line, 37'1" in this example shown on following page.

You can continue to draw connected lines as if you were measuring around an entire building this way as shown in this example:

Easy Lines Exercise



You can use any of the View or Scroll Bar commands while you are drawing lines so you can move around where you are working.

If you wish to start drawing lines or markers from a new starting pointing, click on the Bull's Eye icon in the middle of the angle arrows. This allows you to select a new Start Point for the next line segment.

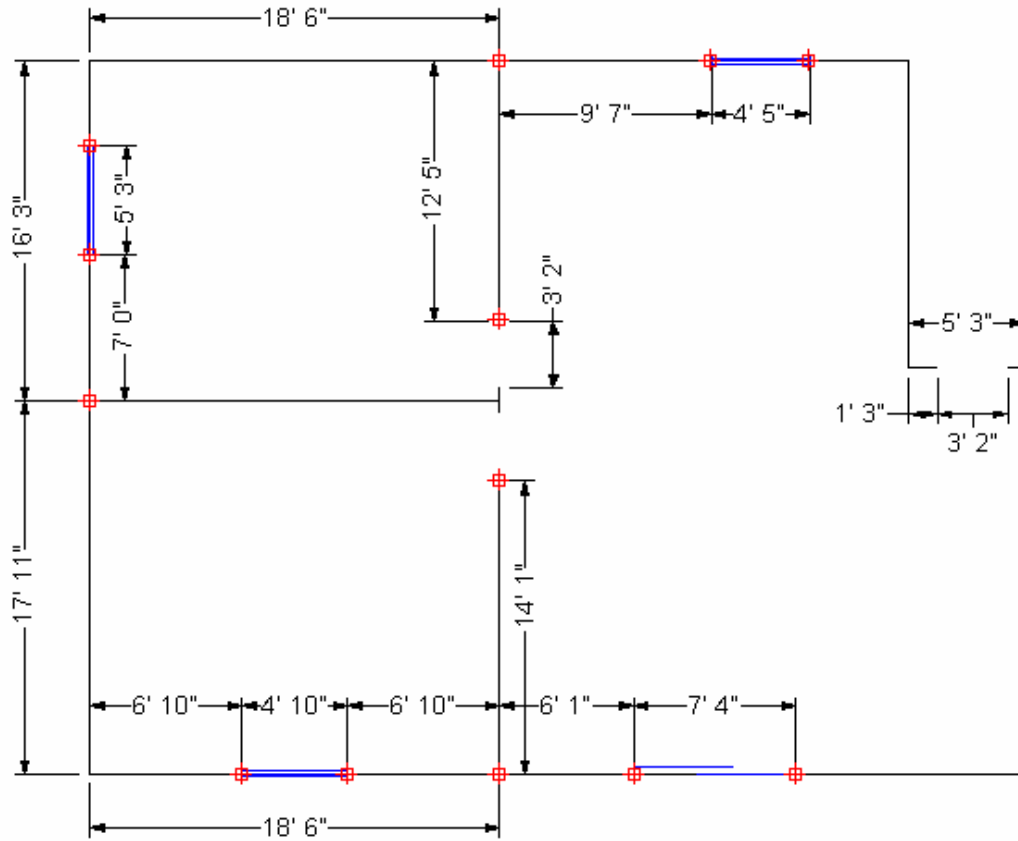
If the angle of a line you wish to draw is not represented by one of the arrow keys, simply click once inside the Angle box on the toolbox and then enter the desired angle from the numeric keypad (or the regular keyboard).

Once you click inside the Angle or Distance box, select the C button on the toolbox to Clear the value that is currently displayed in that box.

The undo arrow back arrow removes the last entry. The "R" button repeats the same angle and distance as previously entered.

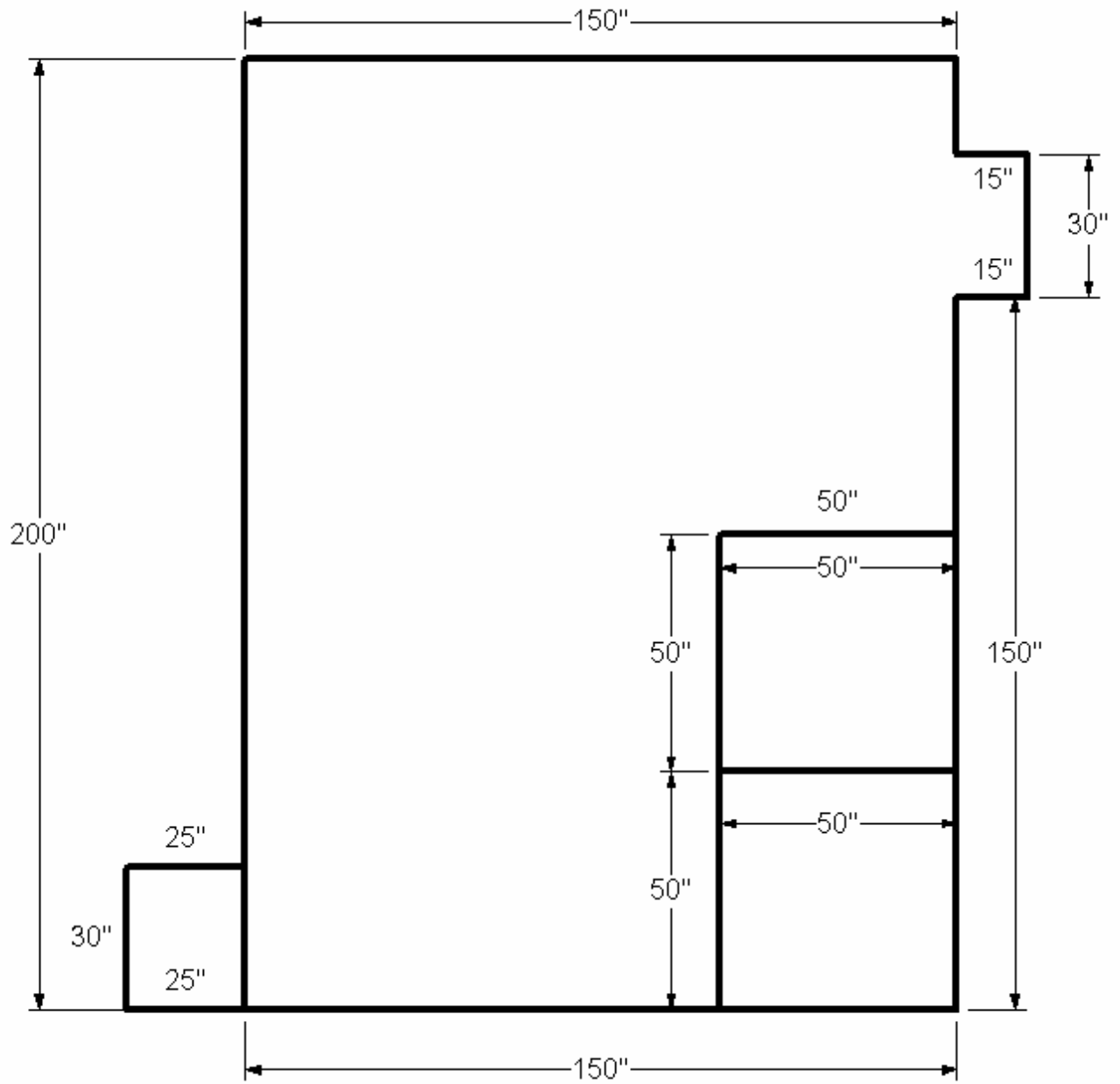
Select various starting points by clicking the Bulls-Eye then pick direction and distance but this time use the blue markers (shown here in red) to show where walls and windows

will be added later as shown in the drawing example below. We will add doors and other features in later.

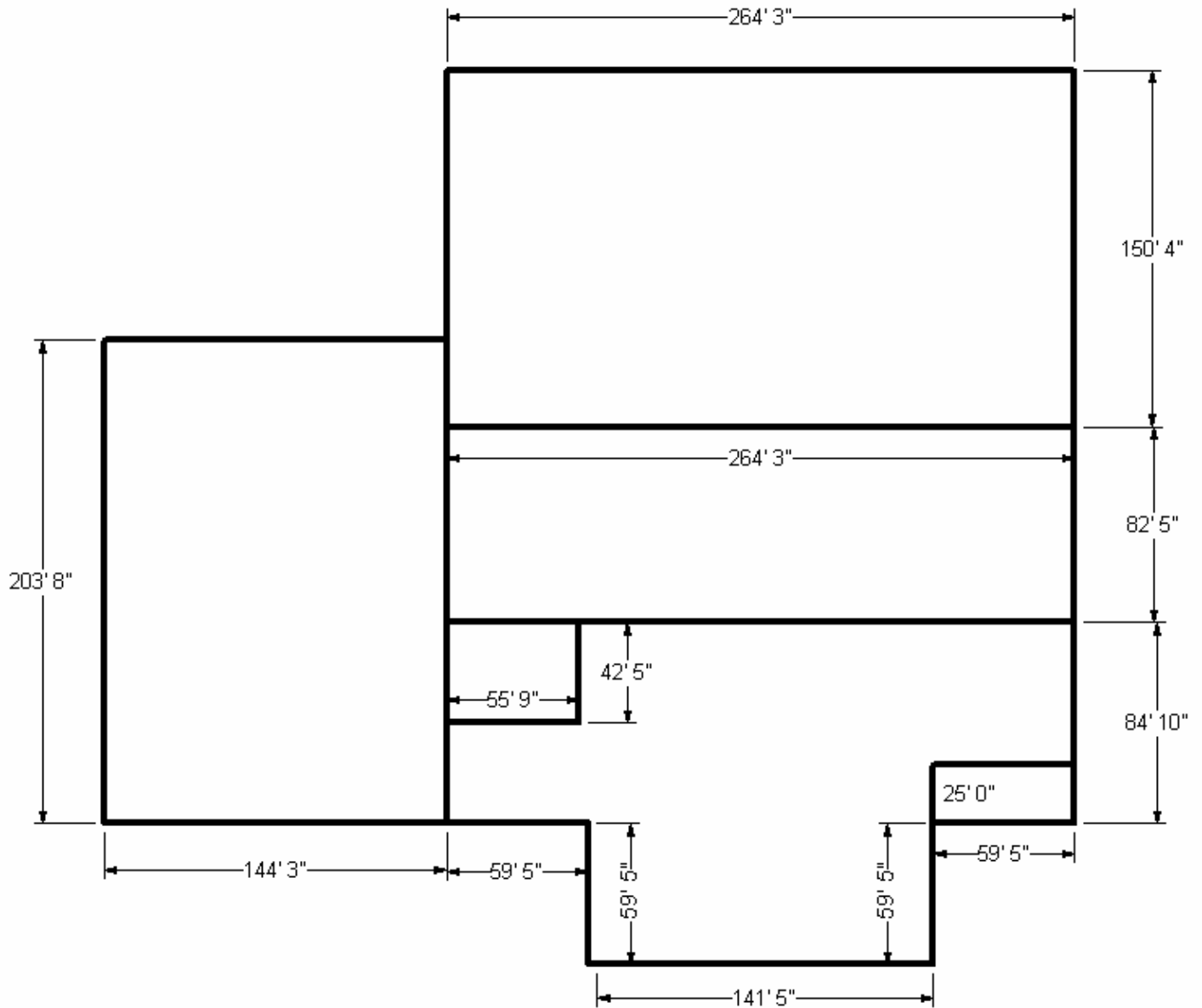


Click the Back button to EXIT using Easy Lines when done. Be sure to **SAVE** your diagram! Click the diskette icon on the speed bar.

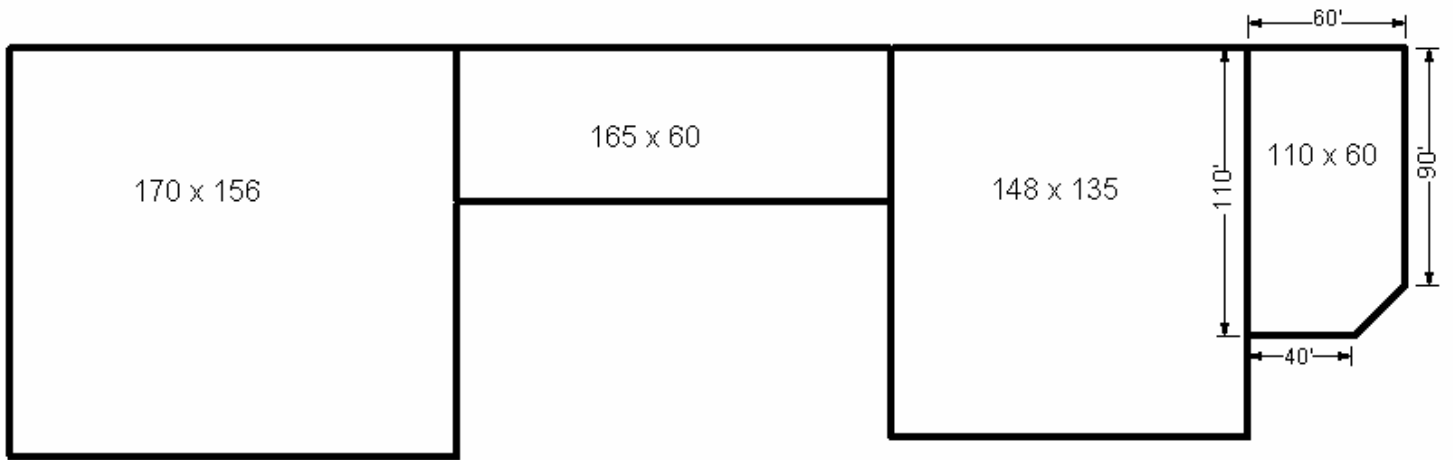
Easy Lines Exercise 2



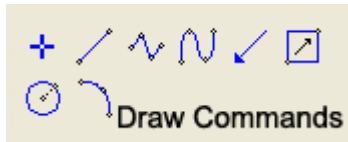
Easy Lines Exercise 3



Easy Lines Exercise 4



Lesson 6: Drawing Basic Objects



There are basic drawing commands included in the program for drawing lines, circles, boxes, curves, and arcs. Use these tools to construct streets, driveways, parking lots, rivers, and any other features of a site.

Direct Distance Method

An easy way to draw objects to exact measurements is to use the “Direct-Distance” method of entering distances. Let’s draw a single line and use Direct Distance to specify the length:

1. Select the single line command.
 2. Click once to place the start point of the line, and move the mouse in the direction the line is to be drawn.
 3. On the keyboard, type the distance of the line.
 4. Press the Enter key and the line will be drawn with the exact distance you entered.
- You can also use this method to draw other basic objects, like continuous lines, circles, etc

Lesson 7: Ortho Angle Draw

Ortho is an abbreviation for orthogonal, meaning **at right angles** or **perpendicular**. Much of your work consists of drawing lines in exactly horizontal, vertical or diagonal directions. To make this easier, the system provides three Icons that restrict the cursor movement:

Using Ortho (Angle Draw):



The Ortho Icon is on the Angle Bar and looks like a carpenter's square for restricted 0 and 90 degree movement and to the right is the Angle 45 Icon. You turn Angle Draw ON by selecting either the Angle 0 or the Angle 45 Icon; they will display a green background and will constrain the movement of the cursor.

EXERCISES:

1. Select the Angle 45 Icon and the cursor will only move in diagonal directions of 45 degrees. To switch to horizontal or vertical, select the Angle 90 Icon.
2. Select the Angle 90 Icon and the cursor will only move in horizontal or vertical directions. To switch to diagonal movement of the cursor, select the Angle 45 Icon.
3. You can turn any of these Icons on before or in the midst of a drawing or editing command.
4. Draw a Single Line using Angle Draw.
5. Select the Angle 90 Icon.
6. Use the Single Line command to draw a horizontal and then a vertical line.
7. The point where you first click with the mouse pointer is the point from which you can either move the cursor horizontally or vertically. If you move the cursor in a horizontal line you must go back to the starting point to move the cursor in a vertical line.
8. Remember the "Undo Last Operation" Icon and the "Redo" Icons if you made an error and need to go back.
9. Select the Angle 45 Icon and use the line command to draw two diagonal lines.
10. Turn-off all the Ortho off and draw a single line. When Angle Draw is turned off, you can see that the cursor can be moved in any direction freely.

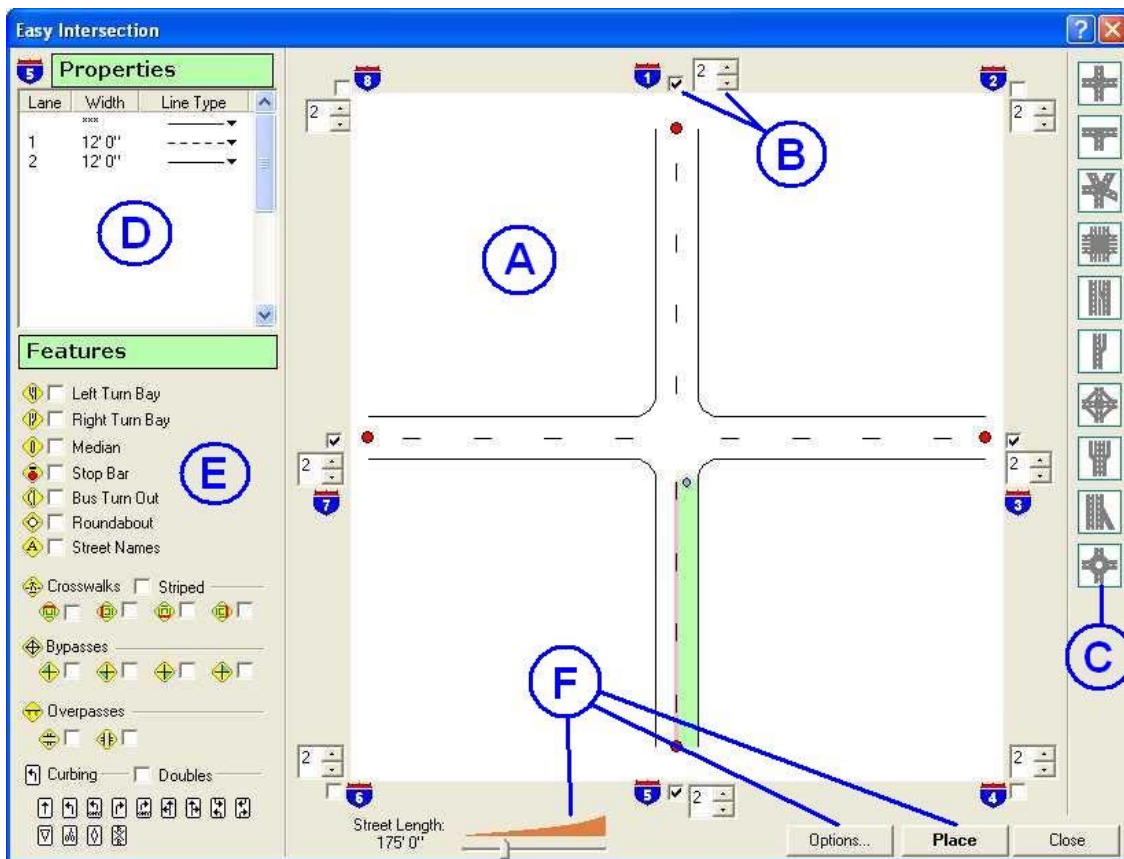
You can use the Angle Draw features to help draw any objects (line, arcs, curves), move items in a straight line, and rotate items in 90 degree increments. Also very useful in placing text straight on diagram.

Lesson 8: Easy Intersection



EASY INTERSECTION: Automated Intersection Builder

The **Easy Intersection** wizard allows you to create simple or complex intersections easily and quickly using this preview building screen then placing on the screen:



Letters Reference to sections in the above diagram:

- A.** Intersection drawing area preview
 - B.** Street selection check boxes with number of lanes (click to increase/decrease)
 - C.** Template guides (starting template format)
 - D.** Lane Properties (width and line type)
 - E.** Roadway Features (adding details shown)
 - F.** **Street length** slide bar, **Options** (settings) and **Place** inserts onto drawing screen
- The **red dots** are handles that can be used to grab the sides and angle the various sections of the intersection visually.
 - **Green shading** on the lower right lane shows that is the “selected lane” that you can set the Properties and Features for.

Easy Intersection Basics:

- 1) Each section of an intersection is referred to as a “**Street.**” The Interstate signs (1 thru 8) denote each of the streets.
- 2) Each “Street” is comprised of “**Lanes.**”
- 3) Whenever you’ve selected a “Lane” on a street, the interstate sign with that street number will be displayed in the “**Properties**” heading.
- 4) Click on a “Lane” and add any of the “**Features**” to it by checking the one or more of the “Feature” boxes.

Quick Steps:

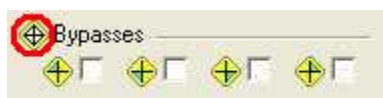
- 1) Build the basic intersection layout, establishing streets and lanes. Or, you can pick one of the pre-built templates from the templates buttons on the right side of the dialog.
- 2) Change the rotation of a street moving your cursor while clicking on and holding down the red rotate handle.
- 3) Click on a lane to select it. When selected, a **lane will be highlighted green with a red highlight on the associated lane line.** The correct lane and lane line will be selected in the 'Properties' area of the dialog. There, you can change the lane width and line type.
- 4) Further modify the selected lane by checking the appropriate item from 'Features' area of the dialog. Features include turn bays, medians, turn outs, roundabouts, street names, crosswalks, bypasses, and turn arrows. Features can be moved inside the lane with your cursor by clicking and holding down the blue rotate handle at the top of the lane.
- 5) When the intersection is complete, click on the “**Place**” button to place it in the drawing.

Tips and Tricks:

- 1) Clicking on the **Crosswalk** button located left of the description, "Crosswalks" will turn all four crosswalks on or off depending on the current state:

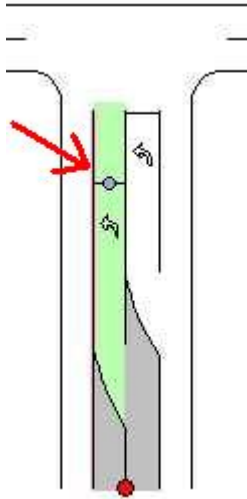


- 2) Clicking on the **Bypasses** button located left of the description, "Bypasses" will turn all four bypasses on or off depending on the current state:



3) Holding down the **Shift** key while dragging the blue bypass handles will scale all the bypasses equally and simultaneously.

4) All Features placed in a lane can be moved back away from the intersection by grabbing the **Blue Move Handle** in the selected lane:



5) All Features can be selected use the **Right click** menu. Select the lane to add Features and Right click your mouse.

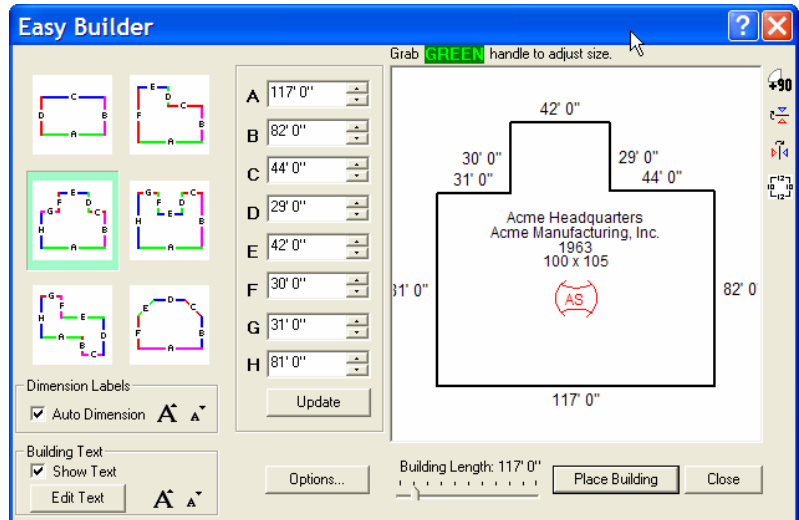
6) Use **Options** to change Lane, Crosswalk, Turn Bay, and Bus Turnout settings:



Lesson 9 – Easy Builder & Auto-dimensions

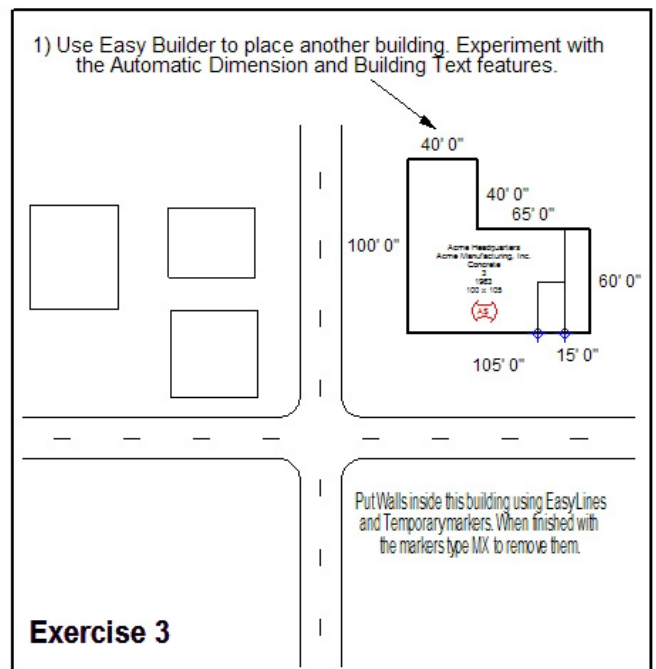
Just like the Easy Intersection toolbox makes it fast and easy to draw intersections, there is a special tool for drawing the outline of a building – Easy Builder. This toolbox lets you select a basic building shape and enter the length of each wall. You can even select to automatically dimension the sides of the building and place text typically used in insurance drawings.

- 1) Select the Easy Builder icon from the left-hand toolbox.
- 2) Select a building shape.
- 3) To specify the length of the walls, you can either enter measurements in the text entry boxes or use the mouse in the preview window to drag the walls to a new size.
- 4) Click the “Show Dimensions” button on the right side of the toolbox to toggle between showing the dimensions or the letter labels in the preview window.
- 5) Click the Mirror and Rotate buttons on the right side of the toolbox to adjust the orientation of the building.
- 6) You can automatically dimension all of the walls by checking the Auto Dimension box in the lower-left of the toolbox. Click the big or small letter A button to change the size of the text.
- 7) Check the Show Text box to display some basic information about the building, including building name, occupancy name, construction type, number of stories, distance to insured’s building, year built, overall dimensions, and a symbol for sprinklers.
- 8) Click the Edit Text button to modify the text and leave some fields blank, if desired.
- 9) When the building looks exactly the way you want it, click the Place Building button and click in the diagram where you want it.



Exercise 3 – Drawing a Building

- 1) Use Easy Builder to draw another building with the measurements shown in the figure.
- 2) Check the Auto-dimension feature.
- 3) Check the Building Text feature and edit the text to add some typical information.
- 4) When finished, click Place Building and click to place the building in the drawing.
- 5) Use Easy Lines to place some interior walls:



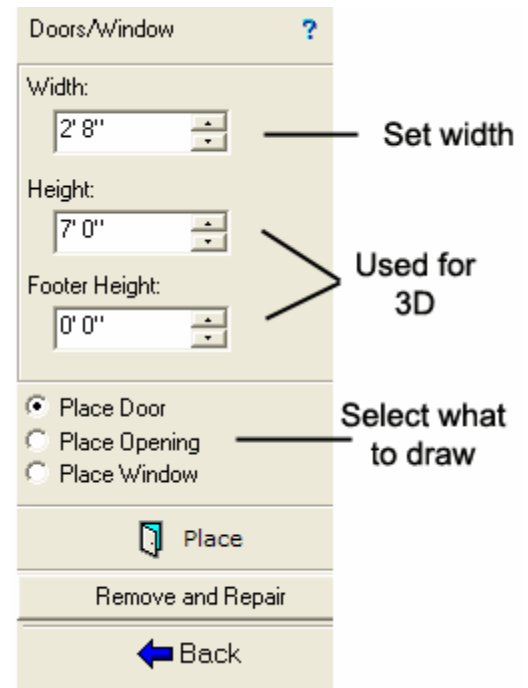
- Turn on Auto-snaps so you automatically attach to the nearest marker or line when you click.
- Click on the 90-degree button on the Speedbar to turn on Angle Draw (ortho).
- Use Easy Lines to place temporary markers at the wall corners. To place a marker, establish the start point, click the direction arrow, enter the distance, and then click the blue Marker button to place it (instead of the line button).
- Draw lines between the markers using the Line command. Click on the marker or on the wall for each point.
- When finished, type MX on the keyboard to erase all the temporary markers.

Save your diagram!

Lesson 10 – Doors & Windows

The Insurance Zone features a specialized tool for placing doors, windows and openings in walls. Use this tool to snap the door or window exactly onto the wall, adjust the swing when placing a door, and automatically break an opening in the wall. The procedure for placing a door, window, or opening, is essentially the same. You just select what you want to place from the buttons near the bottom of the toolbox.

- 1) Open the Doors and Windows toolbox.
- 2) Click in the radial button for “Place Door,” near the bottom of the toolbox.
- 3) Click the up or down arrow to set the door width or type in a value.
- 4) Similarly, enter values for the height and footer height or the door, if desired. These values are only used if you plan to view your diagram in 3D.
- 5) Select the Place button.
- 6) Click first on the desired wall to select it.
- 7) Click again to show the hinge point.
- 8) Move the cursor across the wall to see how it affects the door swing. When you like the swing, click to finish it.
- 9) To remove a door, window, or opening placed with this tool, click the Remove and Repair button at the bottom of the toolbox, then click on the item to remove.

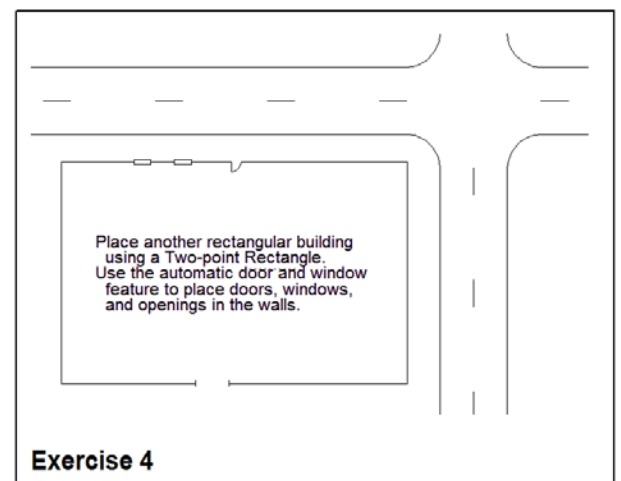


To place a window, you just repeat the above steps but select the “Place Window” radial button from near the bottom of the toolbox. Similarly, select the “Place Opening” button to place an opening in a wall. As you are placing the door, window, or opening into the wall, look at the message bar at the bottom of the screen for instructions on what to do next. These messages will explain what is expected for each mouse click.

Tip: If you do a zoom or refresh and the break in the wall seems to reappear, check to make sure there are not two lines – one on top of the other.

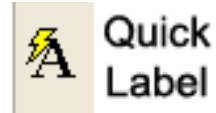
Exercise 4 – Placing Doors & Windows

Draw another large rectangle in your diagram to represent a building, then practice using the Door & Window tool to place doors, windows, and openings in the walls. Follow the steps listed in the Lesson above to place a door.



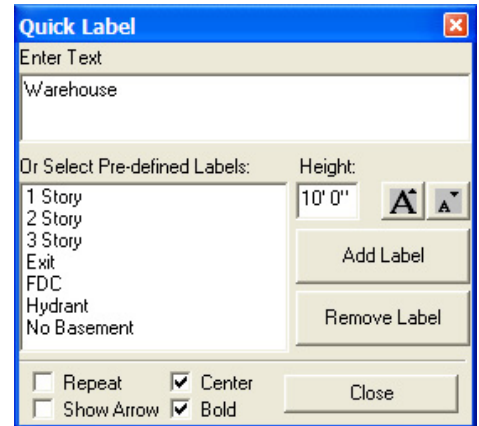
Repeat these steps to place windows and openings, just select the desired item to place from the radial buttons near the bottom of the toolbox. **Be sure to save your diagram!**

Lesson 11 – Entering & Editing Text



The Quick Label feature is used to label objects and place text in the diagram. Quick Label lets you adjust the height of the text, make it centered, make it bold, add an arrow to create a leader, and use a “Repeat” function for placing the same phrase throughout the diagram. To use Quick Label to place text:

- 1) Select the Quick Label command.
- 2) Enter the desired text in the text entry box or click on one of the pre-defined labels to place it.
- 3) Move the cursor back into the drawing window to see an outline box showing the size of the text. To adjust its size, repeatedly click the big A or small A buttons on the toolbox.
- 4) Click once to anchor the text, move the cursor to rotate it to the desired angle, click again to finish it.
- 5) Turn on “Show Arrow” to place a leader.
- 6) Turn on “Repeat” if you want to place the same text in several locations.



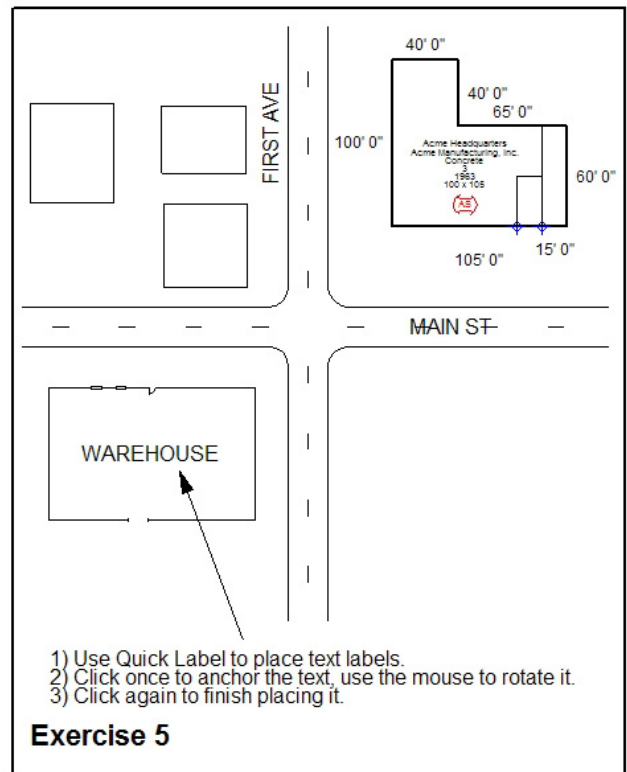
Tip: If you want all your text to be horizontal, you can click on the 90° button to turn on the Angle Draw mode. This constrains the cursor so it can only move exactly horizontally or vertically.

Quick Label has a set of pre-defined labels from which you can select and place in the diagram. You can also add and remove labels from the list.

To edit text that has already been placed, click on the text to select it and then select the Edit command on the left-hand toolbar. The text is shown so it can be edited. Make your changes and click OK to finish it.

Exercise 5 – Placing & Editing Text

Use the Quick Label command to place text in the diagram, some horizontal and some rotated. Follow the steps in the lesson, above. Select a string of text and edit it. **Save your Drawing!!**



Lesson 12 – Measure Area & Dimensions

The Measure Area command is used to measure an area and place the value as text in the drawing. Before you use Measure Area, make sure Auto-Snaps is ON (magnet icon on the speedbar) so you can automatically snap to each corner.



**Measure
Area**

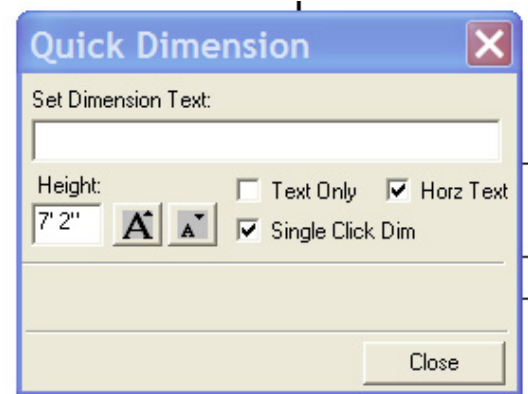
- 1) Select the Measure Area command and place the cursor on any corner of a building. Click to snap to that corner.
- 2) Click to snap to each corner of the building, moving consecutively around the building. Notice the area is displayed at the top-left of the screen and the value changes with each new click.
- 3) Click again on the starting point to finish the area.
- 4) Click the “Place Area Text” button on the speedbar and click in the drawing where you want to place the text. To change the size of the text, place it first and then edit it, as described in Lesson 5, above.

If you use the Easy Builder toolbox, you can automatically place dimensions for all the walls of a building, but what if you want to dimension something that was *not* drawn with Easy Builder? The Quick Dimension tool lets you place a dimension between any points on which you click or snap, or you can use the “single-click” mode to quickly dimension lines, such as the walls of a building. To place a dimension:



**Quick
Dimension**

- 1) If you are dimensioning to existing points, like the corner points of the walls of a building, make sure Auto-snap is turned On.
- 2) Select the Quick Dimension command from the left-hand toolbox.
- 3) Select the desired options, like Text only (no dimension lines or arrows) and Horizontal text.
- 4) Click on the first point of the object to dimension; click again on the second point. When dimensioning a wall, be sure to snap exactly to the corner points.
- 5) Move the cursor away from the wall and notice an outline of the dimension.
- 6) Click the big A – small A buttons on the Quick Dimension toolbox to adjust the text height.
- 7) Click a final time to position the text.



You can continue to place dimensions in this manner by clicking on two new points. There is also a “single click” mode which allows you to dimension any line by just clicking once anywhere along the line. Then The Insurance Zone finds the endpoints of the line automatically for you. You finish the dimension by clicking again to position the text.

Once a dimension is placed in the diagram, it can easily be modified:

- 1) Click on a dimension to select it.
- 2) Select the Edit command from the left-hand toolbar.
- 3) Select any of the options to adjust the position of the text and the dimension lines. These options let you slide the text or move it outside of the dimension lines. This can be very helpful in situations where there is not much space for the dimensions.
- 4) Click OK to finish the changes.

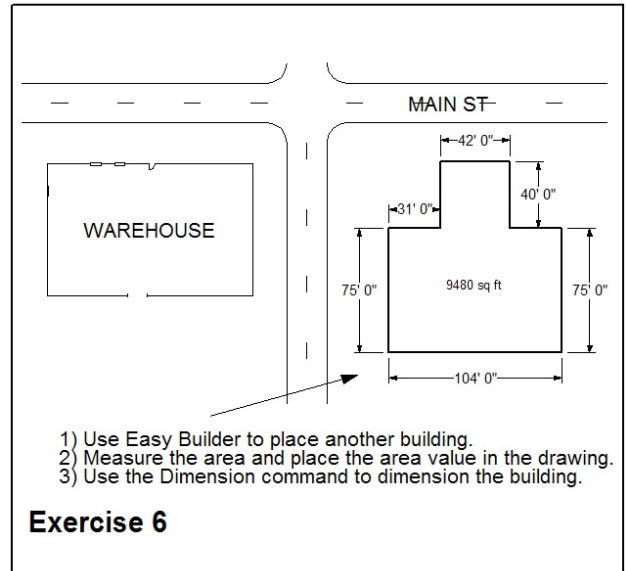
Tip: When you place a dimension, The Insurance Zone calculates the distance between the points, exactly as it was drawn. Sometimes, however, you may want to “cheat” and display a dimension value that is different than how the diagram was constructed. This can be done when you first

place the dimension, using the Quick Label tool, or when you edit a dimension. Just type in the desired value in the text entry box labeled “Set Dimension Text.” To change the dimension value using Quick Label, place the points of the dimension first so the distance is calculated, then delete that value and type in what you wish to be displayed.

Exercise 6 – Dimensions and Measure Area

Create another building in the lower, right-hand quadrant using Easy Builder. Use the Measure Area command to show how to measure its area and place the area as text in the drawing, following the steps in the lesson above. Use Quick Dimension and experiment with the different options. Use the Single Click feature to dimension the building (make sure Auto-Snaps is On). Select a dimension and use the Edit command to change the dimension value.

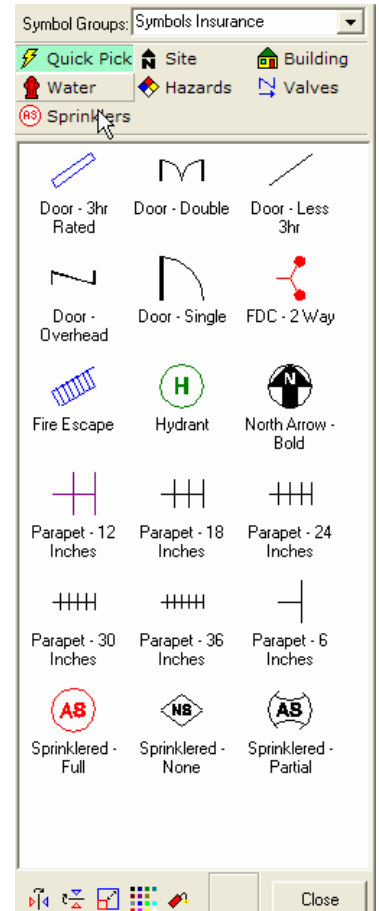
Save your diagram!



Lesson 13 – Placing Symbols

The Insurance Zone has a large number of pre-drawn symbols and several options to help you quickly place symbols in your diagram.

- 1) Click on Symbols on the left-hand toolbox. This brings up the Symbol Manager toolbox.
- 2) Select from one of the Symbol Groups using the pull-down arrow at the top of the toolbox. These symbol groups include Insurance and NFPA symbols.
- 3) The buttons at the top of the toolbox represent the various Symbol categories – Quick Pick, Site, Building, Water, etc.
- 4) Click on one of the symbols shown in the symbol preview window to select it.
- 5) Move the cursor back into the drawing window and notice a preview of the symbol attached to the cursor.
- 6) Each symbol has two handles – click or snap once in the drawing to anchor the first handle. Move the cursor and notice that you can rotate the symbol around the anchor point.
- 7) When the symbol has the desired rotation, click or snap again to finish placing it.



Once you select a symbol from the Symbol Manager, there are several options that allow you to change how the symbol looks:

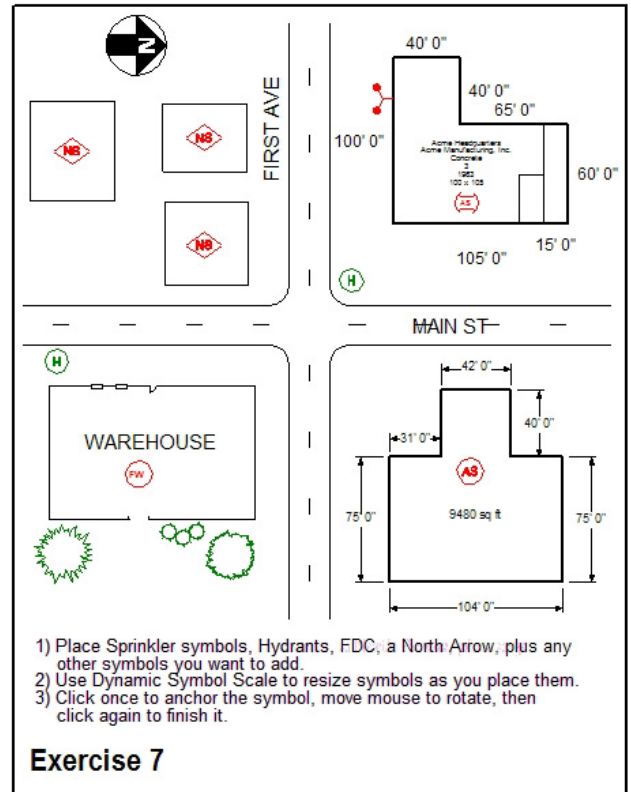
- 1) Select a symbol that is not symmetrical, like the Fire Escape. Click one of the Mirror buttons at the bottom of the toolbox. Move the cursor back into the drawing window to see the effect of the mirror on the symbol's preview. Click the mirror button again to turn it off.
- 2) All symbols are initially drawn to be a certain color. To change a symbol's color, select it from the Symbol Manager and click the color palette button at the bottom of the toolbox. When you place that symbol in the diagram it will have the new color. Click the color palette button again to return to using the default symbol colors for new symbols to be placed.
- 3) All symbols are initially drawn to a certain size. To change a symbol's size, select it from the Symbol Manager and click the Dynamic Symbol Scale button on the bottom of the toolbox. Click in the drawing to anchor the symbol and move the cursor. Now you can change the symbol's size before you finally place it. Click the Dynamic Symbol Scale button again to return to using the default symbol size for new symbols to be placed.

Most symbols are a collection of objects – lines, arcs, text, and so on. Once you place a symbol in a diagram it is treated as a single object. You only need to click once anywhere within the symbol to select it. However, this makes it impossible to edit or modify the objects that make up the symbol. To modify a symbol, you must *explode* it first. This returns it to the collection of objects and it is no longer treated as a symbol. You can explode symbols as you place them by using the Explode option at the bottom of the Symbol Manager. You can also explode a symbol after it is placed in the drawing – just select the symbol (or symbols) and select the Explode command from the Edit/Modify pull-down menu.

Exercise 7 – Placing Symbols

Place several symbols in the diagram to show sprinkler configuration, hydrant location, North arrow, trees, and so on. Make sure you try to rotate symbols, snap some into place on a wall (like an FDC), and use Dynamic Symbol Scale to change a symbol's size on placement. You should also practice moving symbols that do not get placed perfectly the first time.

- Turn On the Auto-snap command to place a symbol attached to a wall at one point, like an FDC.
- Use Auto-snap to place a symbol that is attached to a wall at two points, like a door or window. **Save your diagram!**



Lesson 14: Rotating Objects - Mouse Method

It is possible to rotate objects in a diagram using just a mouse technique without selecting the Rotate command. Once the desired objects are selected, simply click and drag the red rotation control points to perform the rotation mode.

To rotate an object with the mouse:

1. Select the object or objects to be rotated.
2. Drag the anchor point (the target symbol) to another location, if desired. This point is anchored in place and the selected objects are rotated around it. Be sure to use the snap commands if you wish to attach this axis point exactly to another endpoint, line, or arc.
3. Next, position your mouse cursor over the red control point “handle” (attached to the anchor point) of the selection box and the cursor will look like a circular rotation cursor.
4. With the cursor still on the red corner control point, click and hold the left mouse button. Notice a ghost image that represents the outline of the selected object rotates when you move the cursor.
5. Move the cursor until the object is at the desired angle.
6. When the objects are at the desired rotation angle, let up on the left-mouse button.

Unselect the objects to complete the command.

Lesson 15 – Using Line Types

You can use The Insurance Zone’s custom Line Types to draw dashed and dotted lines, fences, railroad tracks, culverts, and more. Line types can only be used when drawing “primitive objects” like lines, arcs, circles, and so on. They do not affect symbols. There are two ways to use line types. The first way is to select the desired line type first, then use the drawing tools to place objects with that line type, as follows:

- 1) Select Line Types from the left-hand toolbox.
- 2) Select the desired line type from the toolbox.
- 3) Select Quick Pick from the left-hand toolbox and then select the object you wish to draw, such as a line or curve.
- 4) Draw the object in the diagram and it will be drawn with the selected line type.
- 5) Continue to draw other objects and they will all have the selected line type.
- 6) Go back to Line Types on the toolbox and click the Norm button at the upper-left to return to drawing with a normal, solid line type.

The second way to use line types is to modify objects that have already been placed in the drawing:

- 1) Select some existing objects in the diagram, like lines, circles, curves, and so on (hold down the Shift key and click to select multiple objects).
- 2) Select Line Types from the left-hand toolbox.
- 3) Select one of the line types from the toolbox, like a dashed line type or a fence.
- 4) All the selected objects will be changed to the selected line type.
- 5) On the Line Type toolbox, select the Norm button to return to a normal, solid line type.

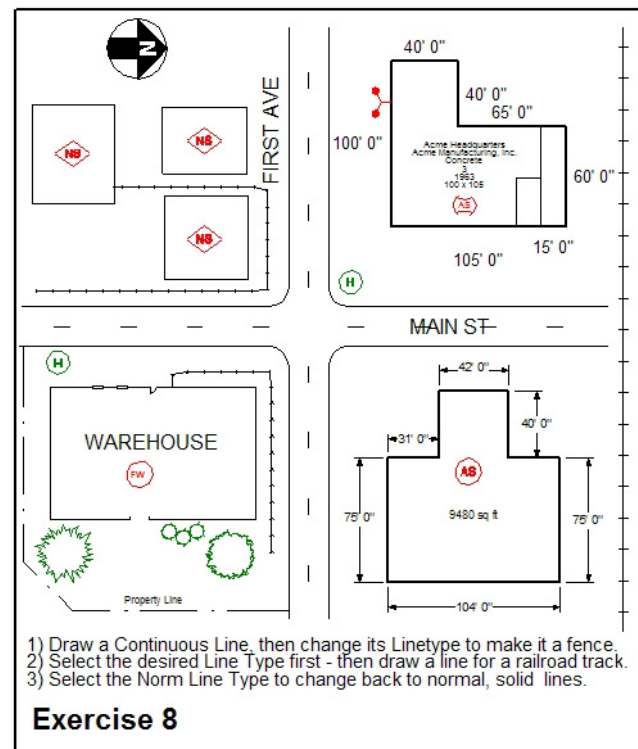


Exercise 8 – Using Line Types

Experiment with line types by placing fences, railroad tracks and property lines in the drawing.

- 1) Use the Continuous Line command to draw lines around some of the buildings for fences.
- 2) Select all the lines (hold down Shift key) and then select Line Types from the toolbox.
- 3) Click on the Fence 10' Line Type and all the selected lines will turn into fences at once.
- 4) Select another Line Type, like a dashed type or Railroad tracks. Go back to Quick Pick on the Toolbox and use the line or curve drawing tools to draw with the new line type.
- 5) On the Line Type toolbox, select the Norm button to return to a normal, solid line type.

Save your diagram!

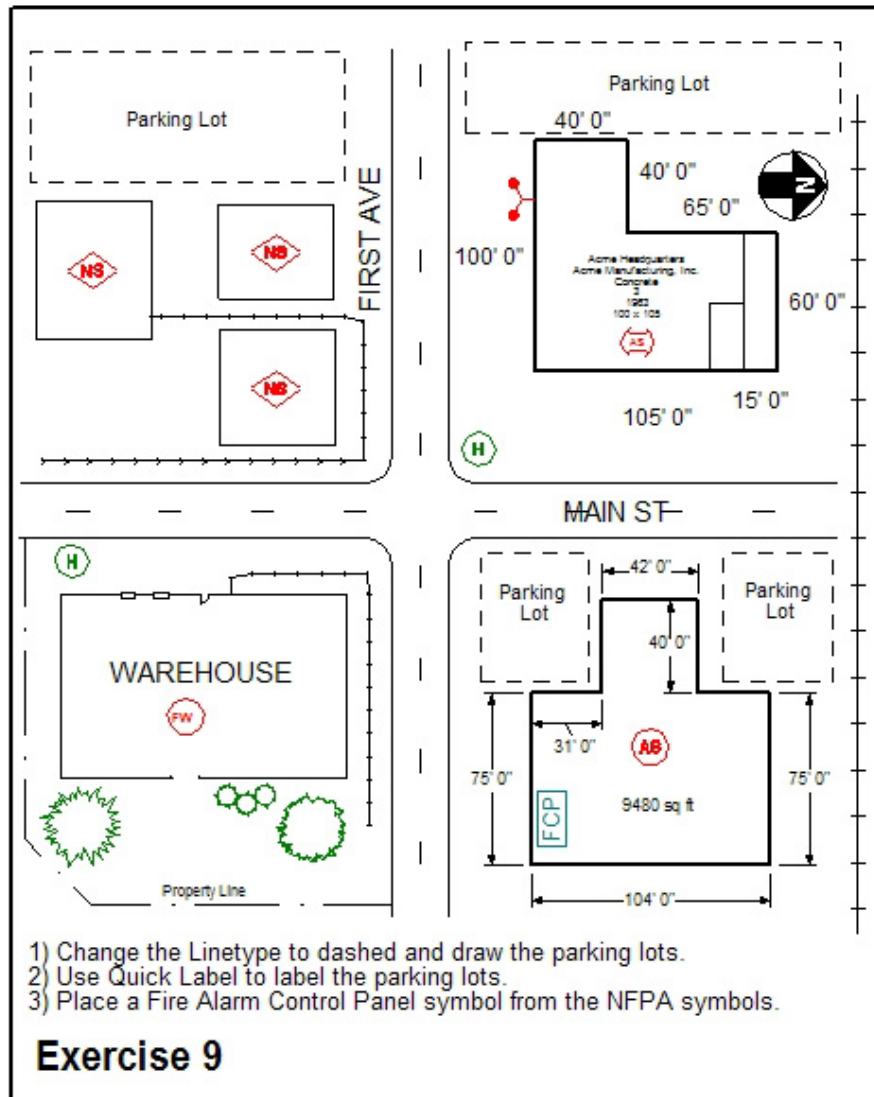


Exercise 9 – Line Type, Text & Symbol Review

The following exercise is a chance to review several of the previous lessons, including drawing, editing, using line types, and placing text and symbols. Refer to the previous exercises for more details on how to perform each step, if needed.

In this exercise you will add some parking lots using a dashed rectangle label them with Quick Label and add some additional symbols.

- 1) Change to a dashed line type and use the Rectangle tool to draw parking lots. Change back to the Normal line type.
- 2) If there is not room on the screen, zoom back or move some things around (like the North Arrow). You can also edit some of the dimensions to move them out of the way (select it and click Edit on the toolbox).
- 3) Use Quick Label to label the parking lots. Use the Repeat option to place the same phrase at multiple locations.
- 4) Open the Symbol Manager and change to the NFPA Symbol Group. Select the 5-05 Cntrl Group; select the Fire Alarm Control Panel symbol and place it in a building. Change back to The Insurance Zone symbol group.
- 5) **Save your diagram.**



Lesson 16 – Place the Form and Print

The Forms feature is used to automatically place a rectangular border around your diagram. This makes it easier for you to print the diagram at a specific scale. These borders “preset” many of the options for you that would normally have to be done when you print the diagram.

To place a form around your finished diagram;

1. Select the Forms feature from the right-hand toolbox.
2. Use the various buttons displayed on the toolbox to adjust the paper size, orientation, and scale at which you wish to print the final diagram.
3. Choose the paper size from the toolbox
4. Choose the paper orientation (Portrait, Landscape, or Best Fit) from the toolbox.
5. Enter a Drawing Scale
6. Select the Place Border button to place the border.

Based on the selected paper size and orientation, the print border is placed around the diagram and the print scale is automatically calculated. The scale value that is calculated (such as 1” = 25”) refers to the scale that diagram will have when it is printed.

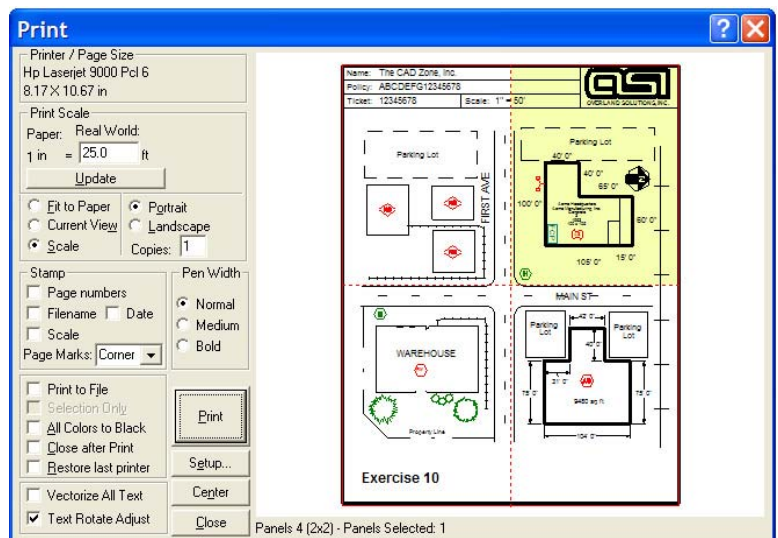
Printing and Print Tiling

When you are ready to print your diagram, just click the printer icon on the Speedbar, or select Print from the File Pull-down menu. There are a number of different options on the Print dialog box. There are three basic ways to determine how your diagram will be printed:

- 1) Fit to Paper fits the entire diagram on a single sheet of paper.
- 2) Current View prints the current zoomed view of the diagram on a single sheet.
- 3) Scale allows to enter an exact scale to use for printing. This scale is entered in the format:
X inches on paper = Y feet in the real world

Other options include the ability to change the paper orientation from portrait to landscape, add page “stamps”, change line widths to be bolder, and Setup your printer.

Two options at the bottom of the toolbox help adjust the rotation of text on the print. Some printers seem to rotate all text in the diagram by 90°. If you notice this happening, select Text Rotate Adjust and see if this solves the problem.



Printing Tiling

When printing diagrams to an exact scale, it is possible to specify a scale that does not allow the diagram to fit on one sheet of paper. In this case the program automatically uses Print Tiling to divide the drawing up so it can be printed on multiple sheets. If you don't have access to a large-scale plotter, print tiling gives you the ability to print your diagrams on multiple sheets and tape them together to construct a larger print.

To use Print Tiling:

1. Select the Print
2. Click in the Scale radial button to select printing to an exact scale. The other two selections do not allow tiling. Fit to Paper will fit the entire diagram on a single sheet of paper. Current View will display the current zoomed view of the diagram on the drawing screen and print out on a single sheet.
3. Set the Print Scale value to some scale that requires more than one sheet of paper to print the drawing. As the scale value decreases, the number of required panels increases. For example, it takes more panels to print a diagram at a scale of 1" = 20' than at a scale of 1" = 50'.
4. After setting the scale, click on the Update button to see your results. You will need to click Update each time you enter a new scale to see the effect that scale value has on the print.
5. Once the panels are shown in the preview window you click on individual panels to select them for printing. You can choose to put a page number and corner marks on each panel so you can easily tape them together to create a large size print.

Exercise 10 – Placing the Form

- 1) Click the Form button on the toolbox and the form is inserted around the diagram.
- 2) Select and edit the text as desired.
- 3) Save the diagram.
- 4) Select Print and experiment with the printing options.

Name: The CAD Zone, Inc.

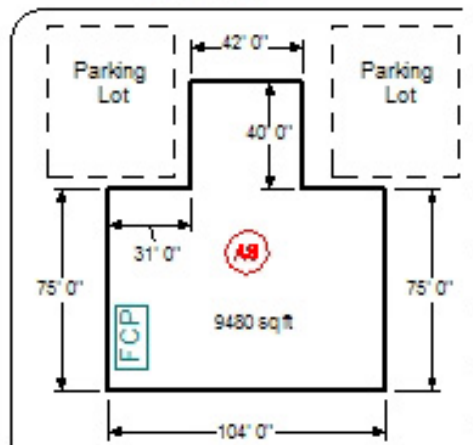
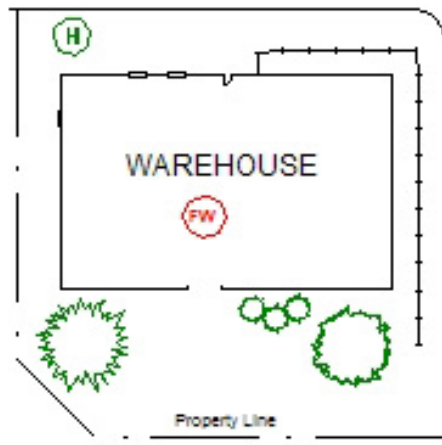
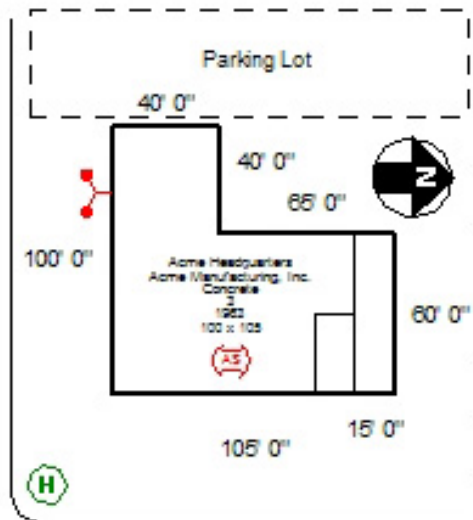
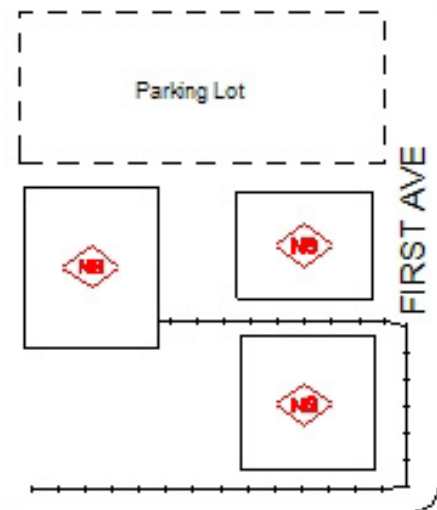
Policy: ABCDEFG12345678

Ticket: 12345678

Scale: 1" = 50'



OVERLAND SOLUTIONS, INC.



- 1) Click the Overland Custom Form icon on the toolbox.
- 2) The form is inserted and filled out automatically.

Exercise 10

End of day one!

Lesson 17: Editing Options



QUICK PICK EDITING commands



BREAK: allows to “erase” a section of a line or object

This command can be useful when drawing intersections, driveway, merging lanes, etc.

EXERCISE: to create a Break in a line > START NEW “EDIT” DRAWING
Select the line, then go to the Left-hand Quick Pick Toolbar and select the Break Icon. (Follow the instruction in the message bar too.)

Click the mouse pointer on the line where you want the break to begin. The break will start at the point closest to the place you point. The mouse pointer cross-hair must touch the line.

Move your mouse pointer along the line and a dynamic preview of the break (line erasing) follows the cursor movement.

Click on the line where you want the break to end. You now have two lines.



TRIM & EXTEND: lengthen or shorten lines precisely to other lines

You can use this command to trim or extend lines, continuous lines, arcs, and curves. For example, when creating a building or intersection you can trim or extend a line that represents one side so it connects precisely to another.

EXERCISE: Using Trim & Extend command

Use the Single Line command and draw 4 single lines (about 50-60’ each) to form a box shape. When drawing the box, make 2 of the corners overlap and 2 of them too short (not connected).

1. From Left-hand Quick Pick Toolbox, select the Trim & Extend Icon.
2. To trim two lines so they match precisely, first select the line that needs to be trimmed (too long) or extended (too short).
3. Next, select the line to which you want to trim/extend the first line to meet.
4. Perform this process for each corner of the box.



FILLET: make a curve between 2 points (defined radius)

EXERCISE: using Fillet command

Use the Fillet command to create rounded corners between lines, arcs, and rectangles.
(Continue to use the box drawn in the previous step to perform this exercise).

1. To fillet two objects:

2. From Left-hand Quick Pick Toolbox, select the Fillet Icon
3. The Fillet Settings Bar pops-up below your speed bar just above your drawing area so you can type in the precise radius for your fillet curve.
4. Enter 10 in the “Fillet Radius” text box to set to make a 10 foot radius fillet.
5. Click the first line to be filleted.
6. Click the second line to be filleted.
7. Move your cursor around the area and notice the preview of the fillet arc moves to give you different placement options.
8. Click when the preview fillet arc is in the correct location.
9. The filleted objects will be trimmed automatically to meet the fillet arc exactly at the tangent points.

TIP: you can set the radius to 0 (zero) to make a sharp corner if you wish.



OFFSET: to make a parallel copy or double up lines

Use the Offset command to make parallel copies of: single lines, continuous lines, polygons, curves, circles, arcs, or ellipses. Applications can be for making double walls or adding sidewalks, extra road lane, etc.

EXERCISE: Using Offset command

1. Draw a line on your drawing which will be the “base” for the drawing additional parallel lines.
2. From Left-hand Quick Pick Toolbox, select the Offset Icon. A Settings Bar will appear below the top Speed bar. It displays an “Offset distance” box that contains a value and a check-box labeled “Fixed distance.”
3. If the Fixed Distance check-box is checked, this will be the offset distance between the original object and the new, parallel object. Click either side.
4. If more than one object is selected to be offset, a fixed offset distance must be entered, i.e. there is no rubber banding preview as with single objects.
5. If the Fixed Distance box is not checked, the parallel object moves freely as you move the cursor, and the distance between the two objects is dynamically displayed in the Offset distance box as you move your cursor.
6. When the parallel object is in the desired location, click to place it. If you wish to repeat this process, press the Space Bar to repeat previous commands.



STRETCH: select object to lengthen or shorten

Use the Stretch command to stretch or reshape objects such as lengthen a roadway or building. (Cannot be used on 3D symbols, use handles on those instead.)

EXERCISE: Using Stretch command:

- 1.) Use EASY INTERSECTION to draw a simple intersection and place in you current drawing.
- 2.) From Left-hand Quick Pick Toolbox, select the Window Stretch Icon. Then drag a “stretch window” on one end of the roadway that encloses the lines (one end) on the intersection that we want to shortened or lengthen out.
- 3.) Click to define a starting reference point such as the end of the centerline.
- 4.) Click further out to place an ending reference point – use the Ortho angle 0 to make it straight. Watch the bottom right command line for movement distance or simply type in a value such as 75 to stretch out exactly 75’.



MOVE: allows you to move objects using snaps for precision

EXERCISE: using Move command

- 1.) Select the object(s) you wish to move.
- 2.) From the left hand Quick Pick tool box choose the Move command icon.
- 3.) Click to a reference point that defines where selected objects are moved from.
- 4.) Then Click a point to define where selection will be moved to.

To move the objects to an exact location, be sure to use a Snap command.

Tip: You can also move objects without selecting a command by using a “mouse method” 4-sided arrow but this does not let you use snaps so it is less precise.



COPY: makes one or multiple copies of a selected item(s)

EXERCISE: using Quick Copy command

- 1.) Select the object(s) you wish to copy.
- 2.) From the left hand Quick Pick tool box choose the Copy command icon.
- 3.) Click or snap to a reference point that will define where selection copied from.
- 4.) Move mouse to where you want to place and click. You can use snaps or Ortho angle for precision. You should see a ghost outline of the copies which provides a dynamic preview of where the copies will be placed.

5.) use Esc or Double click to end this command

Tip: Like other Windows based programs, you can also use the copy/paste icons on the top speed bar (or keyboard Ctrl C and Ctrl V commands) to copy objects within you drawing, between 2 open drawings or even into a Word document.



DELETE: erases object(s) selected

When this command is selected it performs the same function as the **Delete key** on your keyboard; use the Delete (or Erase) command to delete unwanted objects.

To delete objects from your drawing:

1. Select the objects to be deleted.
2. Choose the Delete command from the left Quick Pick toolbox.
- 3.) Object will be deleted.

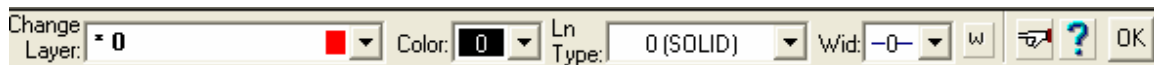
Tip: Like other drawing and editing commands, Erase is reversible. To restore an item or selection that has been erased, click the Undo button on the top Speed Bar.



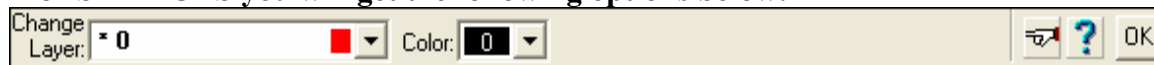
EDIT: change Color, Layer, line type, width or Edit Text & Dimensions

EXERCISES:

- 1.) Select the object(s) to be modified.
- 2.) Choose the Edit command from the from the left Quick Pick toolbox.
- 3.) Depending on the selected object you will get different options:
 - For TEXT: it brings us the “Text Edit” dialog options
 - for DIMENSIONS: it brings up the “Dimension Edit” dialog
 - for LINES and SHAPES you get the following option bar selections:



- for SYMBOLS you will get the following options below:



Important tip: If using either of the 2 above option bars for changes, **you must click OK** when completed or the changes will not be made.

Lesson 18: File Basics

Save and Open files

Open a backup “. BAK” file

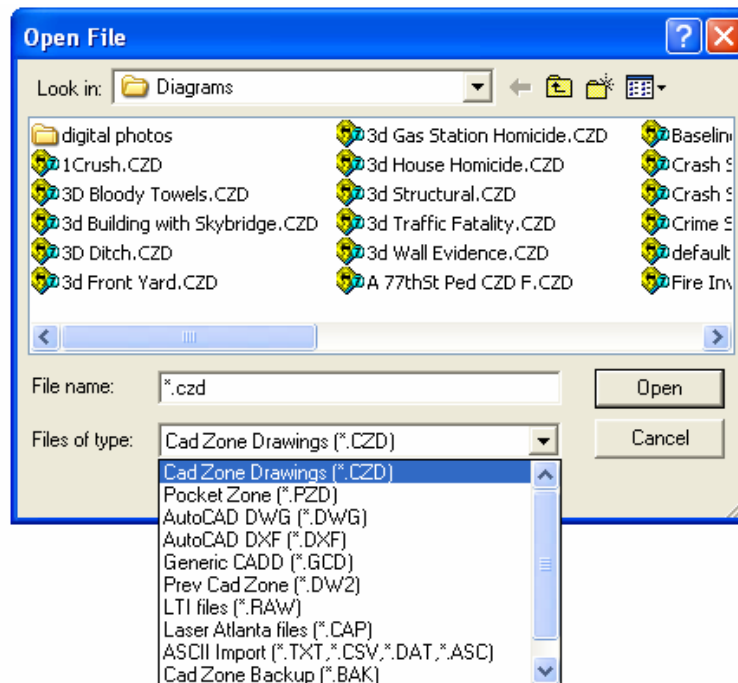
Merge a file

Importing Bitmaps

Exporting file types: Vector and Raster format options

A.) OPEN existing drawing, the .CZD (CAD Zone Drawing) format is the default. To open other file formats, click the “files of type” down arrow to see other options.

You can select AutoCAD (.DWG) files, .DXF files, ASCII Coordinate data from total stations, etc.



If necessary, change the path and drive in order to locate the file you wish to open. You can click on the “Open” button to browse various folders to find your files.

In the list window, double-click the file name, or select the file name and click Open.

The program default path for the DIAGRAMS folder is:

C:\Documents and Settings\Your Name\My Documents\My Cad Zone\Diagrams

Version 7.4 has a new pathing set up options to view these:

Under the UTILITIES pull-down select SETTINGS then the PATHS tab. This allows you to create folders elsewhere and set paths.

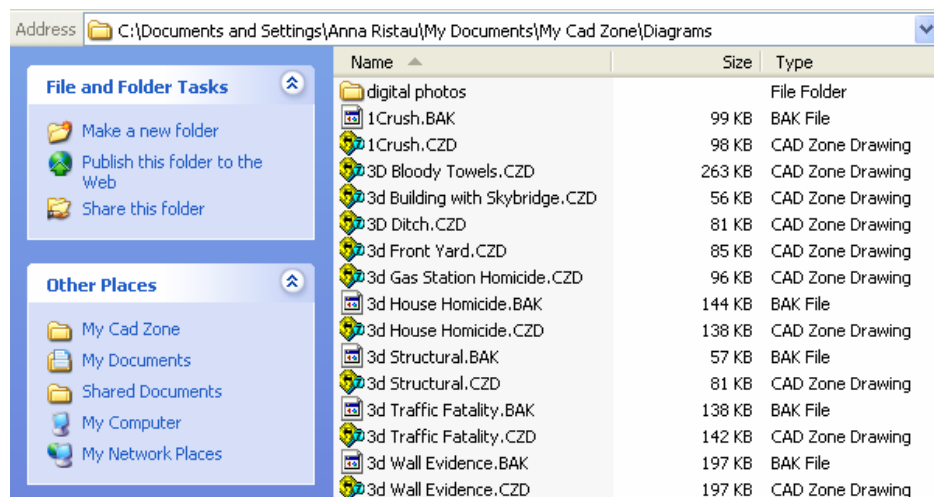
B.) EMERGENCY BACKUP

In case you forget to perform a regular save and something goes wrong, a named drawing will do an automatic backup every 5 minutes to the job .BAK file.

If this happens, shut down the CAD Zone program WITHOUT saving (if it is not already closed). Find the .BAK file that corresponded with your drawing name, rename to something else (i.e. add a "2" to it) and then change the .BAK to a .CZD extension.

Now open The CAD Zone program and open the renamed drawing. You should not have lost more than 5 minutes worth of work.

Opening a .BAK back up file: Click on My Computer icon to view your files and go to the directory where your files are. You should see your original and back up files:



D.) Importing Bitmaps



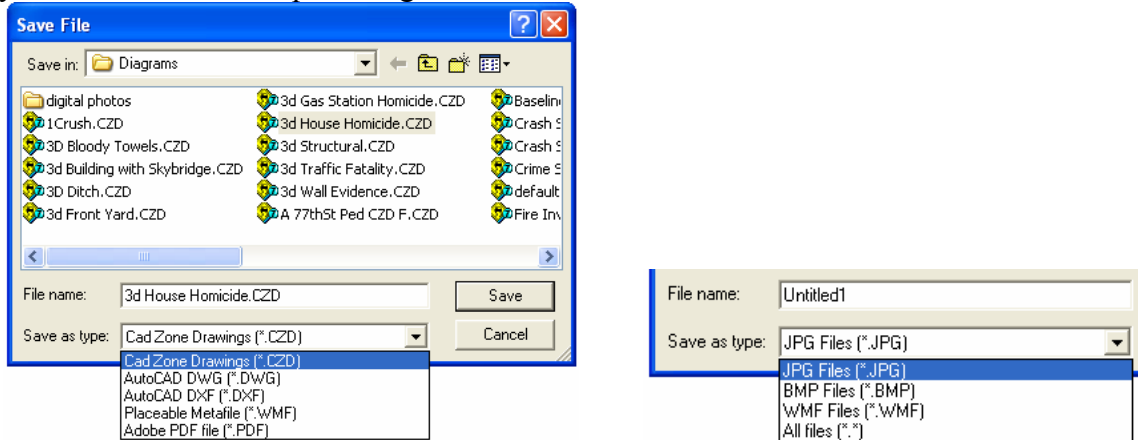
DIGITAL IMAGES: to add your digital photos (jpg, bmp or wmf) or air and satellite photos that you can even trace and draw over.

To place an image in your drawing screen, you first must click 2 points to define a "window frame" where your image will be inserted. Then browse to find the image you wish to insert. Images can be easily moved and scaled afterwards. (See how to set to a scale in the advanced instructions.)

Use the Send to Back/Bring to Front icons on the Quick Pick tools if the image hides some of your drawing lines.

E.) Exporting Images: Vector vs. Raster

You can print from CAD Zone but sometimes you may need to send a drawing file to someone or save to put into a Word document. We give you several options including a PDF format save (ADOBE) that most anyone can open. The formats under Save give you the nicest and sharpest images:



The Raster save formats are under the File pull-down to the “Export Image” but the .JPG and the .BMP do not provide crisp lines or print as clearly as other formats will.

Fire Investigation Details

Lesson 19: Placing Bodies

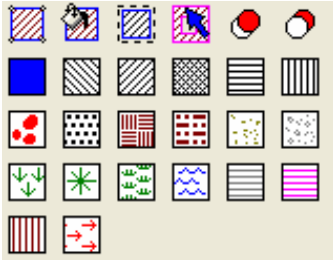


Use the Bodies icon from the QuickPick tool box to place a body in a drawing by selecting a gender, height, build type, and view:


EXERCISE:


- 1.) Select the gender, height, build and the basic body position in the dialog box.
- 2.) Once the body is placed you can modify the position and can add color which will carry over to the 3D view also.
- 3.) To bend an arm, leg, etc. Select part(s) using shift and left mouse to pick them all. Move the pivot point to a joint area then use the rotate handle to rotate into place. Can remove or swap parts between body symbols too.
- 4.) SAVE your drawing.
- 5.) **There are several specific Pre-Posed body symbols in the Symbol Library that you can also use.**


Lesson 20: Hatch Patterns and Fills






HATCH and FILL patterns: allow you to depict several of types of surfaces or debris, damaged areas, blood, fluids, vegetation, water, etc.

 Trace a Boundary command to draw a hatch pattern or solid fill within an area that you specify by clicking manually to define the outline.

 Pick Area hatch command to add a hatch pattern or solid fill to simple closed objects. (DO NOT pick too complex an area or it will not work and may close diagram.) Must be a closed shape so use snaps when drawing to avoid leaving gaps in the object or outline.

 Window Hatch command to add a hatch pattern or solid fill to closed geometric shapes contained in the crossing window. (Can be handy when you want to add a hatch or fill to an object that exists inside another, but do not want to add the pattern to both.)

 Hatch Selected is also good for doing more any closed shapes. The selection tools that come up across the top of the drawing area let you pick: the Select Adjoining option button  is very useful for more complex closed shapes like a median, parking lot, fluid/debris pattern, etc.

 Red/White circles are the send to back/bring to front. The patterns and fill are opaque and may cover part of your lines so sent them to the back to see your lines again.

TIPS: ZOOM IN so you are close while working for precision and for complex shapes or those that are not perfectly closed, use the manual trace.

- It is best to put your hatch/fill on a separate layer so you can turn it on/off or lock so it does cover any of your drawing details. Use lighter colors for better readability.

(More hatch patterns and hatch setting options are available in the Pull-down menu when you select one of the hatch commands.)

EXERCISE:

Experiment using the different Hatch/Fill commands and try the different options available. Place text on top and then practice bring to front/send to back options.

Lesson 21: Using Bubble Text

The Diagram Program allows you to place Bubble Text “markers” to draw attention to witness, sample, photo, evidence, and other items located in your diagram

The Bubble Text command is found on the left-hand menu of the Text & Dimension pull-down menu. You can choose Witness, Evidence, Photo, Sample, or a generic Bubble marker to place in your diagram.

Clicking a marker icon causes it to be displayed in the preview window, whereupon the bubble text can be edited. The Witness, Evidence, Photo, and Sample labels are edited by clicking the “Up and Down” scroll arrows to change the label numbers. The all-purpose bubble text is changed using the standard Windows method of editing text; just click inside the text field, and re-type over the existing text.

Clicking on the “Larger and Smaller” text icons changes the text height if desired. The color of the bubble may be changed using the Color Palette button. You are also given the option to bold the text and to “Show Arrows” attached to the Bubble Text (to point at a specific object or point in the diagram.)

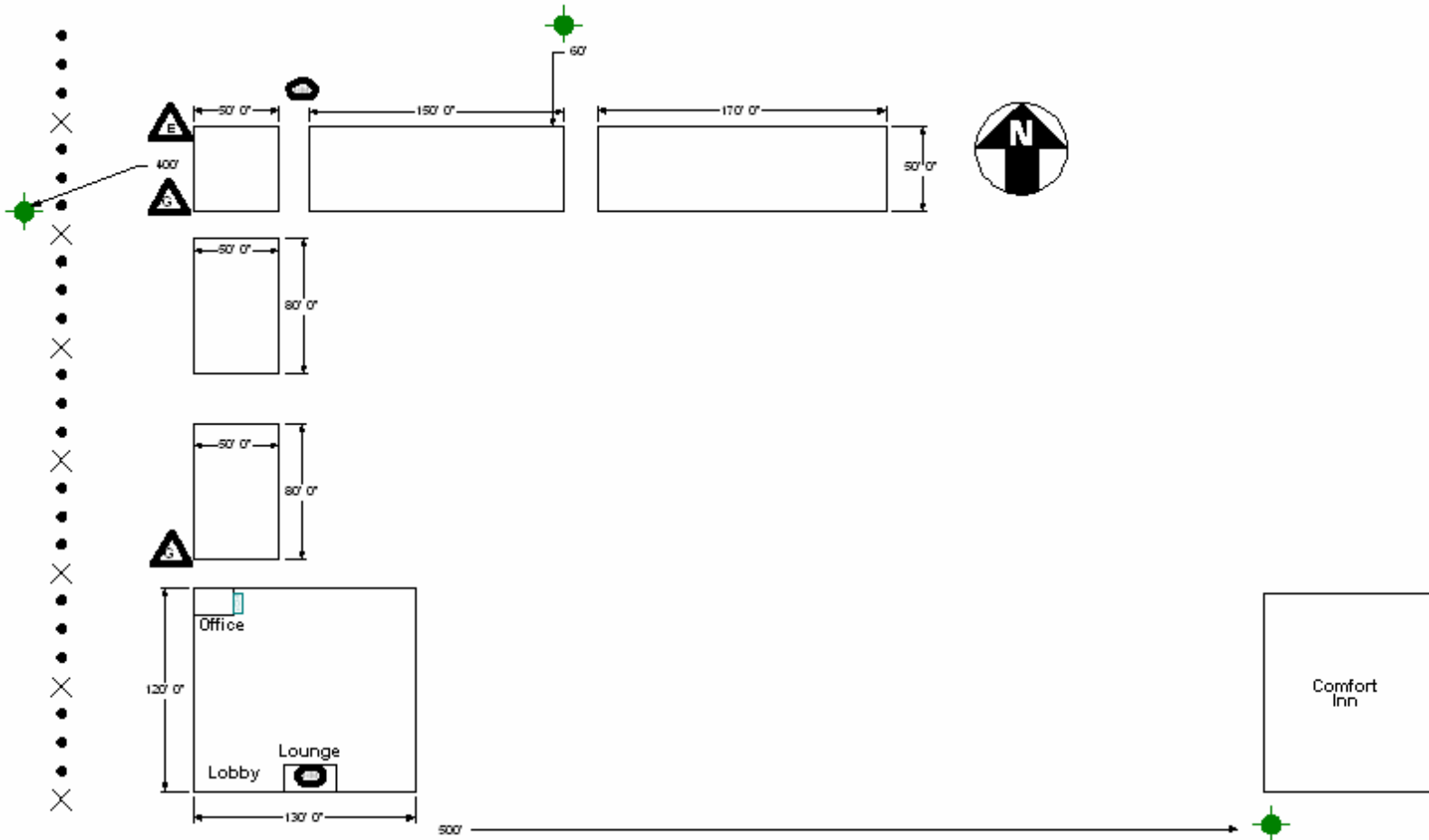
To place Bubble Text

1. Select the Bubble Text command from the left-hand toolbox.
2. When the Bubble Text toolbox appears, select the desired bubble type, such as the Photo Location marker.
3. Click on the arrow buttons to enter the number 12 for the photograph number and 1 for the roll number (or click in the text field and type in the numbers.)
4. Move your mouse pointer into the Drawing Screen and click the left-mouse button once to place the tip of the arrow of the bubble label.

5. Move your mouse pointer to position the bubble text to the desired location in the diagram and click the left-mouse button to finish placing the text bubble.

As long as the bubble label dialog box is displayed you can continue to place additional bubbles. Click “close” to finish placing bubbles. Like all “floating toolboxes” you can drag the bubble label toolbox out of the way if you need to.

Practice Diagram



1. Draw buildings using Easy Lines
2. Place Markers to mark off distances for hydrants
3. Place Symbols (may need to use Dynamic Symbol Scale)
4. Place Text and Leaders
5. Place Dimensions
6. Draw in turnpike using linetype menu
7. Place Custom form and edit form using Edit command from right-mouse menu.