

# TABLE OF CONTENTS

SYSTEM REQUIREMENTS .....	2
INSTALLING PLAN ANALYST ON A HARD DISK.....	2
Before starting setup .....	2
Running Setup.EXE.....	2
Using Setup.EXE.....	2
Running Plan Analyst for the first time.....	3
IF YOU USE A NETWORK .....	3
Printing reports .....	3
NT printing .....	3
PLAN ANALYST FEATURES.....	3
Using the keyboard.....	3
Text boxes .....	3
Calculator use.....	3
Entering dimensions .....	4
Editing text boxes .....	4
SETUP/ DEFAULTS .....	5
Header Information.....	5
Printer and Font Setup.....	5
Printer problems/solutions .....	5
Edit lumber.....	5
USE OF DECK CALCULATOR .....	6
Basic information form.....	6
Details form .....	6
Type of Bolts form .....	7
Dimensions form.....	7
Structural information form .....	8
Deck plan form .....	8

## SYSTEM REQUIREMENTS

In order to use Plan Analyst, you must have the following:

- 1) Microsoft Windows version NT, 98, ME, 2000, XP or VISTA
- 2) 80486 processor or higher with at least 16Mb of RAM.
- 3) VGA or SVGA monitor
- 4) Hard drive with at least 5 Mb available for Plan Analyst files.
- 5) CD drive. *Used for installation only, not required to run Plan Analyst.*
- 6) Printer set up through Windows print manager.
- 7) Mouse

## INSTALLING PLAN ANALYST ON YOUR HARD DRIVE

Before starting Plan Analyst setup

It is important to always exit (close) any other programs (applications) that may be running before installing any new Microsoft based software, including Plan Analyst.

During the setup process, Plan Analyst setup will check your windows directory to determine which libraries need to be added before installing Plan Analyst. If another program is using one of these libraries, Plan Analyst cannot complete the setup process. Note: Many systems start programs during the boot process and do not indicate that they are running in the background.

To close programs running in the background

- 1) Press Ctrl+Alt+Delete at the same time.
- 2) Select End Task to close all programs except 'Explorer'.

Running Setup.EXE

- 1) Insert the Plan Analyst CD in your CD drive, usually drive D:.
- 2) Use either the Start button or the Computer Icon to run the program 'Setup'.

Using Start button:

- 1) Click [Start] located in the lower left corner.
- 2) Click [Run...] on the Task Bar.
- 3) In the box labeled open: Type d:setup (match location of Plan Analyst disk)
- 4) Press <Enter> or click [OK] Note: You may use [Browse...] button.

Using Computer Icon:

- 1) Click Computer Icon
- 2) Double click the CD (D:) Icon. (Selection matches location of the Plan Analyst Disk)
- 3) Double-click SETUP Icon.

Using Setup.EXE

- 1) Necessary library and setup files will be copied to your hard drive. Note: On some computers, you may need to reboot your computer to update libraries and then run Setup again.
- 2) Click the [ OK ] button or press < Enter > on the welcome screen. Note: This is only a reminder to close/end programs that may conflict with the installation of Plan Analyst.
- 3) If you want to change the location where the Plan Analyst files are copied, click the [ Change Directory ] button and enter the new location.
- 4) Click the button with the picture of the computer on it. 
- 5) Click the [ Continue ] button.
- 6) Wait while files are copied.
- 7) Click the [ OK ] button.

## Running Plan Analyst for the first time

The first time you use Plan Analyst, you will be asked to fill out the header information. This must be filled out completely before you can continue. The registration number is on CD jewel case. Note: The information entered will be included on all reports. If you need to change this information in the future, use "Header Information" button on the first screen.

### IF YOU USE A NETWORK

Plan Analyst does not prevent two people from accessing the same file at the same time. If more than one person will be using Plan Analyst at the same time, we recommend that you place separate copies in different directories for each user.

### Printing Reports

Printing should work without any adjustments to your network. If you experience problems:

- 1) Check Plan Analyst setup.
- 2) Verify that the network setup for printing is correct.

Note: The most common problem occurs when the network redirects printing to a different printer or changes the settings.

### NT Printing

Plan Analyst expects the printer driver to exist on the local computer when you are printing to a network printer. Printing may fail when the network printer is not available.

To avoid this problem, use the following procedure to create a printer for Plan Analyst:

- 1) Start Print Manager.
- 2) From the Printer menu, choose Create Printer.
- 3) In the Print To list, select Other.
- 4) In the Print Destination dialog box, select Local Port.
- 5) In the Port Name dialog box, enter the print share name.

For more information, refer to the PRINTER.WRI file located in your WINNT directory.

## PLAN ANALYST FEATURES USING THE KEYBOARD

Enter - Pressing this will accept your selections and move cursor to the next field or screen.

Esc - Pressing this will move the cursor back to the last field or screen. If the cursor is at the first input of a screen, a previous screen will be shown. Note: Plan Analyst will move back more than one screen sometimes. This is necessary to keep the description information correct for the calculations that are being done during the input procedure. If the cursor is located at any point other than the first input, it will be moved back to the previous option or input.

Tab - Pressing this will move the cursor to the next input area.

Shift+Tab - Pressing this will move the cursor to the previous input area.

## TEXT BOXES



These are used for entering text and numbers. When entering text, the length of the text is limited based on the space available in the report format. When you reach the maximum length, Plan Analyst will beep and not accept additional input.

NOTE: When you are entering information into a text box, all standard editing capabilities are available, delete, insert, overtype, etc. If you need to delete characters and type new ones in their place, highlight the characters to be deleted first.

You may do this by using your mouse to:

- 1) Double click the word or
- 2) Drag the mouse cursor over the characters with the left button pressed.
- 3) Then type the new replacement characters.

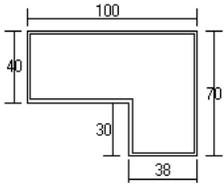
Note: You may also use this method to delete characters or words. Highlight characters/words to be deleted and press the <Delete> key.

## CALCULATOR USE

When numbers, such as dimensions and square footage, are required, a four function calculator is available.

- + for addition
- for subtraction
- X or \* for multiplication
- / for divide

Algebraic logic is used. (ie. division and multiplication are done before addition and subtraction)  
There is no need to reach for your calculator.



When asked for the floor area, you can enter:  $100 \times 40 + 30 \times 38$  and the floor area will be calculated for you.

## ENTERING DIMENSIONS

Dimensions may be entered using:

1. Decimals of a foot or
2. by using the Feet\_inches format.

For 10 feet 5 inches, you enter either 10.4167 or 10\_5.

## EDITING USING THE KEYBOARD

PRESS THIS

TO DO THIS

Left or Right arrow key

Move the cursor one character left or right

Ctrl+Left arrow key or  
Ctrl+Right arrow key

Move the cursor one word to the left or right

Home or End

Move the cursor to start or to end of text.

Shift+arrow key

Highlight letters

Delete

Erase the character where the cursor is located or erase all highlighted characters

Backspace

Erase the character to the left of the cursor.

## EDITING USING THE MOUSE

DO THIS

TO DO THIS

Click

To relocate cursor, click mouse cursor at the new location.

Double click

To highlight a word, double click left button of mouse with cursor on the word.

Hold Left button and move

To highlight one or more characters, drag mouse cursor over character(s) with the left button pressed.

## CUT AND PASTE USING THE WINDOWS CLIPBOARD

Highlight the word or words that you want to move. Press <Shift> + <Delete> to move the selected text to the clipboard. Move the cursor to the new location. Press <Shift> + <Insert> to place the selected text at the new location.

# SETUP/DEFAULTS

## Header Information

If your address or phone number changes, click the [ Edit Header ] button on the first screen. This will allow you to edit the header information that you entered the first time you ran Plan Analyst.

## Printer & Font Setup

To change, use the "Printer Setup" button on the first screen or change before printing. Plan Analyst uses the Windows default printer. Note: If you change the printer in Plan Analyst, the Windows default printer will be changed to the new selection.

Changing fonts will only affect printed drawing. The information on the screen is very tight and changing the font will cause information to write over other information. If some information writes over other information when you change printer font, try a smaller size.

## Printing problems - solutions

1. If some information writes over other information when you change printer font, try a smaller size or a different font.
2. Get error every time you print
  1. Verify that the printer is turned on.
  2. Verify that Windows has the correct printer selected.
  3. Verify that the font selected is valid for the printer selected.

## EDIT LUMBER

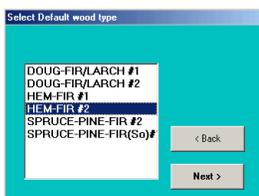
Plan Analyst is shipped with 6 common lumbers selected. You may change the selected list to match the species and grades of lumber used in your area. To change the lumber list, click the [ Edit Lumber ] button on the first screen.

To make Plan Analyst easier to use, you select only the lumber that is used in your area. Click the box beside the lumber name to add or remove a lumber grade. Grades with a check in the box will show up on the list of available lumbers on the "Structural information" form. You may select up to 9 grades of lumber.

Click [ Next ] when you have finished.



On the next screen, select the grade used most in your area for the default. To select, click the name of the lumber that you want to be the default grade.



# USE OF DECK CALCULATOR

## Basic Information form

1. Option shown in yellow is the current selection. Change by clicking the picture of your selection.
2. If the building code shown in the upper left corner does not match the code used in your area, click the [ Code Version ] button to change.
3. Note: If you select “Deck is free standing”, boxes containing information about the house will not show.
4. If the house is cantilevered at the deck, framing and support for the deck will be adjusted for this condition.
5. If the deck includes stairs, click the check box. A check mark is placed in the box when stairs are included.
6. Use the [ Clear ] button to start a new design.
7. Use the [ Load Saved ] button the retrieve a design that you previously saved.
8. Use the [ Save ] button to save the current design before starting a new design or quit.

## Details form

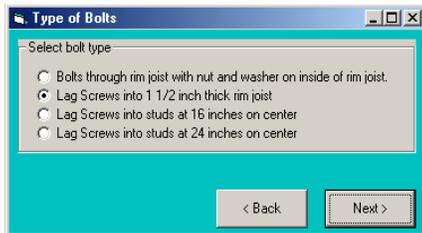
This form has 4 options. Click the picture that matches your design. The picture in yellow is the selected option.

Options:

1. Connection to house. (If not free standing)
2. Connection of post to foundation.
3. Style of guardrail
4. Location of beam at front of deck.

## Type of bolts form

If you select the “Hanger on ledger” option for the “Connection to house”, the following form will be displayed.



For decks that are level with a floor, you will need to bolt ledger to the rim joist.

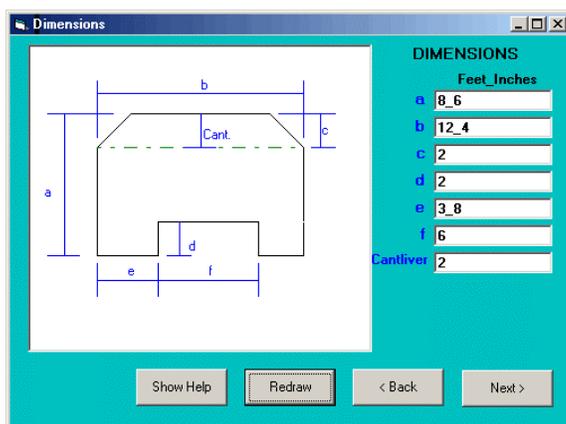
For decks that are not at a floor level, you will need to attach the deck to studs. Select one of the last 2 methods based on the spacing of the studs in the wall.

1. Bolts through rim joist with nut and washer on the inside of rim. This is the strongest way to attach the deck to a rim joist. You must have access to the inside of the rim joist to use this method (new construction or unfinished basement).
2. Lag Screws into 1 1/2 inch thick rim joist  
Use this method if you do not have access to the inside of the rim joist.
3. Lag Screws into studs at 16 inches on center
4. Lag Screws into studs at 24 inches on center

Note: If Plan Analyst indicates that special engineering is required, the load on the ledger is greater than the maximum number of bolts programmed into Plan Analyst. Larger bolts and/or more bolts require special engineering due to the required spacing between bolts and reductions in the allowable for a large number of bolts.

If you do not have a center beam, you may add one to reduce the load on the bolts or you may add a beam to support the deck at the house.

## Dimensions form



DIMENSIONS	
Feet_Inches	
a	8_6
b	12_4
c	2
d	2
e	3_8
f	6
Cantliver	2

For each dimension, enter feet and inches in the box matching the letter on the drawing.

If you have a fraction of an inch, you must enter the fraction in decimal form in the "Inches" box.

Examples:

For 6 3/4 inches, enter 6.75 in the inches box.

For 3 1/2 inches, enter 3.5 in the inches box.

Note: Corner dimension "c" cannot be greater than 1/2 of the depth of the deck "a". If you have a cantilever at the front of the deck, corner dimension "c" cannot exceed the cantilever dimension.

## Structural information form

**Structural Information**

Size of joist:  2x6  2x8  2x10  2x12  Minimum Size

Spacing of Joist:  12" o.c.  16" o.c.  19.2" o.c.  24" o.c.

Size of Beam:  2x6  2x8  2x10  2x12  Minimum Size

Spacing of Post:  Less than 6 feet  6 to 10 feet  10 to 14 feet  Max spacing

Has beam @ center?

**Lumber Grade**

DOUG-FIR/LARCH #1  
DOUG-FIR/LARCH #2  
HEM-FIR #1  
HEM-FIR #2  
SPRUCE-PINE-FIR #2  
SPRUCE-PINE-FIR(So)#1

**Maximum post length**  
4

**Soil allowable - psf**  
1500 - Sand, Silty Sand, Clayey Sand

**Design load - psf**  
60 - Residential

**Depth of Footing (d)**  
30  
Inches - Min. = 12

Show Help < Back Next >

Use setup to add/remove lumber grades.

Note: You cannot select minimum size beam and maximum spacing of post. This creates too many options.

Note: If you are not sure that the design on the next screen is best for you, you can try different options by stepping back and changing joist size, spacing and/or the spacing of post.

**Lumber grade** - If the species and/or grade of lumber that you need to use is not on the list. Exit and restart the Deck Calculator program. On the first screen select "Edit lumber" and add the lumber needed. See directions under "Edit lumber list".

**Soil allowable** - If the soil allowable for your site is not on the list, type in the correct value from the soils report. Note: Deck Calculator will default to the last value used.

**Design Load** - If the Design load (Live Load) for your site is not on the list, type in the correct value. The minimum design load will be set by the local code.

Note: Deck Calculator will default to the last value used.

**Depth of footing** - The minimum will be controlled by local code requirements. This will be based on frost depth and/or soil conditions.

**Maximum post length** - The default post size is 4 X 4. Enter the length of the longest post supporting the deck. Plan analyst will check the post. The post will be changed to a 6 X 6 if a 4 X 4 post does not work.

## Deck plan form

**Deck plan**

Joist size = 2x8 at 16" o.c. - Size OK  
Beam size = 2x10 - Size OK  
Dark lines at wall offset are double joist.  
Minimum post size = 4x4

2x4  
2x6  
38" min  
2x2's w/openings less than 4"  
2x6 Decking  
Joist Hanger  
Post Base  
Post Cap

NOTES:  
Bolt ledger to rim joist using 1-1/2" bolt at 16" o.c.  
Post spacing = 6'-0"  
Max post length = 4'  
Bolt 2x2's to rim joist with 2-3/8" lag bolts.

Plan Analyst Software  
by Ben Weese and Assoc.  
www.plananalyst.com

Your Company Name  
Your Street Address  
Your City, State and Zip

LL = 60psf  
Soil = 1500psf  
HEM-FIR #2

Show Help Print < Back one form Back to main form

Use the [ Print ] button to print the design on your printer.

Use the [ Back one form ] button change beam and/or joist size, add center beam, post spacing, etc. This is great for checking options.

Use [ Back to main form ] button to start a new design or exit.