

GRAPH/NET Computer Integrated Design System

DRAFT3D 2-D to 3-D Conversion Program

Version 1.d

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## DRAFT3D 2-D to 3-D Conversion Program

The DRAFT3D program allows the user of the GRAPH/NET system to automatically convert his two dimensional floor plan into a three dimensional perspective. No additional information is required from the user other than the desired ceiling height for the perspective. The three dimensional file is created and stored in the VUNET area, ready for display, or for the addition of other three dimensional files, such as furniture, trees, etc.

Before the conversion of the floor plan can occur, the user must do some simple preparation work. In the DRAFT program, he must complete the following steps:

1. Display the floor plan on the screen, using the "I" command.
2. Display the layer menu on the screen, using the "k" command, and then selecting the "layers" option.
3. Reset the parameters in the layer menu so that only the wall layer is displayed, alterable and output.
4. Exit from the layer menu. You should now see only the walls on the screen.
5. Un-bundle the walls completely.
6. Store the un-bundled walls on disk under a temporary name, using the "o" command. BE CAREFUL not to overwrite the original floor plan, since at this point you are only outputting the walls.
7. Exit from the DRAFT program, using the "q" command.

The wall layer of the floor plan is now properly prepared for conversion into a three dimensional perspective.

To do the actual conversion, the user must run the DRAFT3D program. To do this, type DRAFT3D, and then hit the RETURN key on the keyboard. The screen will clear, and a message indicating the current version of the program will appear on the screen. The latest release of this program is Version 1.d.

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The following message will then appear on the screen:

```
DRAFT3D Version 1.d
```

```
Program for changing a DRAFT file to a VU file
```

```
What DRAFT file would you like to change to a VU file?
```

Type in the name that you stored the floor plan under in step 6 above. You do not need to type the extension code, .DP.

If you enter the name of a file that does not exist, or if you type the file name incorrectly, the following message will appear on the screen:

```
sys:draftnet>name.dp does not exist.  
Please check your spelling and try again.
```

```
What DRAFT file would you like to change to a VU file?
```

If you have misspelled the name, then re-enter it correctly now. If you think you have entered it correctly, first try again. If the program still does not find the file, make sure that you are in the right area of the disk, and then get a directory listing of the files to find the correct name and spelling. Then restart the program by typing DRAFT3D and hitting the RETURN key.

When the program finds the indicated file, the following message will appear on the screen:

```
What would you like the base elevation to be? (feet.decimal)
```

Enter the base elevation for the file, and then hit the RETURN key on the keyboard. The elevation may be positive, negative or zero. Inches must be expressed decimally, as fractions of feet. Eight feet six inches, for example, should be entered as 8.5.

When you have entered the base elevation, you will see the following message on the screen:

```
How high would you like the walls to be? (feet.decimal)
```

Type in the wall height, and then hit the RETURN key on the keyboard. Inches must be expressed as fractions of feet, so, for example, eight feet six inches should be entered as "8.5".

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NOTE: You are entered the HEIGHT of the walls, not the ceiling elevation! If you enter the ceiling elevation, the walls will be too high.

Next you will see the following message on the screen:

What would you like to call the VU output file?

Enter the name that you would like to call the 3-D file. You may give it the same name as the DRAFT file that you are converting, or you may choose yet another name. You do not need to enter the extension code, .VIL.

The program will then check to be sure that there is not a file stored in the VUNET area of the disk with the name you just entered. If there is, then you will see the following message on the screen:

```
sys:vunet>name.vil already exists.  
Do you want to overwrite it? [Yes or No]
```

If you wish to replace the existing file with the new one, type yes, and hit the RETURN key on the keyboard. If you do not wish to overwrite the older file, type no, and hit the RETURN key. You will then see the following question on the screen:

What would you like to call the VU/NET output file?

Enter another name, and hit the RETURN key. The program will then check the new name to be sure that there is no file stored on disk under that name already.

There will be a short pause while the file conversion occurs, and then the following message will appear on the screen:

```
DRAFT3D Program complete.
```

```
VU Output file name is sys:vunet>name.vil
```

The three dimensional file is already stored in the VUNET area of the disk, so that it can be accessed and manipulated like any other perspective file.