4.1. The Main Screen

The **Main Menu** of the THERM program is shown below. The menu choices allow you to access different program functions.

The **Main Screen**, which is displayed when THERM starts, is where you create and edit cross sections, select the properties (e.g., materials and boundary conditions) associated with the elements of the product you are analyzing, and perform thermal calculations.
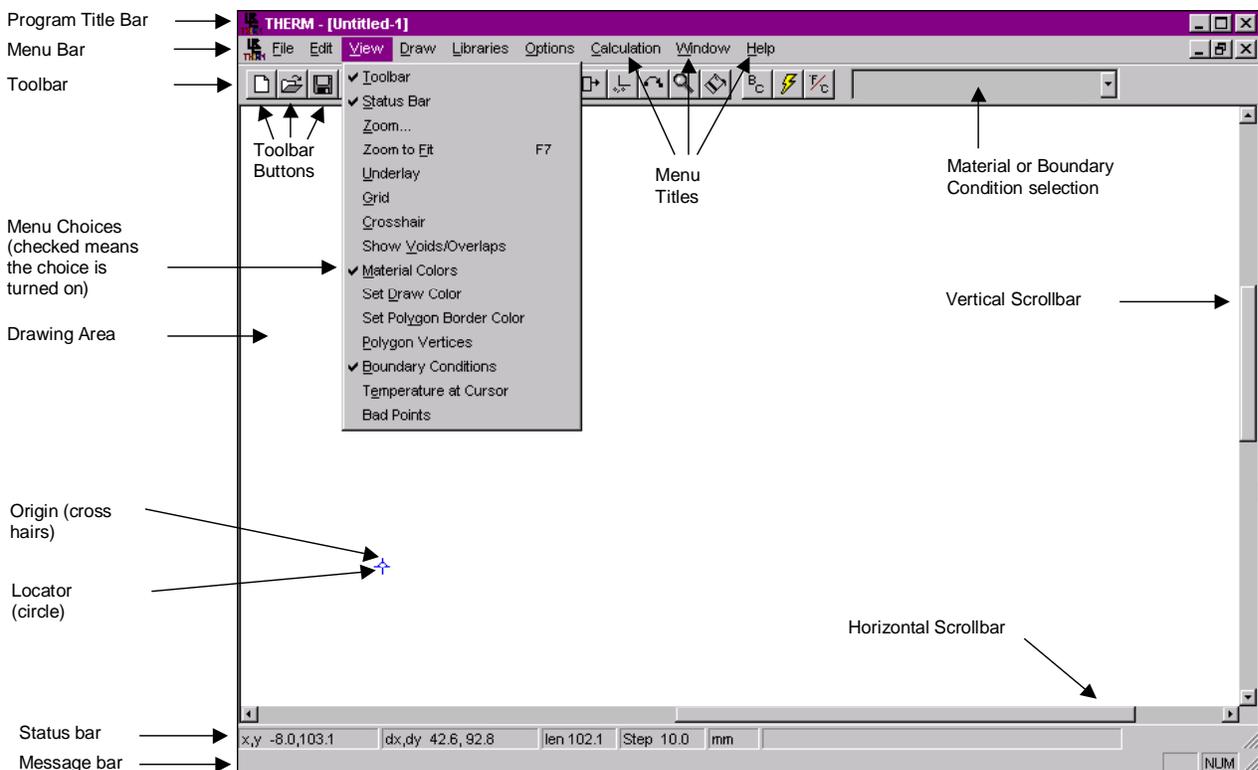

*Figure 4-1. THERM **Main Screen** components*

The **Main Screen** consists of the following components:

▪ Program Title Bar: This shows the program name as well as the name of the currently active drawing file in square brackets. New files are named Untitled followed by a sequence number until you save them with another file name.

▪ Menu Bar: The Main Menu is below the Program Title Bar and is the way to access all THERM menus. From the Main Menu, you can set the drawing options, assign materials and boundary conditions, and run calculations. You can use a mouse to activate a menu by clicking the left mouse button once on the desired menu title. You can use the keyboard to activate a menu by holding down the **Alt** key and typing

the menu's underlined character. For example, pressing **Alt-F**, and then typing **N** would access the **File/New** menu choice.

▪ Menu Choices: Every menu option on the Main Menu offers associated menu choices that appear when you click the mouse on a Menu title. You can activate the choices on the menu list by clicking on them using the left mouse button. You can also use the keyboard to activate a menu choice by typing the underlined character or using the arrow keys to move through the choices.

▪ Toolbar: The toolbar contains buttons for the most common activities in the program, such as Save File and Draw Polygon. A button is activated by placing the mouse cursor on it and clicking the left mouse button. Each toolbar button corresponds to a menu choice, so you can use either a mouse or a keyboard to make your selection (see Section 3.9, "Toolbar Reference Table").

▪ Drawing Area: The large white space below the toolbar on the Main Screen is for drawing the geometry of the cross section you wish to analyze.

▪ Origin: The cross hairs in the drawing area indicate the 0,0 point of the drawing.

▪ Locator: The small circle at the center of the origin cross hairs is the Locator. It can be used to indicate a location for a drawing component, such as a glazing system imported from WINDOW or a spacer copied from another THERM file. By default, the Locator and Origin are in the same position when you start a new drawing. However, the Locator can be moved to any position in the drawing area using the Draw/Locator menu choice.

▪ Cursor Feedback Bar: The cursor feedback bar displays information about the coordinates of your drawing cursor. This is explained in more detail later in this section.

▪ Message Bar: The message bar at the bottom of the Main Screen displays information about the currently selected menu or toolbar button.

4.1.1. Cursor Feedback Bar

The **Cursor Feedback Bar** is the top row of information at the bottom of the **Main Screen**. This bar displays information about the cursor position.

The **x,y** information gives the absolute **x** and **y** coordinates of the cursor relative to the origin (the small cross hairs). The **dx, dy** information gives the **x** and **y** coordinates of the cursor relative to where you most recently began drawing; if you place the cursor anywhere in the drawing window and click the left mouse button, the **dx,dy** values go to **0,0**. These values will change as you move the mouse, showing the coordinates relative to the position where you most recently began drawing. The **len** information gives the distance traveled since the last click of the left mouse button. This length is reset to **0** every time the left mouse button is clicked.

The **Step** information displays the current **Step Size**, which is defined by typing a number with the keyboard. The **Step Size** is the distance traveled by the cursor for every keystroke with the arrow keys. For example, if the **Step** value is set to 10 mm, then pressing the right arrow once will move the cursor 10 mm.
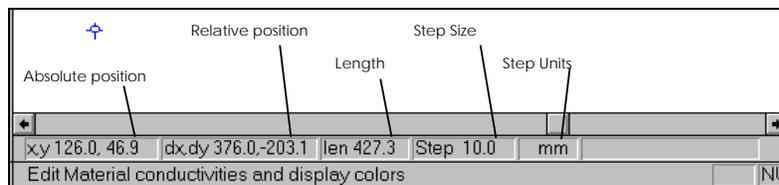

*Figure 4-2. **Cursor Feedback Bar** notations*

4.2 Main Menu

Figure 4.3 shows THERM's main menu choices.
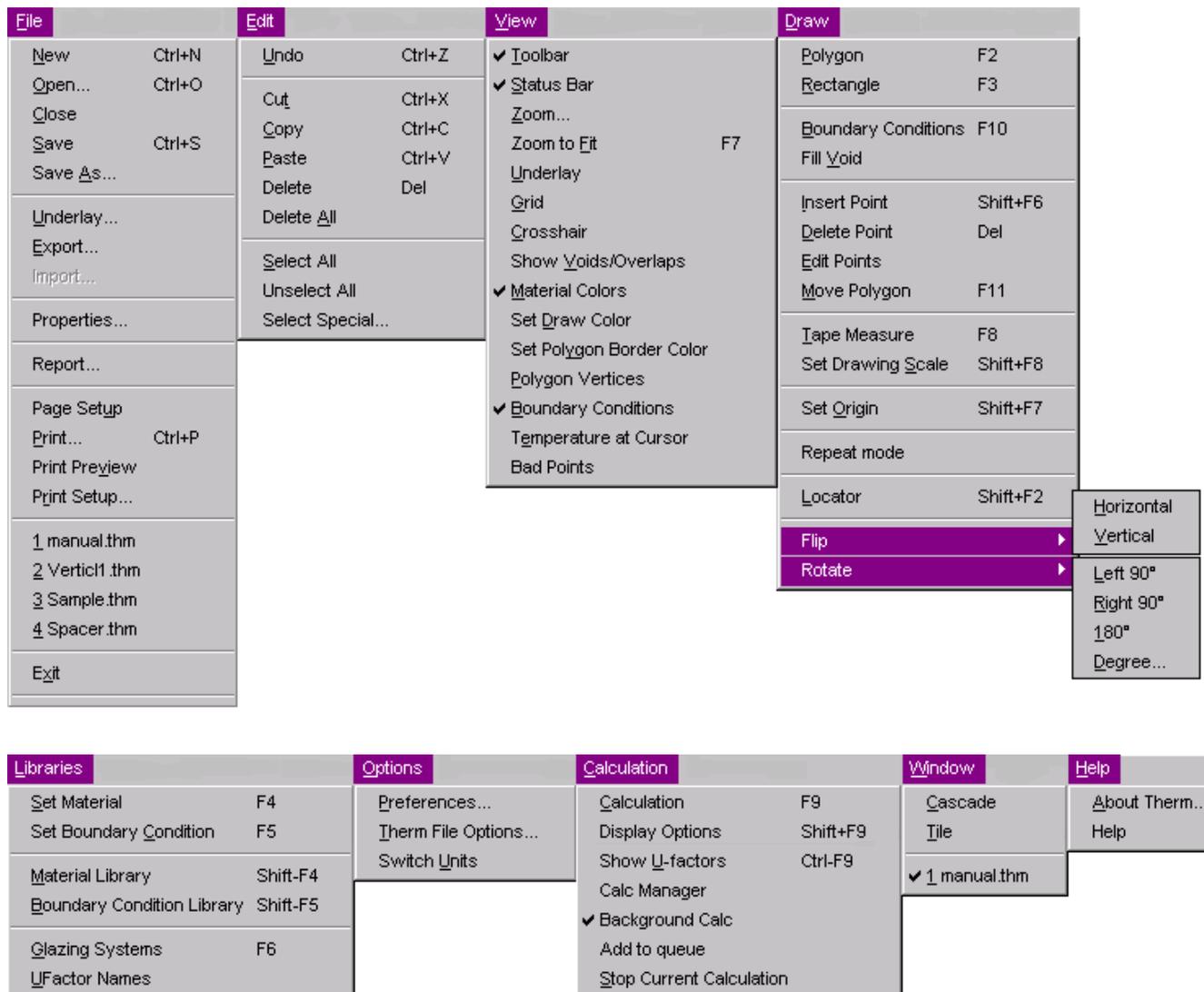
*Figure 4-3. THERM **Main Menu** choices*

To use the keyboard for selecting menu options, press **Alt** plus the underlined character to select the menu; then, type the underlined letter of the menu choice. For example, to choose the **New** choice under the **File** menu, type **Alt F**; then, type **N**.

File	Used to start a THERM drawing file, edit an existing file, and save work on open files. Also used to access printing options, and to import an underlay file.
Edit	Used to modify the components in a currently open THERM drawing.
View	Used to change the view options such as to zoom in on the drawing, view the underlay, and change the position of the drawing origin.

Draw	Used to access the drawing options, such as to draw a rectangle or polygon, move objects, and insert points.
Libraries	Used to access the **Materials**, **Boundary Conditions**, and **Glazing Systems** libraries. From this menu, you can add new library entries, edit existing entries, and import **Glazing Systems** from WINDOW 4.
Options	Used to access some of the THERM program options, such as the measuring units (SI or IP), drawing options, and simulation options.
Calculation	Used to access the finite-element calculation, which simulates the thermal performance of the cross section. Also used to access the **Calc Manager** and define the format in which you wish to view the results.
Window	Used to access each of the open drawings in THERM and display them either as tiled or cascaded. This menu show the names of all open drawings.
Help	Used to access the THERM **Help** file, which contains the information in this manual, as well as the **About Therm** choice, which contains information about the program version and authors.

4.2.1. Pull-down Lists

A pull-down list displays choices for an input value. To display the choices, use the left mouse button to click the arrow to the right of the input box. You can select an item from any pull-down list using one of the following methods:

- Click on the arrow of the pull-down list: This will cause the first set of items in the list to show. A vertical scroll bar will appear on the list if there are more items than can be displayed in one view.

- Type the first few letters of the item: If you type the first letter of the item, the first option that starts with that letter is chosen. If you add the next letter of the item, the program will go to the option in which these first two letters appear. When the correct item it highlighted, you can select it by clicking on Enter.
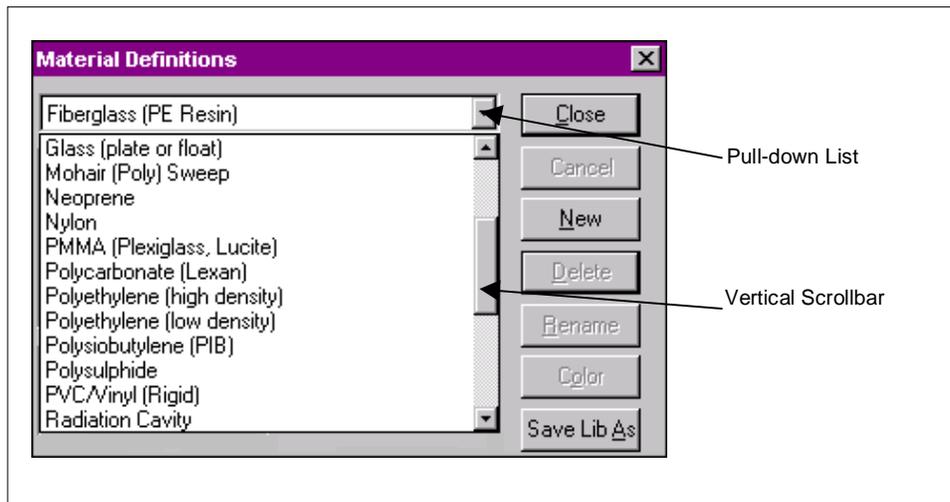
Figure 4-4. Example of a pull-down list

4.2.2. THERM Files

You should save each cross section that you draw as a THERM file, using the **File/Save** menu or the **Save File** toolbar button. THERM will automatically add a THM extension to the file name you type. Two sample files,

SAMPLE.THM and SPACER.THM, are included in the installation diskettes. You can open these, or any other THERM file, using the **File/Open** menu choice, or the **Open File** toolbar button. A list of files with a THM extension will be displayed, and you can select the file you want.

You can also start a new file using the **File/New** menu choice or the **New File** toolbar button. You will see a blank drawing area, and you can begin drawing. When you save the file, using the **File/Save** menu choice, THERM will automatically assign a THM extension to the name.

THERM allows you to have multiple THM files open at one time. You can see a list of all opened files using the **Window** menu. You can close each open THM file independently, using the **File/Close** menu option. You can close all the files, and still have the THERM program active. However, the **File** menu becomes reduced to a few choices, such as **New** or **Open**, when there are no files open.

You can see a list of the last four open THERM files at the end of the **File** menu. You can open one of these files by either clicking your mouse on the file name or typing **Alt-F** and the number of the file.
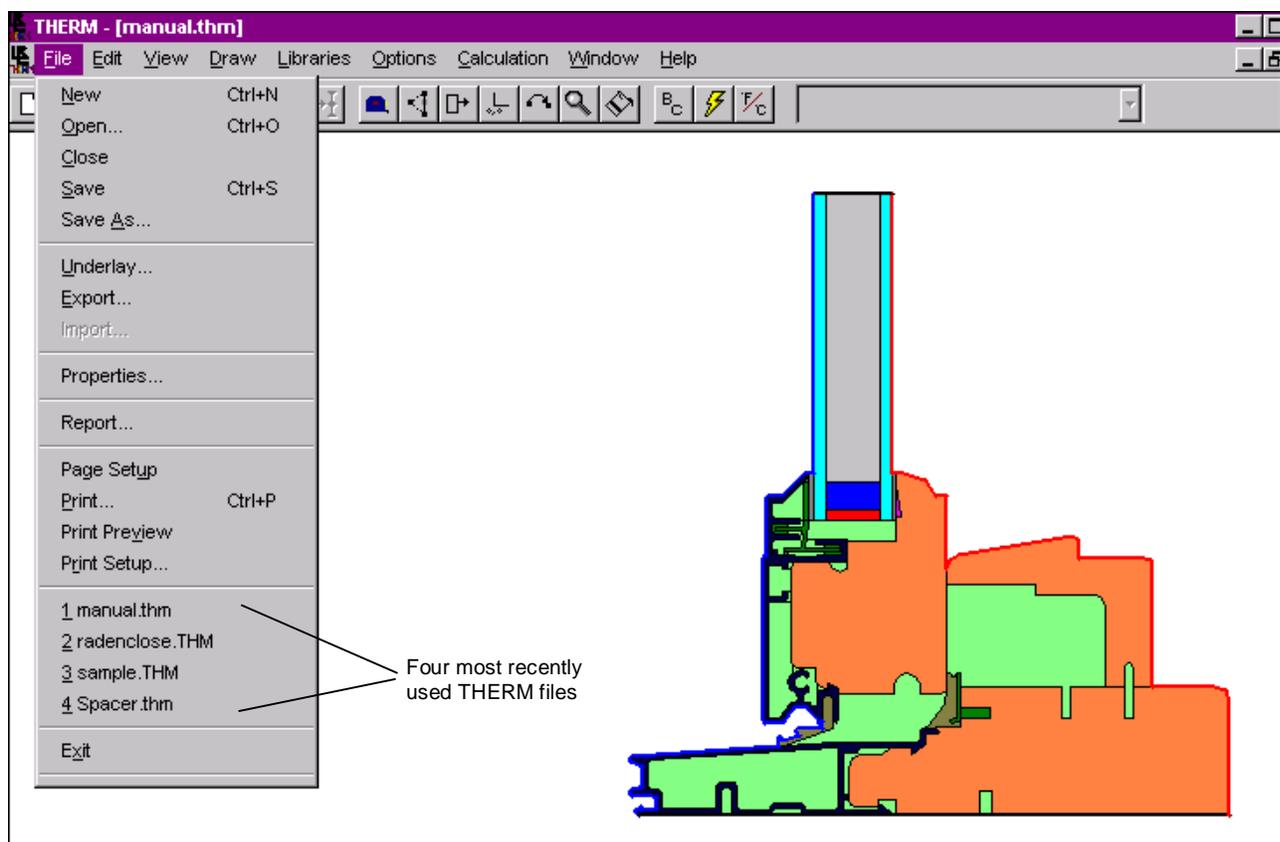

*Figure 4-5. Last four open THERM files are shown at the end of the **File** menu.*