

HOME IMPROVEMENT PLANNER

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Loading time: 3 minutes 25 seconds

Load name must be typed in lower case letters.

Calculate the materials and cost of various home improvement projects at the touch of a few keys. Separate options let you plan the painting of a room or the entire outside of the house. Estimate carpeting or wallpaper needs and the cost. Just type in a few area dimensions. Save the interior and exterior dimensions of your house on cassette and use them when you are faced with future home improvement tasks.

TO LOAD: Press LOAD "home", start the tape player, then press ENTER. The program loads in 3 minutes 25 seconds and starts automatically. Stop the tape when instructed by the computer.

TO USE: Select an option from the menu appearing on the screen:

1. INTERNAL DIMENSION SPECIFICATIONS
2. EXTERNAL DIMENSION SPECIFICATIONS
3. CARPETING YARDAGE ESTIMATION
4. INTERNAL PAINTING ESTIMATION
5. WALLPAPER ROLL ESTIMATION
6. EXERNAL PAINTING ESTIMATION
7. AREA AND DIMENSION CATALOGUE
8. SAVE PROGRAM AND DIMENSIONS
9. PROGRAM OPERATING INSTRUCTIONS
0. DELETE ALL PREVIOUS SPECIFICATIONS

We explain each of these options in detail in these written instructions.

NOTES:

1. Always remember to press ENTER after typing anything with the flashing L cursor showing at the bottom of the screen.
2. Throughout the program, instructions appear on the screen to prompt you in entering information and to help you operate the program. Some of those prompts are discussed in these instructions.

1. HOME DIMENSION SPECIFICATIONS:

Press 1. You will want to use this option first since most other options depend on the information you type into the TS2000's memory here. Before you start, make a chart of the dimensions of the rooms with which you are working. For example, let's assume you are painting the living room and dining room and laying new carpeting in the living room. Your chart might look like this:

	<u>Length</u>	<u>Width</u>	<u>Wall Height</u>
LivRm	20	15	10
Extra Area	5	4	10
Din Rm	14	12	10

All dimensions entered must be in feet. Convert inches into feet--for example, 4 feet 6 inches is entered as 4.5 feet; 6 feet 8 inches as 6.667 feet.

The screen prompts you to input the "area designation." You may use any designations you like--room names, numbers--but they may not be more than 10 characters long. We've chosen to use abbreviated room names--Liv Rm and Din Rm.

Type Liv Rm and press ENTER. The TS2000 draws a sample room plan to help you enter the dimensions. The letter in the diagram corresponding to the dimension the computer is asking for flashes on the screen. To start, input the length of the Living Room (notice the flashing L at the top of the screen)--type 20, and press ENTER. When asked for width--type 15. Is there any extra area in the Living Room? In our example, there is, so press Y for yes--and input the length and width of the extra area.

You are asked again if there is extra area in the Living Room. Press N for no this time. The computer asks for extra areas until you state there are no more. Add as many extra areas as you like.

A new diagram asks for the wall height of the Living Room (flashing H)--type 10. If the wall height of an extra area is different than the rest of the room, enter that area as a separate room.

Input the next area designation. Enter the Dining Room the same way you entered the Living Room (except this time press N the first time you are asked for an extra area). Since we're only doing two rooms, press 0 the next time you are asked for an area designation. The TS2000 lists the floor and wall areas (in square feet) for the two rooms we're working on, with the extra area in the Living Room figured in. The program stores this information for later use in computing other options. Press z to return to the menu.

To reassure yourself the dimensions of the two rooms are safely stored in the computer, try option 7 now.

If you make a typing error while inputting information in option 1 (or in option 2) and you notice the error before pressing ENTER, make corrections using DELETE (CAPS SHIFT 0) and the arrow keys (CAPS SHIFT 5 and 8). If you have ENTERED an error, finish filling in the specifications for that room, and press 0 when asked for the next area designation. Then, select option 1 again--either to correct an error or to add new areas to your catalogue--the computer will ask if you wish to change any of the rooms you have already entered. It will ask for each room by name. Press n if there are no changes, or press y and re-enter all the information for that room. Once you change all the area designations you entered earlier, you will be asked for more area designations--simply press 0 if you have no new areas to add.

2. EXTERNAL DIMENSION SPECIFICATIONS:

Press 2. This option works in much the same way as option 1, except you are asked for outside dimensions. The screen displays a sample diagram of a house exterior to help you enter the dimensions. As in option 1, the flashing letters correspond to the desired dimension. You are asked to:

INPUT THE MAJOR LENGTH OF THE HOUSE: Indicated by the flashing L.

INPUT THE MAJOR WIDTH OF THE HOUSE: Indicated by the flashing W.

INPUT THE MAJOR FOUNDATION TO ROOF HEIGHT OF THE HOUSE: Indicated by the flashing H.

After entering the above dimensions, you are asked for additional side area on your house. The computer is asking for any additions or irregularities, indicated in the diagram by the addition on the right side of the house. Press y if you have such an area. Then

INPUT THE LENGTH OF THE SIDE AREA: Here it is asking for the total of all three sides—length + length + length.

INPUT THE AVERAGE FOUNDATION TO ROOF HEIGHT OF THE SIDE AREA: In the diagram, the height is measured from the ground to a point midway between the bottom of the roof and the top of the roof. If the roof extends to the ground on either side of the side area, you have a triangle and you enter 1/2 the total height.

You are again asked if you have any side area on your house. Unless you have a flat roof, you are likely to have two additional areas—the two triangles at either end of the house which comprise the areas from the gutters to the peak of the roof. This area is not indicated in our diagram. When you are asked for the length, enter twice the width of the house (to account for both side triangles). Disregard the flashing L's. For the "average foundation to roof height" of these end triangles, enter half the distance from gutter height to peak roof height (this number is not doubled, and is only entered once).

If there are no more side areas, answer the next prompt with n (for no). You are automatically shown the AREA AND DIMENSION CATALOGUE, which now has the dimensions of the outside of the house added to it. Press z to return to the menu.

3. CARPETING YARDAGE ESTIMATION:

Use this option to calculate the number of square yards needed to carpet a room and the cost. **Press 3.**

We decided we are just carpeting the Living Room. In response to INPUT ROOM TO BE CARPETED, type Liv Rm. If you make a mistake typing Liv Rm or if you enter a room not in the AREA AND DIMENSION CATALOGUE the TS2000 tells you it does not have a room listed by that name and asks you to choose from a list it displays. If the room you want to carpet is not on the list, return to option 1 and enter it.

Do you wish to cover the entire floor area of the Living Room? Press y (for yes). You will be told you need approximately 36 square yards and asked to input the price per square yard of the carpet. Suppose the price is \$9.75. Input 9.75 (omit the dollar sign). It will cost \$351 to buy 36 square yards.

If you answered n (no) when asked if you wished to cover the entire floor area, you would have been asked to enter the area not to be covered. You might not have wanted to cover the "extra area," for example, or a large fireplace hearth area. Enter as many areas not to be covered as you like. The TS2000 would deduct those areas from the calculation.

4. INTERNAL PAINTING ESTIMATION:

Use this option to calculate the number of gallons of paint you need to paint a given area and the cost. **Press 4.**

Input the name of the room to be painted. You are asked if you wish to paint the walls or the ceiling. You can do both, of course, but you'll have to calculate them separately--you might want to use a different paint for each.

If you choose to do the walls, you'll be asked if there are any wall areas not to be painted. Input one at a time--such areas as windows, doors, fireplaces, and openings leading from room to room. Once again a chart is useful in feeding the information into the computer in an orderly fashion. With the ceiling there are no such areas not to be painted, in our calculations.

5. WALLPAPER ROLL ESTIMATION:

Use this option to determine how many rolls of wallpaper you will need for an area, and the cost. **Press 5.**

Enter the room you want to paper. You are asked for any areas longer than 4 feet that will not be papered. If there are such areas, press y (for yes) and enter the width and height for each (these may be openings between rooms, windows, a built-in bookcase, etc.--or simply areas of wall you wish to leave unpapered). These areas will not be included when calculating the wallpaper requirements. Press n (for no) when you have no more areas to enter.

The TS2000 tells you how many rolls of wallpaper are needed for the job, and asks you to input the price per roll. It then calculates the total price.

6. EXTERNAL PAINTING ESTIMATION:

Use this option to calculate the amount and cost of paint needed for the outside of the house. **Press 6.**

You are asked for side areas you wish to exclude from the paint usage estimation (areas covered with brick, a garage door to be painted a different color, or any other substantial area). Press y (for yes) and enter the width and height for each. Press n (for no) when there are no more areas. You are told how many gallons of paint are needed for the job. Enter the price per gallon to calculate total cost.

7. AREA AND DIMENSION CATALOGUE:

Press 7. You are shown the areas entered into the catalogue--both internal and external--using options 1 and 2. This is simply a reference list--no calculations are performed in this option.

8. SAVE PROGRAM AND DIMENSIONS:

Press 8. Save the program on cassette, along with all the dimensions of your home. Next time you have a home improvement task go directly to options 3 through 7.

Type in a name (10 characters or less) with which to save to program, (be sure to remember the name--you need it to load this saved version of the program in the future.) The MIC port on the TS2000 must be connected to the MIC port on the tape recorder. The tape must be set to the beginning, if a new tape--or to any location on a tape where you will not record over anything else. Start the recorder in RECORD mode and press any key. The save will take approximately 4 minutes.

9. PROGRAM OPERATING INSTRUCTIONS:

Press 9. This option highlights the program instructions. If for any reason the program stops with an error report, press GOTO 20 and ENTER. The program will run again without any loss of data.

0. DELETE ALL PREVIOUS SPECIFICATIONS:

Press 0. This deletes all area names and dimensions from the computer's memory and begins with a clean slate. If you have more than one home or building, you might want to save one set of dimensions using option 8. Use this option to delete the data and enter the dimensions for a second, or subsequent, home.

LOADING INSTRUCTIONS:

(See Chapter 4 of your instruction manual for detailed instructions.)

1. First listen to the tape so you will be familiar with its distinct sections. The tape has a period of silence at the beginning, followed by a high-pitched, screechy noise. This is the computer program. The program is recorded twice on the cassette in case one does not load.

2. Set the volume control on the cassette deck to about 3/4 of the maximum. If you have tone controls, set the bass to minimum and treble to maximum. If you have just one tone control, set it to HIGH or MAXIMUM.

3. Rewind the tape to the beginning. Connect the EAR jack on the computer to the EAR jack on the cassette deck recorder. Make sure the plugs are clean and securely in place.

4. To instruct the computer to accept the program you must press the LOAD command and type the name of the program in quotation marks. See the instructions or cassette for the correct loading name.

5. Start the cassette deck, allow a few seconds for it to get up to speed, then press ENTER during the silence before the program begins.

6. The border of the TV screen will alternate between pale blue (cyan) and red, during the time the computer is searching for the program on the tape.

7. When the program has been found, the screen border will show a pattern of lines in the same shades of blue and red, and shortly the name of the program will appear on the screen.

8. Next, as the program itself is being loaded into the computer, the border pattern will become thinner, faster moving yellow and dark blue lines.

9. When the computer has finished loading the program, one of two things will happen:

1. Most commercial programs will begin running automatically, usually with a "title screen" or instructions to the user. (A title screen may tell you that the tape is still loading, if not, you should stop the tape immediately at this point so as to be in the proper position to load the next program if you wish.) or

2. The screen will be blank, except for a 0 OK, 0:1 in the lower left hand corner. This is a report code and means that the computer has successfully loaded the program.

Stop the tape immediately. To execute the program, you press RUN and ENTER. This will start the program.

SOME SUGGESTIONS

1. The volume at which the program is loaded is very important. Usually 3/4 maximum volume works best, but recorders vary and may require experimentation with the volume setting. If you have a technical background you can check the output level of your recorder's EAR/SPKR jack. It must be at least 4-volts peak-to-peak, although 5 to 6-volts peak-to-peak is best.
2. Clean and demagnetize the heads of the tape recorder. Your ears may not pick up the signal fluctuations due to magnetic flux on the tape heads, but the computer has a much more sensitive "ear."
3. The computer is very susceptible to outside interference. Working on a metal table or near electrical appliances should be avoided.
4. Occasionally, once a program has loaded, the video display will show instability. This can be corrected by adjusting the vertical hold on the television.

WARRANTY

There are no warranties which extend beyond the description on the face hereof. No other warranty, whether express or implied, including the warranty of merchantability, shall exist in connection with the sale of this product. In no event shall Timex be liable for any consequential, incidental or special damages.

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