The Calorique WARM FLOORS System is intended to be installed between the floor joists as a primary or supplementary heating (floor warming) system. The thin-film heating elements are available in 3 standard widths for 12", 16", or 24" joist spacing. The heating panels are easily installed by stapling the unheated, marked edges of the panels to the inside edge of the floor joist.

# WARM FLOORS SYSTEM DESIGN

Instructions that apply only to systems designed as Primary Heat are marked with a **P**, those that apply only to Supplementary Heat systems are marked **S**.

1P. A heat loss calculation must be completed for each room or area in which the Warm Floors system is the primary heat source. The completed heat loss calculation provides a result that is the minimum required amount of heat that should be installed within the area.

### **NOTE - Primary Heat**

To ensure rapid heat recovery in the event of open doors or windows or a rapid temperature drop, add a heat recovery factor of 20% to the total calculated heat requirement. Installing more panels will not increase the homeowners energy consumption and will increase the comfort level because more of the floor area will be covered.

- 2. A scale drawing or diagram should be made showing all joists and walls within the area.
- Determine the joist spacing in each area and refer to the following table to determine the heat output per panel (Watts per panel) for the heating panels to be used.

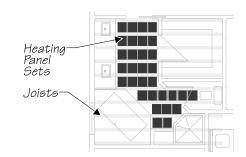
Joist Spacing	Watts / Panel	125 Vac	240 Vac
12" (30 cm)	8 watts	FLR13P8W125V	FLR13P8W240V
16" (40 cm)	11 watts	FLR17P11W125V	FLR17P11W240V
24″ (60 cm)	17 watts	FLR25P17W125V	FLR25P17W240V

4P. To determine the number of heating panels that are required for primary heat divide the total heat required (as determined by the heat loss calculation) by the heat output per panel. This is the minimum amount of Warm Floors panels that should be installed.

### **NOTE - Primary Heat**

The total sum of the heating panels that can be installed in all of the available joist bays must exceed the total number of panels that are required — if the number required can not be installed then the Warm Floors System can not be used as the sole means of primary heating in the room.

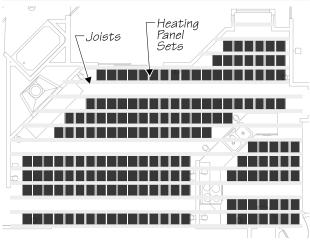
4S. To determine the number of panels of supplementary heat to be installed in each joist cavity, divide the length of the joist cavity to be heated by the panel length (12.6 inches, 320 mm).



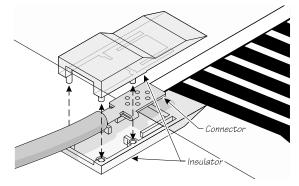
5P. On the drawing, layout the position of the sets of heating panels. Distribute the heating panels evenly throughout the room. Retain this drawing for reference during installation.

#### NOTE

**Do not** install Warm Floors heating panels below any permanent fixtures, cabinets, etc.



6. Each separate set of heating panels will require 2 connectors and 2 insulators.

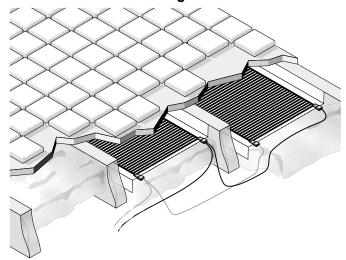


Please use this information to complete the form on the back. This form must be used to order your materials.



under floor heating panel system

**Planning Guide** 



Complete installation instructions are included with each order.

Use this guide as an aid to design your Floor Heating System.

Please complete the table inside this guide and fax or mail to Calorique or your Calorique distributor. This information is required by Calorique to ensure that the system has been properly designed.

## WARM FLOORS System Project Design Summary / Order Form

Name of Installer	Installation Contact Telephone Number	
Name of Homeowner	Homeowner Telephone number	
Street Address of Installation		
Ship System To		
Heat Loss Calculated By	Purchase Order Number	

### **Rooms / Areas Where WARM FLOORS Heating Panels Will Be Installed**

	A Calculated Heat Loss (Step 1) (for Primary Heat)	B Heat Loss Plus 20 Percent (step 1) (for Primary Heat)	C Joist Spacing (step 3)	D Number of Warm Floors Panels (step 4P, 4S)	E Total Number of Watts (D times watts from table in step 3)	F Number of Controls (1per room per 16 amps) (thermostat for Primary Heat)	G Number of Connectors & Insulators (step 6)	H Nominal Voltage	Number of Amperes (Total Watts divided by Nominal Voltage)
Living Room									
Dining Room									
Entrance									
Kitchen									
Family Room									
Bedroom 1									
Bedroom 2									
Bedroom 3									
Bathroom 1									
Bathroom 2									
Den									
Other									
TOTAL									

Is a correctly calibrated FCT-104 crimping tool available? Yes 🗖 No 📮 If no, number of crimping tools required \_

Wire for non-heating leads (to make connections between heating panel sets) must be Type UF #12 AWG single conductor.

The Calorique Warm Floors Heating System must only be installed only by qualified personnel in accordance with the manufacturer's installation instructions.

Warm Floors System Project Order Form Completed by			
	Name (please print)	Signature	Date
CALORIQUE	Send Completed Form To: Or Fax To:	Calorique, Ltd. • 2380 Cranberry Hwy. • W. Wareham MA 02576 USA • (800) 922-9276 (508) 291-2299	Copyright © 1997 Colorique, Ltd. All rights reserved. Printed in USA

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