



Patio Heater

Model Selection



CALCANA PH-SERIES HEATERS

PRODUCT MODEL SELECTION GUIDE

Calcana PH-Series are the only patio heaters on the market that have a patented modulating (or variable) burner that can accommodate most installations. From heating patios in the extreme conditions of Canada to the mild requirements of Mexico, our modulating burner is great for tasks like melting snow or just to provide a gentle blanket of warmth for your patio; it's one heater for all seasons at the turn of a dial. As compared to our competitors, they would have to use two or three of their units to achieve the same results that we can with just one unit.

Selecting the appropriate outside heater for your application is easy with our Patio Heater Selection Guide. Follow our three easy steps to help in your selection of the patio heater that best suits your needs.

1. Which application best fits your needs?

For example, let's assume your application or installation requirement is for spot heating a specific area. Locate the **spot heating applications** section on the following chart:

MODEL	SPOT HEATING APPLICATIONS Exposed/non enclosed, using 1 heater only			ENTIRE PATIO HEATED Exposed/non enclosed, using 2 or more heaters			SEMI, TEMPORARY, OR TOTALLY ENCLOSED INSTALLATIONS		
	SPOT HEATING	MOUNTING HEIGHT	AREA HEATED	COMPLETE HEATING	MOUNTING HEIGHT	AREA HEATED	ENCLOSED HEATING	MOUNTING HEIGHT	AREA HEATED
PH-40HO	Yes	7' to 9'	8' x 8'	Yes	7.5' to 11'	10' x 10'	No	N/A	N/A
PH-75HO	Yes	7' to 9'	12' x 12'	Yes	7.5' to 11'	14' x 14'	No	N/A	N/A
PH-40A	No	N/A	N/A	No	N/A	N/A	Yes	7.5' to 11'	8' x 13'
PH-50A	No	N/A	N/A	No	N/A	N/A	Yes	7.5' to 11'	10' x 18'
PH-75A	No	N/A	N/A	No	N/A	N/A	Yes	7.5' to 11'	12' x 26'
Exposed, outdoor applications are defined as areas that are open to the elements. Patios with a roof and up to 2 side walls are still considered to be exposed or open.							Applications with a roof and 3 side walls are considered semi-enclosed.		

2. Select the amount of area to be heated.

Let's assume the spot area to be heated is 12' x 12' (see red boxes below).

MODEL	SPOT HEATING APPLICATIONS Exposed/non enclosed, using 1 heater only		
	SPOT HEATING	MOUNTING HEIGHT	AREA HEATED
PH-40HO	Yes	7' to 9'	8' x 8'
PH-75HO	Yes	7' to 9'	12' x 12'
PH-40A	No	N/A	N/A
PH-50A	No	N/A	N/A
PH-75A	No	N/A	N/A

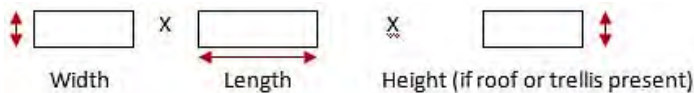
3. Select the patio heater model that best suits your installation and area to be heated.

The outside heater model that best suits this application or installation is our PH-75HO patio heater. (see blue highlighted box above)

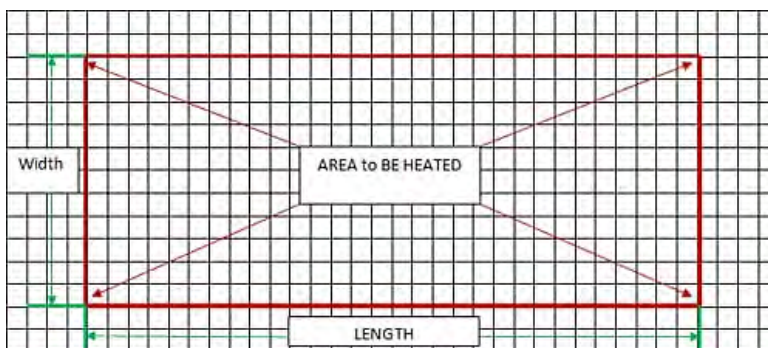
Patio Heater Selection Guide Details Section

Below are the credentials used in developing our patio heater size chart.

1. **How much area would you like to heat?**
 - a. Certain areas or spots?
 - b. The entire patio?
2. **What weather conditions affect your area?**
 - a. Is it a windy location, cool breeze off the ocean?
 - b. Well protected and very little wind.
 - c. Low ambient temperature?
3. **How much will the patio area be used?**
 - a. Open spring, summer and fall; extension of season.
 - b. Open year round with side curtains added in the winter.
4. **Does the area have any of the following?**
 - a. Trellis
 - b. Roof, flat ceiling
 - c. Roof, vaulted or peak inside, height of peak in inches: _____"
 - d. Roof, flat ceiling but recessed: amount of recess in inches: _____"
 - e. No overhead structure, but will build one for the heaters
 - f. No overhead structure, units will have to be wall mounted
5. **Measure the dimensions of the area to be heated:**
Width x Length x Height (if roof or trellis)



6. **Sketch out patio and note any features that may interfere with the design such as trees or landscaping items or architectural features.**



7. **Determine quantity, model and size of heaters for your patio.** The two biggest variables that determine the model and quantity of heaters required for an application is wind and climate.

Note the installation heights and effective heated area (spread pattern) that we suggest in the following guide are for average installations with wind below 15 mph and ambient temperatures of 50° F or higher. If your location does not match these conditions, you simply will need to add more heaters to achieve the desired results.

With respect to installations that have a roof, the following guidelines should be read prior to making your selection:

Do not install our heaters in a recessed cavity. Calcana heaters are designed with specific clearances and airflow requirements and should not be recessed into any cavity or enclosed hollow. A heater installed in a recessed cavity can become over-heated and cause damage to the unit as well as the surrounding structure.

For tray ceilings (not a recessed cavity), our heaters should not be installed unvented unless the area has a form of ventilation to allow exhaust gases to escape. Ventilation can be a powered ventilator, or a ventilation grille sized and located to provide proper air flow and ventilation of the space. With improper ventilation, the unit can shut down, over-heat and cause damage to the unit as well as the surrounding structure. As an alternative to ventilation, the PH-A Series can utilize a chimney system to expel exhaust gases from the area.

a. **For open or exposed patios that are going to be either spot heated or entirely heated:**

(Note: if your installation is enclosed or semi enclosed refer to section 7 – b).

These applications require the highest amount of concentrated heat per square foot. Our high output (HO) patio heaters are the best choice to use in this type of application. With even heat output along the entire length, stainless steel construction and a modulating gas valve, this is the most popular and versatile heater we make for patio heating.

Regarding this section: exposed or open patios may have a roof but cannot have side curtains or walls that completely enclose the space. They may also have an open trellis system with or without curtains or walls.

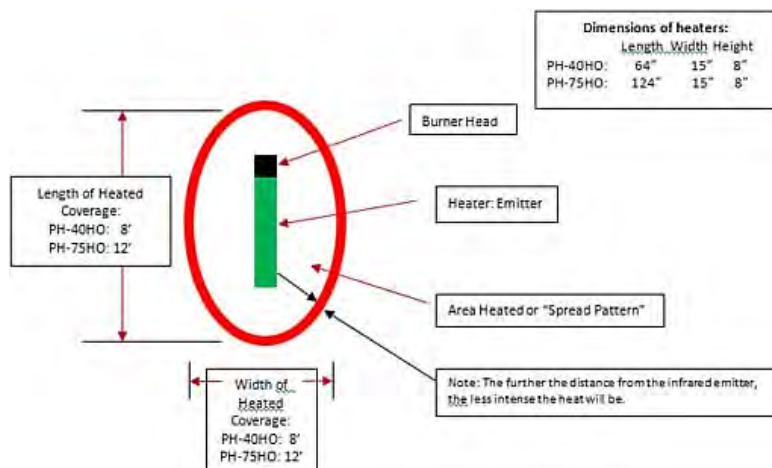
Remember that heating outside where there are no walls is challenging, and it is important to have sufficient capacity. Where wind conditions are significant, wind breaks and extra heaters may be required to provide a comfortable environment. If there is a concern about too much heat, all PH models come with a proprietary variable control panel so the heat level can be reduced when maximum heat output is not needed.

Spot Heating Applications – Single Unit Installations: For heating a specific area such as a table or sitting area. Start by measuring the area to be heated (width x length), then see the illustration below to select the model and size of unit according to the application.

Spot Heating: Area heated (coverage or spread pattern) by a particular unit

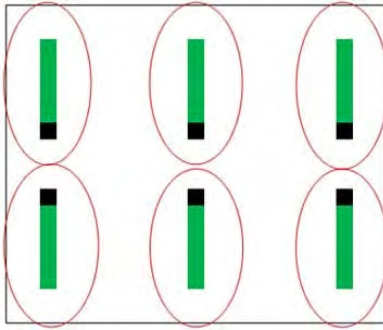
Recommended mounting height: 7' to 9'

Note: The higher the mounting height, the less intense the heat will be. If it is necessary to install the heater at an elevation higher than 9', it may be necessary to select the next larger heater or use two heaters. In these situations, contact the factory for further information. In weather conditions that are breezy or low ambient temperatures; mount the heaters at a lower elevation to concentrate the heat onto the area requiring heat.



Spot Heating Applications – Multiple Unit Installations: Using the dimensions of the spread pattern in the diagram above for each unit, select the heater you require and locate the heaters above each area that requires spot heating.

Entire Patio Heating Applications:

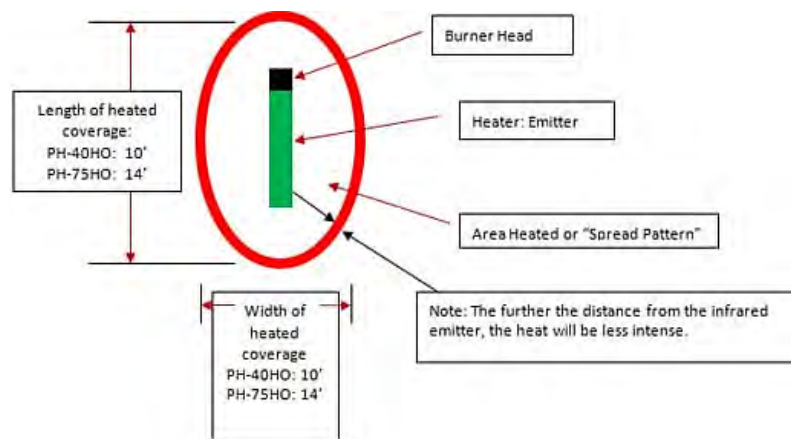


The entire patio area can be heated with multiple units and the outside heaters are installed with their spread patterns overlapping. In this type of installation, there is a cumulative effect from the overlapping of the spread patterns which increases the size of the area heated by the heater.

To determine the correct unit and quantity, start by measuring the area to be heated (width x length). Determine the number of heaters required according to their associated spread patterns (see illustration below). It is most economical to select the largest unit possible since there will be less heaters overall, thereby reducing the associated costs as compared to the installation of "many small units".

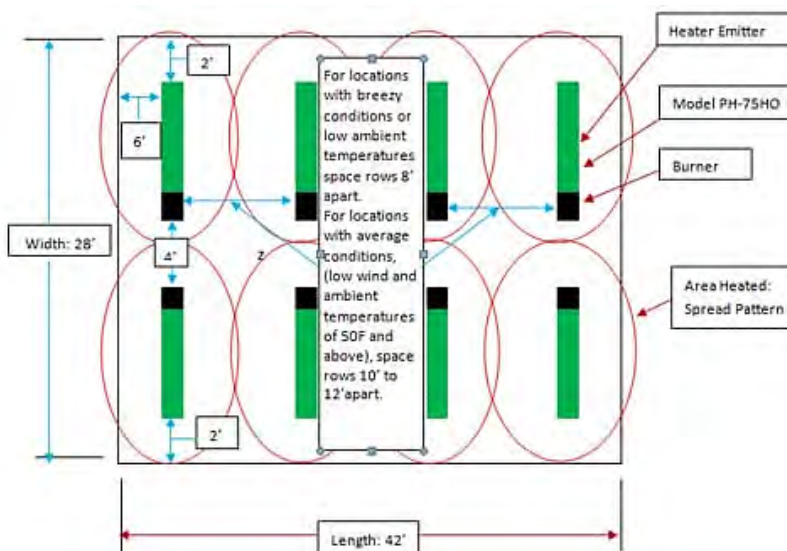
Entire patio heating: Area heated by a particular unit when two or more heaters are used.

Recommended mounting height: 7.5' to 11'



Example: The patio area is 28' wide x 42' long. Select the PH-75HO patio heater based upon the spread pattern associated with the unit, and in this example, use eight units. See the below diagram for positioning of the heaters. Note the layout of our patio heaters is subject to weather conditions of the patio. In cooler locations and breezy situations, space the heaters closer. For average conditions our patio heaters can be farther apart.

Entire Patio Heating Layout Example:



b. **Semi enclosed, temporarily enclosed (removable side curtains) or totally enclosed patios:**

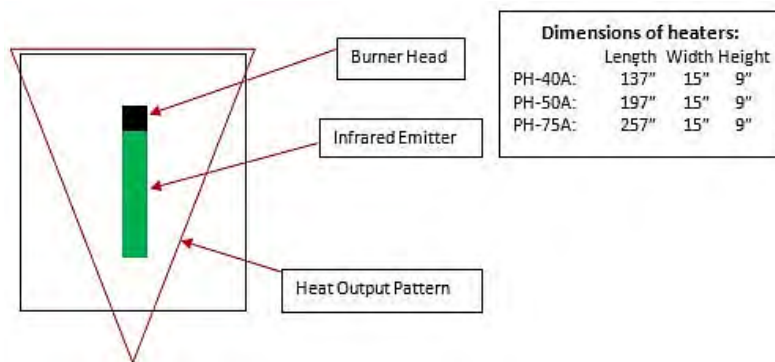
Our standard output patio heaters are the best choice for these applications. The heaters in this series can be connected to either a roof chimney or side wall vent that will safely vent exhaust gases from the area being heated. Note that enclosed patios require less heat because they usually have some form of barrier (side curtains, roof) to help contain the heat in a given area.

Standard Output Models of Patio Heaters: Designed primarily for use in enclosed or semi-enclosed areas, patios with recessed ceilings that prevent the escape of exhaust gases, or patios that will be using side curtains. Depending upon application, these units can be either unvented or vented. Vented is defined as using a chimney or connecting to sidewall venting.

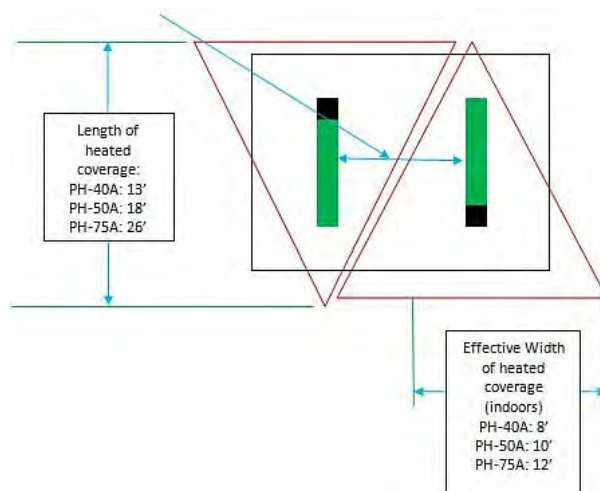
Heat output varies from burner end (hot) to exhaust port (cooler), and it is advised to take this into consideration when selecting a unit from this series. For assistance please don't hesitate to call us for further information.

These models have a very low clearance to combustible materials, making them perfect for many applications. The modulating burner allows the user to adjust heat capacity according to comfort requirements using the wall mounted Variable Control Panel. In entirely enclosed applications, a thermostat can also be used to control the temperature inside the space that is being heated.

Example of the heat spread pattern for a PH-A series unit:



Note to achieve even heat coverage, it is best to use multiple units with the heaters parallel to each other, separated by 8' to 14' and with the burner heads on opposite ends as shown below:

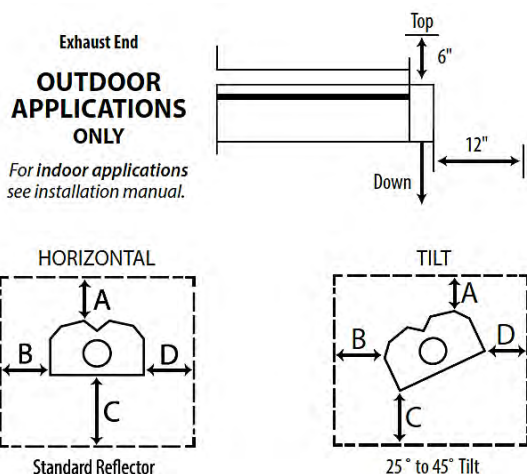


To select the model and size of unit, follow the suggested rational used in section 7 - a and apply it to your semi enclosed or totally enclosed application. In other words, take into consideration the area to be heated, the heat spread pattern and calculate the number of units for your application. If you have any questions, please feel free to give us a call and we would be happy to assist you with your selection.

8. Clearance to combustible materials for our patio heaters:

Once you have decided on the model and size of heaters for your application, refer to the clearance to combustible dimensions below to confirm they can be installed safely in your patio*.

If you have any questions, please don't hesitate to call or email us and we'll be happy to assist you with this process.



Installation Type 1 (Inches)

Input	A	B	C	D
40	4	12	34	12
50	4	12	41	12
75	4	15	46	15
40 HO	8	17	41	17
75 HO	6	12	42	12

Installation Type 2 (Inches)

Input	A	B	C	D
40	4	4	31	28
50	4	4	35	28
75	4	4	40	31
40 HO	8	4	28	25
75 HO	6	4	31	22

*** Important Note:** The stated clearances above are based on correct installation of the heater(s), adjacent to material with a heat tolerance able to withstand the ambient temperature increase while the heater is operating at maximum capacity. Some materials, for instance some vinyl sidings, have a low heat tolerance and can melt, distort, or damage when exposed to temperatures that are surprisingly low. This can happen immediately or with consistent exposure over time.

It is important to check the heat rating (maximum temperature to softening or distortion) of the material the heaters are being installed near. The manufacturer of the product or material should be able to provide this information. You can calculate the maximum operating temperature at the distances indicated on the charts above by adding 90° F to the maximum ambient temperature of the installation area. From there, compare this calculated temperature to the heat rating of the material that the heaters are installed adjacent to. It may be necessary to increase the distance from the material or to install a heat shield.

It is the installer's responsibility to ensure that the heaters are installed properly while heeding clearances, air flow requirements and proper ventilation of the units selected.

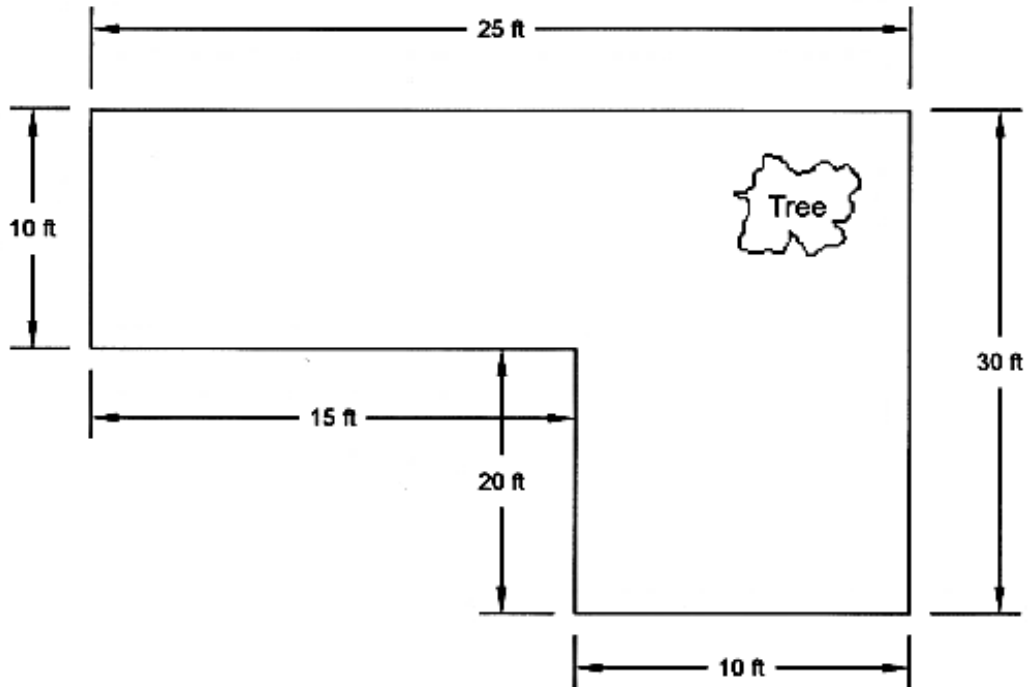


Canada: 5507 6 Street SE, Calgary, AB T2H 1L6
United States: 30201 County Road 49, Loxley, AL 36551
1-800-778-6729 | sales@calcana.com

PATIO HEATER DESIGN DATA SHEET

NAME:	DATE:
ADDRESS:	
PHONE:	EMAIL:
FUEL AVAILABLE: ☐ NATURAL GAS ☐ PROPANE	
NOTES: _____ _____ _____ _____	
Please draw a simple diagram with length and width. If you have an overhead structure or roof, include the height. Also note any obstacles such as trees, bushes, fountains, etc. that may need to be taken into consideration for the design (see example on back). If you have a digital camera, take a few pictures and send them along with this sheet to: sales@calcana.com. If your patio layout is different than the standard layout below, simply draw your configuration or send blueprints to our office. Our design team will review your information, and if required may contact you for any clarification needed.	
PATIO: (DRAW ON ADDITIONAL SHEET IF NECESSARY)	
↑ ↓ WIDTH ↑ ↓ LENGTH	DO YOU HAVE: ☐ ROOF ☐ OPEN TRELLIS ☐ AWNING ☐ OTHER IF SO, PLEASE PROVIDE HEIGHT: ↑ ↓ BUILDING SIDE VIEW

Example



DO YOU HAVE:

ROOF

☒

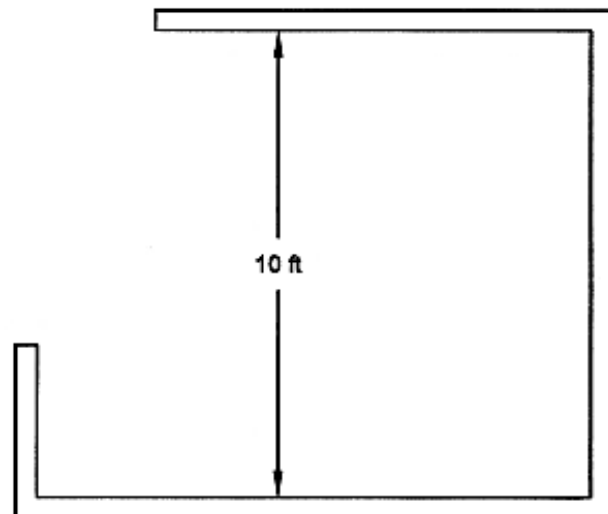
OPEN TRELLIS

☐

AWNING

☐

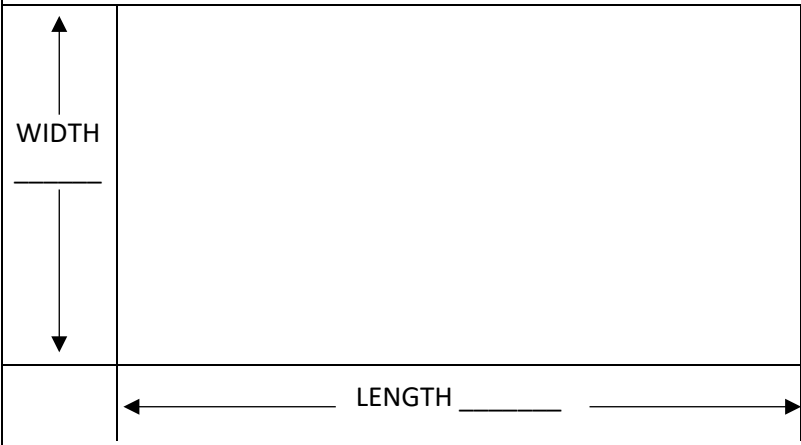
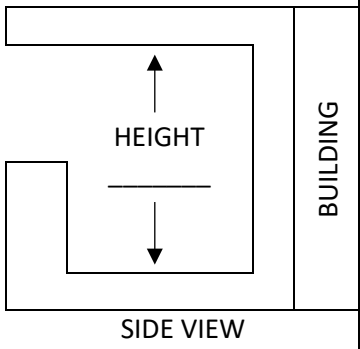
OTHER

☐

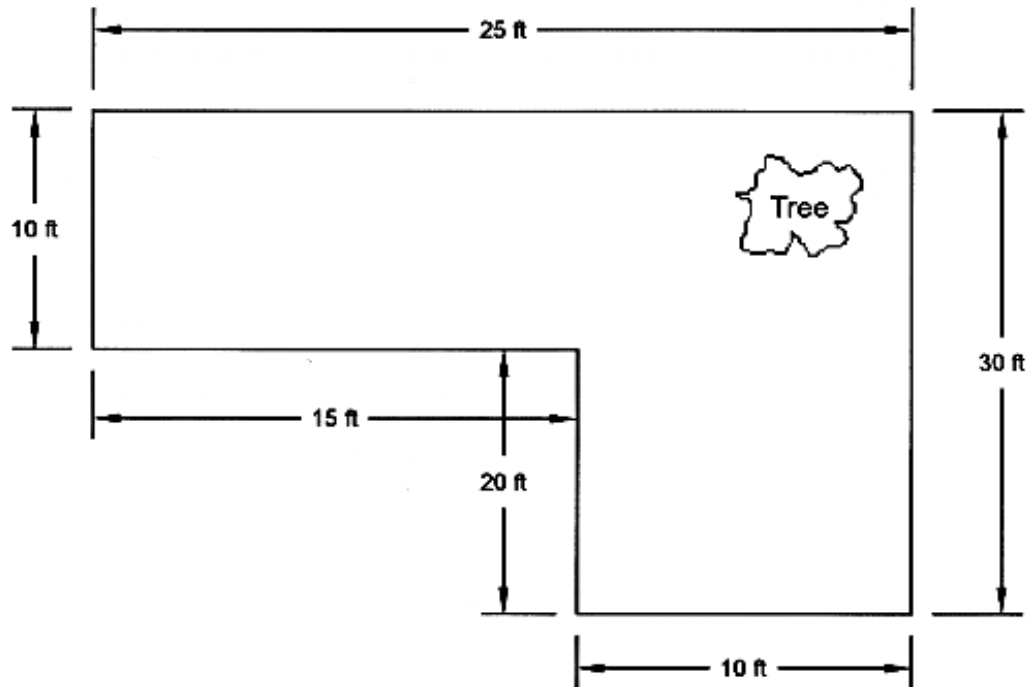


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PATIO HEATER DESIGN DATA SHEET

NAME:	DATE:
ADDRESS:	
PHONE:	EMAIL:
FUEL AVAILABLE: ☐ NATURAL GAS ☐ PROPANE	
NOTES: _____ _____ _____ _____	
Please draw a simple diagram with length and width. If you have an overhead structure or roof, include the height. Also note any obstacles such as trees, bushes, fountains, etc. that may need to be taken into consideration for the design (see example on back). If you have a digital camera, take a few pictures and send them along with this sheet to: sales@calcana.com. If your patio layout is different than the standard layout below, simply draw your configuration or send blueprints to our office. Our design team will review your information, and if required may contact you for any clarification needed.	
PATIO: (DRAW ON ADDITIONAL SHEET IF NECESSARY)	
	DO YOU HAVE: ☐ ROOF ☐ OPEN TRELLIS ☐ AWNING ☐ OTHER IF SO, PLEASE PROVIDE HEIGHT: 

Example



DO YOU HAVE:

ROOF

☒

OPEN TRELLIS

☐

AWNING

☐

OTHER

☐