

PROJECT:

CONTACT INFORMATION:



Floor Warming and Heating Systems

HOW TO MEASURE THE SPACE

PRECISE MEASUREMENTS

THE KEY TO A SUCCESSFUL INSTALLATION!

* All measurements should be taken in inches, to insure a more precise calculation.

Steps to follow to calculate the area to be heated:

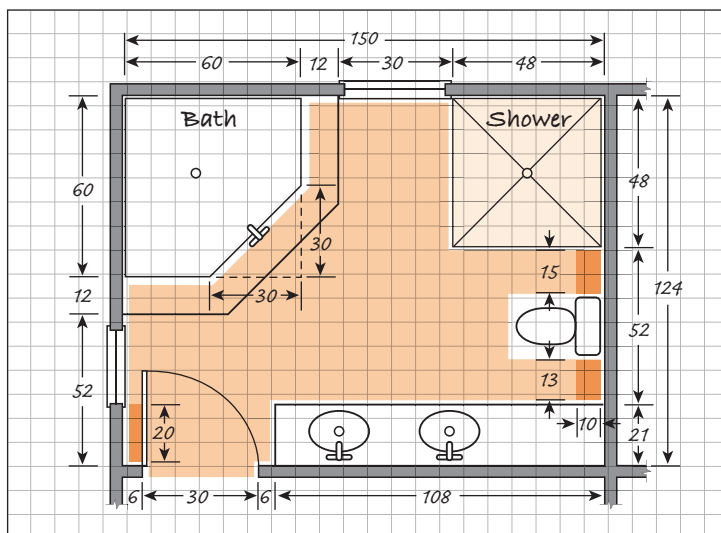
Room sketch

- Make a scale diagram of the room and calculate the total surface area.

Permanent fixtures

- Calculate the surface area of the permanent fixtures.
- Subtract the surface area of the permanent fixtures from the total surface area (don't forget to calculate any angles if the walls or permanent fixtures are not square or rectangular).
- The result is the **maximum** area to be covered.

Bathroom



TOTAL SURFACE AREA

$$150 \text{ in} \times 124 \text{ in} = 129.2 \text{ ft}^2$$

LESS PERMANENT FIXTURES

	Dimensions	Subtotal	Angles to include	Surface area
Shower:	48 in x 48 in =	16 ft ²		16.0 ft ²
Bath:	60 in x 60 in =	25 ft ²	-3.1 ft ² [(30 in x 30 in) ÷ 2] =	21.9 ft ²
Vanity*:	108 in x 21 in =	15.8 ft ²		15.8 ft ²
Toilet:				3.0 ft ²

56.7 ft²

$$\text{Maximum area to be covered: } 129.2 \text{ ft}^2 - 56.7 \text{ ft}^2 = 72.5 \text{ ft}^2$$

$$\text{Minimum area to be covered: } 72.5 \text{ ft}^2 - 2.8 \text{ ft}^2 \text{ (buffer zones)} = 69.7 \text{ ft}^2$$

Note: You must install a specific cable inside a ceramic shower.

* Take measurements from the toe kick.

Legend

	Heated area		Buffer zones
	Heated area – ceramic shower (separate cable)		Permanent fixtures

Buffer zones

- Provide for buffer zones (area not necessary to heat) where you can place any excess cable.
- Subtract the buffer zone areas from the **maximum** area to be covered.
- You will get the **minimum** area to be covered.

Choosing your system

- **Green Cable™ Surface**
Conforms to rooms of any shape.
- **Green Cable™ Mat**
Perfect for square or rectangular rooms.
- **Green Cable™ Concrete**
Installed in the concrete slab during construction.

Important

- It is important that the area covered by the system chosen be between the **maximum** area to be covered and the **minimum** area to be covered since the cable cannot be cut or modified.

Some basic rules for calculations

• Conversion from in² to ft²

All measurements should be taken in inches to have in² totals. Then you can convert it to ft², here is the rule:

$$\text{in}^2 \div 144 = \text{ft}^2$$

• Square surface area

Multiply the length of one of the sides by itself.

Shower example

$$48 \text{ in} \times 48 \text{ in} = 2304 \text{ in}^2$$

$$2304 \text{ in}^2 \div 144 = 16 \text{ ft}^2$$

• Rectangle surface area

Multiply the length by the width.

Vanity example

$$108 \text{ in} \times 21 \text{ in} = 2268 \text{ in}^2$$

$$2268 \text{ in}^2 \div 144 = 15.8 \text{ ft}^2$$

• Triangle surface area

Multiply the base by the height, then divide by 2.

Bathtub angle example

$$30 \text{ in} \times 30 \text{ in} = 900 \text{ in}^2 \div 2 = 450 \text{ in}^2$$

$$450 \text{ in}^2 \div 144 = 3.1 \text{ ft}^2$$

