

Worksheet 1 of 1

Job ID: 123456 (Rev. 1)
 Date: 20-Apr-2007
 Company: John Doe Contracting, Inc.
 Project: Example Project - Master Bath

Area To Be Heated: Master Bathroom
 Size Of Area (ft²): 177.1 ft²
 Floor Covering: Tile

Required Net Power For Floor Heating: 3.5 W/ft²
 Estimated Power Of Area: 3.7 W/ft²
 Estimated Net Power (Project Entirety): 3.7 W/ft²

Floor Level: 1st Floor
 Subfloor: Slab On Grade

Total Element Length (Project Entirety): 72.75 ft
 Total Number Of Strips (Project Entirety): 10 pieces

Thermal Insulation is REQUIRED under elements. Please refer to the STEP Handbook™ (section 6) for details.

Service Panel >>>> Circuit Breaker (Type HID)* 1.25 (Safety Factor) x Primary Amps: 7 A

NOTE: *Use HID (High Intensity Discharge) circuit breaker to avoid nuisance tripping.

Control Device >>>> EPI-LX-TH (Master)* 1 (Non-Programmable Thermostat)

NOTE: *EPI-LX-SEN floor temperature sensor available upon request.

Power Supply 1 of 1 >>>> EPI-LX-R-1000 120 VAC Primary 60Hz Primary Amps: 5.5 A
 24 VAC Secondary Secondary Amps: 27.3 A

Maximum Wire Length	
14AWG	15 ft
12AWG	24 ft
10AWG	38 ft
8AWG	55 ft
6AWG	88 ft
4AWG	140 ft

Wattage	
391.5 W	(1A + 2A)

Element I.D. / Model	Output	Width	Length	Amps
#1 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	6.75 ft	2.6 A
+ #2 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	12.25 ft	4.6 A
#3 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	12.25 ft	4.6 A
+ #4 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	12.25 ft	4.6 A

Total (1A + 2A): 43.5 ft 16.3 A

Maximum Wire Length	
14AWG	18 ft
12AWG	29 ft
10AWG	47 ft
8AWG	67 ft
6AWG	106 ft
4AWG	169 ft

Wattage	
263.25 W	(1B + 2B)

Element I.D. / Model	Output	Width	Length	Amps
#5 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	5.25 ft	2.0 A
+ #6 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	5.25 ft	2.0 A
+ #7 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	5.25 ft	2.0 A
#8 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	5.25 ft	2.0 A
+ #9 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	3 ft	1.2 A
+ #10 EP-30-2-29W-24V	9 W/ft @ 68°F	12"	5.25 ft	2.0 A

Total (1B + 2B): 29.25 ft 11.0 A

Total Wattage: 654.75 W Total Number Of Strips: 10 pieces Total (All Terminals): 72.75 ft 27.3 A