

Complete this form by entering text, numbers, check boxes as required below.
 Save document and e-mail to design@schwankgroup.com.
 Or Print and fax the completed form and drawings to:
 Canada Fax: 1-866-724-9265 ; USA Fax: 1-866-361-0523 [or 706-554-9390]



Patio Design Form

* Indicates required information: Incomplete information will result in delays

Electric IR Heaters: Must also complete Page 2 and optionally Page 3 for a design

*Distributor Name: _____	*Project Name: _____
*Contact Person: _____	*Project City: _____
*Address: _____	*State/Prov: _____
*City: _____	
*State/Prov: _____	*Contractor: _____
*Phone: _____	*Contact Person: _____
*Fax: _____	Phone: _____
E-mail: _____	E-mail: _____

**Note: Patio Heating Designs allow for a wind condition of 10 mph [15 km/hr].
 Patios with wind breaks provide best comfort for patrons.**

*Type of Fuel: Nat. Gas Propane Electricity	*Comfort Temperature Needs: Check: °F or °C When in use, coldest outside temperature: _____ °F or °C Desired Comfort Temperature rise: _____ [Typical: 15° to 20°F]
*Entire Patio to be heated: Yes No Indicate partial area on floor plan	*Is there a roof/canopy over patio: Yes No Include a cross section sketch and indicate high and low point dimensions Roof Construction _____ Material: _____
*Is Patio adjacent to a wall: Yes No If Yes , indicate wall[s] on the floor plan & cross section	*Is there a wind break on any side of patio: Yes No Indicate location[s] on floor plan How much wind is blocked _____ % [Estimate]
*Can heaters be mounted on a wall: Yes No If Yes , indicate which wall[s] on your sketch	

On separate sheet[s] include a floor plan sketch and a cross section. **Include all dimensions.**

- Indicate:
- Location of Tables
 - Table type: chair height tables; stool height tables
 - Windows and doors [these interfere with possible heater locations]
 - Any wall area where heaters can be located
 - Any restrictions to heater locations [overhangs, signs, fans, windows, etc]
 - Mark any partial area of floor plan to heat
 - Mark any specific Zones of heat required on the patio
 - Roof or canopy: Dimensions to the high and low sides; construction material
 - If the patio area has other special circumstances, indicate on sketch

Electric IR Heating: Must also read & complete Page 2 and optionally Page 3 for a design

**Canada Fax: 1-866-724-9265 , USA Fax: 1-866-361-0523 [or 706-554-9390]
 or e-mail to design@schwankgroup.com**

Standard turnaround is 3 business days, if possible Schwank will endeavor to accommodate earlier requirements.

Electric IR Heating Guidelines: Read First

Ensure the site has sufficient electrical capacity before submitting a design request

Use this table as a guideline for the **minimum** amperage capacity required at site electrical panel.

This table indicates the electrical capacity required for **each** 100 sq ft [9.3 sq m] of Patio area:

Site Voltage	Comfort temperature rise	
	15°F	20°F
120	50 Amps	75 Amps
208	30 Amps	40 Amps
240	25 Amps	34 Amps
277	22 Amps	28 Amps
480	12 Amps	16 Amps

Minimum Amps service required per each 100 sq ft [9.3 sq m] of Patio area

Square Feet: Divide total patio area by 100, then multiply by the appropriate amps in the table above.

Square Meters: Divide total patio area by 9.3, then multiply by the appropriate amps in the table above.

If the required electrical capacity [amps] cannot be made available, do not design with Electric IR

Example: 12 ft x 24 ft patio with 208 volts at project site and customer desires a 15°F comfort temperature rise.







12' x 24' = 288 sq ft requires: $[288/100] \times 30 \text{ Amps} = 87 \text{ Amps}$ minimum capacity at an electrical panel on site.

Information below is required for design of Electric IR heating:

Site Voltage [Check one only]: 120 208 240 277 480
 Phase: Single Phase Three Phase

Select a Control Strategy: [select one; More controls next page]

Note: Schwank design staff will best match the selected control strategy to the heaters required by design. An alternate solution may be needed or suggested depending upon heater model[s] required.

	INF Input Regulators for use with single element heaters up to 3000 W [max. 15 amps]	Duplex Stack Switches for use with dual element heaters. Range 120V - 277V [max. 20 amps/switch]
Check One In-Wall For Indoor or Protected Outdoor Areas		
In-Wall for Exposed Outdoor Areas		
Surface Mount for Exposed Outdoor Areas		

More control options next page

Canada Fax: 1-866-724-9265, USA Fax: 1-866-361-0523 [or 706-554-9390]
 or e-mail to design@schwankgroup.com

Standard turnaround is 3 business days, if possible Schwank will endeavor to accommodate earlier requirements.

More control solutions previous page

Surface Mounted Solid State Relay Panels

- Nema 4 rated: Completely weather resistant
- Maximum 8,000 watts @208V per relay
- Maximum 9,000 watts @240V per relay
- Grey powder coat finish

Check

One

Used in conjunction with
Zone Intensity Controllers
[select one style below]

1 to 6 Relays / Panel*

or

Used in conjunction with a home
management system

1 to 6 Relays / Panel*

Note: Requires 0-10V DC Signal



* Relay Panels requiring more than six relays are also available by special order.

A separate form is required for the design of custom Relay Panels: "Solid State Controls Worksheet.pdf"

Check

One

Zone Intensity Controllers

- Nema 12 rated: Can be exposed to mist, but not direct rain
- Stainless steel cover**
- Control the intensity of heat in specific zones
- Lighted On/Off switch for each zone
- 1 to 4 Controller gang
- Each zone control can control up to 3 relays in the Relay Panel



Zone Intensity Controllers with Master Timer

- Master Digital Timer intervals: 15, 30, 60 min.; 2 and 4 hours
- 1 to 3 Controller gang + Master Digital Timer
- Same specifications as Controllers above



Check

For White

** All Zone Intensity Controllers are also
available in white finish surface plate



Canada Fax:1-866-724-9265 , USA Fax: 1-866-361-0523 [or 706-554-9390]

or e-mail to design@schwankgroup.com

Standard turnaround is 3 business days, if possible Schwank will endeavor to accommodate earlier requirements.