**SUBMITTAL** DATA



## **2300 SERIES**

MODELS 2312, 2313, 2352

## **HIGH EFFICIENCY / COMBINED INTENSITY INFRA-RED PATIO HEATERS** FOR OUTDOOR AND INDOOR USE



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|----|-------|------|
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|    |       |      |
|    |       |      |

| PROJECT:         |      |        |  |
|------------------|------|--------|--|
| ENGINEER:        |      |        |  |
| CONTRACTOR:      |      |        |  |
| DISTRIBUTOR:     |      |        |  |
| SCHWANK MODEL #: |      |        |  |
| FUEL:            | N.G. | L.P.G. |  |
| APPROVED BY:     |      |        |  |
| DATE:            |      |        |  |
| APPROVAL #:      |      |        |  |

#### NOTICE:

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## CERTIFICATION

The 2300 Series heater is approved for outdoor and indoor use to the following standards:

- Outdoor: ANSI Z83.26 / CSA 2.37 Gas-Fired Outdoor Infrared Patio Heaters
- Indoor: ANSI Z83.19 / CSA 2.35 Gas-Fired High Intensity Infrared Heaters

#### Outdoor Definition per ANSI Z83.26 / CSA 2.37 Approval Standard.

An appliance approved for "outdoor use" may be installed with shelter no more inclusive than:

- With walls on all sides, but with no overhead cover, (overhead permanently open) or
- Within a partial enclosure which includes an overhead cover and no more than two side walls. These side walls may be parallel, as in a breezeway, or at right angle to each other. The open sides must be <u>permanently open</u> *or*
- Within a partial enclosure which includes an overhead cover and three side walls, as long as 30 percent or more of the horizontal periphery of the enclosure is <u>permanently</u> <u>open</u>.

# If "outdoor" conditions are not met, Models 2312 & 2313 are approved for "indoor use" and ventilation requirements of local codes apply.



|     |              |                             | GAS         | 1/2" GAS INL                 | ET PIPE SIZE                      |                      |                 |                  |
|-----|--------------|-----------------------------|-------------|------------------------------|-----------------------------------|----------------------|-----------------|------------------|
| QTY | MODEL<br>NO. | INPUT<br>CAPACI-<br>TY BTUH |             | MINIMUM GAS<br>LINE PRESSURE | MAXIMUM GAS<br>LINE PRES-<br>SURE | MANIFOLD<br>PRESSURE | ELECTRI-<br>CAL | WEIGHT<br>(LBS.) |
|     | 2312-N       | 23,000                      | NAT         | 6" W.C.                      | 14" W.C.                          | 5" W.C.              | VOLT-           | 32               |
|     | 2312-L       | 23,000                      | LP          | 11" W.C.                     | 14" W.C.                          | 10" W.C.             | AGE<br>24VAC    | 32               |
|     | 2313-N       | 35,000                      | NAT         | 6" W.C.                      | 14" W.C.                          | 5" W.C.              |                 | 44               |
|     | 2313-L       | 35,000                      | LP          | 11" W.C.                     | 14" W.C.                          | 10" W.C.             | CUR-<br>RENT    | 44               |
|     | 2352-N       | 50,000/<br>35,000           | NAT<br>ONLY | 6" W.C.                      | 14" W.C.                          | 5" W.C.              | 40VA*           | 49               |

\*For a multiple heater installation, the transformer is sized: 40 VA for the first heater + 20 VA for each additional heater. If total VA is between transformer sizes, select the next higher VA rating.

## MINIMUM CLEARANCES TO COMBUSTIBLES

Note that clearances to combustible material are different for indoor application than for outdoor. (*See Table below*)



| QTY | Application | MODEL NO | Horizontal |       | 30° Angle |      |      | Under | Ends |
|-----|-------------|----------|------------|-------|-----------|------|------|-------|------|
|     |             |          | Α          | S     | Т         | В    | F    | U     | Е    |
|     | OUTDOOR     | 2312     | 5.5"       | 7"    | 9.5"      | 1"   | 9.5" | 48"   | 3"   |
|     | OUTDOOR     | 2313     | 7.5"       | 9"    | 9.5"      | 1.5" | 21"  | 48"   | 5"   |
|     | OUTDOOR     | 2352     | 12"        | 28"   | 16"       | 10"  | 36"  | 60"   | 21"  |
|     | INDOOR      | 2312     | 8"         | 10"   | 12.5"     | 2.5" | 14"  | 60"   | 4"   |
|     | INDOOR      | 2313     | 10.5"      | 14.5" | 14.5"     | 2.5" | 26"  | 60"   | 6"   |

SUGGESTED MOUNTING HEIGHT FOR COMFORT:

- 2312: 8 ft to 10 ft
- 2313: 8 ft-6 in to 11 ft
- 2352: 9 ft to 12 ft

## Do not mount less than 8 ft [2438 mm] above floor.

## Do not store or place anything directly under heater.

Notes:

- 1. Ensure mounting height in any location is sufficient to prevent patrons from coming in contact with heater, and clearances to combustibles are maintained.
- The clearance to combustible material represents the minimum distance that must be maintained between the outer heater surface and a nearby surface. The stated clearance to combustibles represents a surface temperature of: Indoor = 90F° (50C°) above room temperature; Outdoor = 117F° (65C°) above ambient temperature.
- 3. <u>It is the installer's responsibility to ensure that building materials with a low heat tolerance</u> which may degrade at lower temperatures are protected to prevent degradation. Examples of low heat tolerance materials include awnings, vinyl siding, fabrics, some plastics, filmy materials, etc.

#### 2300 SERIES: OPTIONS

#### OPTION QTY DESCRIPTION PATIO CONTROL PANEL 24 VOLT CONTROL **REMOTE CONTROL** OPTIONS 2-STAGE ILLUMINATED SWITCH GANG (2352 Only) MOUNTING OPTIONS **Fits All Models** JP-2100-CB-K Ceiling Mount Kit Heater must be rigidly mounted Stainless Steel construction - not chain (one end shown) Fits All Models - 30° Mount K 11" 11.5 JP-2100-MB **Black Painted Steel** JP-2100-MB-SS Stainless Steel 2312 & 2313 Models Only - 30° Mount JP-2300-MB Black Painted Steel JP-2300-MB-SS Stainless Steel 8" Fits All Models - 30° Mount at 30 inches from wall JP-2300-MK Black Painted Steel JP-2300-MK-SS Stainless Steel Fits All Models - 30° Mount from 4" dia. pole JP-2300-PK **Black Painted Steel** JP-2300-PK-SS Stainless Steel

### 2300 SERIES: COMPONENT DESCRIPTION

| 2312, 2313<br>COMBINATION<br>GAS VALVE | NATURAL GAS 5" W.C. MANIFOLD PRESSURE; 24 VAC<br>PROPANE 10" W.C. MANIFOLD PRESSURE; 24 VAC   |  |  |  |  |
|--|---|--|--|--|--|
| 2352<br>COMBINATION<br>GAS VALVE       | TWO-STAGE NATURAL GAS ONLY:<br>5" / 3.0" W.C. MANIFOLD PRESSURE; 24 VAC   |  |  |  |  |
| IGNITION                               | DIRECT SPARK MODULE: 3 TRIAL IGNITION SEQUENCE; AUTOMATIC<br>SOFT LOCK-OUT WITH AUTO RESET AFTER 30 MINUTES FOR IGNITION<br>RETRIAL   |  |  |  |  |
| WIND SCREEN                            | MARINE GRADE 316 STAINLESS STEEL W/ BLACK EMISSIVE COATING  |  |  |  |  |
| CABINET                                | MARINE GRADE 316 STAINLESS STEEL W/ BLACK EMISSIVE COATING  |  |  |  |  |
| VENTURI TUBE                           | STEEL BUILT INTO BURNER HOUSING   |  |  |  |  |
| BURNER                                 | ONE ATMOSPHERIC BURNER COMPLETE WITH IGNITION / FLAME SENS-<br>ING / MONITORING SYSTEM  |  |  |  |  |
| CERAMIC TILE                           | SCHWANK EFFECT TILE 14/4 WITH INCREASED SURFACE INDENTA-<br>TIONS AND HARD FINISHED EDGES   |  |  |  |  |
| TILE RETAINERS                         | STAINLESS STEEL   |  |  |  |  |
| COMBUSTION                             | TILE SURFACE TEMPERATURE: 1,760°F [960°C]<br>"COLD STATE" COMBUSTION TRANSFERS HEAT INSTANTANEOUSLY TO<br>TILE SURFACE AND MINIMIZES EMISSIONS:<br>CO: 10 – 48 ppm, air free [11 – 50 mg/kWh]<br>NOx: 9 – 14 ppm, air free [15 – 25 mg/kWh] |  |  |  |  |