

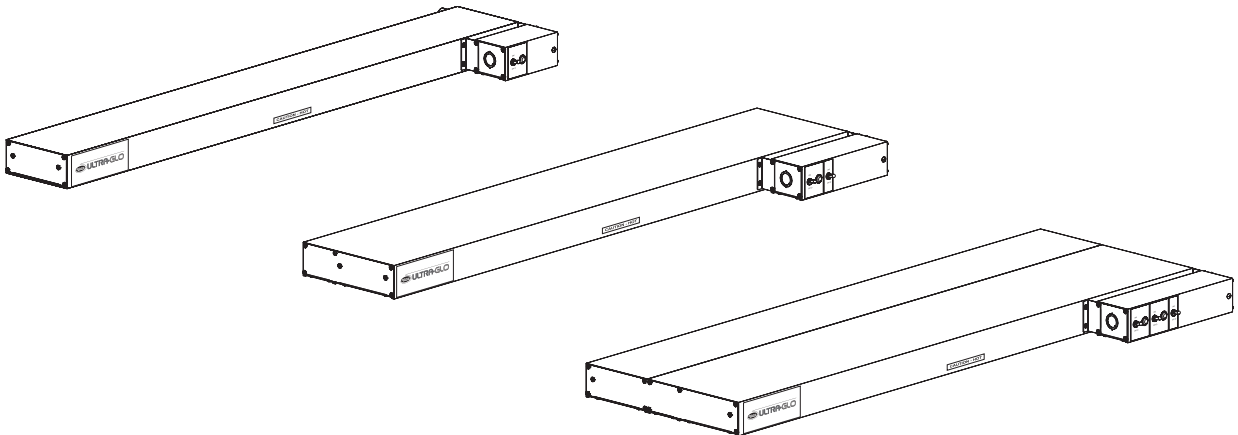


Ultra-Glo[®]

Ceramic Infrared Strip Heaters

UGA, UGAL, UGAD, and UGADL Series

Installation and Operating Manual



⚠ WARNING

Do not operate this equipment unless you have read and understood the contents of this manual! Failure to follow the instructions contained in this manual may result in serious injury or death. This manual contains important safety information concerning the maintenance, use, and operation of this product. If you're unable to understand the contents of this manual, please bring it to the attention of your supervisor. Keep this manual in a safe location for future reference.

⚠ ADVERTENCIA

No opere este equipo al menos que haya leído y comprendido el contenido de este manual! Cualquier falla en el seguimiento de las instrucciones contenidas en este manual puede resultar en un serio lesión o muerte. Este manual contiene importante información sobre seguridad concerniente al mantenimiento, uso y operación de este producto. Si usted no puede entender el contenido de este manual por favor pregunte a su supervisor. Almacenar este manual en una localización segura para la referencia futura.

⚠ AVERTISSEMENT

Ne pas utiliser cet équipement sans avoir lu et compris le contenu de ce manuel ! Le non-respect des instructions contenues dans ce manuel peut entraîner de graves blessures ou la mort. Ce manuel contient des informations importantes concernant l'entretien, l'utilisation et le fonctionnement de ce produit. Si vous ne comprenez pas le contenu de ce manuel, veuillez le signaler à votre supérieur. Conservez ce manuel dans un endroit sûr pour pouvoir vous y référer plus tard.

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IMPORTANT OWNER INFORMATION

Record the model number, serial number, voltage, and purchase date of the unit in the spaces below (specification label on underside of unit). Please have this information available when calling Hatco for service assistance.

Model No. _____

Serial No. _____

Voltage _____

Date of Purchase _____

Business

Hours: 7:00 AM to 5:00 PM Monday–Friday,
Central Time (CT)
(Summer Hours—June to September:
7:00 AM to 5:00 PM Monday–Thursday
7:00 AM to 4:00 PM Friday)

Telephone: +1-414-671-6350

E-mail: support@hatcocorp.com

Additional information can be found by visiting our web site at www.hatcocorp.com.

Register your unit!

Completing online warranty registration will prevent delay in obtaining warranty coverage. Access the Hatco website at www.hatcocorp.com, select the *Support* pull-down menu, and click on “Warranty”.



Correct Disposal of this Product

This marking indicates that this product and its electronic components should not be disposed of with other commercial waste. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle responsibly to promote the sustainable reuse of material resources. To dispose of product and its electronic components, contact supplier where product was purchased for environmentally safe recycling.

INTRODUCTION

Hatco Ultra-Glo® Ceramic Strip Heaters ensure maximum food holding and minimize the risk of food-borne illness. Optimum safety and quality is the result of food held at the proper serving temperatures using Ultra Glo’s pre-focused heat patterns. The pre-focused heat pattern prevents foods from being over-cooked in the middle and cooling off around the edges by concentrating higher temperatures to the outer edges of holding surfaces where heat loss is the greatest. Utilizing specially designed reflectors to direct the heat from the element, Ultra-Glo Ceramic Strip Heaters safely maintain peak serving temperatures longer without cooking the food beyond the point of excellence. The ceramic element heat output allows the units to be mounted at increased heights for improved working clearances.

Ultra-Glo Ceramic Strip Heaters are available from the factory with or without shatter-resistant display lights to illuminate the warming area. These bulbs have a special coating that guards against injury and food contamination in the event of breakage.

Ultra-Glo Ceramic Strip Heaters are a product of extensive research and field testing. The materials used were selected for maximum durability, attractive appearance, and optimum performance. Every unit is inspected and tested thoroughly prior to shipment.

This manual provides the installation, safety, and operating instructions for Ultra-Glo Ceramic Strip Heaters. Hatco recommends all installation, operating, and safety instructions appearing in this manual be read prior to installation or operation of the strip heaters.

Safety information that appears in this manual is identified by the following signal word panels:



WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



NOTICE is used to address practices not related to personal injury.

NOTE: Refer to the Symbol Identification tables on the back cover of this manual for definitions of symbols that may appear in this manual.





Read the following important safety information before using this equipment to avoid serious injury or death and to avoid damage to equipment or property.

WARNING**ELECTRIC SHOCK HAZARD:**

- Unit must be installed by a qualified electrician. Installation must conform to all local electrical codes. Installation by unqualified personnel will void unit warranty and may lead to electric shock or burn, as well as damage to unit and/or its surroundings.
- Units supplied without an electrical cord and plug require a hardwired connection to on-site electrical system. Connection must be properly grounded and of correct voltage, size, and configuration for electrical specifications of unit. Contact a qualified electrician to determine and install proper electrical connection.
- Turn OFF power switch, turn off power at circuit breaker, and allow unit to cool before performing any cleaning, adjustments, or maintenance.
- DO NOT submerge or saturate with water. Unit is not waterproof. Do not operate if unit has been submerged or saturated with water.
- This unit is not “jet-proof” construction. Do not use jet-clean spray to clean this unit.
- Use only Genuine Hatco Replacement Parts when service is required. Failure to use Genuine Hatco Replacement Parts will void all warranties and may subject operators of the equipment to hazardous electrical voltage, resulting in electrical shock or burn. Genuine Hatco Replacement Parts are specified to operate safely in the environments in which they are used. Some aftermarket or generic replacement parts do not have the characteristics that will allow them to operate safely in Hatco equipment.

FIRE HAZARD:

- Do not install unit above or around combustible surfaces. Discoloration or combustion could occur. Unit must be installed in non-combustible surroundings only.
- Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

Make sure all operators have been instructed on the safe and proper use of the unit.

WARNING

This unit is not intended for use by children or persons with reduced physical, sensory, or mental capabilities. Ensure proper supervision of children and keep them away from unit.

Use only light bulbs that meet or exceed National Sanitation Foundation (NSF) standards and are specifically designed for food holding areas. Breakage of light bulbs not specially-coated could result in personal injury and/or food contamination.

This unit has no “user-serviceable” parts. If service is required on this unit, contact an Authorized Hatco Service Agent or contact the Hatco Service Department at or +1-414-671-6350.

CAUTION

BURN HAZARD: Some exterior surfaces on unit will get hot. Avoid unnecessary contact with unit.

Ensure safe and proper operation. Refer to the “Minimum Clearance Requirements” listed in the INSTALLATION section of this manual.

NOTICE

Standard and approved manufacturing oils may smoke up to 30 minutes during initial startup. This is a temporary condition. Operate unit without food product until smoke dissipates.

Installation of two or more separate units with less than 76 mm (3”) between housings may result in premature failure of component parts. Failure to provide proper spacing may result in heat damage to electrical components.

Do not add a decorative soffit to hide a pass-through mounted strip heater. Premature failure of components due to excessive heat may occur.

DO NOT conceal unit. Unit must be installed below lowest edge of a rolled or flanged shelf. Failure to mount unit properly may result in premature failure of switches and void product warranty.

IMPORTANT SAFETY INFORMATION

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NOTICE

Remote mounted control boxes must be installed outside strip heater heat zone to prevent premature failure of components due to excessive heat.

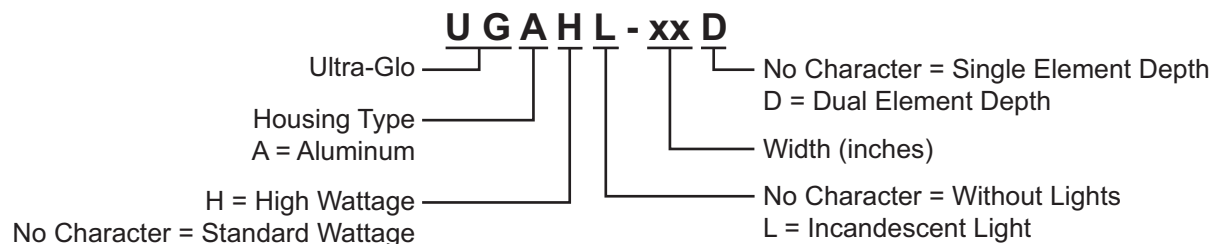
Damage to any countertop material caused by heat generated from Hatco equipment is not covered under the Hatco warranty. Contact manufacturer of countertop material for application information.

NOTICE

Do not locate unit in area with excessive air movement around unit. Avoid areas that may be subject to active air movements or currents (i.e., near exhaust fans/hoods, air conditioning ducts, and exterior doors).

Use non-abrasive cleaners and cloths only. Abrasive cleaners and cloths could scratch the finish of the unit, marring its appearance and making it susceptible to soil accumulation.

MODEL DESIGNATION



Hatco Ultra-Glo® Ceramic Strip Heaters keep hot foods at optimum serving temperatures longer. Foods do not dry out or become discolored; even the most delicate dishes hold that “just-prepared” look. The Ultra-Glo pre-focused heat pattern directs heat from a ceramic element to bathe the entire holding surface. The ceramic element heat output allows the units to be mounted at increased heights for improved working clearances.

Ultra-Glo Ceramic Strip Heaters are constructed with aluminum housings in widths of 18” (457 mm) to 72” (1829 mm).

Dual models allow for side-by-side mounting of two heating elements to provide a deeper holding area (dual models are constructed with a standard 3” [76 mm] or optional 6” [152 mm] spacer between heating elements).

All Ultra-Glo Ceramic Strip Heaters have several mounting options and switch locations. Optional infinite control switches, electronic infinite control switches, remote control enclosures, incandescent lighting, and halogen lighting are available.

UGA-xx: Aluminum housing, single element depth

UGAH-xx: Aluminum housing, high wattage, single element depth

UGAL-xx: Aluminum housing, incandescent lights, single element depth

UGAHL-xx: Aluminum housing, high wattage, incandescent lights, single element depth

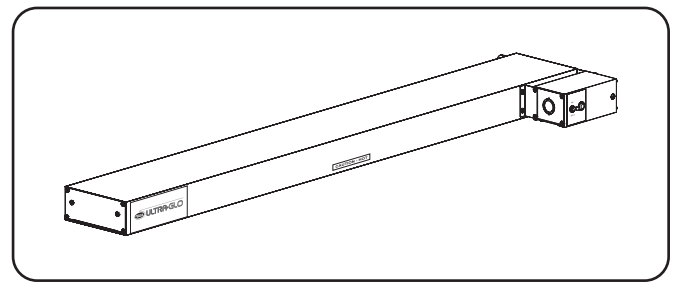
UGA-xxD: Aluminum housing, dual element depth

UGAH-xxD: Aluminum housing, high wattage, dual element depth

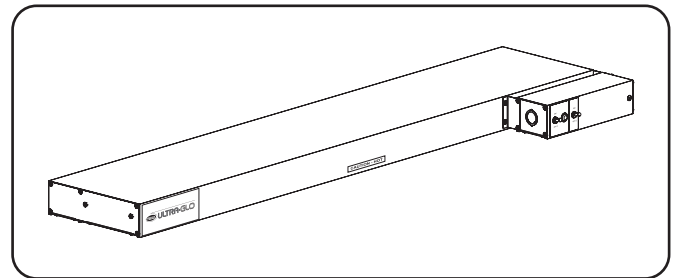
UGAL-xxD: Aluminum housing, incandescent lights, dual element depth

UGAHL-xxD: Aluminum housing, high wattage, incandescent lights, dual element depth

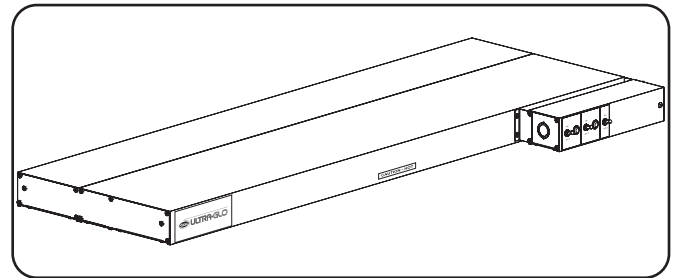
NOTE: Incandescent lights are not available for retrofit.



UGA-xx Model



UGAL-xx Model



UGAL-xxD Model, 76 mm (3") Spacer

SPECIFICATIONS



Electrical Rating Chart — UGA Models

Model	Voltage	Watts	Amps	Shipping Weight *
UGA-18	220	546	2.5	4 kg (9 lbs.)
	240	500	2.1	
UGA-24	220	630	2.9	5 kg (10 lbs.)
	240	650	2.7	
UGA-30	220	756	3.4	5 kg (11 lbs.)
	240	900	3.8	
UGA-36	220	1092	5.0	5 kg (12 lbs.)
	240	1000	4.2	
UGA-42	220	1260	5.7	13 lbs. (6 kg)
	240	1200	5.0	
UGA-48	220	1638	7.4	6 kg (14 lbs.)
	240	1500	6.3	
UGA-54	220	1639	7.4	7 kg (16 lbs.)
	240	1500	6.3	
UGA-60	220	2185	9.9	8 kg (17 lbs.)
	240	2000	8.3	
UGA-66	220	2185	9.9	9 kg (19 lbs.)
	240	2000	8.3	
UGA-72	220	2520	11.5	9 kg (20 lbs.)
	240	2000	8.3	

Electrical Rating Chart — UGAH Models

Model	Voltage	Watts	Amps	Shipping Weight *
UGAH-18	220	630	2.9	4 kg (9 lbs.)
	240	650	2.7	
UGAH-24	220	756	3.4	5 kg (10 lbs.)
	240	750	3.1	
UGAH-30	220	945	4.3	5 kg (11 lbs.)
	240	1125	4.7	
UGAH-36	220	1260	5.7	5 kg (12 lbs.)
	240	1300	5.4	
UGAH-42	220	1680	7.6	6 kg (13 lbs.)
	240	1500	6.3	
UGAH-48	220	1860	8.6	6 kg (14 lbs.)
	240	1950	8.1	
UGAH-54	220	2268	10.3	7 kg (16 lbs.)
	240	2250	9.4	
UGAH-60	220	2520	11.5	8 kg (17 lbs.)
	240	2600	10.8	
UGAH-66	220	2520	11.5	9 kg (19 lbs.)
	240	2600	10.8	
UGAH-72	220	3025	13.8	9 kg (20 lbs.)
	240	3000	12.5	

* Add 1–3 kg (2–8 lbs.) to shipping weight depending on size of remote control enclosure.



Electrical Rating Chart — UGAL Models

Model	Voltage	Watts	Amps	Shipping Weight *
UGAL-18	220	596	2.7	5 kg (12 lbs.)
	240	560	2.3	
UGAL-24	220	730	3.3	6 kg (13 lbs.)
	240	770	3.2	
UGAL-30	220	856	3.9	7 kg (15 lbs.)
	240	1020	4.3	
UGAL-36	220	1242	5.6	8 kg (17 lbs.)
	240	1180	4.9	
UGAL-42	220	1410	6.4	8 kg (18 lbs.)
	240	1380	5.8	
UGAL-48	220	1838	8.4	9 kg (20 lbs.)
	240	1740	7.3	
UGAL-54	220	1838	8.4	10 kg (22 lbs.)
	240	1740	7.3	
UGAL-60	220	2434	11.1	10 kg (23 lbs.)
	240	2300	9.6	
UGAL-66	220	2434	11.1	11 kg (25 lbs.)
	240	2300	9.6	
UGAL-72	220	2820	12.8	12 kg (27 lbs.)
	240	2360	9.8	

Electrical Rating Chart — UGAHL Models

Model	Voltage	Watts	Amps	Shipping Weight *
UGAHL-18	220	680	3.1	5 kg (12 lbs.)
	240	710	3.0	
UGAHL-24	220	856	3.9	6 kg (13 lbs.)
	240	870	3.6	
UGAHL-30	220	1045	4.8	7 kg (15 lbs.)
	240	1245	5.2	
UGAHL-36	220	1410	6.4	8 kg (17 lbs.)
	240	1480	6.2	
UGAHL-42	220	1830	8.3	8 kg (18 lbs.)
	240	1680	7.0	
UGAHL-48	220	2090	9.5	9 kg (20 lbs.)
	240	2190	9.1	
UGAHL-54	220	2468	11.2	22 lbs. (10 kg)
	240	2490	10.4	
UGAHL-60	220	2770	12.6	10 kg (23 lbs.)
	240	2900	12.1	
UGAHL-66	220	2770	12.6	11 kg (25 lbs.)
	240	2900	12.1	
UGAHL-72	220	3324	15.5	12 kg (27 lbs.)
	240	3360	14.0	

* Add 1–3 kg (2–8 lbs.) to shipping weight depending on size of remote control enclosure.

SPECIFICATIONS



Electrical Rating Chart — UGA-xxD Models

Model	Voltage	Total Watts	Circuit	Circuit Watts	Circuit Amps	Shipping Weight *
UGA-18D	220	1092	1	1092	5.0	8 kg (17 lbs.)
	240	1000		1000	4.2	
UGA-24D	220	1260	1	1260	5.7	9 kg (19 lbs.)
	240	1300		1300	5.4	
UGA-30D	220	1512	1	1512	6.9	10 kg (21 lbs.)
	240	1800		1800	7.5	
UGA-36D	220	2184	1	2184	9.9	11 kg (24 lbs.)
	240	2000		2000	8.3	
UGA-42D	220	2520	1	1260	5.7	12 kg (27 lbs.)
			2	1260	5.7	
	240	2400	1	1200	5.0	
			2	1200	5.0	
UGA-48D (Left/Right Control)	220	2520	1	1260	5.7	30 lbs. (14 kg)
			2	1260	5.7	
	240	3000	1	1500	6.3	
			2	1500	6.3	
UGA-48D (Front/Back Control)	220	2520	1	1260	5.7	30 lbs. (14 kg)
			2	1260	5.7	
	240	3000	1	1500	6.3	
			2	1500	6.3	
UGA-54D (Left/Right Control)	220	2520	1	1260	5.7	33 lbs. (15 kg)
			2	1260	5.7	
	240	3000	1	1500	6.3	
			2	1500	6.3	
UGA-54D (Front/Back Control)	220	2520	1	1260	5.7	33 lbs. (15 kg)
			2	1260	5.7	
	240	3000	1	1500	6.3	
			2	1500	6.3	
UGA-60D	220	4368	1	2184	9.9	17 kg (37 lbs.)
			2	2184	9.9	
	240	4000	1	2000	8.3	
			2	2000	8.3	
UGA-66D	220	4368	1	2184	9.9	18 kg (40 lbs.)
			2	2184	9.9	
	240	4000	1	2000	8.3	
			2	2000	8.3	
UGA-72D	220	5040	1	2520	11.5	20 kg (44 lbs.)
			2	2520	11.5	
	240	4000	1	2000	8.3	
			2	2000	8.3	

* Add 2–8 lbs. (1–3 kg) to shipping weight depending on size of remote control enclosure.

Electrical Rating Chart — UGAH-xxD Models

Model	Voltage	Total Watts	Circuit	Circuit Watts	Circuit Amps	Shipping Weight *
UGAH-18D	220	1260	1	1260	5.7	8 kg (17 lbs.)
	240	1300		1300	5.4	
UGAH-24D	220	1512	1	1512	6.9	9 kg (19 lbs.)
	240	1500		1500	6.3	
UGAH-30D	220	1890	1	1890	8.6	10 kg (21 lbs.)
	240	2250		2250	9.4	
UGAH-36D	220	2520	1	2520	11.5	11 kg (24 lbs.)
	240	2600		2600	10.8	
UGAH-42D	220	3360	1	1680	7.6	12 kg (27 lbs.)
			2	1680	7.6	
	240	3000	1	1500	6.3	
			2	1500	6.3	
UGAH-48D (Left/Right Control)	220	3780	1	2520	11.5	14 kg (30 lbs.)
			2	1260	5.7	
	240	3900	1	2600	10.8	
			2	1300	5.4	
UGAH-48D (Front/Back Control)	220	3780	1	1890	8.6	14 kg (30 lbs.)
			2	1890	8.6	
	240	3900	1	1950	8.1	
			2	1950	8.1	
UGAH-54D (Left/Right Control)	220	4536	1	3024	13.7	15 kg (33 lbs.)
			2	1512	6.9	
	240	4500	1	3000	12.5	
			2	1500	6.3	
UGAH-54D (Front/Back Control)	220	4536	1	2268	10.3	15 kg (33 lbs.)
			2	2268	10.3	
	240	4500	1	2250	9.4	
			2	2250	9.4	
UGAH-60D	220	5040	1	2520	11.5	17 kg (37 lbs.)
			2	2520	11.5	
	240	5200	1	2600	10.8	
			2	2600	10.8	
UGAH-66D	220	5040	1	2520	11.5	18 kg (40 lbs.)
			2	2520	11.5	
	240	5200	1	2600	10.8	
			2	2600	10.8	
UGAH-72D	220	6048	1	3024	13.8	20 kg (44 lbs.)
			2	3024	13.8	
	240	6000	1	3000	12.5	
			2	3000	12.5	

* Add 1–3 kg (2–8 lbs.) to shipping weight depending on size of remote control enclosure.

SPECIFICATIONS



Electrical Rating Chart — UGAL-xxD Models

Model	Voltage	Total Watts	Circuit	Circuit Watts	Circuit Amps	Shipping Weight *
UGAL-18D	220	1142	1	1142	5.2	8 kg (17 lbs.)
	240	1060		1060	4.4	
UGAL-24D	220	1360	1	1360	6.2	9 kg (19 lbs.)
	240	1420		1420	5.9	
UGAL-30D	220	1612	1	1612	7.3	10 kg (21 lbs.)
	240	1920		1920	8.0	
UGAL-36D	220	2334	1	2334	10.6	11 kg (24 lbs.)
	240	2180		2180	9.1	
UGAL-42D	220	2420	1	1120	5.7	12 kg (27 lbs.)
			2	1300	6.4	
	240	2580	1	1200	5.0	
			2	1380	5.8	
UGAL-48D (Left/Right Control)	220	2720	1	1680	7.6	14 kg (30 lbs.)
			2	1040	4.7	
	240	3240	1	2000	8.3	
			2	1240	5.2	
UGAL-48D (Front/Back Control)	220	2720	1	1260	5.7	14 kg (30 lbs.)
			2	1460	6.6	
	240	3240	1	1500	6.3	
			2	1740	7.3	
UGAL-54D (Left/Right Control)	220	2720	1	1680	7.6	15 kg (33 lbs.)
			2	1040	4.7	
	240	3240	1	2000	8.3	
			2	1240	5.2	
UGAL-54D (Front/Back Control)	220	2720	1	1260	5.7	15 kg (33 lbs.)
			2	1460	6.6	
	240	3240	1	1500	6.3	
			2	1740	7.3	
UGAL-60D	220	4618	1	2184	9.9	17 kg (37 lbs.)
			2	2434	11.1	
	240	4300	1	2000	8.3	
			2	2300	9.6	
UGAL-66D	220	4618	1	2184	9.9	18 kg (40 lbs.)
			2	2434	11.1	
	240	4300	1	2000	8.3	
			2	2300	9.6	
UGAL-72D	220	5340	1	2520	11.5	20 kg (44 lbs.)
			2	2820	12.8	
	240	4360	1	2000	8.3	
			2	2360	9.8	

Electrical Rating Chart — UGAHL-xxD Models

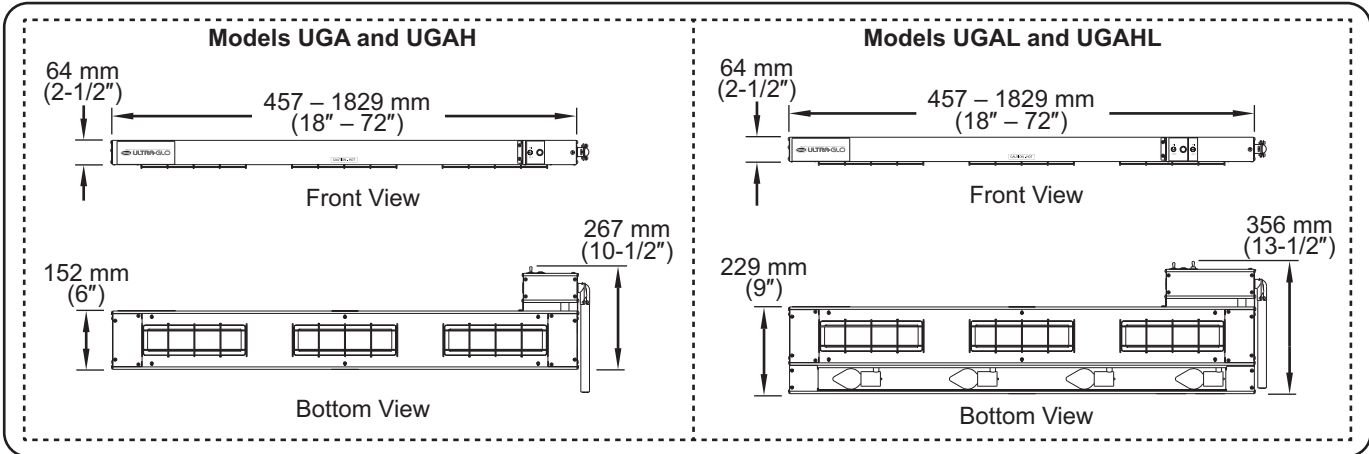
Model	Voltage	Total Watts	Circuit	Circuit Watts	Circuit Amps	Shipping Weight *
UGAHL-18D	220	1310	1	1310	6.0	8 kg (17 lbs.)
	240	1360		1360	5.7	
UGAHL-24D	220	1612	1	1612	7.3	9 kg (19 lbs.)
	240	1620		1620	6.8	
UGAHL-30D	220	1990	1	1990	9.0	10 kg (21 lbs.)
	240	2370		2370	9.9	
UGAHL-36D	220	2670	1	2670	12.1	11 kg (24 lbs.)
	240	2780		2780	11.6	
UGAHL-42D	220	3510	1	1680	7.6	12 kg (27 lbs.)
			2	1830	8.3	
	240	3180	1	1500	6.3	
			2	1680	7.0	
UGAHL-48D (Left/Right Control)	220	3980	1	2520	11.5	14 kg (30 lbs.)
			2	1460	6.6	
	240	4140	1	2600	10.8	
			2	1540	6.4	
UGAHL-48D (Front/Back Control)	220	3980	1	1890	8.6	14 kg (30 lbs.)
			2	2090	9.5	
	240	4140	1	1950	8.1	
			2	2190	9.1	
UGAHL-54D (Left/Right Control)	220	4736	1	3024	13.7	15 kg (33 lbs.)
			2	1712	7.8	
	240	4740	1	3000	12.5	
			2	1740	7.3	
UGAHL-54D (Front/Back Control)	220	4736	1	2268	10.3	15 kg (33 lbs.)
			2	2468	11.2	
	240	4740	1	2250	9.4	
			2	2490	10.4	
UGAHL-60D	220	5290	1	2520	11.5	17 kg (37 lbs.)
			2	2770	12.6	
	240	5500	1	2600	10.8	
			2	2900	12.1	
UGAHL-66D	220	5290	1	2520	11.5	18 kg (40 lbs.)
			2	2770	12.6	
	240	5500	1	2600	10.8	
			2	2900	12.1	
UGAHL-72D	220	6348	1	3024	13.8	20 kg (44 lbs.)
			2	3324	15.1	
	240	6360	1	3000	12.5	
			2	3360	14.0	

* Add 1–3 kg (2–8 lbs.) to shipping weight depending on size of remote control enclosure.

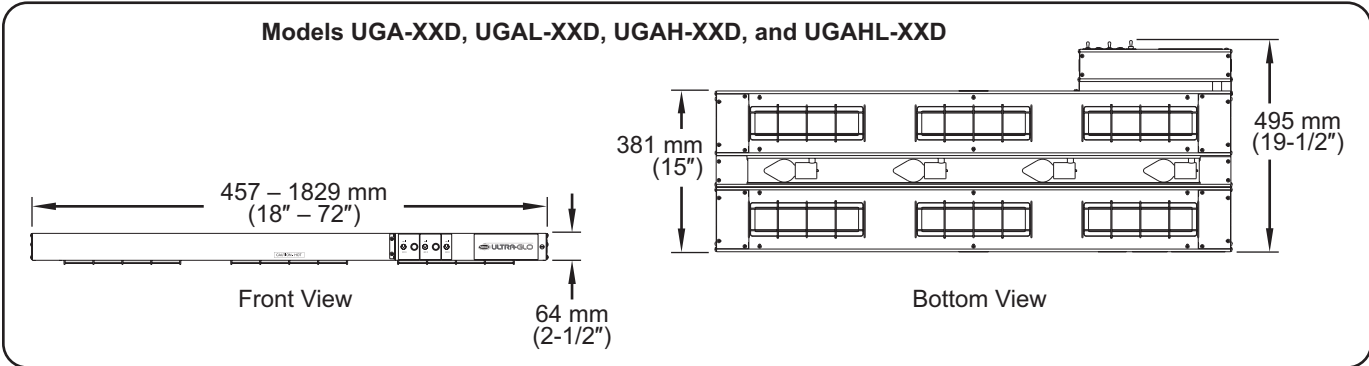
SPECIFICATIONS



Dimensions — UGA, UGAH, UGAL, and UGAHL Models



Dimensions — UGA-xxD, UGAL-xxD, UGAH-xxD, and UGAHL-xxD Models



NOTE: Dimension shown is standard with 3" (76 mm) spacer; when used with 6" (152 mm) spacer, add 3" (76 mm) to the depth.

General

Use the information in this section to prepare for installation of the strip heater. Make sure to locate the specific information for the model of strip heater and type of installation. Ultra-Glo® Strip Heaters are shipped with most components pre-assembled. Dual units come with a required 3" (76 mm) or 6" (152 mm) spacer pre-assembled at the factory.

Optional mounting equipment and remote control enclosures must be installed on location.

WARNING

FIRE HAZARD: Do not install unit above or around combustible surfaces. Discoloration or combustion could occur. Unit must be installed in non-combustible surroundings only.

CAUTION

Ensure safe and proper operation. Refer to the "Minimum Clearance Requirements" listed in the INSTALLATION section of this manual.

NOTICE

Damage to any countertop material caused by heat generated from Hatco equipment is not covered under the Hatco warranty. Contact manufacturer of countertop material for application information.

Do not add a decorative soffit to hide a pass-through mounted strip heater. Premature failure of components due to excessive heat may occur.

NOTE: Contact the countertop manufacturer of the base material for application information and surface temperature limits before installing the unit.

1. Remove the unit from the shipping carton and remove all packing materials.

NOTE: To prevent delay in obtaining warranty coverage, complete online warranty registration. See the IMPORTANT OWNER INFORMATION section for details.

2. Remove tape and protective packaging from all surfaces of the unit.

NOTE: If unit is equipped with optional equipment, see the OPTIONS AND ACCESSORIES section near the back of this manual.

3. Install/mount the unit in an appropriate location.
 - a. Verify recommended mounting heights and minimum clearance requirements are met for the appropriate model. Refer to "Recommended Mounting Heights" and "Minimum Clearance Requirements" in this section.
 - b. For angle bracket mounting installation, refer to "Undershelf Mounting" in this section.
 - c. For tubular stand mounting installation, refer to "Permanent Surface Mounting" in this section.
 - d. For overhead hanger post installation, refer to "Overhead Mounting" in this section.

Dual Mounting

When mounting units side-by-side, a space not less than 76 mm (3") must be maintained between units. Dual units ordered from the factory are shipped with a pre-assembled 3" (76 mm) or 6" (152 mm) spacer.

NOTICE

Installation of two or more separate units with less than 76 mm (3") between housings may result in premature failure of component parts. Failure to provide proper spacing may result in heat damage to electrical components.

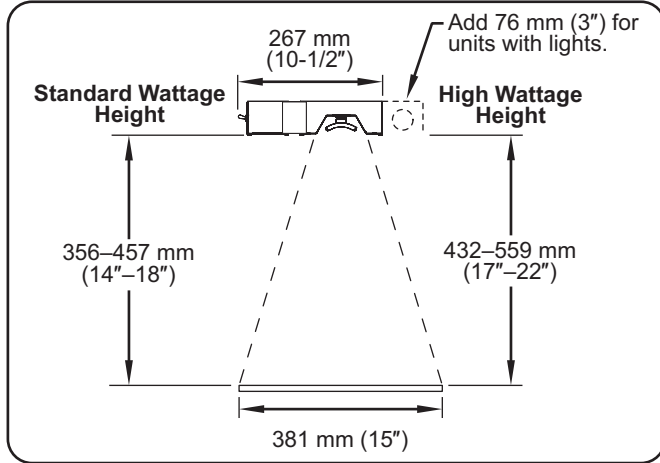
Under Shelf Mounting

When mounting a unit under a shelf, use adjustable angle brackets to assure proper spacing. Remote control enclosures are recommended to keep switches out of the heat zone and prevent premature failure.

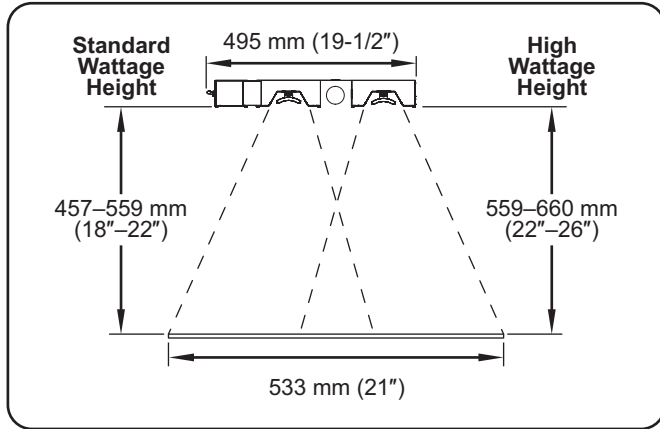
Pass-Through

If pass-through area is 305 to 406 mm (12" to 16") deep, a single unit can be used. For a 508 to 610 mm (20" to 24") deep pass-through area, a dual unit is recommended. Installation of multiple units must have a minimum spacing of 76 mm (3") between heaters.

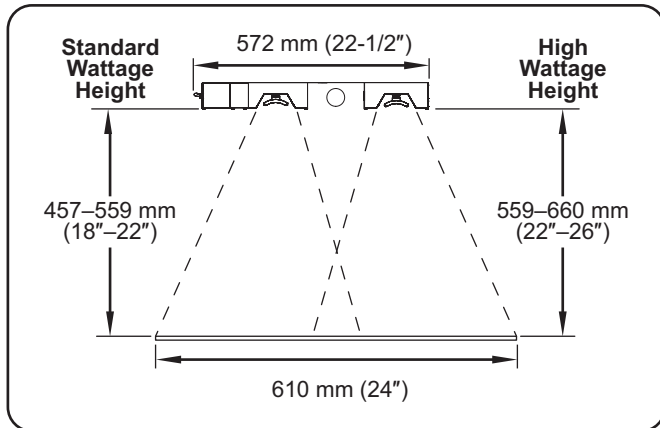
Recommended Mounting Heights



Recommended Mounting Height for all UGA single element depth models.



Recommended Mounting Height for all UGA dual element depth models with a 3" (76 mm) spacer.



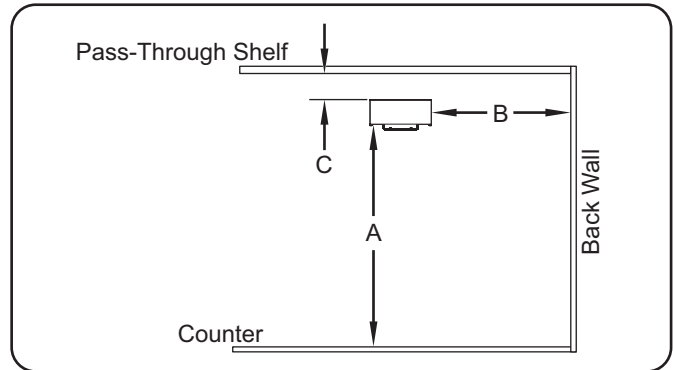
Recommended Mounting Height for all UGA dual element depth models with a 6" (152 mm) spacer.

Minimum Clearance Requirements



FIRE HAZARD: Do not install unit above or around combustible surfaces. Discoloration or combustion could occur. Unit must be installed in non-combustible surroundings only.

Models	A	B	C
UGA and UGAL	356 mm (14")	76 mm (3")	25 mm (1")
UGAH and UGAHL	432 mm (17")	76 mm (3")	25 mm (1")



Clearance Requirements

Undershelf Mounting

Undershelf mounting permanently attaches the unit to the underside of a shelf. It can be mounted to a flat shelf or a shelf with rolled/flanged edges using the included adjustable angle brackets. A minimum gap of 25 mm (1") is required between the unit and the underside of the shelf to prevent heat damage to the electrical system of the unit.



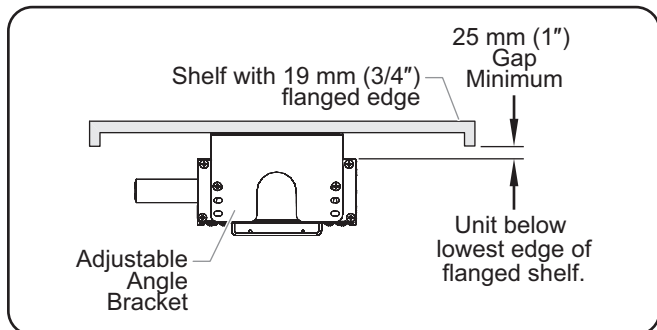
Ensure safe and proper operation. Refer to the "Minimum Clearance Requirements" listed in the INSTALLATION section of this manual.

NOTE: When mounting the unit under a shelf, it is recommended to use a remote control enclosure.

If the shelf has a rolled or flanged edge, use the appropriate screw hole locations on the adjustable angle brackets to mount the unit below the lowest edge of the rolled or flanged shelf. The adjustable angle brackets can provide a 25 mm (1"), 38 mm (1-1/2"), or 51 mm (2") gap between the unit and the underside of the shelf.



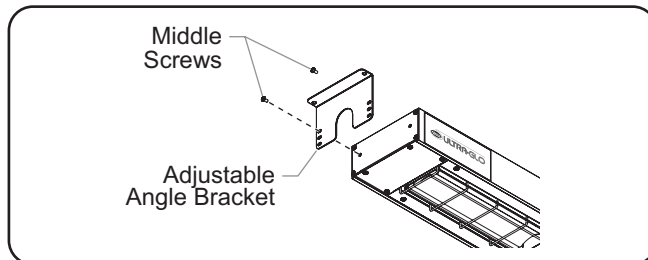
DO NOT conceal unit. Unit must be installed below lowest edge of a rolled or flanged shelf. Failure to mount unit properly may result in premature failure of switches and void the product warranty.



Flanged Shelf Installation

Adjustable Angle Bracket Mounting

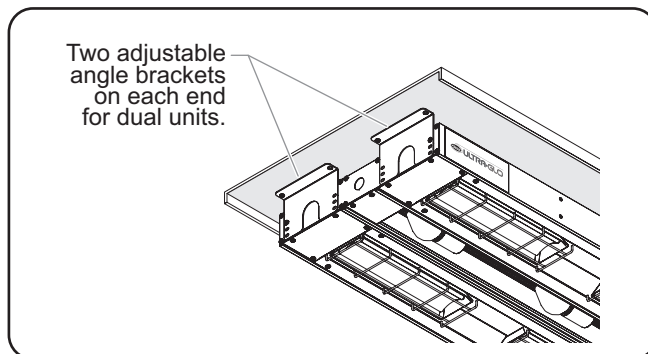
1. Position the unit on a flat surface with the heating elements facing down.
2. Remove the two middle screws from each end of the unit.
3. Align the appropriate holes on an adjustable angle bracket with the middle screw holes on one end of the unit. Secure the angle bracket using the removed middle screws.
4. Repeat step 3 for the opposite end of the unit.



Adjustable Angle Bracket Installation

5. Fasten the angle brackets to the underside of the shelf using appropriate fasteners (not supplied by Hatco).

NOTE: Two pairs of brackets will be needed for dual units.



Dual Unit Mounting

Permanent Surface Mounting

Tubular stand mounting permanently attaches the unit to a countertop or serving table. All wiring may be concealed within one of the tubular stands.

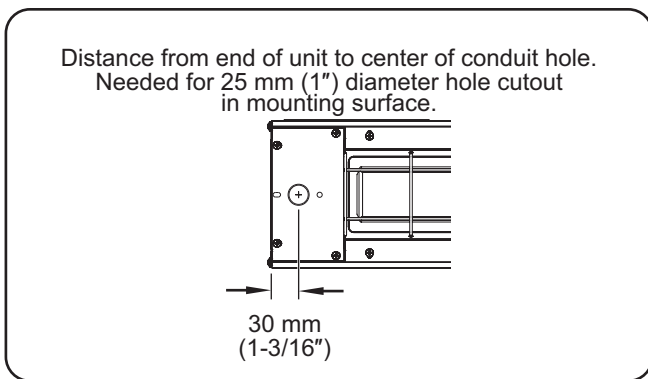


Ensure safe and proper operation. Refer to the “Minimum Clearance Requirements” listed in the INSTALLATION section of this manual.

The aluminum, non adjustable tubular stands are available in 25 mm (1”) increments from 356–610 mm (14”–24”).

NOTE: Tubular stands are not field retrofittable.

NOTE: If wiring is to be concealed, a 25 mm (1”) diameter hole must be provided in the mounting surface centered under the stand containing the wiring conduit.



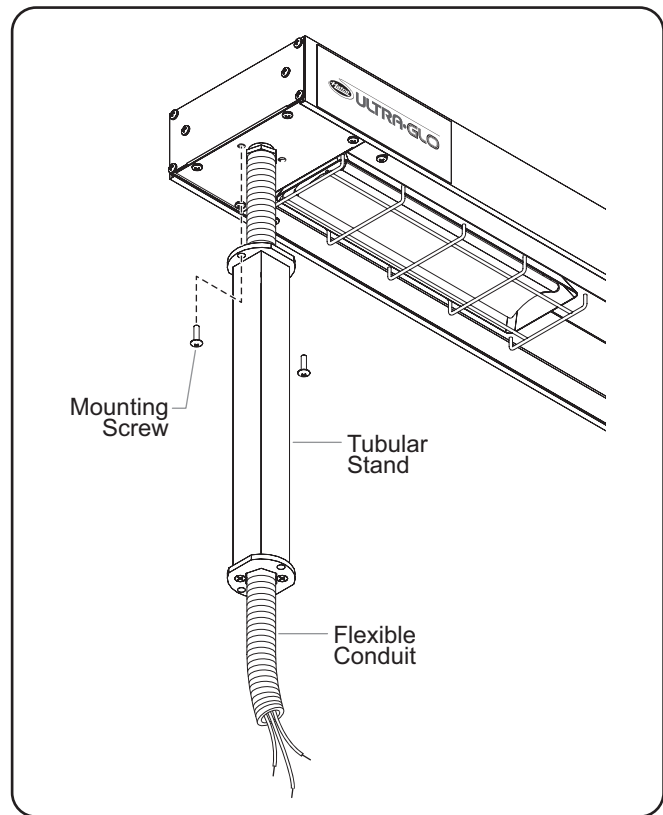
Countertop Conduit Hole Dimension

1. Position the unit upside-down on a flat surface.

NOTE: Units for this application are supplied with the conduit attached to one side of the unit. Conduit should not be removed.

2. If applicable, route the flexible conduit through the center of one of the stands.
3. Pull the conduit-side stand up against the unit and secure the stand to the unit using the screws supplied.
4. Align the other stand with the mounting holes at the opposite end of the unit and secure the stand to the unit using the screws supplied.
5. If applicable, route the flexible conduit through the 25 mm (1”) diameter hole cut into the mounting surface.
6. Secure the stands to the mounting surface.

NOTE: Two pairs of stands will be needed for mounting dual units.



Tubular Stand Mounting

Overhead Mounting

Overhead hanger post mounting permanently attaches the unit to an overhead surface. All wiring may be concealed within one of the hanger posts. Overhead mounting is for single element depth units.



Ensure safe and proper operation. Refer to the “Minimum Clearance Requirements” listed in the INSTALLATION section of this manual.

Hanger posts are available in aluminum non-adjustable lengths from 76 – 254 mm (3”– 10”).

NOTE: Hanger posts are not field retrofittable.

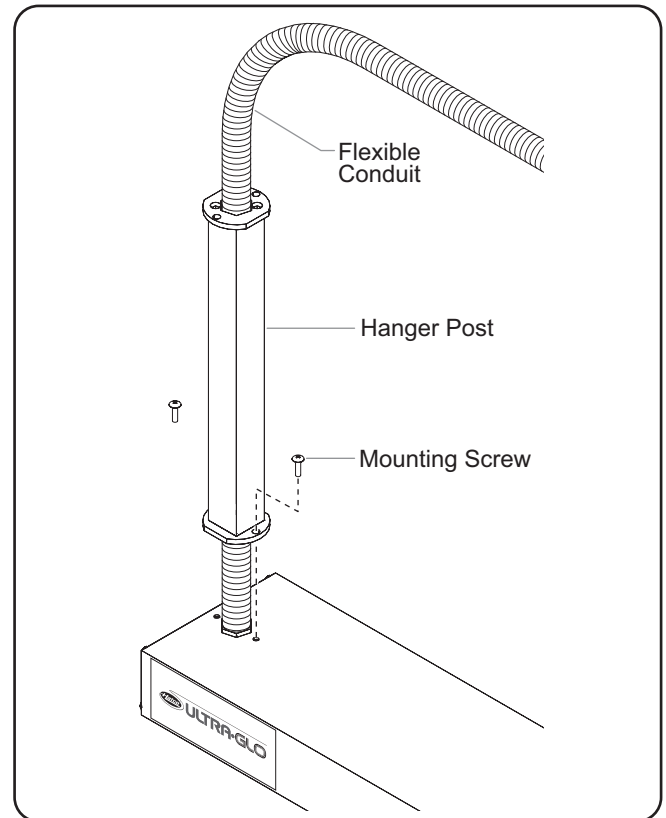
NOTE: If wiring is to be concealed, a 25 mm (1”) diameter hole must be provided in the mounting surface centered above the hanger post containing the wiring conduit.

1. Make sure the overhead mounting surface is secure and will allow the unit to be suspended at a level, safe, and proper distance from walls, counter, and food.
2. Position the unit on a flat surface with the heating elements facing down.

NOTE: Units for this application are supplied with the conduit attached to one side of the unit. Conduit should not be removed.

3. If applicable, route the flexible conduit through the center of one of the hanger posts.
4. Pull the conduit-side hanger post down onto the unit and secure the post to the unit using the screws supplied.
5. Align the other hanger post with the mounting holes at the opposite end of the unit and secure the post to the unit using the screws supplied.
6. If applicable, route the flexible conduit through the 25 mm (1”) diameter hole cut into the mounting surface.
7. Carefully lift the unit and secure the hanger posts to the overhead mounting surface.

NOTE: Two pairs of hanger posts will be needed for mounting dual units.



Hanger Post Mounting

Electrical Information

Refer to the wiring diagram supplied with the unit and specification label attached to the unit for specific electrical information. Also, refer to the “Electrical Rating Charts” in the SPECIFICATIONS section for unit specific information.



ELECTRIC SHOCK HAZARD: Unit must be installed by a qualified electrician. Installation must conform to all local electrical codes. Installation by unqualified personnel will void unit warranty and may lead to electric shock or burn, as well as damage to unit and/or its surroundings.

NOTE: If the unit being installed is not shown or listed in this manual, refer to the wiring diagram supplied with the unit and the installation information on the unit for further instructions.

Power Supply

Install supply wire and connectors suitable for at least 194°F (90°C).

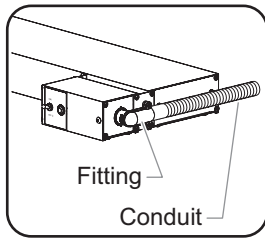
- Use a minimum of No. 14 AWG copper wire for individual circuits up to 15 amps.
- Use a minimum of No. 12 AWG copper wire for individual circuits 15 to 20 amps.
- Use a minimum of No. 10 AWG copper wire for individual circuits 20 to 25 amps.

NOTE: Refer to the wiring diagram supplied with the unit and specifications label attached to the unit for specific electrical information.

continued...

Conduit Connection

Units supplied with a right angle fitting and flexible conduit attached have had all internal connections completed at the factory. Attach the proper power supply leads to the high temperature lead wires in the conduit.



NOTE: Refer to the wiring diagram supplied with the unit and specifications label attached to the unit for specific electrical information.

Remote Control Enclosures

Hatco Remote Control Enclosures (RMBs) include switches, wire leads, and/or indicator lights and are ready for installation. Proper use of RMBs require one RMB per strip heater.

NOTE: Remote control enclosures are available in several sizes. All models are built in accordance with UL standards to accommodate switches, indicator lights, and wiring, ready for installation. See the OPTIONS AND ACCESSORIES section near the back of this manual.

IMPORTANT NOTE:

Remote mounted enclosures and control switches must be installed in a cool, dry location as far away from any heat zone as possible. Do not mount enclosures or switches directly on, under, or above unit. Do not mount enclosures or switches in direct contact with any heated surface or near any steam generating equipment.

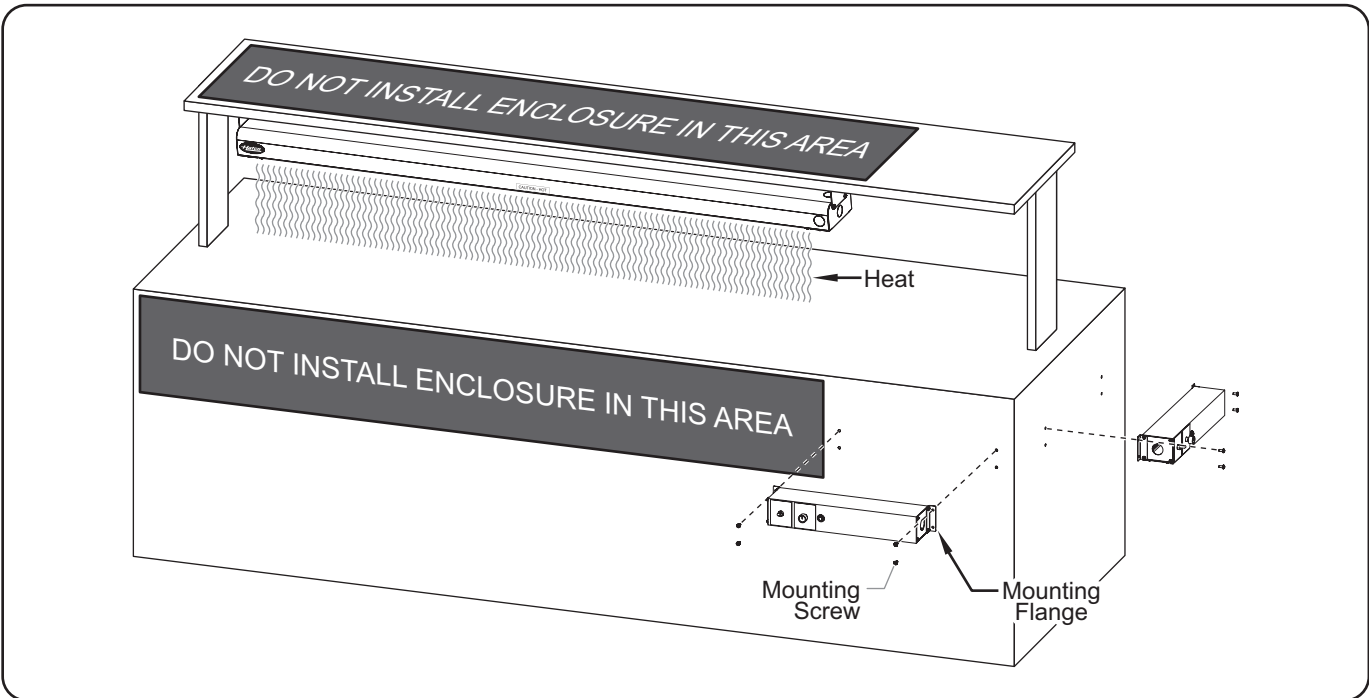
Remote Mounted Control Switches

Optional remote mounted control switches include I/O (on/off) toggle switches and infinite control switches. These switches need to be installed into an approved electrical box/enclosure (not supplied) by a qualified electrician. See the OPTIONS AND ACCESSORIES section for more information.

NOTE: When two or more units are mounted where the heat from one housing tends to raise the temperature of another, the control switches should be installed in a remote control enclosure. Units in a multiple installation should use remote mounted control switches.

NOTICE

Remote mounted control boxes must be installed outside strip heater heat zone to prevent premature failure of components due to excessive heat.



Remote Mounted Enclosure Installation Locations

General

Use the following information to operate Ultra-Glo® Strip Heaters.



Read all safety messages in the **IMPORTANT SAFETY INFORMATION** section before operating this equipment.



Standard and approved manufacturing oils may smoke up to 30 minutes during initial startup. This is a temporary condition. Operate unit without food product until smoke dissipates.

Controls

Strip heaters come standard with controls mounted to the unit or with optional remote mounted controls. The following is a list of the available controls for the strip heaters.

I/O (on/off) Toggle Switch—Turns power on and off to the heating elements and/or the lights (depending on control configuration).

Infinite Control—Turns on the power and controls the temperature of the heating elements. The infinite control is available on remote control enclosures only.

NOTE: Units with factory installed control boxes cannot be equipped with infinite controls.

Lights I/O (on/off) Toggle Switch—Turns power on and off to the lights.

Indicator Light—Illuminates when power is on, shuts off when power is off.

NOTE: Dual units require remote indicator lights.

NOTE: Toggle switches cannot be used on circuits that exceed 15 amps. Infinite controls cannot be used on circuits that exceed 12.2 amps.

Startup

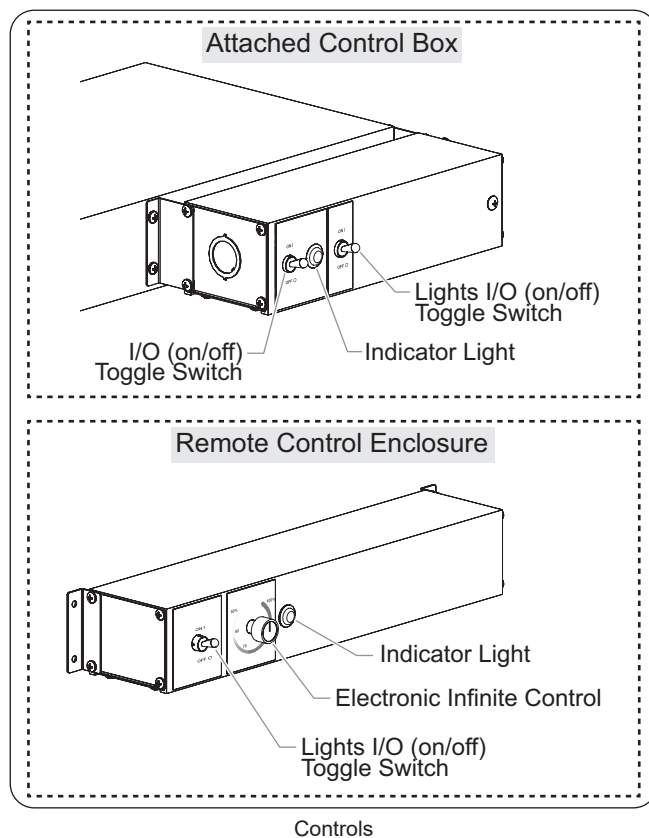
1. Turn on the heating element(s). The indicator light (if equipped) will illuminate and the heating elements will energize.
 - If unit is equipped with a I/O (on/off) toggle switch, move the toggle switch to the I (on) position.
 - If unit is equipped with an optional infinite control(s), turn the control to the desired setting.

NOTE: Allow 15–20 minutes to reach operating temperature.

2. On models equipped with display lights, move the Lights I/O (on/off) toggle switch to the I (on) position.



BURN HAZARD: Some exterior surfaces on unit will get hot. Avoid unnecessary contact with unit.



NOTE: Refer to the OPTIONS AND ACCESSORIES section for remote control enclosure information.

Shutdown

1. Move the I/O (on/off) toggle switch to the O (off) position or turn the optional infinite control(s) to the O (off) position.
 - The indicator light (if equipped) will shut off and the heating elements will shut down.
2. On models equipped with display lights, move the Lights I/O (on/off) toggle switch to the O (off) position.

General

Hatco Ultra-Glo® Strip Heaters are designed for maximum durability and performance with minimum maintenance.



ELECTRIC SHOCK HAZARD:

- Turn OFF power switch, turn off power at circuit breaker, and allow unit to cool before performing any cleaning, adjustments, or maintenance.
- DO NOT submerge or saturate with water. Unit is not waterproof. Do not operate if unit has been submerged or saturated with water.
- Do not steam clean or use excessive water on unit.
- This unit is not “jet-proof” construction. Do not use jet-clean spray to clean this unit.
- Use only Genuine Hatco Replacement Parts when service is required. Failure to use Genuine Hatco Replacement Parts will void all warranties and may subject operators of the equipment to hazardous electrical voltage, resulting in electrical shock or burn. Genuine Hatco Replacement Parts are specified to operate safely in the environments in which they are used. Some aftermarket or generic replacement parts do not have the characteristics that will allow them to operate safely in Hatco equipment.

This unit has no “user-serviceable” parts. If service is required on this unit, contact an Authorized Hatco Service Agent or contact the Hatco Service Department at +1-414-671-6350.

NOTICE

Use non-abrasive cleaners and cloths only. Abrasive cleaners and cloths could scratch the finish of the unit, marring its appearance and making it susceptible to soil accumulation.

Daily Cleaning

To preserve the finish of the strip heater, it is recommended that all surfaces be cleaned daily.

1. Turn off the unit and allow the unit to cool.
2. Wipe down all metal surfaces with a water-dampened, non-abrasive cloth. Stubborn stains may be removed with a good stainless steel or non-abrasive cleaner. Clean hard to reach areas using a small brush and mild soap.
3. Wipe dry the entire unit using a non-abrasive, dry cloth.

Replacing Display Light Bulbs



Use only light bulbs that meet or exceed National Sanitation Foundation (NSF) standards and are specifically designed for food holding areas. Breakage of light bulbs not specially coated could result in personal injury and/or food contamination.

The display light is an incandescent bulb that illuminates the warming area. These bulbs have a special coating to guard against injury and food contamination in the event of breakage.

To replace a display light bulb:

1. Disconnect the power supply and wait until the unit has cooled.
2. Unscrew the light bulb from the unit and replace it with a new, specially-coated incandescent or optional halogen bulb.

NOTE: Hatco shatter-resistant light bulbs meet NSF standards for food holding and display areas. For 220 and 240 volt applications, use Hatco P/N 02.30.266.00.



This unit must be serviced by qualified personnel only. Service by unqualified personnel may lead to electric shock or burn.



ELECTRIC SHOCK HAZARD: Turn OFF power switch, turn off power at circuit breaker, and allow unit to cool before performing any cleaning, adjustments, or maintenance.

Symptom	Probable Cause	Corrective Action
Unit is turned "ON" but there is no heat.	No power to unit.	Check circuit breaker and reset as necessary.
	Switch is defective.	Contact Authorized Service Agent or Hatco for assistance.
	Heating element defective.	
	Fuse is defective.	
	Wiring is open.	
Heat is inadequate.	Unit mounted too high above target area.	Lower unit, putting effective heat closer to target.
	Excessive air movement around strip heater target area.	Restrict or redirect air movement (air conditioning duct or exhaust fan) away from unit.
	Incorrect power supply (low).	Check power supply to unit, making sure it matches rating on the unit. If power supply is incorrect, change to match rating on unit.
Heat is excessive.	Unit mounted too close to target area.	Check to see that installation is within specifications for type/model. Increase mounting height if too close.
	Voltage supply too high.	Check power supply to unit, making sure it matches rating on unit. If power supply is incorrect, change to match rating.
Control switches burn-out rapidly.	Switches are mounted in the heat zone.	Check switch location per Hatco guidelines in the Installation and Operations Manual. Relocate switches to a cooler zone if installation is incorrect.
	Switches used are not Hatco supplied.	Genuine Hatco Parts are specified to operate safely and properly in the environment in which they are used. Contact Authorized Service Agent or Hatco to replace switches with Genuine Hatco Replacement Parts.

Troubleshooting Questions?

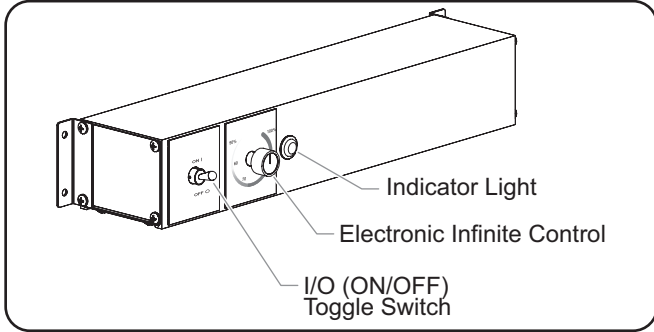
If you continue to have problems resolving an issue, please contact the nearest Authorized Hatco Service Agency or Hatco for assistance. To locate the nearest Service Agency, log onto the Hatco website at www.hatcocorp.com, select the *Support* pull-down menu, and click on "Find A Service Agent"; or contact the **Hatco Parts and Service Team** at:

Telephone: +1-414-671-6350

e-mail: support@hatcocorp.com

Remote Control Enclosures

Hatco remote control enclosures (RMBs) come in various sizes and configurations for use with the strip heaters. RMBs locate controls away from the constant heat of the unit, increasing the life span of the controls. All models are built in accordance with UL standards to accommodate controls, indicator lights, and wiring.



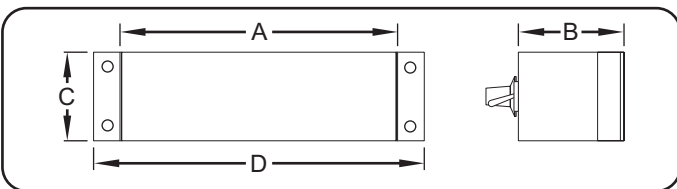
RMB (RMB-14 Series Shown)

NOTICE

Remote mounted control boxes must be installed outside strip heater heat zone to prevent premature failure of components due to excessive heat.

NOTE: Proper use of remote control enclosures requires one RMB per strip heater.

Model	Width (A)	Depth (B)	Height (C)	Width (D)
RMB-3 Series	140 mm (5-1/2")	76 mm (3")	64 mm (2-1/2")	178 mm (7")
RMB-7 Series	229 mm (9")	76 mm (3")	64 mm (2-1/2")	267 mm (10-1/2")
RMB-14 Series	356 mm (14")	76 mm (3")	64 mm (2-1/2")	394 mm (15-1/2")
RMB-16 Series	406 mm (16")	76 mm (3")	64 mm (2-1/2")	445 mm (17-1/2")
RMB-20 Series	508 mm (20")	76 mm (3")	64 mm (2-1/2")	546 mm (21-1/2")
RMB-22 Series	559 mm (22")	76 mm (3")	64 mm (2-1/2")	597 mm (23-1/2")
RMB-24 Series	610 mm (24")	76 mm (3")	64 mm (2-1/2")	648 mm (25-1/2")



Dimensions — RMB

Chef LED Bulbs

Chef LED bulbs are available for all units with lights. Chef LED bulbs are LED light bulbs that offer energy savings over incandescent bulbs. Use the following for replacement bulbs:

230 Volts

2700K: R02.30.197.01

3000K: R02.30.198.01

4000K: R02.30.199.01

1. PRODUCT WARRANTY

Hatco warrants the products that it manufactures (the “Products”) to be free from defects in materials and workmanship, under normal use and service, for a period of one (1) year from the date of purchase when installed and maintained in accordance with Hatco’s written instructions or 18 months from the date of shipment from Hatco. Buyer must establish the Product’s purchase date by registering the Product with Hatco or by other means satisfactory to Hatco in its sole discretion.

Hatco warrants the following Product components to be free from defects in materials and workmanship from the date of purchase (subject to the foregoing conditions) for the period(s) of time and on the conditions listed below:

a) Two (2) Year Parts and Labor Warranty (UK only):

Induction Ranges
Induction Warmers

b) Two (2) Year Parts Warranty:

Conveyor Toaster Elements (metal sheathed)
Drawer Warmer Elements (metal sheathed)
Drawer Warmer Drawer Rollers and Slides
Strip Heater Elements (metal sheathed)
Display Warmer Elements (metal sheathed air heating)
Holding Cabinet Elements (metal sheathed air heating)
Heated Well Elements — HW and HWB Series
(metal sheathed)

c) Five (5) Year Parts Warranty:

3CS and FR Tanks

d) Ten (10) Year Parts Warranty:

Electric Booster Heater Tanks
Gas Booster Heater Tanks

e) Ninety (90) Day Parts Warranty:

Replacement Parts

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT INFRINGEMENT. Without limiting the generality of the foregoing, SUCH WARRANTIES DO NOT COVER: Coated incandescent light bulbs, fluorescent lights, heat lamp bulbs, coated halogen light bulbs, halogen heat lamp bulbs, xenon light bulbs, LED light tubes, glass components, and fuses; Product failure in booster tank, fin tube heat exchanger, or other water heating equipment caused by liming, sediment buildup, chemical attack, or freezing; or Product misuse, tampering or misapplication, improper installation, or application of improper voltage.

2. LIMITATION OF REMEDIES AND DAMAGES

Hatco’s liability and Buyer’s exclusive remedy hereunder will be limited solely to replacement of part or Product using, at Hatco’s option, new or refurbished parts or Product by Hatco or a Hatco-authorized service agency with respect to any claim made within the applicable warranty period referred to above. Hatco reserves the right to accept or reject any such claim in whole or in part. In the context of this Limited Warranty, “refurbished” means a part or Product that has been returned to its original specifications by Hatco or a Hatco-authorized service agency. Hatco will not accept the return of any Product without prior written approval from Hatco, and all such approved returns shall be made at Buyer’s sole expense. HATCO WILL NOT BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING BUT NOT LIMITED TO LABOR COSTS OR LOST PROFITS RESULTING FROM THE USE OF OR INABILITY TO USE THE PRODUCTS OR FROM THE PRODUCTS BEING INCORPORATED IN OR BECOMING A COMPONENT OF ANY OTHER PRODUCT OR GOODS.

SERVICE INFORMATION

The warranty on this Hatco unit is for one year from date of purchase or eighteen months from date of shipping from Hatco, whichever occurs first.

If you experience a problem with this unit during the warranty period, please do the following:

Contact Local Hatco Dealer

When contacting the Hatco dealer for service assistance, please supply the dealer with the following information to ensure prompt processing:

- Model of unit
- Serial number (located on the unit)
- Specific problem with the unit
- Date of purchase
- Name of business
- Shipping address
- Contact name and phone number

The Hatco dealer will do the following:














- Provide replacement part(s) as required
- Submit warranty claim to Hatco for processing

Non-Warranty Problems

If you experience a non-warranty problem that requires assistance, please contact the nearest Authorized Hatco Service Agency.

To locate the nearest Service Agency:

- access our website at www.hatcocorp.com, select the *Support* pull-down menu, and click on “Find Service Agent”
- call Hatco Service at +1-414-671-6350
- e-mail Hatco Service at: support@hatcocorp.com

GB	Symbol Identification
ES	Identificación de los símbolos
FR	Identification de Symbole
	Safety Alert Alerta de seguridad Alerte de sécurité
	Read Operator's Manual Lea el manual del operador Lire le manuel de l'opérateur
	Caution — Hot Surface Precaución: superficie caliente Attention - Surface Chaude
	Power ON Encendido Puissance Sur
	Power OFF Apagado Hors Tension
	Standby En espera Veille
	Protective Earth Ground Puesta a tierra protectora La Terre de Protection
	Earth Ground Puesta a tierra Mise à la Terre
	Equipotential Ground Masa equipotencial Rez de Potentiel
	Alternating Current Corriente alterna Courant Alternatif
	Phase Fase Phase
	Water Fill, Low Water Llenado de agua, bajo nivel de agua Remplir d'eau, Bas Niveau d'eau
	Humidity, Humidity Cycle Humedad, ciclo de humedad Humidité, Cycle Humidité

DE	Symbolerklärung
IT	Identificazione del simbolo
NL	Uitleg bij de symbolen
	Sicherheitswarnung Avviso di sicurezza Veiligheidswaarschuwing
	Benutzerhandbuch lesen Leggere il manuale dell'operatore Lees de gebruikershandleiding
	Vorsicht – Heiße Oberfläche Attenzione: superficie calda Voorzichtig: heet oppervlak
	Einschalten Acceso Ingeschakeld
	Ausschalten Spento Uitgeschakeld
	Standby Standby Standby
	Schutzerde Messa a terra protettiva Beschermdende aarding
	Erde Messa a terra Aarding
	Erdung mit Potenzialausgleich Terra equipotenziale Vereffeningleiding
	Wechselstrom Corrente alternata Wisselstroom
	Phase Fase Fase
	Wasser auffüllen, Wasserstand niedrig Riempire con acqua, acqua insufficiente Water bijvullen, laag waterpeil
	Feuchtigkeit, Befeuchtungszyklus Umidità, ciclo di umidità Vochtigheid, bevochtigingscyclus

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