



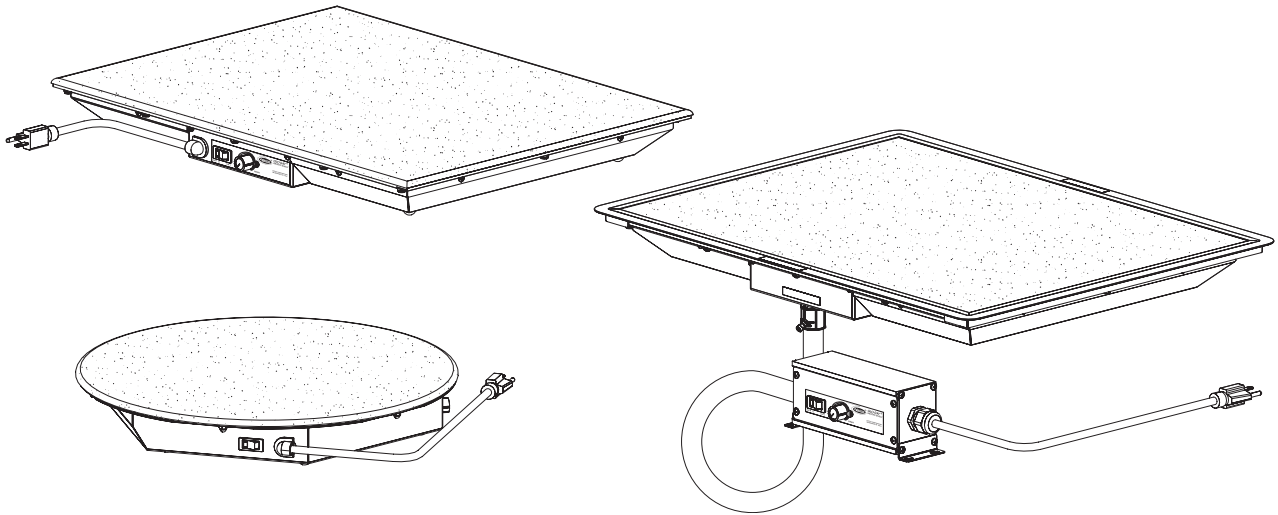
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(see page 2)



Glo-Ray® Heated Stone Shelves 保温石板

GRSS, GRSSB, GRSSR Series/系列

Installation and Operating Manual 安装及操作手册



⚠ 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.

English = p 2

⚠ 警告

请在 真阅读并理解本手册的内容后再操作本设备！不按照本手册中的说明操作可能会导致严重的人身伤亡事故。本手册中包含了有关本产品维护、使用和操作的重要安全事项。如果您不理解本手册的内容，请将本手册交给主管人员，以提请其注意。请将本手册妥善放置，以便参照。

中文 = 第 19 页

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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 bottom of GRSS and GRSSR models, bottom of control box on GRSSB models). Please have this information available when calling Hatco for service assistance.

Model No. _____

Serial No. _____

Voltage _____

Date of Purchase _____

Business 9:00 AM to 6:00 PM (Beijing Time)
 Hours: Monday through Friday
 Telephone: (0512) 6732-5091
 E-mail: infocn@hatcocorp.com

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

INTRODUCTION

The Hatco Glo-Ray® Heated Stone Shelf is designed to keep prepared foods hot while blending into your décor. Heated Stone Shelves will keep all foods at optimum serving temperatures without affecting quality. These warmers have a thermostatically-controlled heated base to extend the holding times of most foods.

Glo-Ray Heated Stone Shelves 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 the Glo-Ray Heated Stone Shelf. Hatco recommends all installation, operating, and safety instructions appearing in this manual be read prior to installation or operation of a unit.

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.



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:

- Plug unit into a properly grounded electrical receptacle of the correct voltage, size, and plug configuration. If plug and receptacle do not match, contact a qualified electrician to determine and install the proper voltage and size electrical receptacle.
- Remote mounted control enclosure must be mounted on a vertical wall and installed in vertical position. Mounting control enclosure in horizontal position may result in collection of liquids and lead to an electric shock.
- Turn OFF power switch, unplug power cord, 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.
- Unit is not weatherproof. Locate unit indoors where ambient air temperature is a minimum of 21°C (70°F).
- This unit is not “jet-proof” construction. Do not use jet-clean spray to clean this unit.
- Do not steam clean or use excessive water on unit.
- Do not pull unit by power cord.
- Discontinue use if power cord is frayed or worn.
- Do not attempt to repair or replace a damaged power cord. The cord must be replaced by Hatco, an Authorized Hatco Service Agent, or a person with similar qualifications.
- This unit must be serviced by qualified personnel only. Service by unqualified personnel may lead to electric shock or burn.
- 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: Locate unit a minimum of 25 mm (1”) from combustible walls and materials. If safe distances are not maintained, discoloration or combustion could occur.

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 the unit.

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

Make sure food product has been heated to the proper food-safe temperature before placing on the unit. Failure to heat food product properly may result in serious health risks. This unit is for holding preheated food product only.

WARNING

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 (0512) 6732-5091.

CAUTION

BURN HAZARD: Some exterior surfaces on the unit will get hot. Use caution when touching these areas.

Locate unit at proper counter height in an area that is convenient for use. Location should be level to prevent unit or its contents from falling accidentally and strong enough to support the weight of the unit and contents.

Do not operate built-in models without the trim mounting ring and the control box mounted properly as described in the installation instructions.

Make sure to clean and sanitize stone surface properly after deep cleaning the surface using abrasives and before placing food product on unit.

NOTICE

Unit is designed and recommended for use in or on metallic countertops. Damage to any countertop material caused by heat generated from Hatco equipment is not covered under the Hatco warranty. Verify with the manufacturer that the material is suitable for prolonged temperatures up to 93°C (200°F).

Built-in units must not have a setpoint temperature higher than 93°C (200°F). Temperatures exceeding 93°C (200°F) will damage unit and void warranty.

Do not modify wiring or cut thermostat capillary on control box to increase remote mounting distance. Cutting thermostat capillary will cause unit to overheat and may damage unit as well as surrounding countertop.

The National Sanitation Foundation (NSF) requires that units over 914 mm (36”) in width or weighing more than 36 kg (80 lbs.) either be sealed to or raised above the installation surface. If unit cannot be sealed at the point of use, 102 mm (4”) legs are included to allow for proper cleaning access below unit.

Do not lay unit on the side with the control panel. Damage to unit could occur.

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

Do not drag or slide unit when moving or installing. Carefully lift unit to prevent the rubber feet from tearing off.

If weight on shelf exceeds 23 kg (50 lbs.), a deflection up to 4 mm (5/32”) is possible. If weight on shelf exceeds 45 kg (100 lbs.), a deflection of 6 mm (1/4”) is possible. Shelf is not guaranteed if weight on shelf exceeds 68 kg (150 lbs.). All weight must be distributed evenly across entire shelf.

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).

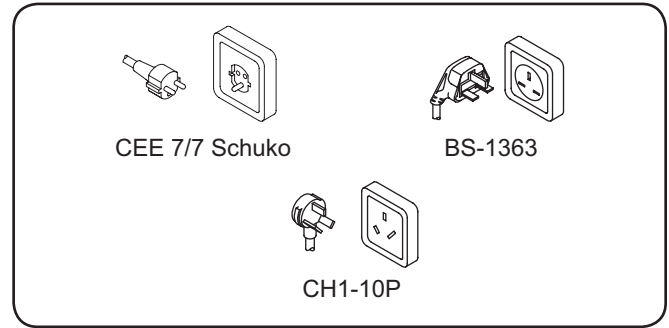
Plug Configurations

Units are supplied from the factory with an electrical cord and plug installed. Plugs are supplied according to the applications.

⚠ WARNING

ELECTRIC SHOCK HAZARD: Plug unit into a properly grounded electrical receptacle of the correct voltage, size, and plug configuration. If plug and receptacle do not match, contact a qualified electrician to determine and install proper voltage and size electrical receptacle.

NOTE: Specification label on bottom of GRSS model, bottom of control box on GRSSB and GRSSR models. See label for serial number and verification of unit electrical information.



Plug Configuration

NOTE: Receptacle not supplied by Hatco.

Electrical Rating Chart — GRSS Models

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
GRSS-2418	220	534	2.4	BS-1363	12 kg (27 lbs.)
	220–230	534–583	2.4–2.5	BS-1363, CEE 7/7 Schuko	
	230–240	583–635	2.5–2.6	BS-1363, CEE 7/7 Schuko	
GRSS-3018	220	655	3.0	BS-1363	14 kg (30 lbs.)
	220–230	655–716	3.0–3.1	BS-1363, CEE 7/7 Schuko	
	230–240	716–780	3.1–3.3	BS-1363, CEE 7/7 Schuko	
GRSS-3618	220	781	3.6	BS-1363	16 kg (35 lbs.)
	220–230	782–854	3.6–3.7	BS-1363, CEE 7/7 Schuko	
	230–240	854–930	3.7–3.9	BS-1363, CEE 7/7 Schuko	
GRSS-4818	220	1068	4.9	BS-1363	20 kg (45 lbs.)
	220–230	1068–1166	4.9–5.1	BS-1363, CEE 7/7 Schuko	
	230–240	1166–1270	5.0–5.2	BS-1363, CEE 7/7 Schuko	
GRSS-6018	220	1310	6.0	BS-1363	25 kg (56 lbs.)
	220–230	1310–1432	6.0–6.2	BS-1363, CEE 7/7 Schuko	
	230–240	1432–1560	6.2–6.6	BS-1363, CEE 7/7 Schuko	
GRSS-7218	220	1564	7.1	BS-1363	31 kg (68 lbs.)
	220–230	1564–1708	7.1–7.4	BS-1363, CEE 7/7 Schuko	
	230–240	1708–1860	7.4–7.8	BS-1363, CEE 7/7 Schuko	

NOTE: Shipping weight includes packaging.

Electrical Rating Chart — GRSSR Models

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
GRSSR-16	220	210	0.9	BS-1363	6 kg (14 lbs.)
	220–230	190–220	0.8–0.9	CEE 7/7 Schuko	
	230–240	220–250	0.9–1.0	BS-1363	
GRSSR-18	220	273	1.2	BS-1363	7 kg (16 lbs.)
	220–230	265–295	1.2–1.3	CEE 7/7 Schuko	
	230–240	295–325	1.3–1.4	BS-1363	
GRSSR-20	220	336	1.5	BS-1363	8 kg (18 lbs.)
	220–230	330–370	1.5–1.6	CEE 7/7 Schuko	
	230–240	370–400	1.6–1.7	BS-1363	

Electrical Rating Chart — GRSSB Models

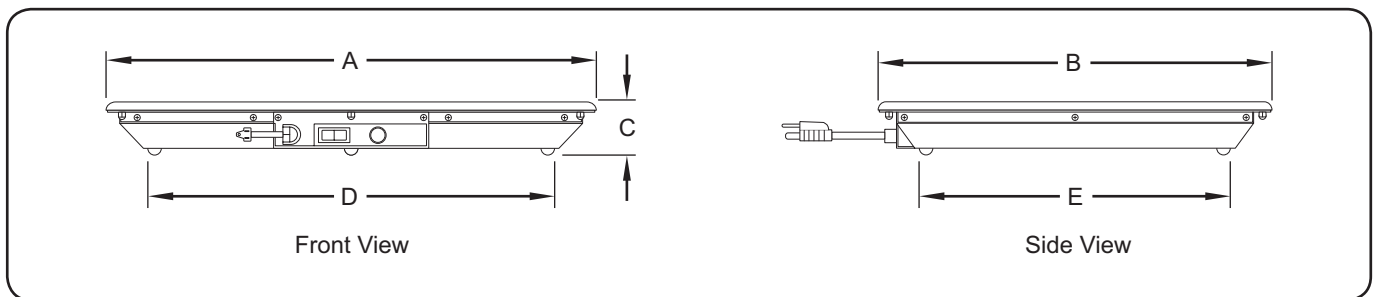
Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
GRSSB-2418	220	534	2.4	BS-1363	14 kg (30 lbs.)
	220–230	534–583	2.4–2.5	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	583–635	2.5–2.6	BS-1363, CEE 7/7 Schuko	
GRSSB-3018	220	655	3.0	BS-1363	16 kg (35 lbs.)
	220–230	655–716	3.0–3.1	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	716–780	3.1–3.3	BS-1363, CEE 7/7 Schuko	
GRSSB-3618	220	781	3.6	BS-1363	18 kg (40 lbs.)
	220–230	782–854	3.6–3.7	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	854–930	3.7–3.9	BS-1363, CEE 7/7 Schuko	
GRSSB-4818	220	1068	4.9	BS-1363	23 kg (51 lbs.)
	220–230	1068–1166	4.9–5.1	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	1166–1270	5.0–5.2	BS-1363, CEE 7/7 Schuko	
GRSSB-6018	220	1310	6.0	BS-1363	25 kg (56 lbs.)
	220–230	1310–1432	6.0–6.2	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	1432–1560	6.2–6.6	BS-1363, CEE 7/7 Schuko	
GRSSB-7218	220	1564	7.1	BS-1363	32 kg (70 lbs.)
	220–230	1564–1708	7.1–7.4	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	1708–1860	7.4–7.8	BS-1363, CEE 7/7 Schuko	

NOTE: Shipping weight includes packaging.

Dimensions

Model	Width (A)	Depth (B)	Height (C)	Footprint Width (D)	Footprint Depth (E)
GRSS-2418	610 mm (24")	457 mm (18")	64 mm (2-1/2")	502 mm (19-3/4")	349 mm (13-3/4")
GRSS-3018	762 mm (30")	457 mm (18")	64 mm (2-1/2")	654 mm (25-3/4")	349 mm (13-3/4")
GRSS-3618	914 mm (36")	457 mm (18")	64 mm (2-1/2")	806 mm (31-3/4")	349 mm (13-3/4")
GRSS-4818*	1220 mm (48")	457 mm (18")	159 mm (6-1/4")	1086 mm (42-3/4")	324 mm (12-3/4")
GRSS-6018*	1524 mm (60")	457 mm (18")	159 mm (6-1/4")	1391 mm (54-3/4")	324 mm (12-3/4")
GRSS-7218*	1828 mm (72")	457 mm (18")	159 mm (6-1/4")	1695 mm (66-3/4")	324 mm (12-3/4")

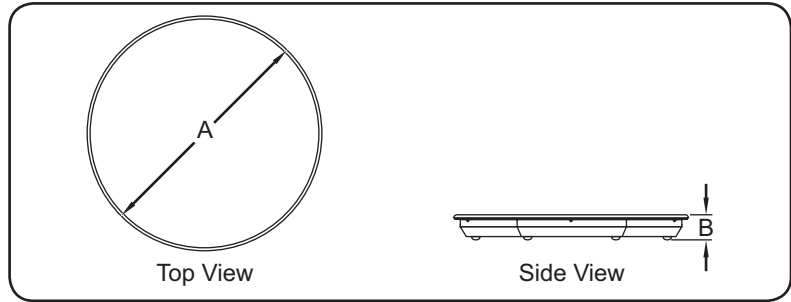
* Height includes 102 mm (4") legs.



Dimensions—GRSS Model

Dimensions — GRSSR Models

Model	Diameter (A)	Height (B)
GRSSR-16	406 mm (16")	67 mm (2-5/8")
GRSSR-18	457 mm (18")	67 mm (2-5/8")
GRSSR-20	508 mm (20")	67 mm (2-5/8")



Dimensions—GRSSR Model

Dimensions — GRSSB Models

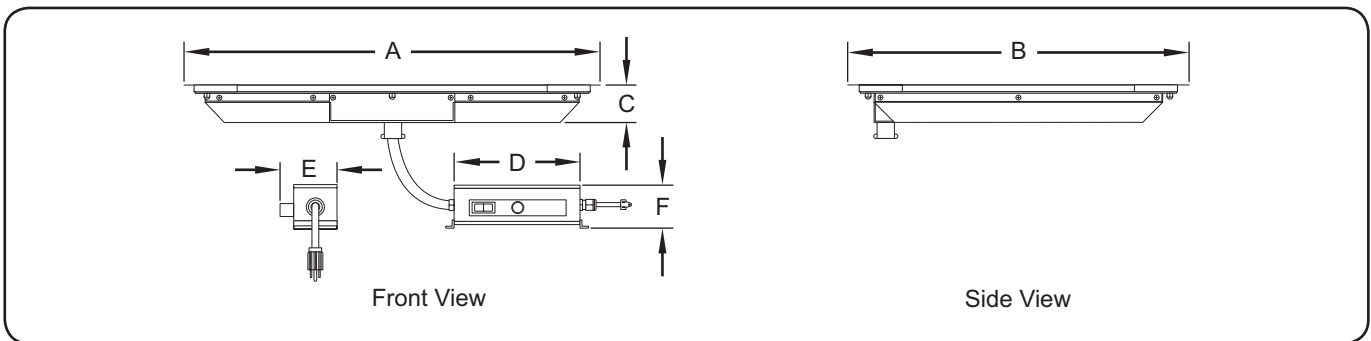
Model	Width (A)	Depth (B)	Height (C)
GRSSB-2418	651 mm (25-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-3018	803 mm (31-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-3618	956 mm (37-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-4818	1260 mm (49-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-6018	1565 mm (61-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-7218	1870 mm (73-5/8")	498 mm (19-5/8")	57 mm (2-1/4")

Model	Width (A)	Depth (B)	Height (C)
Remote Box (Standard)	178 mm (7")	76 mm (3")	83 mm (3-1/4")

NOTE: See the OPTIONS AND ACCESSORIES section for dimension information for flush-style remote mounted control enclosures.

NOTICE

Refer to the installation section of this manual for actual countertop cutout dimensions.



Dimensions—GRSSB Model

General

Use the following procedures to install the GRSS, GRSSR, and GRSSB units.

WARNING

ELECTRIC SHOCK HAZARD: Unit is not weatherproof. Locate unit indoors where ambient air temperature is a minimum of 21°C (70°F).

FIRE HAZARD: Locate unit a minimum of 25 mm (1") from combustible walls and materials. If safe distances are not maintained, discoloration or combustion could occur.

CAUTION

Locate unit at proper counter height in an area that is convenient for use. Location should be level to prevent unit or its contents from falling accidentally and strong enough to support the weight of the unit and contents.

NOTICE

The National Sanitation Foundation (NSF) requires that units over 914 mm (36") in width or weighing more than 36 kg (80 lbs.) either be sealed to or raised above the installation surface. If unit cannot be sealed at the point of use, 102 mm (4") legs are included to allow for proper cleaning access below unit.

Do not lay unit on the side with the control panel. Damage to unit could occur.

GRSS and GRSSR Models

1. Remove the unit from the box.

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 unit.

NOTE: If 102 mm (4") legs are required, refer to the OPTIONS AND ACCESSORIES section in this manual for installation instructions. 102 mm (4") legs are included with models greater than 914 mm (36") in width.

3. Place the unit in the desired location.
 - Locate the unit in an area where the ambient air temperature is constant and a minimum of 21°C (70°F). Avoid areas that may be subject to active air movements or currents (i.e., near exhaust fans/hoods, air conditioning ducts, and exterior doors).
 - Make sure the unit is at the proper counter height in an area convenient for use.
 - Make sure the countertop is level and strong enough to support the weight of the unit and food product.
 - Make sure all the feet on the bottom of the unit are positioned securely on the countertop.
4. Install any accessories that came with the unit. Refer to the OPTIONS AND Accessories section for details.

GRSSB Models

1. Remove the unit from the box.

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 unit.

NOTICE

Unit is designed and recommended for use in or on metallic countertops. Damage to any countertop material caused by heat generated from Hatco equipment is not covered under the Hatco warranty. Verify with the manufacturer that the material is suitable for prolonged temperatures up to 93°C (200°F).

3. Prepare the countertop opening. Refer to the "GRSSB Countertop Cutout Chart" in this section for recommended countertop cutout dimensions.
4. Apply a bead of National Sanitation Foundation (NSF)-approved sealant on the top edge of the countertop cutout and the underside of the trim mounting ring. The sealant must be rated for use at a minimum temperature of 121°C (250°F).
5. Place the unit into the countertop opening.
6. Remove any excess sealant.
7. Locate the remote control box assembly in an area that is convenient for operation. If desired or necessary, the control box can be mounted in a semi-remote location.
 - Remove the control box from the bottom of the unit.
 - If necessary, remove the end brackets from the control box, rotate/reposition, and re-secure to the control box.
 - The control box can be panel, surface, or under counter mounted.
 - The distance the control box can be mounted from the unit is determined by the 914 mm (3') conduit (optional conduit lengths of 1829 mm [6'] and 3048 mm [10'] are also available with electronic controls). Do not pull the conduit tight to increase the mounting distance. The conduit should have some slack after the control box is mounted.

NOTE: The remote control box should be mounted using screws with a 6 mm (1/4") minimum diameter screw head inserted through the keyholes located on the mounting brackets. The remote control box is to be readily removable—not permanently mounted.

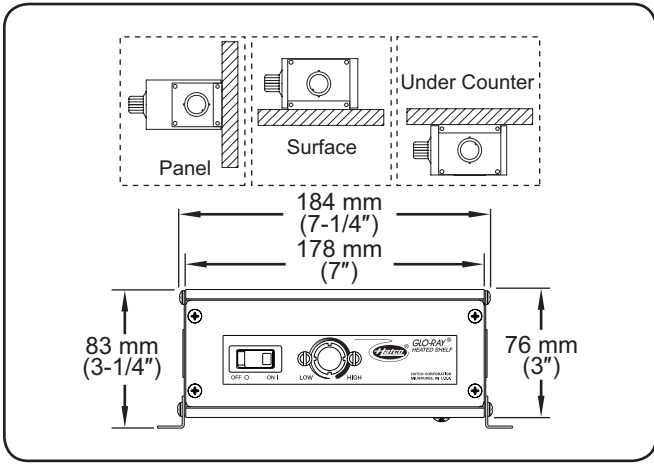
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NOTICE

Do not modify wiring or cut thermostat capillary on control box to increase remote mounting distance. Cutting thermostat capillary will cause unit to overheat and may damage unit as well as surrounding countertop.

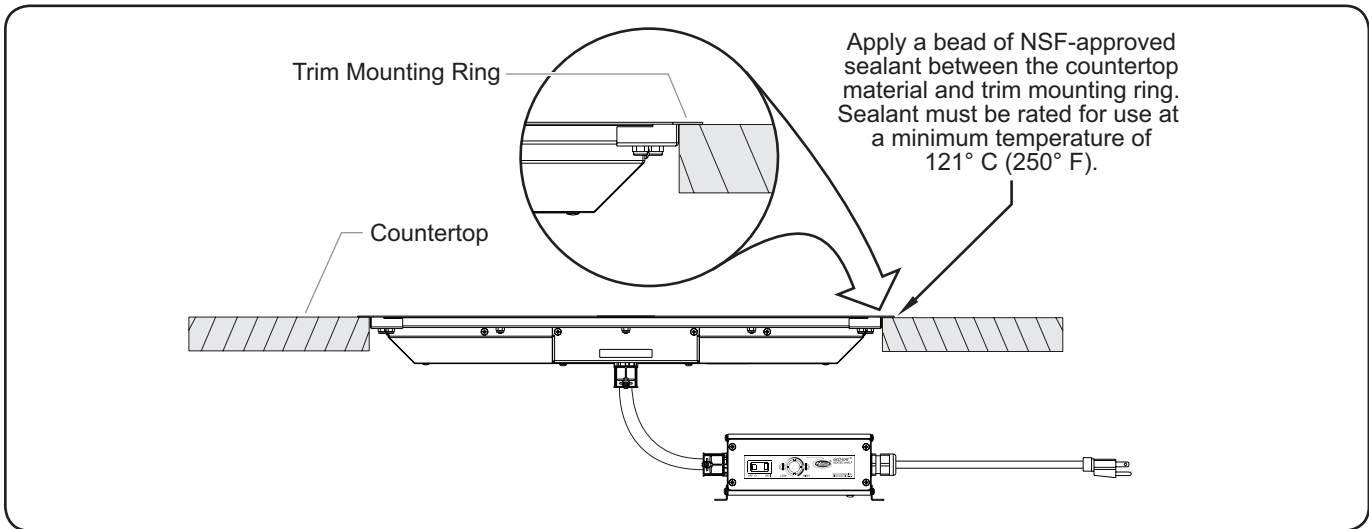
8. Once all components are secured, proceed to the OPERATION section.

NOTE: A 1829 mm (6') cord is supplied with this unit; any excess cord should be routed neatly so it does not hang down.



Control Box Mounting Options

GRSSB Built-In Installation



GRSSB Countertop Cutout Chart		
Model	Width	Depth
GRSSB-2418	625 mm (24-5/8") – 632 mm (24-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-3018	778 mm (30-5/8") – 784 mm (30-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-3618	930 mm (36-5/8") – 937 mm (36-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-4818	1235 mm (48-5/8") – 1241 mm (48-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-6018	1540 mm (60-5/8") – 1546 mm (60-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-7218	1845 mm (72-5/8") – 1851 mm (72-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")

General

Use the following procedure to turn on and operate the GRSS, GRSSR, and GRSSB units.

⚠ WARNING

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

Startup

1. Clean and sanitize the stone surface using a clean, damp cloth and a sanitizer approved for food contact surfaces.
2. Plug unit into a properly grounded electrical receptacle of the correct voltage, size, and plug configuration. See SPECIFICATIONS section in this manual for details.
3. Move the Power I/O (on/off) switch to the I (on) position.

⚠ CAUTION

BURN HAZARD: Some exterior surfaces on the unit will get hot. Use caution when touching these areas.

4. Turn the Temperature Control to the desired temperature setting.

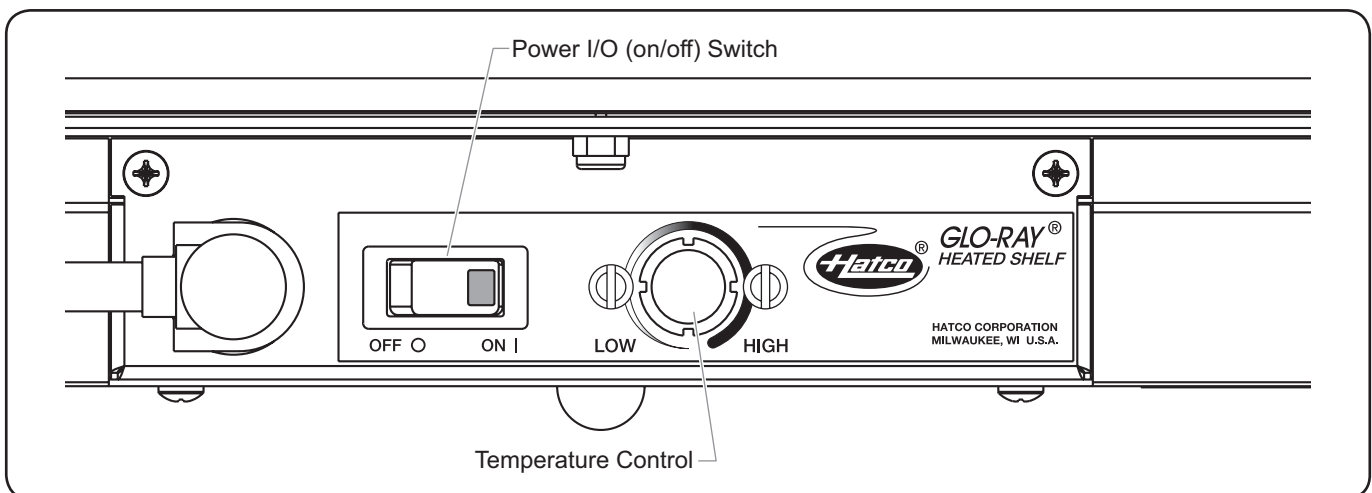
- Turning the Temperature Control knob clockwise will increase the temperature setting. Turning the Temperature Control knob counterclockwise will decrease the temperature setting.

5. Allow the unit 30 minutes to reach operating temperature.

NOTE: Refer to the OPTIONS AND ACCESSORIES section for installation and operation information for GRSSB units equipped with a flush-style remote mounted control panel.

NOTICE

If weight on shelf exceeds 23 kg (50 lbs.), a deflection up to 4 mm (5/32") is possible. If weight on shelf exceeds 45 kg (100 lbs.), a deflection of 6 mm (1/4") is possible. Shelf is not guaranteed if weight on shelf exceeds 68 kg (150 lbs.). All weight must be distributed evenly across entire shelf.



Standard Control Panel—GRSS Model

General

Hatco Glo-Ray® Heated Stone Shelves are designed for maximum durability and performance, with minimum maintenance.



ELECTRIC SHOCK HAZARD:

- Turn OFF power switch, unplug power cord, 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.
- Do not steam clean or use excessive water on 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 (0512) 6732-5091.

Daily Cleaning

To preserve the bright finish of the cabinet, it is recommended that the unit be cleaned daily.

NOTICE

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

1. Before turning on the unit each day, clean and sanitize the stone surfaces using a clean, damp cloth and a sanitizer approved for food contact surfaces. If additional cleaning is necessary, refer to the “Cleaning the Stone Surface” information in this section.
2. At the end of each day:
 - a. Turn off the unit and allow to cool.
 - b. Wipe down all metal surfaces using a clean, damp, non-abrasive cloth.
 - c. Clean and sanitize the stone surfaces using a clean, damp cloth and a sanitizer approved for food contact surfaces. If additional cleaning is necessary, refer to the “Cleaning the Stone Surface” information in this section.

NOTE: To correct inconsistent staining and discoloration, refer to the “Cleaning the Stone Surface” information in this section.

- d. Wipe dry with a clean, non-abrasive cloth.

Cleaning the Stone Surface

Proper use of the products listed below will not damage the stone surface (follow the directions on the product labels).

NOTE: Stone surfaces are a simulated stone solid surface.



Make sure to clean and sanitize stone surface properly after deep cleaning the surface using abrasives and before placing food product on unit.

Hard to Remove Stains

For hard-to-remove stains, use the supplied abrasive pad along with an abrasive cleaner such as Ajax, Comet, Bon Ami, or Bar Keeper’s Friend. Additional abrasive pads are available from Hatco (P/N 04.39.049.00). **NOTICE: Use supplied abrasive pad on stone surface only.**

NOTE: Do not use steel wool or metal scouring pads.

Mineral Based Stains

For a mineral-based stain, cleaners designed to remove iron or rust are recommended and should not harm the stone surface.

Scratches

For scratches, use sandpaper starting with the coarsest grit and going to finest grit until the scratch disappears. Blend area in with the supplied abrasive pad.

⚠ WARNING

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

⚠ WARNING

ELECTRIC SHOCK HAZARD: Turn power switch OFF, unplug power cord, and allow unit to cool before performing any maintenance or cleaning.

Symptom	Probable Cause	Corrective Action
Unit too hot.	Temperature Control set too high.	Change the temperature setting to a lower setting.
	Unit plugged into incorrect power supply.	Verify with qualified personnel that power supply matches unit specification.
	Temperature Control defective.	Contact Authorized Service Agent or Hatco for assistance.
Unit not hot enough.	Temperature Control set too low.	Change the temperature setting to a higher setting.
	Location of unit is susceptible to air currents (air conditioning ducts, exhaust fans, hood, and exterior doors).	Block air currents or relocate unit.
Unit not working at all.	Unit not plugged in.	Plug unit into proper power supply.
	Unit not turned on.	Move Power I/O (on/off) switch to the I (on) position.
	Power ON/OFF (I/O) switch defective.	Contact Authorized Service Agent or Hatco for assistance.
	Temperature Control defective.	
	Base heating element burned out.	
Stone surface material is stained, discolored, or has inconsistent staining/discoloration.	Stone surface is not being cleaned properly.	Clean surface using the "Cleaning the Stone Surface" information in the MAINTENANCE section of this manual. If these methods fail to produce acceptable results, contact Hatco for assistance.
Shelf is flexing.	Excessive weight on shelf.	Distribute weight evenly on entire shelf. If weight on the shelf exceeds 23 kg (50 lbs.), a deflection up to 4 mm (5/32") is possible. If weight on the shelf exceeds 45 kg (100 lbs.), a deflection of 6 mm (1/4") is possible. The shelf is not guaranteed if weight on shelf exceeds 68 kg (150 lbs.).

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: (0512) 6732-5091

e-mail: infocn@hatcocorp.com

102 mm (4") Adjustable Legs (GRSS Model)

Use the following procedure to install 102 mm (4") adjustable legs in place of the rubber feet on a GRSS unit.

NOTE: 102 mm (4") legs are included with models greater than 914 mm (36") in width.

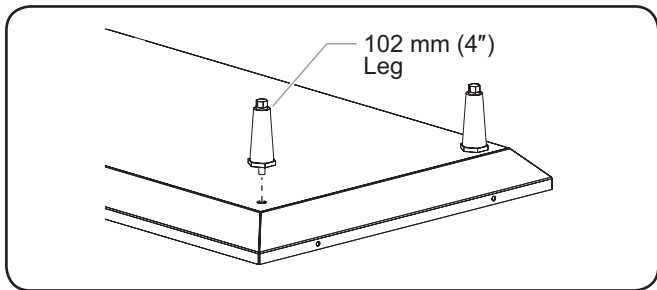


ELECTRIC SHOCK HAZARD: Turn power switch OFF, unplug power cord, and allow unit to cool before performing any maintenance or cleaning.



Do not lay unit on the side with the control panel or damage to unit could occur.

1. Turn off the unit, unplug the power cord, and allow the unit to cool.
2. Carefully turn the unit upside down and lay the unit on a flat surface. Make sure to cover the surface with something to prevent scratching the stone surface.
3. At each corner of the base, remove the foot screw and rubber foot.



Installing the 102 mm (4") Legs

4. At each corner of the base, screw a 102 mm (4") leg into the bottom of the base.

NOTE: The feet on the 102 mm (4") legs are adjustable for leveling the unit. Use a 16 mm (5/8") open-end wrench to make leveling adjustments once the unit is placed in its final position.

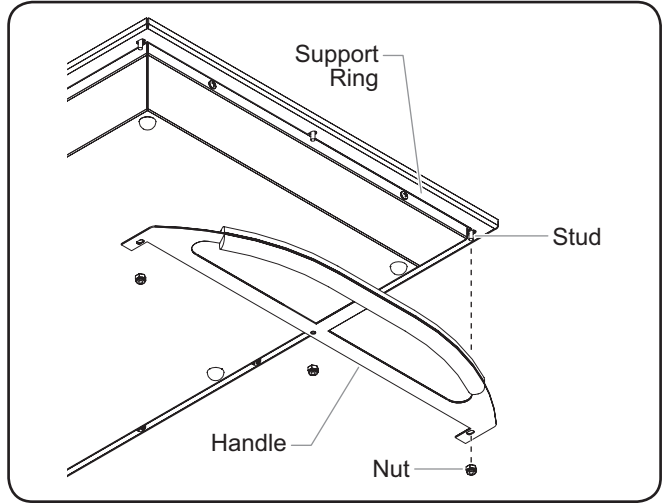
Handles (GRSS Models only)

Designer black powdercoated rounded stainless steel handles are available for GRSS models.

The handles are field retrofittable and are installed onto each end of the unit using the following procedure.

On each end of the unit:

1. Remove the three nuts located on the underside of the stone surface support ring.
2. Align the three holes on the handle with the three studs on the support ring, and position the handle on the studs.
3. Replace the three nuts onto the studs, and tighten securely.



Handle Installation

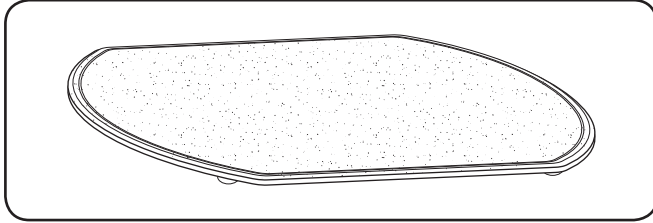
Recessed Top for GRSSB Models

An optional recessed top is available for GRSSB models. Units with a recessed top allows the heated surface to sit lower than countertop surface.

Cutting Board (GRSSR Models only)

The cutting board comes equipped with rubber feet on the bottom to center it on the unit.

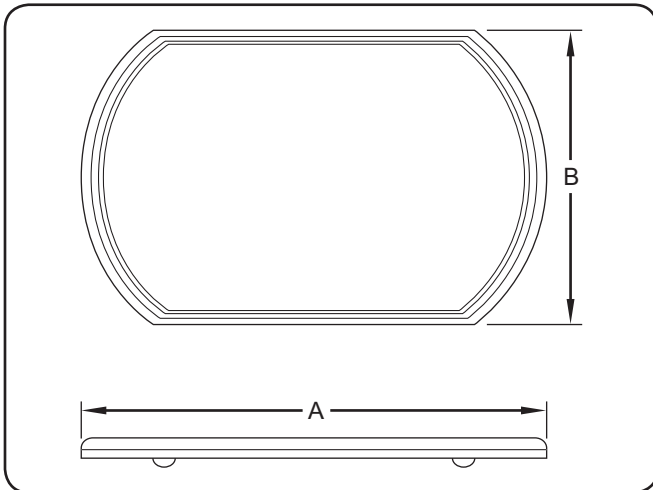
The cutting board is made of the same material as the heated stone surface and is available in the same colors.



Cutting Board

Cutting Board Dimensions

Model	Width (A)	Depth (B)
GRSSR-16	432 mm (17")	298 mm (11-3/4")
GRSSR-18	483 mm (19")	349 mm (13-3/4")
GRSSR-20	533 mm (21")	400 mm (15-3/4")



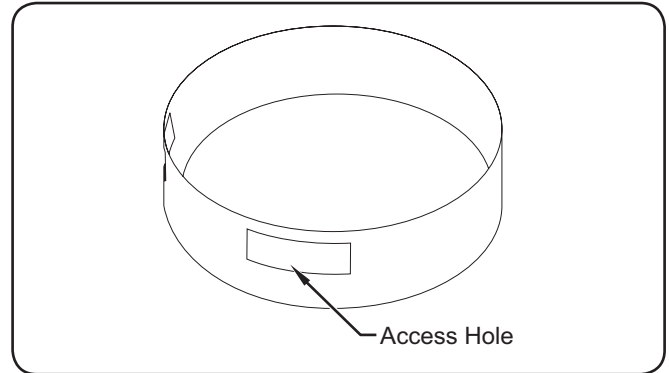
Cutting Board Dimensions

Risers (GRSSR Models only)

Steel risers are available to increase the height of GRSSR units. They are available in 76 mm (3") and 127 mm (5") heights in several colors and in stainless steel.

To install the riser:

1. Place the riser in the desired location on the countertop.
2. Thread the power cord of the GRSSR unit through one of the access holes in the riser.
3. Set the GRSSR unit inside the riser. Make sure the controls are accessible through one of the access holes in the riser.



Model GRSSR 127 mm (5") Riser

Remote Mounted Control Enclosures (GRSSB Models only)

Two flush-style remote mounted control enclosures are available for the GRSSB model — the Mechanical Temperature Control enclosure and the Digital Temperature Controller enclosure. Both enclosures are installed using the following procedure.



ELECTRIC SHOCK HAZARD: Remote mounted control enclosure must be mounted on a vertical wall and installed in vertical position. Mounting control enclosure in horizontal position may result in collection of liquids and lead to an electric shock.



Install remote mounted control enclosure outside of heat zone. Locating control enclosure inside heat zone will cause control(s) to overheat, malfunction, and fail.

Do not modify wiring or cut thermostat capillary on control box to increase remote mounting distance. Cutting thermostat capillary will cause unit to overheat and may damage unit as well as surrounding countertop.

NOTE: A qualified electrician is recommended for connecting the units to a power source.

1. Prepare cutout and pre-drill screw holes.
2. Remove trim cover from control enclosure assembly.
3. Position control enclosure into opening through the backside.
4. Secure control enclosure to mounting surface using screws (not supplied).
5. Connect proper power source to the mounted remote control enclosure.
6. Reinstall trim cover.

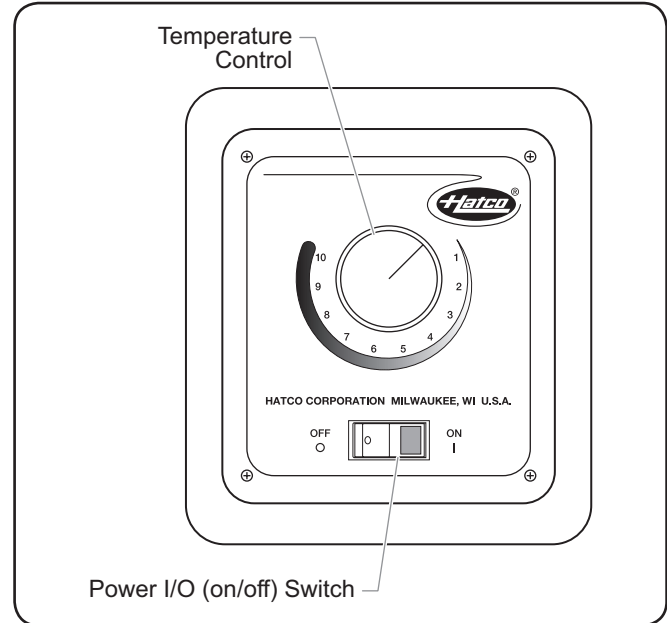
NOTE: Units are equipped with a 914 mm (3') flexible conduit connecting the control enclosure to the unit. The digital temperature controller also offers 1829 mm (6') and 3048 mm (10') conduit lengths.

Power I/O (on/off) Switch

Both flush-style remote mounted control enclosures are equipped with a Power I/O (on/off) switch. Move the Power I/O (on/off) switch to the I (on) position to turn on the unit. The indicator light in the switch glows when the unit is on.

Changing the Setpoint Temperature — Mechanical Temperature Control

Turn the temperature control clockwise to increase the setpoint temperature. Turn the temperature control counterclockwise to decrease the setpoint temperature.



Mechanical Temperature Control

Front View of Cutout

IMPORTANT NOTE
Make sure the installation location provides enough room for electrical connections to the control enclosure.

Digital Temperature Controller
121 mm (4-3/4")
Mechanical Temperature Control
102 mm (4")

Trim Cover
Control Enclosure
Mounting Surface

Side View of Installed Enclosure

Optional Remote Mounted Control Enclosure Installation Dimensions

Changing the Setpoint Temperature — Digital Temperature Controller

Units equipped with a digital temperature controller will heat up to the setpoint temperature automatically when they are turned on. Use the following procedure to change the setpoint temperature.

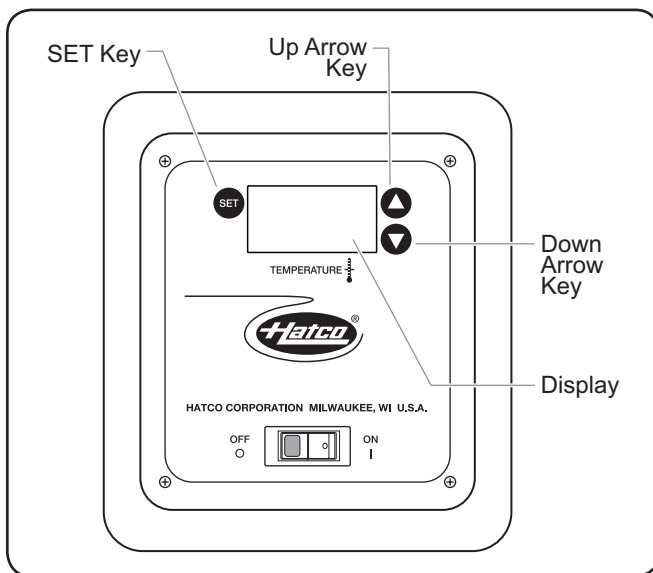
NOTICE

Built-in units must not have a setpoint temperature higher than 200°F (93°C). Temperatures exceeding 93°C (200°F) will damage unit and void warranty.

NOTE: The temperature shown on the display may be inaccurate when unit temperature is below 54°C (130°F).

1. Press the **SET** key three times. The current setpoint temperature will be shown on the TEMPERATURE display ("SP" will be displayed after the second press).
2. Press the **▲** key or **▼** key within 10 seconds to change the setpoint temperature.
3. Press the **SET** key to lock in the new setpoint temperature. The TEMPERATURE display will go blank for two seconds to show that the new setting has been accepted.

NOTE: After 10 seconds of inactivity during the programming process, the controller will exit programming mode automatically without saving any changes.



Digital Temperature Controller

Changing Fahrenheit and Celsius Setting — Digital Temperature Controller

Use the following procedure to change between Fahrenheit and Celsius on the display.

1. Press the **SET** key once. Either an "F" for Fahrenheit or "C" for Celsius will be displayed.
2. Press the **▲** key or **▼** key within 10 seconds to change between "F" (Fahrenheit) and "C" (Celsius).
3. Press the **SET** key three times to lock in the new setting. The TEMPERATURE display will go blank for two seconds to show that the new setting has been accepted.

NOTE: After 10 seconds of inactivity during the programming process, the controller will exit programming mode automatically without saving any changes.

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 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)

b) Five (5) Year Parts Warranty:

- 3CS and FR Tanks

c) Ten (10) Year Parts Warranty:

- Electric Booster Heater Tanks
- Gas Booster Heater Tanks

d) 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 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:

- call Hatco at (0512) 6732-5091
- e-mail Hatco at infocn@hatcocorp.com

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使用者重要注意事项

请在下列空白处记下本设备的型号、序列号、电压、和购买日期（规格标签在 GRSS 和 GRSSR 型号的底部、GRSSB 型号的控制箱底部）。致电 Hatco 要求服务帮助时请提供上述信息。

型号 _____

序列号 _____

电压 _____

购买日期 _____

工作时间： 北京时间 上午 9:00 – 下午 6:00

电话： (0512) 6732-5091

E-mail: infocn@hatcocorp.com

查询更多信息请访问我们的网站: www.hatcocorp.com

简介

Hatco Glo-Ray® 保温石板设计用于保存预制的熟食，同时可将其融入到装饰中。保温石板可以在不影响质量的情况下将所有食品保持在最佳就餐温度。这些保温汤池具有恒温控制的保温底座，从而延长大多数食物的保存时间。

Glo-Ray 保温石板是经过广泛研究和现场测试诞生的产品。所选用的材料经久耐用，外型美观，且性能优异。每件产品在出厂前都经过严格的检验和测试。

本手册提供 Glo-Ray 保温石板的安装、安全和操作说明。Hatco 建议您在安装和使用电热锅之前，请仔细阅读本手册中的所有安装、操作和安全说明。

本手册中的安全信息采用以下标志表示：



“警告”表示有危险情况，如果不加以避免，则可能导致人身伤亡。



“小心”表示有危险情况，如果不加以避免，则可能导致轻度或中度人身伤害。



“注意”用于提示不会涉及人身伤害的操作。

! 使用本设备前，请仔细阅读下列重要安全事项，以免造成严重的人身伤亡及设备或财产的损坏。

! 警告

触电危险：

- 将设备插头妥善插入有接地的电气插座内，插入前请核对电压、规格和插头型式是否正确。如果插头和插座不匹配，请和有正式资格的电工联系，以确定并安装电压和规格正确的电气插座。
- 对设备进行清洗、调整、或维修前，请切断电源，拔掉电源线，并让设备冷却。
- 不得将设备浸入水中。本设备不具备防水性能。如果设备被水浸泡，不得进行操作。
- 设备不防水。将该设备放于室内，周围空气温度保持最低 21°C (70°F)，最高 45°C (113°F)。
- 不得用蒸汽或使用过多的水清洁本设备。
- 本设备不具备“防喷淋”结构。请勿使用喷淋头清洁本设备。
- 请勿用电源线拖拽本设备。
- 如果电源线出现磨损，请停止使用。
- 请勿试图维修或更换损坏的电源线。电源线必须由 Hatco、Hatco 授权服务机构或具备类似资格的人负责更换。
- 该设备必须只由合格人员进行操作。无资格人员操作可能会导致触电或灼伤。
- 维修时只能使用正宗的 Hatco 更换零部件。未使用正宗 Hatco 更换零部件会造成质保无效，并可能造成设备操作人员受到有害电压威胁，并引起触电或着火。正宗 Hatco 更换零部件可以保证使用环境下的安全生产。某些普通零部件不具备相关特性，从而无法在 Hatco 设备内安全使用。

着火危险：

- 本设备距离可燃墙壁或材料应至少有 25 mm (1")。如果不能保持上述安全距离，则可能引起褪色或燃烧。
- 请勿在设备顶部放置任何物品。

! 警告

Hatco 公司对 z 食品的实际供应温度不承担责任。用户有责任确保食品在安全的温度下存放和供应。

确保所有操作人员都已了解如何安全和妥善地使用本设备。

对于身体、感官和智力上有缺陷，或经验和知识有欠缺的人（包括儿童），此说明书不适用。

本设备不含“用户维修”零部件。如需维修，请联系赫高授权服务机构或赫高服务部门，电话 (0512) 6732-5091。

! 小心

燃烧危险：本设备的某些外表面处温度较高。接触这些部位时请务必小心。

将本设备置于台面高度适宜、且使用方便的位置。放置位置应水平，以防止本设备或其部件以外落地，并有足够的强度支撑本设备及其部件的重量。

美国国家卫生基金会 (NSF) 要求对宽度超过 36" (914 mm) 或重量超过 80 lbs. (36 kg) 的设备进行密封，或抬升到安装表面上方。

注意

只能使用无腐蚀的清洁剂和抹布清洁设备。带腐蚀性的清洁剂和抹布会划伤设备表面，影响外观，同时容易积污垢。

放置本设备时，不得用控制面板侧承重，否则易造成设备损坏。

请勿将设备置于气流过急的环境中。避免将设备放于空气流动或气流活跃的区域（即靠近排气扇/排风罩、空调管和外门处）。

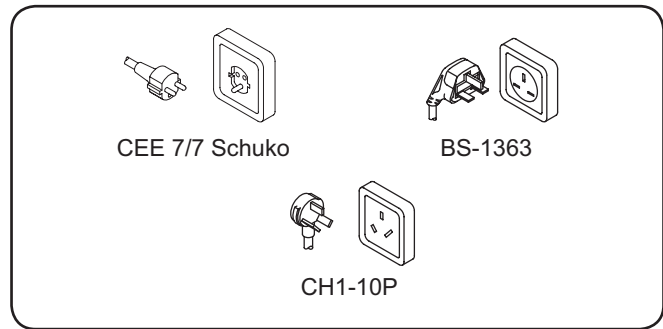
插头型式

设备出厂时带有可拆卸的电源线和插头。插头根据实际使用情况配备。



触电危险： 将设备插头妥善插入有接地的电气插座内，插入前请核对电压、规格和插头型式是否正确。如果插头和插座不匹配，请和有正式资格的电工联系，以确定并安装具有正确电压和规格的电气插座。

注意： 规格标签在 GRSS 型号的底部、GRSSB 和 GRSSR 型号的控制箱底部。请根据标签查看序列号，并核对设备电气信息。



插头型式

注意：Hatco 不提供插座。

电气参数表 — GRSS 型号

型号	电压	功率	电流	插头型式	出厂重量
GRSS-2418	220	534	2.4	BS-1363	12 kg (27 lbs.)
	220-230	534-583	2.4-2.5	BS-1363, CEE 7/7 Schuko	
	230-240	583-635	2.5-2.6	BS-1363, CEE 7/7 Schuko	
GRSS-3018	220	655	3.0	BS-1363	14 kg (30 lbs.)
	220-230	655-716	3.0-3.1	BS-1363, CEE 7/7 Schuko	
	230-240	716-780	3.1-3.3	BS-1363, CEE 7/7 Schuko	
GRSS-3618	220	781	3.6	BS-1363	16 kg (35 lbs.)
	220-230	782-854	3.6-3.7	BS-1363, CEE 7/7 Schuko	
	230-240	854-930	3.7-3.9	BS-1363, CEE 7/7 Schuko	
GRSS-4818	220	1068	4.9	BS-1363	20 kg (45 lbs.)
	220-230	1068-1166	4.9-5.1	BS-1363, CEE 7/7 Schuko	
	230-240	1166-1270	5.0-5.2	BS-1363, CEE 7/7 Schuko	
GRSS-6018	220	1310	6.0	BS-1363	25 kg (56 lbs.)
	220-230	1310-1432	6.0-6.2	BS-1363, CEE 7/7 Schuko	
	230-240	1432-1560	6.2-6.6	BS-1363, CEE 7/7 Schuko	
GRSS-7218	220	1564	7.1	BS-1363	31 kg (68 lbs.)
	220-230	1564-1708	7.1-7.4	BS-1363, CEE 7/7 Schuko	
	230-240	1708-1860	7.4-7.8	BS-1363, CEE 7/7 Schuko	

注意：运输重量含包装。

电气参数表 — GRSSR 型号

型号	电压	功率	电流	插头型式	出厂重量
GRSSR-16	220	210	0.9	BS-1363	6 kg (14 lbs.)
	220–230	190–220	0.8–0.9	CEE 7/7 Schuko	
	230–240	220–250	0.9–1.0	BS-1363	
GRSSR-18	220	273	1.2	BS-1363	7 kg (16 lbs.)
	220–230	265–295	1.2–1.3	CEE 7/7 Schuko	
	230–240	295–325	1.3–1.4	BS-1363	
GRSSR-20	220	336	1.5	BS-1363	8 kg (18 lbs.)
	220–230	330–370	1.5–1.6	CEE 7/7 Schuko	
	230–240	370–400	1.6–1.7	BS-1363	

电气参数表 — GRSSB 型号

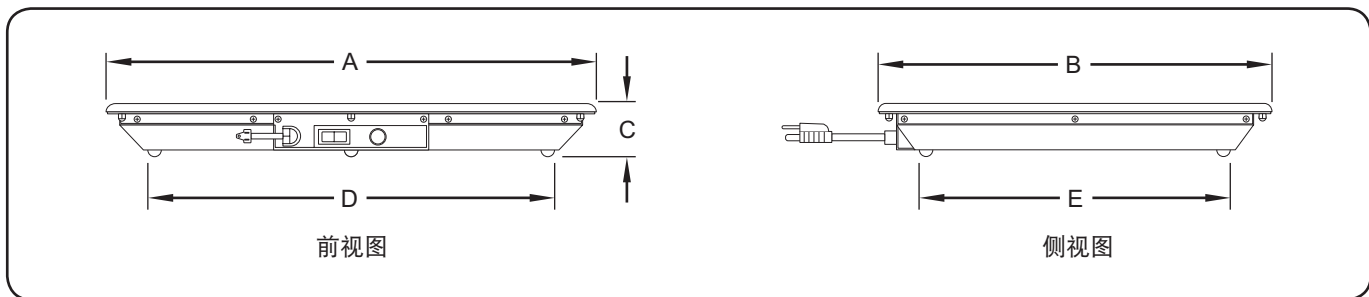
型号	电压	功率	电流	插头型式	出厂重量
GRSSB-2418	220	534	2.4	BS-1363	14 kg (30 lbs.)
	220–230	534–583	2.4–2.5	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	583–635	2.5–2.6	BS-1363, CEE 7/7 Schuko	
GRSSB-3018	220	655	3.0	BS-1363	16 kg (35 lbs.)
	220–230	655–716	3.0–3.1	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	716–780	3.1–3.3	BS-1363, CEE 7/7 Schuko	
GRSSB-3618	220	781	3.6	BS-1363	18 kg (40 lbs.)
	220–230	782–854	3.6–3.7	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	854–930	3.7–3.9	BS-1363, CEE 7/7 Schuko	
GRSSB-4818	220	1068	4.9	BS-1363	23 kg (51 lbs.)
	220–230	1068–1166	4.9–5.1	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	1166–1270	5.0–5.2	BS-1363, CEE 7/7 Schuko	
GRSSB-6018	220	1310	6.0	BS-1363	25 kg (56 lbs.)
	220–230	1310–1432	6.0–6.2	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	1432–1560	6.2–6.6	BS-1363, CEE 7/7 Schuko	
GRSSB-7218	220	1564	7.1	BS-1363	32 kg (70 lbs.)
	220–230	1564–1708	7.1–7.4	CH1-10P, BS-1363, CEE 7/7 Schuko	
	230–240	1708–1860	7.4–7.8	BS-1363, CEE 7/7 Schuko	

注意：运输重量含包装。

尺寸 — GRSS 型号

型号	宽度 (A)	深度 (B)	高度 (C)	底脚宽度 (D)	底脚深度 (E)
GRSS-2418	610 mm (24")	457 mm (18")	64 mm (2-1/2")	502 mm (19-3/4")	349 mm (13-3/4")
GRSS-3018	762 mm (30")	457 mm (18")	64 mm (2-1/2")	654 mm (25-3/4")	349 mm (13-3/4")
GRSS-3618	914 mm (36")	457 mm (18")	64 mm (2-1/2")	806 mm (31-3/4")	349 mm (13-3/4")
GRSS-4818*	1220 mm (48")	457 mm (18")	159 mm (6-1/4")	1086 mm (42-3/4")	324 mm (12-3/4")
GRSS-6018*	1524 mm (60")	457 mm (18")	159 mm (6-1/4")	1391 mm (54-3/4")	324 mm (12-3/4")
GRSS-7218*	1828 mm (72")	457 mm (18")	159 mm (6-1/4")	1695 mm (66-3/4")	324 mm (12-3/4")

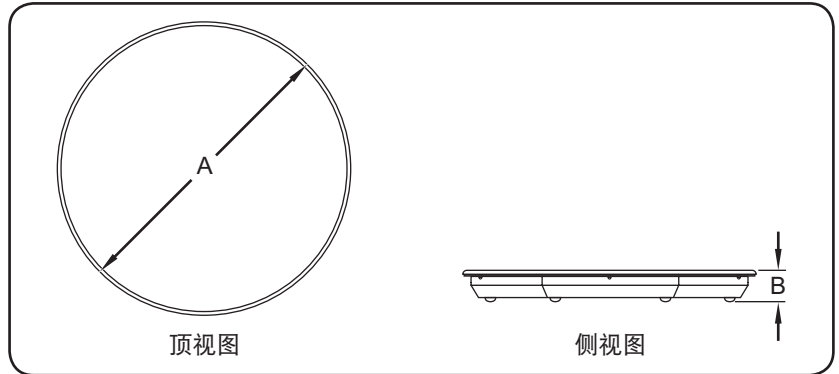
* 高度包括 102 mm (4") 脚架。



尺寸 — GRSS 型号

尺寸 — GRSSR 型号

型号	直径 (A)	高度 (B)
GRSSR-16	406 mm (16")	67 mm (2-5/8")
GRSSR-18	457 mm (18")	67 mm (2-5/8")
GRSSR-20	508 mm (20")	67 mm (2-5/8")



尺寸—GRSSR 型号

尺寸 — GRSSB 型号

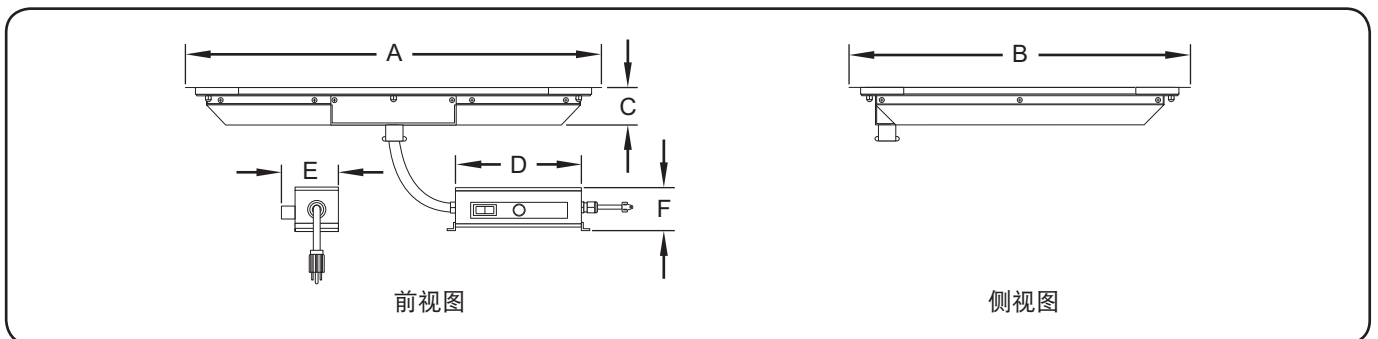
型号	宽度 (A)	深度 (B)	高度 (C)
GRSSB-2418	651 mm (25-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-3018	803 mm (31-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-3618	956 mm (37-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-4818	1260 mm (49-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-6018	1565 mm (61-5/8")	498 mm (19-5/8")	57 mm (2-1/4")
GRSSB-7218	1870 mm (73-5/8")	498 mm (19-5/8")	57 mm (2-1/4")

型号	宽度 (A)	深度 (B)	高度 (C)
遥控盒 (标准)	178 mm (7")	76 mm (3")	83 mm (3-1/4")

注意：请参阅“选件及附件”部分了解平接型壁挂遥控控制盒的尺寸信息。

注意

请参阅本手册的安装部分了解实际工作台面开口尺寸。



尺寸—GRSSB 型号

总则

请使用以下程序安装 GRSS、GRSSR 和 GRSSB 设备。



警告

触电危险：本设备不具备耐候性。请将本设备置于室内，室内气温不得低于 21°C (70°F)。

着火危险：

- 本设备距离可燃墙壁或材料应至少有 25 mm。如果不能保持上述安全距离，则可能引起褪色或燃烧。



小心

将设备置于便于使用的区域，并使其处于适宜的台面高度。放置位置应保持水平，以防设备或承装物意外跌落，还应有足够的强度，以承受设备和承装物的重量。



注意

美国国家卫生基金会 (NSF) 要求对宽度超过 914 毫米 (36 英寸) 或重量超过 36 公斤 (80 磅) 的设备进行密封，或抬升到安装表面上方。如果不能在使用点密封设备，则应包括 102 mm (4") 脚架，以便允许在设备下方进行合适的清洁检修。

不要将设备放在具有控制面板的一侧。可能会损坏设备。

GRSS 和 GRSSR 型号

1. 从装运箱中取出设备。

注意：为防止延误保修，请完成在线保修登记。有关详细信息，请参见“重要用户信息”部分。

2. 取下设备所有表面的胶带和保护性包装。

注意：如果需要 102 mm (4") 脚架，请参阅本手册的“选件及附件”部分获取安装说明。宽度大于 914 mm (36") 的型号随附 102 mm (4") 脚架。

3. 将设备置于所需位置。

- 将设备置于环境气温恒定的地方，最低温度为 21°C (70°F)。避免将设备置于空气流动或气流活跃的区域（即排气扇/排风罩、空调管和外门附近）。
- 确保设备工作台高度合适，方便使用。
- 确保工作面呈水平状态，且足够结实，能够承受本设备和存放食品的重量。
- 确保设备底部的所有基座均稳妥置于工作台上。

4. 安装设备随附的任何配件。有关详细信息，请参阅“选件及附件”部分。

GRSSB 型号

1. 从装运箱中取出设备。

注意：为防止延误保修，请完成在线保修登记。请参阅“物主重要信息”部分了解详细信息。

2. 取下设备所有表面的胶带和保护性包装。

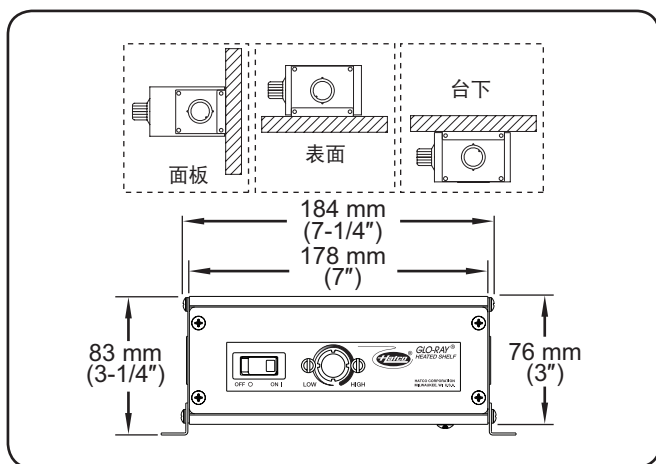
注意

设备适用于在金属工作台面中或金属工作台上使用，并且建议如此使用。因为 Hatco 设备产生热量造成的任何台面材料损伤，都不在 Hatco 的保修范围内。请向制造商核实材料是否适合高达 93°C (200°F) 的长期温度。

3. 准备工作台面开口。参阅本部分的“GRSSB 工作台面开口图”了解建议的工作台面开口尺寸。
4. 在工作台面开口的顶部边缘和装饰安装环的底面涂抹经国家卫生基金会批准的密封胶。密封胶的额定使用最低温度必须是 121°C (250°F)。
5. 将设备放在工作台面开口中。
6. 清除任何多余的密封胶。
7. 将遥控控制箱总成置于便于操作的区域。如果需要或者必要，控制箱可以安装在半遥控位置。

- 从设备的底部取下控制箱。
- 如有必要，从控制箱卸下端架，旋转/重新定位，然后重新固定到控制箱。
- 控制箱可以安装在面板、表面或台下。
- 控制箱安装位置与设备的距离取决于 914 mm (3') 导管（另外，对于电子控制，还可提供 1829 mm [6'] 和 3048 mm [10'] 可选长度的导管）。不要拉紧导管以增加安装距离。在安装控制箱后，导管应该有些松弛。

注意：应将螺丝头直径至少为 6 mm (1/4") 的螺丝插入安装支架上的键孔，来安装遥控控制箱。遥控控制箱易于拆卸——并非永久安装。



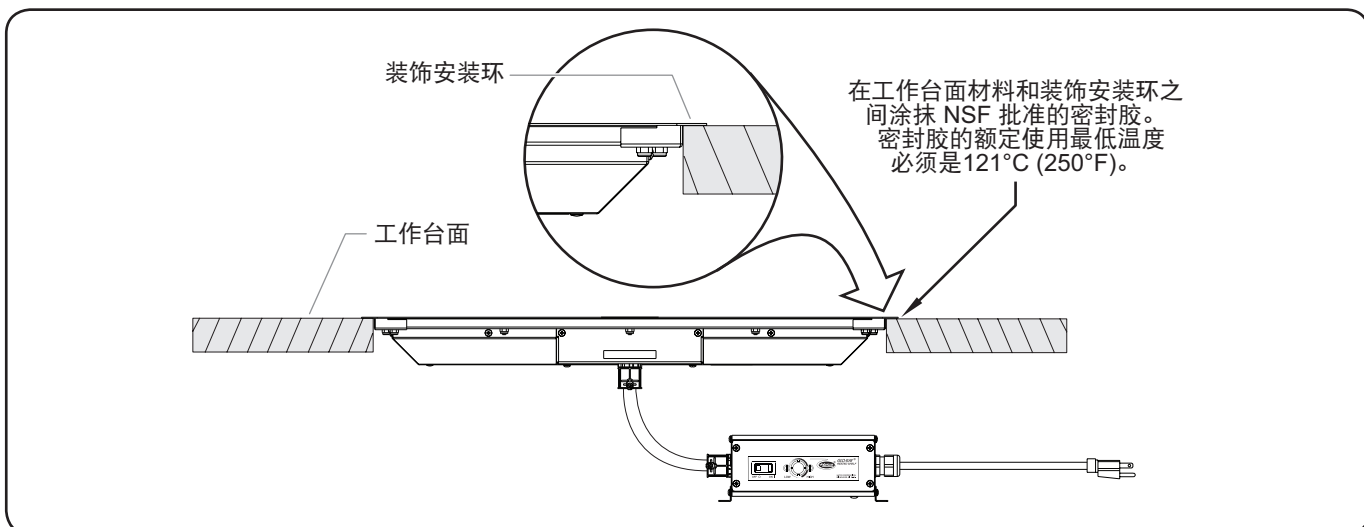
控制箱安装选项

注意

不要修改控制箱上的接线或切断恒温器毛细管以增加遥控安装距离。切断恒温器毛细管会引起设备过热，并且可能损坏设备和周围的工作台面。

8. 固定所有组件之后，继续“操作”部分。

注意：本设备提供一条 1829 mm (6') 电源线；任何多余的电源线都应该整齐地布线，使之不会垂下来。

GRSSB 嵌入式安装**GRSSB 工作台面开口图**

型号	宽度 (A)	深度 (B)
GRSSB-2418	625 mm (24-5/8") – 632 mm (24-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-3018	778 mm (30-5/8") – 784 mm (30-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-3618	930 mm (36-5/8") – 937 mm (36-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-4818	1235 mm (48-5/8") – 1241 mm (48-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-6018	1540 mm (60-5/8") – 1546 mm (60-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")
GRSSB-7218	1845 mm (72-5/8") – 1851 mm (72-7/8")	473 mm (18-5/8") – 479 mm (18-7/8")

总则

请使用以下程序打开和操作 GRSS、GRSSR 和 GRSSB 设备。



操作本设备前，请仔细阅读“重要安全事项”中的所有安全说明。

启动

1. 使用干净湿布和批准用于食品接触表面的消毒杀菌剂对石材表面进行清洁和消毒。
2. 将设备插入电压、尺寸及插头配置均正确且妥当接地的电气插座中。参见本手册的“规格”部分了解详细信息。
3. 将电源 I/O（打开/关闭）开关移至 I（打开）位置。



着火危险：本设备的某些外表面处温度较高。接触这些部位时请务必小心。

4. 将温度控制器转至所需的温度设置。

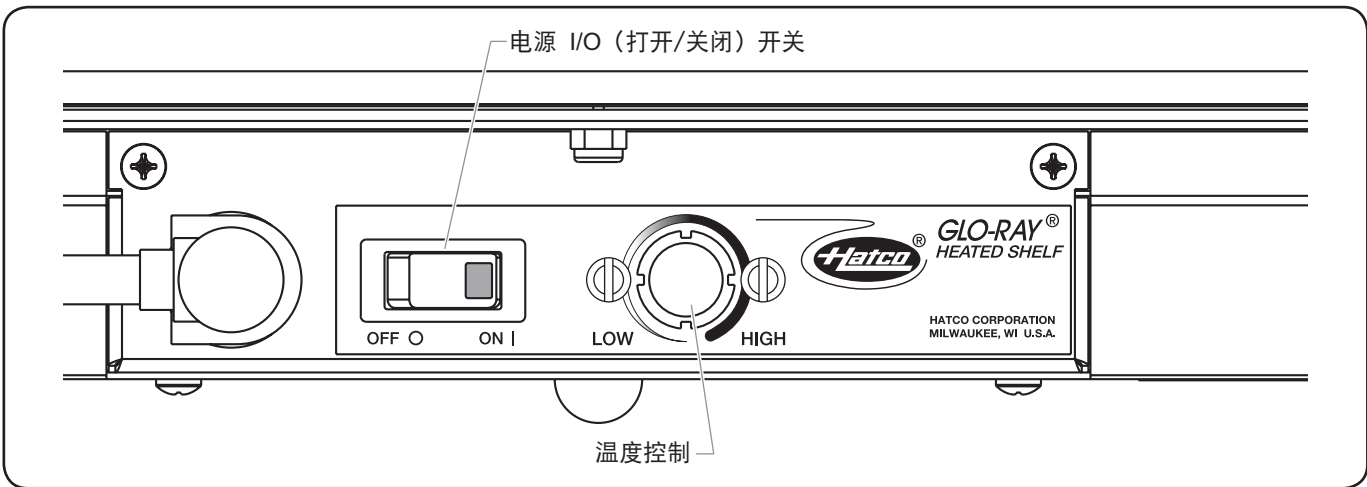
- 顺时针转动温度控制器旋钮将升高温度设置。逆时针转动温度控制器旋钮将降低温度设置。

5. 等待 30 分钟以使设备达到运行温度。

注意：请参阅“选件及附件”部分了解有关配备平接型壁挂遥控控制面板的 GRSSB 设备的安装和操作信息。



如果板上的重量超过 23 kg (50 lb)，则最多可能弯曲 4 mm (5/32")。如果板上的重量超过 45 kg (100 lb)，则可能弯曲 6 mm (1/4")。如果板上的重量超过 68 kg (150 lb)，则无法保证板的使用。所有重量均应均匀分布在板上。



标准控制面板——GRSS 型号

总则

Hatco Glo-Ray® 保温石板的设计经久耐用、性能优异且易于维护。

警告

触电危险：

- 在进行任何清洁、调整或维护之前，请先关闭电源开关，拔下电源线，并使设备冷却。
- 请勿将设备浸入水中或浸湿。本设备不防水。严禁使用被水浸过或浸湿的设备。
- 本设备不具备防喷淋结构。请勿使用喷淋头清洁本设备。
- 请勿用蒸汽或使用过多的水清洁设备。
- 维修时只能使用正宗的 Hatco 更换零部件。未使用正宗 Hatco 更换零部件会造成质保无效，并可能造成设备操作人员受到有害电压威胁，并引起触电或着火。正宗 Hatco 更换零部件可以保证使用环境下的安全生产。某些普通零部件不具备相关特性，从而无法在 Hatco 设备内安全使用。

本设备不含“用户维修”零部件。如需维修，请联系赫高授权服务机构或赫高服务部门，电话 (0512) 6732-5091。

日常清洁

为保持保温柜的光洁度，建议每天清洁保温柜的内外面面。

注意

只能使用无腐蚀的清洁剂和抹布清洁设备。带腐蚀性的清洁剂和抹布会划伤设备表面，影响外观，同时容易积污垢。

1. 每天启动设备前，使用干净湿布和批准用于食品接触表面的消毒杀菌剂对石材表面进行清洁和消毒。如果需要额外清洁，请参阅本部分的“清洁石材表面”信息。
2. 每天结束时：
 - a. 关闭设备并让其冷却。
 - b. 使用干净柔软的湿布擦拭所有金属表面。
 - c. 使用干净湿布和批准用于食品接触表面的消毒杀菌剂对石材表面进行清洁和消毒。如果需要额外清洁，请参阅本部分的“清洁石材表面”信息。

注意：若要纠正不一致的染色和脱色，请参阅本部分的“清洁石材表面”信息。

- d. 使用干净的软布擦干。

清洁石材表面

正确使用下面列出的产品不会损坏石材表面（遵循产品标签上的指示）。

注意：石材表面是仿造石材固体表面。

小心

使用研磨材料深度清洁表面后以及将食品放置到设备上之前，确保对石材表面进行正确清洁和消毒。

难以清除的污渍

对于难以清除的污渍，使用随附的研磨垫以及诸如 Ajax、Comet、Bon Ami 或 Bar Keeper's Friend 等研磨清洁剂。额外研磨垫可从 Hatco 购买 (P/N 04.39.049.00)。注：随附的研磨垫仅可用于石材表面。

注意：不要使用钢丝球或金属丝百洁布。

矿物质污渍

对于矿物质污渍，建议使用专为清除铁或锈设计的清洁剂并且不应损坏石材表面。

划痕

对于划痕，先使用最粗的砂纸，然后使用最细的砂纸，直到划痕消失为止。用随附的研磨垫将此区域融合。

**警告**

本设备只能由受过培训且具备相应资格的人员负责维修。若由不具备相应资格的人员维修，则可能引起触电或着火。

**警告**

触电危险：对设备进行清洗、调整、或维修前，请切断电源，拔掉电源线，并让设备冷却。

症状	可能原因	纠正措施
设备过热。	温度控制设置过高。	将温度设置调低。
	设备插入错误电源。	由专业人士验证电源供应是否与设备规格匹配。
	温度控制有缺陷。	请联系授权服务机构或 Hatco 请求帮助。
设备不够热。	温度控制设置过低。	将温度设置调高。
	设备位置易受气流影响（空调管、排气扇、排风罩和外门）。	阻挡气流或重新安置设备。
设备根本不运行。	设备未接通电源。	将设备接入合适的电源。
	设备未开机。	将电源 I/O（打开/关闭）开关移至 I（打开）位置。
	电源打开/关闭（I/O）开关有缺陷。	请联系授权服务机构或 Hatco 请求帮助。
	温度控制有缺陷。	
	底座加热元件烧坏。	
石材表面染色、脱色或有不一致的染色/脱色。	未正确清洁石材表面。	使用本手册“维护”部分的“清洁石材表面”信息清洁表面。如果这些方法无法产生可接受的结果，则联系 Hatco 寻求帮助。
板弯曲。	板上的重量过高。	让重量在整个板上均匀分布。如果板上的重量超过 23 kg (50 lb)，则最多可能弯曲 4 mm (5/32")。如果板上的重量超过 45 kg (100 lb)，则可能弯曲 6 mm (1/4")。如果板上的重量超过 68 kg (150 lb)，则无法保证板的使用。

对问题进行故障针对？

如果您的困境在问题解决后仍无法解除，请联系距您最近的经过授权的服务代理或 Hatco 以寻求帮助。请查找最近的服务机构，请登录 Hatco 网站 www.hatcocorp.com，选择 支持 下拉菜单，然后单击“查找服务代理”；或者联系 Hatco 零部件和服务团队：

电话： (0512) 6732-5091

电子邮件： infocn@hatcocorp.com

102 mm (4") 可调节脚架 (GRSS 型号)

使用下列程序将 102 mm (4") 可调节脚架安装到 GRSS 设备的橡胶底脚上。

注意：宽度大于 914 mm (36") 的型号随附 102 mm (4") 脚架。



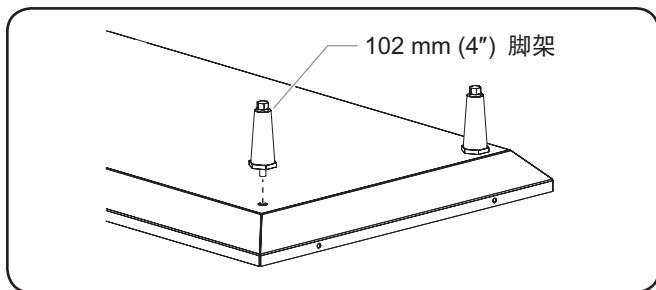
警告

触电危险： 在进行任何维护或清洁工作之前，请先关闭电源开关、拔下电源线，并使设备冷却。

注意

不要将设备放在具有控制面板的一侧，否则可能损坏设备。

1. 关掉设备，断开电源线并让设备冷却。
2. 小心地将本机倒置，并将其放置在平面上。确保用东西盖住表面，防止刮擦石材表面。
3. 在底座的每个角上，取下底脚螺丝和橡胶底脚。



安装 102 mm (4") 脚架

4. 在底座的每个角上，将 102 mm (4") 脚架拧到底座底部。

注意：102 mm (4") 脚架上的底脚可以调节，从而调平设备。在设备处于最终位置之后，使用 16 mm (5/8") 开口扳手进行水平调整。

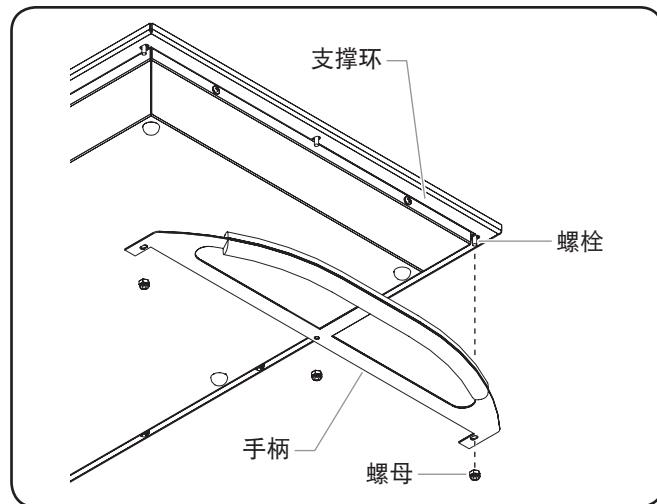
手柄 (仅限 GRSS 型号)

GRSS 型号有设计师黑色粉末涂层圆形不锈钢手柄可供选择。

手柄可现场改造并且使用下列程序安装到设备的每端。

在设备的每端：

1. 取下石材表面支撑环下面的三个螺母。
2. 将手柄上的三个孔与支撑环上的三个螺栓对齐，然后将手柄置于螺栓上。
3. 将三个螺母重新拧到螺栓上，并牢固拧紧。



手柄安装

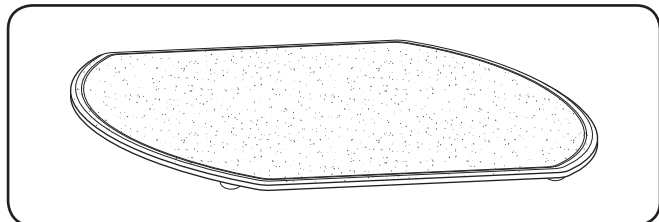
GRSSB 型号的凹顶

GRSSB 型号有可选凹顶可供选择。具有凹顶的设备可让保温表面位于低于工作台面表面的位置。

砧板 (仅限 GRSSB 型号)

砧板底部配备橡胶底脚以将其置于设备中心。

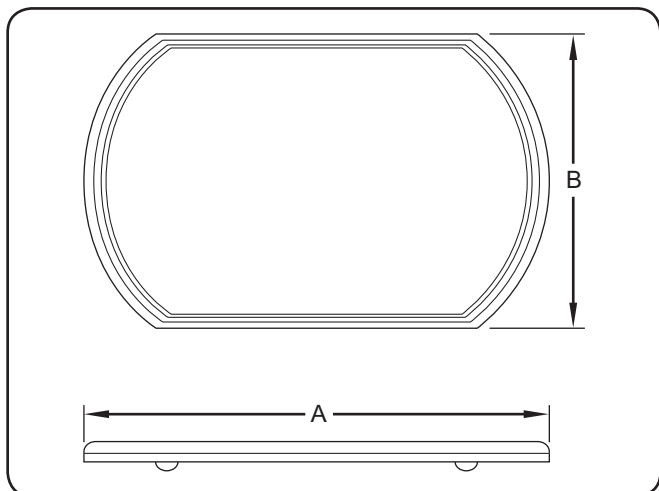
制成砧板的材料与保温石板表面相同，有不同颜色可供选择。



砧板

砧板

型号	宽度 (A)	深度 (B)
GRSSR-16	432 mm (17")	298 mm (11-3/4")
GRSSR-18	483 mm (19")	349 mm (13-3/4")
GRSSR-20	533 mm (21")	400 mm (15-3/4")



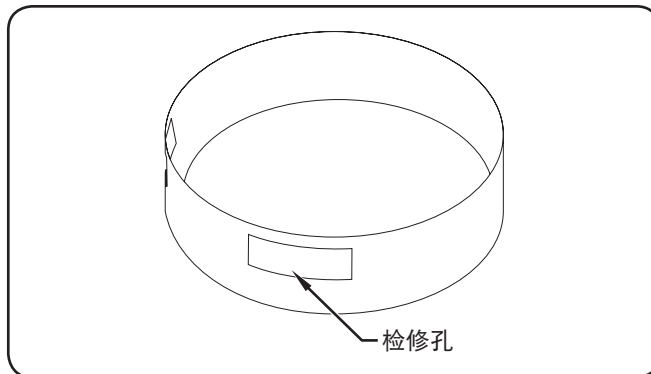
砧板

立板 (仅限 GRSSB 型号)

可提供钢立板以增加 GRSSR 设备的高度。材质为不锈钢，有 76 mm (3") 和 127 mm (5") 的高度以及不同颜色可供选择。

若要安装立板：

1. 将立板放在工作台面上的所需位置。
2. 将 GRSSR 设备的电源线穿过立板的其中一个检修孔。
3. 将 GRSSR 设备置于立板内。确保可通过立板的其中一个检修孔触及控制器。



型号 GRSSR 127 mm (5") 立板

壁挂遥控控制盒安装 (仅限 GRSSB 型号)

GRSSB 型号有两种平接型壁挂遥控控制盒可供选择——机械温度控制盒和数字温度控制盒。两种控制盒均使用以下程序进行安装。

警告

触电危险壁挂遥控控制盒必须安装在直墙上的垂直位置。控制盒安装在水平位置可造成积液，导致触电。

注意

在加热区域以外安装壁挂遥控控制盒。将控制盒置于加热区域内将导致控制器过热、故障和失灵。

不要修改控制箱上的接线或切断恒温器毛细管以增加遥控安装距离。切断恒温器毛细管会引起设备过热，并且可能损坏设备和周围的工作台面。

注意：建议由具有资质的电工将设备连接到电源。

1. 准备开口和预钻螺丝孔。
2. 从控制盒总成卸下装饰盖板。
3. 通过背面将控制盒定位在开口中。
4. 使用螺丝（未提供）将控制盒固定到安装表面。
5. 将合适的电源连接到壁挂遥控控制盒。
6. 重新安装装饰盖板。

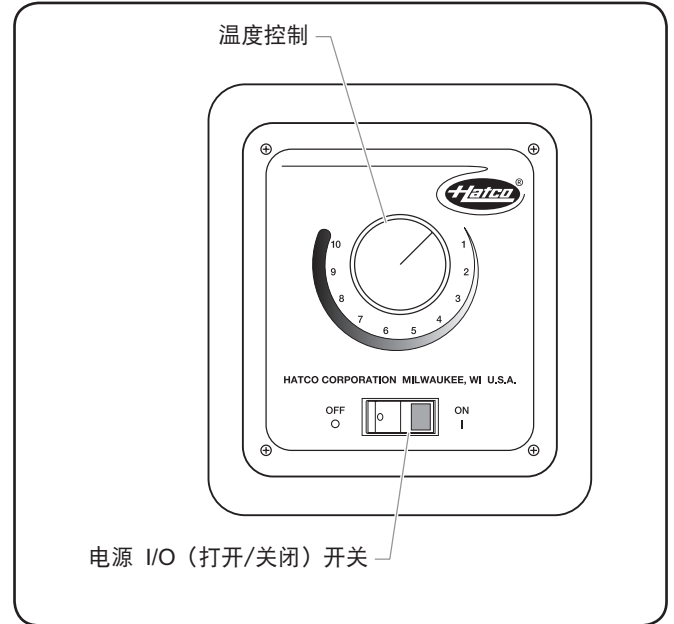
注意：设备配备一根 914 mm (3') 柔性导管，后者将控制盒连接到设备。数字温度控制器还提供 1829 mm (6') 和 3048 mm (10') 的导管长度。

电源 I/O (打开/关闭) 开关

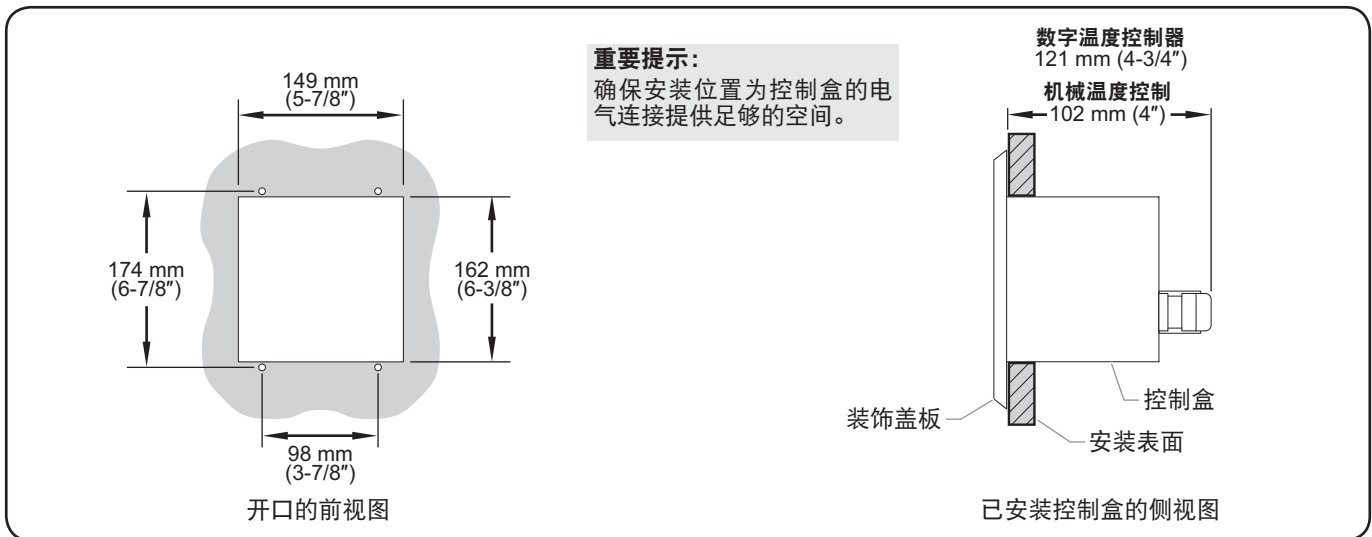
两种平接型壁挂遥控控制盒配备电源 I/O (打开/关闭) 开关。将电源 I/O (打开/关闭) 开关移至 I (打开) 位置可打开设备。当设备打开时，开关中的指示灯发光。

更改设定温度 — 机械温度控制

顺时针转动温度控制器可升高设定温度。逆时针转动温度控制器可降低设定温度。



机械温度控制



可选壁挂遥控控制盒安装尺寸

重要提示:

确保安装位置为控制盒的电气连接提供足够的空间。

更改设定温度 — 数字温度控制器

配备数字温度控制器的设备在打开时将自动加热到设定温度。请按照以下程序更改设定温度。

注意

嵌入式设备的设定温度不得高于 **200°F (93°C)**。超过 **93°C (200°F)** 的温度会损坏设备并使保修失效。

注意：当设备温度低于 **54°C (130°F)** 时，显示屏上显示的温度可能不准确。

1. 按 **SET** 三下按键。当前设定温度将显示在温度显示屏上（按两下按键后将显示“SP”）。
2. 按 **▲** 按键或 **▼** 长按 10 秒可更改设定温度。
3. 按 **SET** 按键以锁定新的设定温度。温度显示屏将变为空白两秒钟，以显示新设置已被接受。

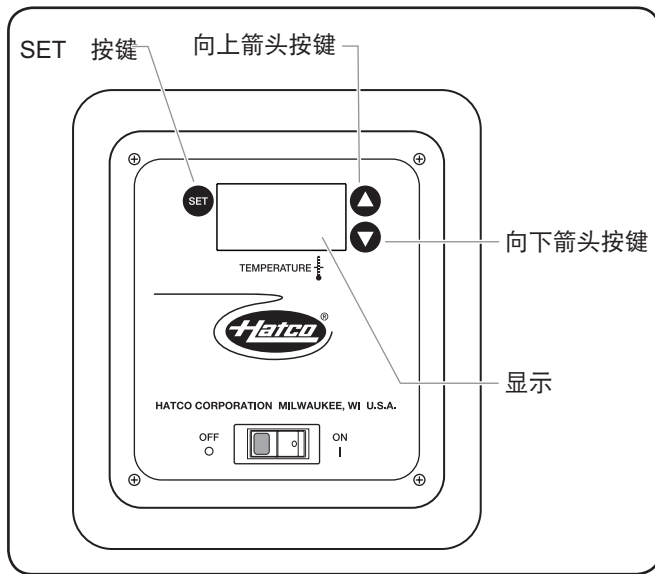
注意：编程过程中无任何操作超过 **10 秒钟**，则控制器将自动退出编程模式，且不保存任何更改。

更改华氏和摄氏温度设置 — 数字温度控制器

按照以下程序将显示屏在华氏温度和摄氏温度之间进行更改。

1. 按 **SET** 一下按键。显示“F”表示为华氏温度，显示“C”则表示为摄氏温度。
2. 按 **▲** 按键或 **▼** 长按按键 10 秒以在“F”（华氏温度）和“C”（摄氏温度）之间进行更改。
3. 按 **SET** 三下按键以锁定新的设置。温度显示屏将变为空白两秒钟，以显示新设置已被接受。

注意：编程过程中无任何操作超过 **10 秒钟**，则控制器将自动退出编程模式，且不保存任何更改。



数字温度控制器

1. 产品质保

赫高保证其生产的产品（下称“本产品”）不存在材料和工艺缺陷，在按照赫高的说明书安装和维护的情况下，自购买之日起1年内（用户必须书面且保养）或自赫高出厂之日起18个月内，设备可以保证正常工作。客户必须通过在赫高的官网上完成本产品的注册来确定产品的购买日期，或是经由赫高判断进而认可的其他方式。

赫高保证在下述时间内及条件下，下列部件自购买之日起（符合上述条件）起不存在材料和工艺缺陷（条件如下）：

a) 保修期为两（2）年的部件：

- 履带式烤面包机加热器（金属铠装）
- 保温抽屉加热器（金属铠装）
- 保温抽屉的抽屉滚轴和滑轨
- S食品保温器加热器（金属铠装）
- 保温陈列柜加热元件（金属铠装、空气加热）
- 保温柜加热元件（金属铠装、空气加热）
- 保温汤锅加热元件—HWB系列（金属铠装）

b) 保修期为五（5）年的部件：

- 3CS和FR水箱

c) 保修期为十（10）年的部件：

- 电动瞬时加热器的水箱
- 煤气瞬时加热器的水箱

d) 保修期为九十（90）天的部件：

- 可更换零件

上述质保为赫高独家提供，并代替任何明示或隐含的质保，包括但不限于侵犯某个特定用途、专利或其他知识产权的适够性或实用性的银汉质保。在没有特定说明的情况下，上述质保不包括：带涂层白炽灯泡、日光灯、保温加热灯泡、带涂层卤素灯泡、卤素加热灯泡、氙气灯泡、LED光管、玻璃组件和保险丝；由于结垢、化学腐蚀或严寒造成的瞬时加热器水箱、翅片管式换热器或其他水加热设备的故障；或产品使用不当、擅自改动或误用、安装不当，或电压不正确。

2. 修复和损坏限制

本文所述赫高责任以及对用户的独家修复补偿义务仅限于在上述保修期内提出索赔，由赫高或赫高授权的服务机构负责更换新零件或产品或对原零件或产品进行维修。赫高有权接受或拒绝任何此类全部或部分的索赔。在此有限质保规定中，“翻新”是指本产品的部分或整机已经被赫高或赫高授权的服务代理机构修复至原有的产品规格。未经赫高事先书面批准，赫高不接受任何产品的退回，经过赫高同意的产品退回，其相关费用均由用户独自承担。在任何情况下，对于因故或意外而引起的损失，包括但不限于人工费用，或因产品的使用，或不会用，或产品隶属或成为其他产品的一部分而造成的利润损失，赫高将不予负责。

服务信息

此款 Hatco 设备的保修期为自购买之日起 1 年内或 Hatco 发货之日起 18 个月内，以先发生的日期为准。

如果此设备在保修期内出现问题，请做以下事项：

联系当地 Hatco 经销商

在联系 Hatco 经销商寻求服务帮助时，请为经销商提供以下信息，以确保及时处理：

- 设备型号
- 序列号（位于设备）
- 设备具体问题
- 购买日期
- 商业名称
- 邮寄地址
- 联系人姓名和电话号码

Hatco 经销商会做以下事项：

- 按需提供更换零部件
- 向 Hatco 提交保修索赔以供处理

非保修问题

如果遇到需要帮助的非保修问题，请联系最近的 Hatco 授权服务代理。

查找最近的服务代理：

- 向 Hatco 致电：(0512) 6732-5091
- 向 Hatco 发送电子邮件：infocn@hatcocorp.com



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