



INSTALLATION & OWNER'S MANUAL

HELIOS® LIGHT & WARMER COMBO

TABLE OF CONTENTS

Identifying Your Product	2	Wiring Diagram.....	7
Receiving & Inspecting the Equipment.....	3	Operation	7
Safety Precautions.....	4	Cleaning Instructions	7
Recommended Mounting Heights & Minimum Clearance Requirements	5	Parts & Service	8
Installation.....	5	Changing & Ordering LED Bulbs	8
Remote Infinite Controls	6	Troubleshooting Guide	9
		Warranty	10

This manual is an important part of your equipment. Your Owner's Manual should be stored in a safe location, as it will be useful for the life of your product. It contains important safety information concerning the maintenance, operation, and servicing of these products.

Failure to properly use this manual may result in serious injury. Do not operate this equipment unless you have read and understood the contents of this manual.

IMPORTANT OWNER INFORMATION

Record the serial number(s) of your Helios® light and warming units as a reference when contacting your local representative or BSI headquarters.

Serial No.:	
Serial No.:	
Date of Purchase:	
Other:	

BSI Contact Information

Business Hours: 8:00 AM to 5 PM MST

Telephone: 800.662.9595

Fax: 303.331.8444

Web Address: www.bsidesigns.com

IDENTIFYING YOUR PRODUCT

Each Helios unit contains an Identification Sticker. This sticker provides the customer with the following information:

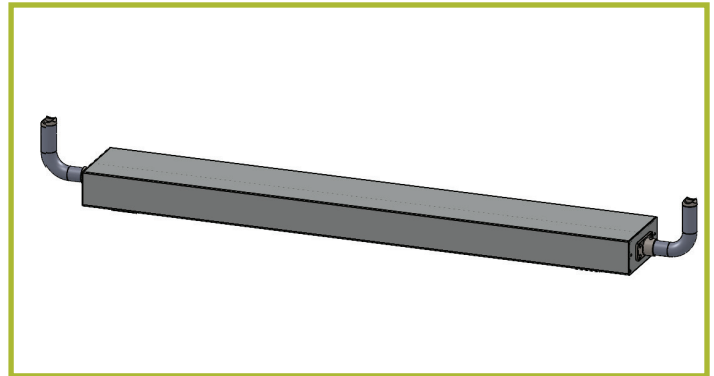
- Serial Number
- Model Number
- Manufacture Date
- Electrical Information



RECEIVING AND INSPECTING THE EQUIPMENT

1. Visually inspect the package, skid, or container exterior. Any damage should be noted and reported to the delivering carrier immediately.
2. Open and inspect contents for damage and verify that all items were received.
3. In the event that damage is discovered, notify the carrier and request freight damage forms.
4. Request an inspection by the shipping company of the damaged equipment. This should be done within 10 days of equipment receipt.
5. Retain all packaging materials until an inspection has been made or waived.

MODELS



Helios® Light/Warmer Combo Unit Model 705E

Helios® lights and warmers are certified by NSF and UL.



SAFETY PRECAUTIONS



This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

ELECTRIC SHOCK HAZARD:

- Units supplied without an electrical 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 perform 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.
- Do not steam clean or use excessive water on unit.
- Use only genuine BSI replacement parts when service is required. Failure to do so will void all warranties and may subject users to hazardous electrical voltage, resulting in electrical shock or burn. Some aftermarket replacement parts are not designed to safely operate on BSI equipment.

FIRE HAZARD:

- Locate unit the correct distance from combustible walls and materials. If safe distances are not maintained, discoloration or combustion could occur. Refer to specific installation and mounting information in this manual for proper clearances.

EXPLOSION HAZARD:

- Do not store or use substances with 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.

RECOMMENDED MOUNTING HEIGHTS AND MINIMUM CLEARANCE REQUIREMENTS

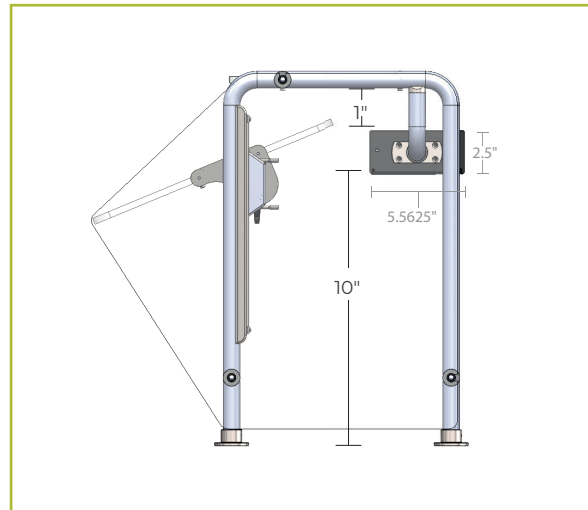
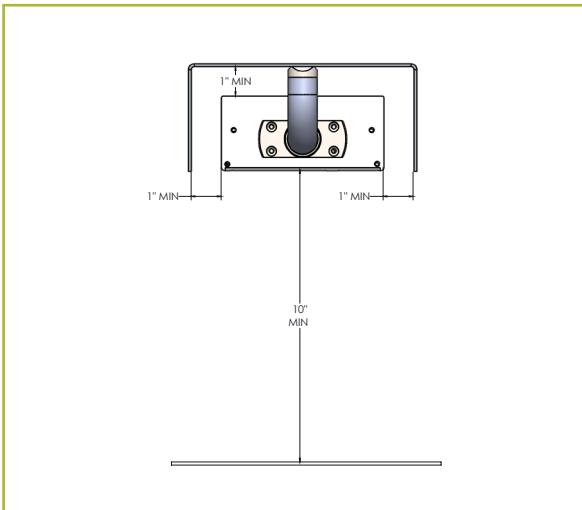
The mounting height and minimum clearance requirements listed are for installation safety and must be followed accordingly for combustible and non-combustible surroundings.

Combustible Surroundings

The recommended mounting height and minimum clearance requirements for combustible surroundings are provided to prevent fire hazards, discoloration, and combustion.

Non-Combustible Surroundings

The mounting height and minimum clearance requirements for non-combustible surroundings is provided to prevent discoloration and combustion.



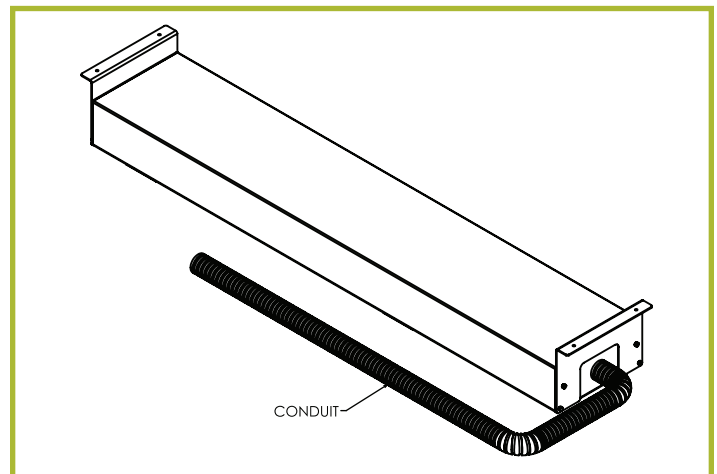
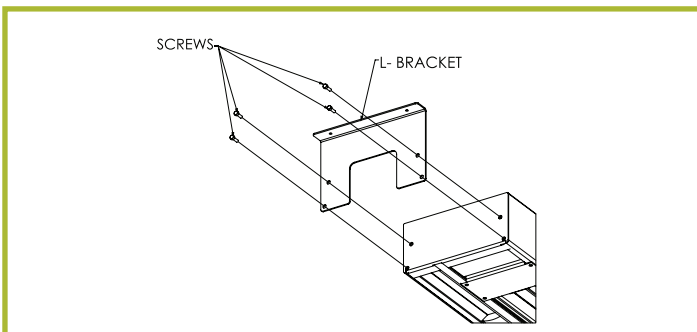
INSTALLATION

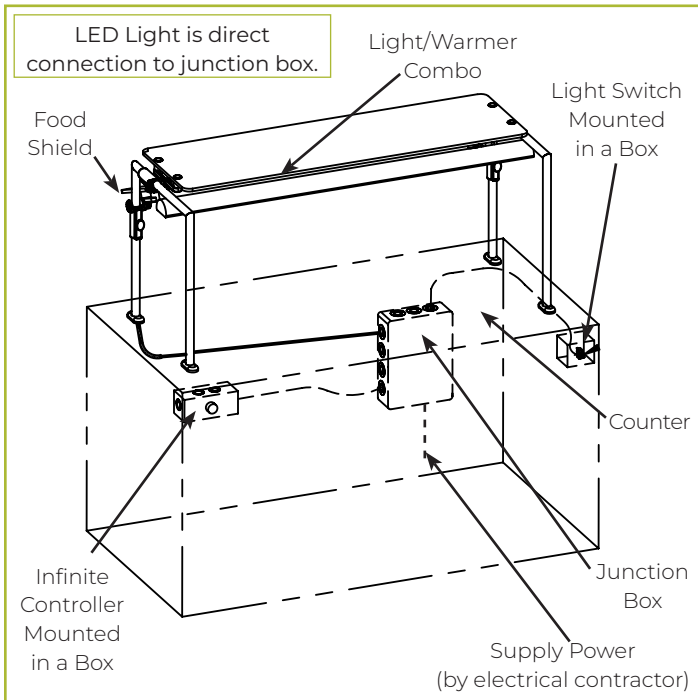
Helios® is mounted by attaching it to the underside of a shelf.

1. Place unit on flat surface with heating unit facing down.
2. Fasten the L-shaped bracket to the underside of the shelf using the appropriate hardware (not included). Reference the "Recommended Mounting Heights and Minimum Clearance Requirements" section above to properly hang Helios units in combustible and non-combustible environments.

■ CONDUIT CONNECTION

Internal electrical connections are assembled prior to shipment. Each unit includes a 3' conduit whip and 4' wire leads to attach the proper electrical power supply.



OPTIONAL REMOTE INFINITE CONTROL (SOLD SEPARATELY)**INSTALLATION INSTRUCTIONS**

Use the following instructions for Helios® units shipped with the optional remote infinite control (RIC) to regulate heat output of the heat lamp.

- All electrical wiring and connections should be done by a qualified electrical contractor that is familiar with hazards involved.
- Ensure that all power circuits have been turned off prior to installing RIC.
- Do not mount the RIC in high temperature locations. High heat will cause improper operation of control and or possible failure.
- The RIC is designed to be mounted in an approved metal electrical enclosure with a minimum size of 2" wide x 4" tall x 2-1/2" deep.

1. Apply temperature control decal to provided electrical cover face, centering the decal hole with hole in electrical cover. The "off" indicator on decal should be in line with mounting screw hole on cover.

2. Insert dial shaft of RIC through hole of electrical cover and secure RIC to cover with nut provided. Ensure the RIC is correctly positioned prior to

tightening nut. A mark on the controller back indicates control top. This mark should be aligned with "off" indicator mark of the temperature control decal.

3. Install dial on RIC shaft. Tighten set screw on dial against flat side of shaft. Ensure that dial indicator mark is aligned with "off" position of temperature control decal.

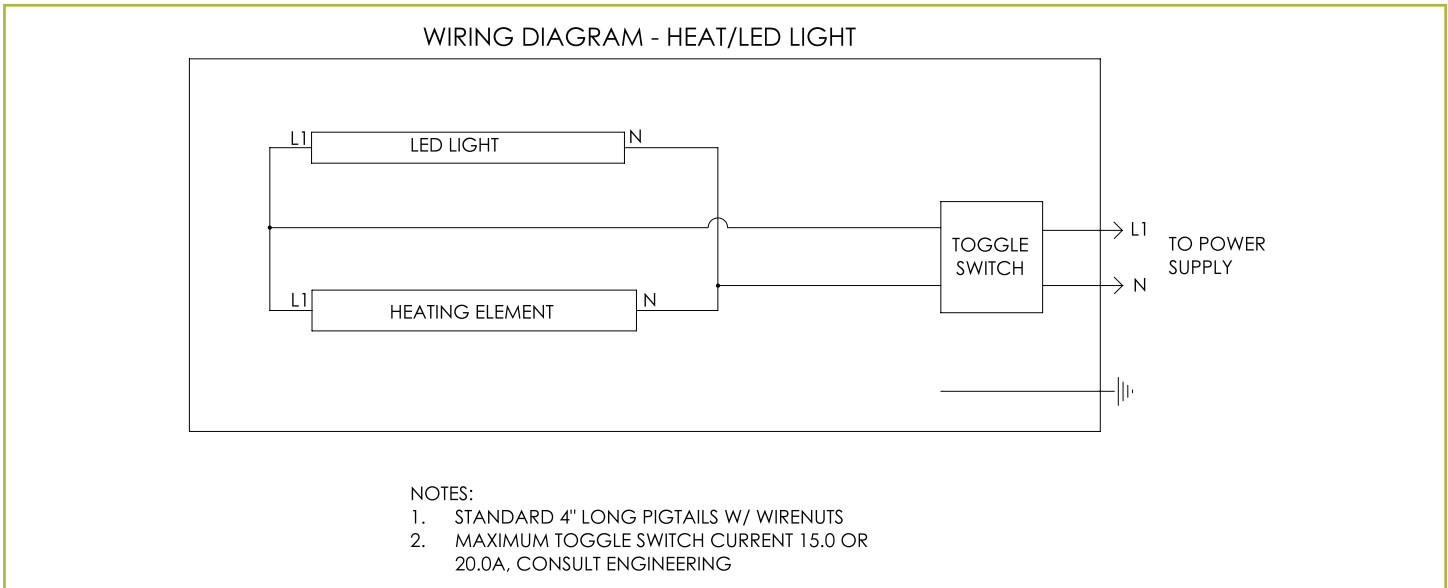
4. Follow wiring diagram provided with RIC to make electrical connections with building power and heat lamp. (Do not connect lighting wires to RIC as this will cause improper function of the heat lamp light.)

5. Ensure there is a proper grounding conductor secured to the RIC's metal electrical enclosure (There is not a grounding terminal on the RIC).

6. Carefully insert RIC into electrical enclosure, making sure that wiring terminals do not touch enclosure sides and wiring is not pinched or damaged. Secure electrical cover to enclosure with screws provided.

WIRING DIAGRAM

Toggle Switch for Helios® Light & Warmer Combo Units



OPERATION

CONTROLS

ON/OFF (I/O) TOGGLE SWITCH: Helios units come equipped with a toggle switch that operates the light and warmer.

START UP

Turn the Helios unit on by moving the toggle switch to the ON or (I) position. Allow 10-15 minutes for the unit to reach operating temperature.

During initial startup, standard and approved manufacturing oils may smoke for a short period of time. Allow the unit to run without the presence of food until the smoke dissipates.

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

SHUTDOWN

Move the toggle switch to the OFF or (O) position. Both the light and warmer will turn off; however, it will several minutes for the heating element to return to ambient temperature.

CLEANING INSTRUCTIONS

- Turn power off prior to cleaning and wait until housing has cooled. **Cleaning when the warmer is hot can cause staining or damage to food warmer finish.**
- Wipe the surface with a clean, damp cloth to remove fingerprints, dust, etc.
- Spray with a light coating of glass cleaner to remove grease or other dirt. Use a non-ammonia cleaner.
- Be sure not to spray any cleaning product directly into the LED light or heating elements.

PARTS & SERVICE

If your Helios® unit needs service, contact your local installer for assistance.

For questions about the replacement parts, contact BSI at 800.662.9595.

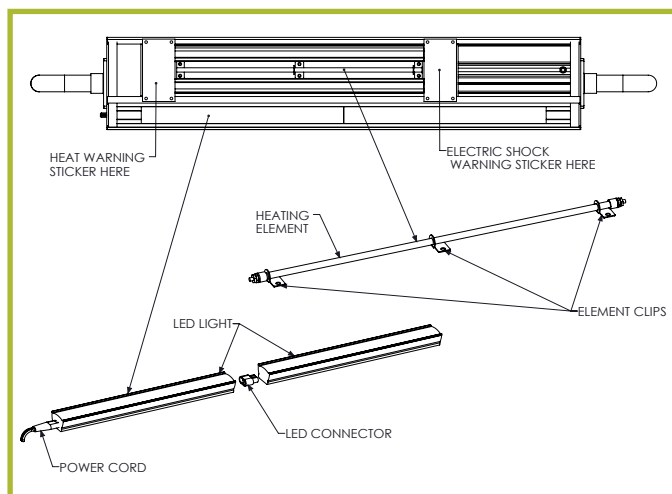
REPLACING THE TUBULAR HEATING ELEMENT

Helios heat and light units contain a tubular heating element that can burn out — similar to a light bulb.

Replacement of the tubular heating element should be completed by a professional service technician. If you have additional questions, contact BSI at 800.662.9595.

REPLACEMENT HEATING ELEMENTS

Part #	Description
492-18-BK	Element:_18"_120V_Heater_350W
492-24-BK	Element:_24"_120V_Heater_500W
492-30-BK	Element:_30"_120V_Heater_660W
492-36-BK	Element:_36"_120V_Heater_800W
492-42-BK	Element:_42"_120V_Heater_950W
492-48-BK	Element:_48"_120V_Heater_1100W
492-54-BK	Element:_54"_120V_Heater_1250W
492-60-BK	Element:_60"_120V_Heater_1400W
492-66-BK	Element:_66"_120V_Heater_1560W



CHANGING THE LED BULB

- Turn off power to all lights and warmers.
- Carefully unscrew the end plate and slide out the entire LED light.
- If multiple lights are connected to each other, carefully disconnect serial connector or power connector.
- Once the defective light bar section is removed, replace with new LED light bar section. Carefully reconnect the connector and slide in the light bar assembly.
- Replace end cover and two screws.

ORDERING NEW LED LIGHTS

Part #	Description
16289	Kelly LED:_12"_LED_Light_Bar
16290	Kelly LED:_18"_LED_Light_Bar
16292	Kelly LED:_36"_LED_Light_Bar
16505	Kelly LED:_48"_LED_Light_Bar
16293	Kelly LED:_10'_Power_Cord_w/o_Plug
16294	Kelly LED:_Serial_Connector
16295	Kelly LED:_6" Power_Connector

16883	Aspect LED:_12"_LED_Light_Bar
16884	Aspect LED:_18"_LED_Light_Bar
16885	Aspect LED:_36"_LED_Light_Bar
16886	Aspect LED:_48"_LED_Light_Bar
16887	Aspect LED:_11" adapter cord
16888	Aspect LED:_10' power cord
16889	Aspect LED:_96W 24VDC Power Supply
16890	Aspect LED:_60"_LED_Light_Bar

TROUBLESHOOTING GUIDE - LED LIGHTS

ELECTRIC SHOCK HAZARD:



Turn OFF power switch, unplug power cord/turn off power at circuit breaker, and allow unit to cool before performing any cleaning, adjustments, or maintenance.

TROUBLESHOOTING QUESTIONS?

If you continue to have issues, contact BSI for assistance.

Telephone: 800.662.9595

E-Mail: support@bsidesigns.com

Symptom	Probable Cause	Corrective Action
Light does not turn on.	Light was never wired in field during installation.	Wire LED light and switch to wiring diagram found in owner's manual.
	Power cable is loose on light bar.	Remove the light end cover to access the power cable and check that it is plugged into and seated properly in the receptacle on the end of the LED light.
	Light switch is not wired properly.	Switch should be wired in series on hot wire from building power to light.
Only one light bar turns on.	Serial connector between light bars is loose and not properly seated.	Remove end cover from light housing to access power cable. Unplug power cable from light and slide light bar assembly out of housing. Remove sections of light bar by pulling them apart. Ensure that the serial connector between the sections is fully seated into the light bar power receptacles. Re-install light bar into housing and plug power cable into the end of the light. Verify correct operation.
Middle of light is burnt out.	An individual light bar section driver has failed.	Remove end cover from light housing to access power cable. Unplug power cable from light and slide light bar assembly out of housing. Remove sections of light bar by pulling them apart. Measure length of light bar that was not operational and contact BSI for replacement. Re-install light bar into housing and plug power cable into the end of the light. Verify correct operation.
Section of light is strobing or flashing.	An individual light bar section has failed.	Remove end cover from light housing to access power cable. Unplug power cable from light and slide light bar assembly out of housing. Remove sections of light bar by pulling them apart. Measure length of light bar that was strobing or flashing and contact BSI for replacement. Re-install light bar into housing and plug power cable into the end of the light. Verify correct operation.
LED light trips GFCI breaker.	Broken wire inside conduit, food shield post, or light housing.	Verify short to ground using a multi-meter and inspect LED light wiring for abrasions or cuts. Repair and or replace wiring as necessary. Verify that short to ground has been eliminated using a multi-meter prior to LED light being re-energized.
	Individual light bar has internal short to ground	Remove end cover from light housing to access power cable. Unplug power cable from light and slide light bar assembly out of housing. Remove sections of light bar by pulling them apart. Using a multi-meter, check for short to ground on electrical terminals. Once short is determined, measure length of light bar that has short and contact BSI for replacement. Re-install light bar into housing and plug power cable into the end of the light. Verify correct operation.

TROUBLESHOOTING GUIDE - HEAT LAMP

ELECTRIC SHOCK HAZARD:



Turn OFF power switch, unplug power cord/turn off power at circuit breaker, and allow unit to cool before performing any cleaning, adjustments, or maintenance.

TROUBLESHOOTING QUESTIONS?

If you continue to have issues, contact BSI for assistance.

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E-Mail: support@bsidesigns.com

Symptom	Probable Cause	Corrective Action
Heat lamp does not turn on.	Heat lamp was never wired in field during installation.	Wire heat lamp and infinite control according to wiring diagram found in owner's manual.
	Wire terminal came off back of infinite control.	Inspect wires on back of infinite control. Crimp loose connectors and re-install. Ensure terminals are insulated and do not touch electrical enclosure.
	Infinite control is not wired properly.	See wiring schematic in owner's manual for infinite control.
Heat lamp does not get warm.	Heat lamp is a 208v model being fed with only 120v.	Verify voltage on heat lamp data plate. Measure incoming voltage with multi-meter. Correct incoming voltage if it differs from heat lamp data plate.
	Infinite control knob is loose and not in the correct position.	Position knob with off indicator facing up. Tighten set screw on bottom side of knob and ensure that the set screw is aligned to flat side of shaft on infinite control. Verify operation after tightening.
	Building HVAC is blowing directly on heat lamp.	Excessive air currents will affect heat lamp performance by disrupting air under the heat lamp. Adjust building HVAC to eliminate excessive air currents directed towards heat lamp.
Heat lamp gets too hot.	Heat lamp is a 120v model and is being fed with 208v.	Verify voltage on heat lamp data plate. Measure incoming voltage with multi-meter. Correct incoming voltage if it differs from heat lamp data plate.
Heat lamp trips breaker.	Broken wire inside conduit, food shield post, or heater housing.	Verify short to ground using a multi-meter and inspect heat lamp wiring for abrasions or cuts. Repair and/or replace wiring as necessary. Verify that short to ground has been eliminated using a multi-meter prior to re-energizing heat lamp.
	End of heat rod is touching cover.	Remove heat rod end covers and inspect electrical connections on the ends of the heat rod for any indication of an electrical short. Replace insulation as necessary on electrical connections and re-center heat rod in housing. Replace end covers and re-energize.
	Heat rod has internal short.	Remove electrical connections from both ends of the heat rod and verify if heat rod has a short to ground. Replace heat rod if short to ground was found between electrical terminal and heat rod outer sheath.
	Wire terminal came off back of infinite control.	Inspect wires on back of infinite control. Crimp loose connectors and re-install. Ensure terminals are insulated and do not touch electrical enclosure.

BSI E-SERIES WARRANTY

BSI, LLC warrants its products to be free of material and workmanship defects under normal use from the date of original purchase and for the applicable warranty periods set forth below. BSI, LLC's warranty extends only to original purchasers acquiring new products purchased in the United States directly from BSI, LLC, its authorized dealers, or other companies specifically authorized by BSI, LLC to act as resellers of its products.

E-SERIES FOOD GUARDS

BSI, LLC warrants all E-Series food guards against material and workmanship defects for a period of one year from invoice date. This excludes post-installation glass chipping or breakage that can be explained as "standard wear and tear."

HELIOS® LIGHTS & WARMERS

BSI, LLC warrants the Helios housing, warming element, and light ballast against material and workmanship defects for a period of one year from invoice date. The LED bulb itself is not covered under warranty.

THERE ARE NO WARRANTIES EXCEPT AS STATED ABOVE, WHETHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Warranties do not apply to products that have been altered in any way or to products subjected to misuse, abuse, neglect, accident, or damage in transit. Warranty is void if products are used, held, or stored in an unsupervised environment. BSI, LLC's liability shall be limited to product repair or replacement, or refund of purchase price issued at the discretion of BSI, LLC. BSI, LLC will not be liable, under any circumstances, for incidental or consequential damages (including, without limitation, to lost profits) arising in connection with the sale, use, inability to use, repair, or replacement of BSI, LLC's products. The liability of BSI, LLC arising from any cause shall not exceed the price paid for the products.

Any breach claim of the foregoing warranties shall be deemed waived unless submitted to BSI, LLC in writing within 30 days of alleged defect discovery date or by reasonable inspection should have been discovered. Merchandise must be returned to the BSI, LLC factory, freight prepaid, and will not be accepted unless a prior Return Merchandise Authorization (RMA) has been issued by BSI, LLC. A copy of the original invoice must accompany the returned merchandise to verify the original purchase date and warranty entitlement. Any cause of action for breach of the foregoing warranties shall be deemed waived unless brought within one year of claim submission.