



PROTECTED INTEGRATED CUSTOMIZED

UMBRELLAS | WEATHER ACCESSORIES

Contents

Contents

Heated Alfresco Structures	1
Umbrella Models	2
Packages	4
Heating Options	5
Lighting	6
Weather Accessories	7
Umbrella Colors	8
Maintenance	10



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Heated Alfresco Structures

Heated Alfresco Structures from HeatRay are designed for partial or complete protection of exposed outdoor areas against wind, rain or snow. Intended for counteracting low air temperatures during colder seasons as well as mitigation of sunlight's excessive UV radiation (A & B rays) during summer. Color branding options along with a range of accessories allows the umbrellas to be customized for every project.



Available in a range of shapes and sizes for standalone or fully linked applications to form continuous overhead coverage over any size or any shape outdoor space.



Highly wind rated structures (up to Hurricane Class 2) for installations on elevated terraces of buildings up to 50 stories high, or along coastal and exposed mountainous areas.



Integrated with a choice of either low intensity slimline, totally non-glowing heating panels (latest & most desirable technology for long term commercial operations) or more traditional Halogen style glowing elements, more suitable for domestic applications when shorter daily usage is envisaged.



Available with a suite of seasonally reconfigurable modular weather accessories, specifically designed for seamless integration with HeatRay Heated Shade Umbrellas, in order to provide year round protection from the elements.



Built in compliance to the ASCE/SEI-7/2010 Code pertaining to the Minimum Design Loads for Buildings & Other Structures, as specified by the Structural Engineering Institute & American Society of Civil Engineers.



UV & Flame Resistant Fabrics. ASTM E84 Class A, NFPA 701 Method 1, CSFM Title 19, MEA-150-05-m (OTCR), ULC S-109.

Frame construction

All steel frame construction and wind rated, the frames are made from rust resistant, hot-sprayed zinc and aluminium galvanized tubular steel with a 2 layer powder-coated finish, alternatively from marine-grade 316 stainless steel.

Exposed fittings

For all models, exposed fittings, cables and connectors are manufactured from marine grade 316 stainless steel.

Membrane

The PVC canopy is waterproof, UV resistant, anti-fungal, easy-clean PVDF coated, for long life and low maintenance.

Umbrella Installation

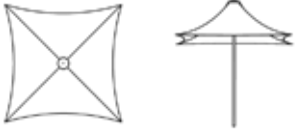
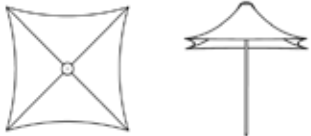

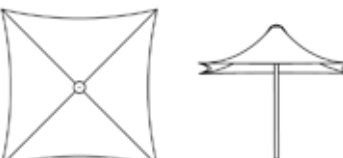
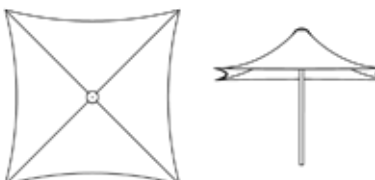
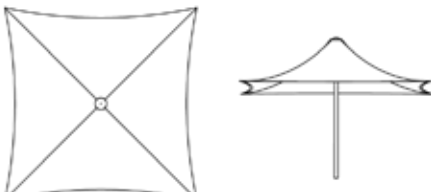
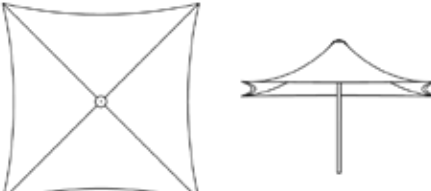
HeatRay Umbrellas can be installed in any location; on timber decks, balconies and roof terraces or can be set into a concrete footing.

Accessories

- Heaters
- Lighting
- All weather protection

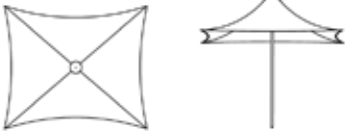

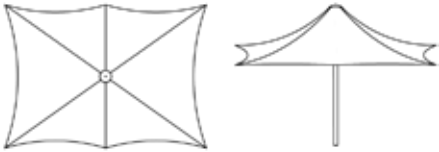
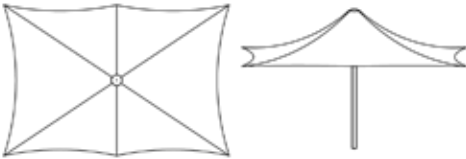
Umbrella Models

Square Models


HeatRay Umbrellas	Model	Size	Application	Technical Specifications
	HeatRay S 9.0 (CS27)	9' - 1/4" x 9' - 1/4"	Small area, outdoor facilities, restaurants. Foldable, permanent or temporary free standing structure. 8-10 seating capacity	Non-glowing heaters - 4 units Power: 4.8kW (high) 2.4kW (low)
	HeatRay S 10.7 (CS32)	10' - 7/4 " x 10' - 7/4 "	Small area, outdoor facilities, restaurants. Foldable, permanent or temporary free standing structure. 12-15 seating capacity	Non-glowing heaters - 4 units Power: 4.8kW (high) 2.4kW (low) Glowing heaters - 4 units Power: 6kW (high) 3kW (low)
	HeatRay S 12.5 (CS38)	12' - 4 1/2 " x 12' - 4 1/2 "	Large area, outdoor facilities, restaurants. Foldable, permanent or temporary freestanding structure. 16-20 seating capacity	Non-glowing heaters - 4 or 8 units Power (4): 4.8kW (high) 2.4kW (low) Power (8): 9.6kW (high) 4.8kW (low) Glowing heaters - 4 units Power: 6kW (high) 3kW (low)
	HeatRay S 13.6 (CS40)	13' - 5 1/2 " x 13' - 5 1/2 "	Large area, outdoor facilities, restaurants. Non-foldable, permanent or temporary freestanding structure. 18-23 seating capacity	Non-glowing heaters - 8 units Power: 9.6kW (high) 4.8kW (low) Glowing heaters - 4 units Power: 6kW (high) 3kW (low)
	HeatRay S 15.1 (CS45)	15' - 1 " x 15' - 1 "	Large area, outdoor facilities, restaurants. Non-foldable, permanent or temporary freestanding structure. 22-28 seating capacity	Non-glowing heaters - 8 or 12 units Power (8): 9.6kW (high) 4.8kW (low) Power (12): 14.4kW (high) 7.2kW (low) Glowing heaters - 4 units Power: 6kW (high) 3kW (low)
	HeatRay S 16.8 (CS50)	16' - 7 3/4 " x 16' - 7 3/4 "	Large area, outdoor facilities, restaurants. Non-foldable, permanent or temporary freestanding structure. 28-35 seating capacity	Non-glowing heaters - 8 or 12 units Power (8): 9.6kW (high) 4.8kW (low) Power (12): 14.4kW (high) 7.2kW (low) Glowing heaters - 4 units Power: 6kW (high) 3kW (low)
	HeatRay S 17.8 (CS54)	17' - 8 1/2 " x 17' - 8 1/2 "	Large area, outdoor facilities, restaurants. Non-foldable, permanent or temporary freestanding structure. 32-40 seating capacity	Non-glowing heaters - 16 units Power: 19.2kW (high) 9.6kW (low) Glowing heaters - 4 units Power: 6kW (high) 3kW (low)

Umbrella Models

Rectangular Models

HeatRay Umbrellas	Model	Size	Application	Technical Specifications
	HeatRay R 12.5 (CR38)	10' - 6 ³ / ₄ " x 12' - 4 ¹ / ₂ "	Small area, outdoor facilities, restaurants. Foldable, permanent or temporary free standing structure. 14-18 seating capacity	Non-glowing heaters - 4 units Power: 4.8kW (high) 2.4kW (low) Glowing heaters - 4 units Power: 6kW (high) 3kW (low)
	HeatRay R 15.1 (CR45)	10' - 7 ¹ / ₂ " x 15' - 1"	Large area, outdoor facilities, restaurants. Non-foldable, permanent or temporary freestanding structure. 16-20 seating capacity	Non-glowing heaters - 6 or 8 units Power (6): 7.2kW (high) 3.6kW (low) Power (8): 9.6kW (high) 4.8kW (low)
	HeatRay R 17.6 (CR53)	12' - 4 ¹ / ₂ " x 17' - 5 ³ / ₄ "	Large area, outdoor facilities, restaurants. Non-foldable, permanent or temporary freestanding structure. 22-28 seating capacity	Non-glowing heaters - 8 or 10 units Power (8): 9.6kW (high) 4.8kW (low) Power (10): 12kW (high) 6kW (low)
	HeatRay R 21.8 (CR65)	14' - 5 ¹ / ₄ " x 21' - 8"	Large area, outdoor facilities, restaurants. Non-foldable, permanent or temporary freestanding structure. 32-40 seating capacity	Non-glowing heaters - 16 units Power: 19.2kW (high) 9.6kW (low) Glowing heaters - 6 units Power: 9kW (high) 4.5kW (low)

Truncated Square Models






HeatRay Umbrellas	Model	Size	Application	Technical Specifications
	HeatRay TS 14.1 (CTS43)	14' - 3 ⁴ / ₄ " x 14' - 3 ⁴ / ₄ "	Large area, outdoor facilities, restaurants. Non-foldable, permanent or temporary freestanding structure. 20-25 seating capacity	Non-glowing heaters - 8 units Power: 9.6kW (high) 4.8kW (low) Glowing heaters - 4 units Power: 6kW (high) 4kW (low)

Packages

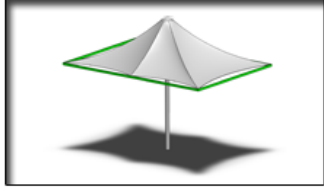
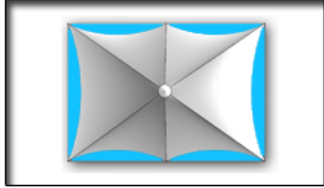
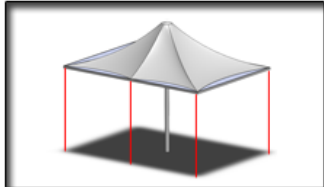
HeatRay provides three Heated Alfresco Structure packages. Each package is suited to the level of coverage that is required for your outdoor space.

See below for more information regarding each package:

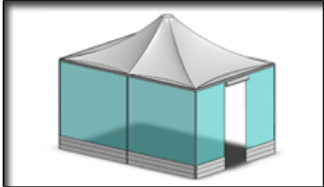
Package A - Sun Protection

PACKAGE A - Sun Protection with Heating & Lighting		
Umbrella Structure	x 1	
Non-Glowing Heaters	x 4	
LED Lights	x 4	
Hub + Wiring Looms	x 1	
Control Module	x 1	

Package B - Rain Protection

PACKAGE B - Enhanced Rain or Snow Protection		
Perimeter Frames & Linking Gutters	x 4	
Canopy Skylights	x 6	
Wind Columns	x 6	

Package C - Wind Protection

PACKAGE C - Full Protection against strong Winds		
Side Covers	x 4	
Roll-up Door	x 1	

Heating Options

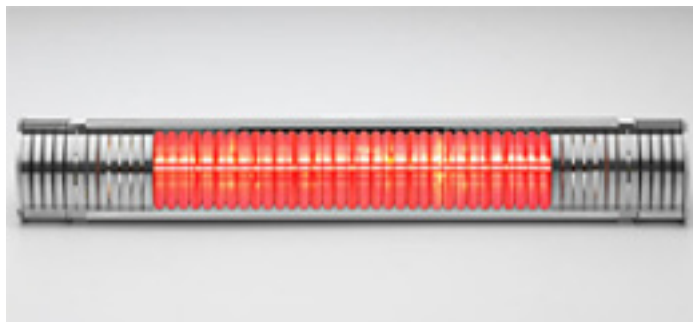
HeatRay provides two options for heating umbrellas:

- ERH (Non Glowing) Panel heaters and
- IRH-E (Glowing) heaters

HeatRay Non Glowing Electric Radiant Heating panels have been designed to provide optimal performance in outdoor environments. The gently curved (convex) black faces of the slimline panels never glow but deliver totally invisible and pleasantly dispersed heat, without creating any "hotpots" over the seating space, commonly associated with most Glowing Heaters, equally gas fired or electric.



Heatray Glowing Heaters can be seamlessly integrated with the HeatRay's Umbrellas, as well as with most other outdoor structures in order to provide an instant & highly effective radiant heat.



Surround heat: ERH panels are positioned on the umbrellas in such a way as to create evenly distributed surround heating under the umbrella. Additionally, IRH-E heaters are optional for high intensity heating applications.

Safety Rating: The HeatRay Umbrella system is IPX5 rated against water penetration, allowing the umbrella and heaters to be safely washed and rinsed with a water hose.

Closing The Umbrella: With a patented lever action system C30, C36 and ATS umbrellas are fully collapsible even with ERH panels and lights attached.

Hub Loom

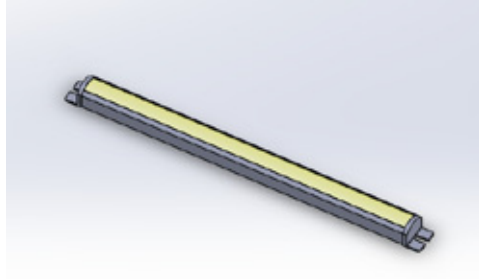
The Umbrella Hub Loom is the central wiring termination point for the integral lighting and heating system. The Hub Loom consists of the following main components;

- **Sealed Junction Boxes:** (one or more, depending on umbrella type). The enclosures are weather proof, complete with cable entry glands to maintain a performance rating of IP65.
- **Hub Tray:** Designed to house and conceal the Junction Boxes and associated wiring and main power cables.
- **Control:** A Control Module allows heaters to be controlled for ON/OFF, and in the case of ERH heaters, HIGH/LOW operation.

Lighting

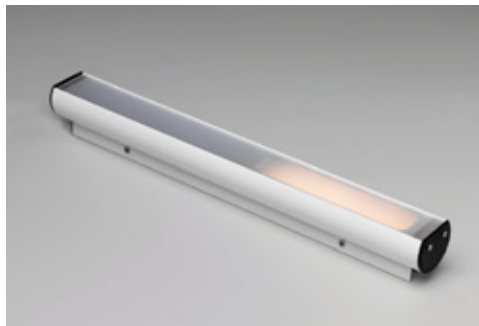
Two lighting systems are available on the Umbrellas, the Celight standard system and an LED lighting system. In both cases, the lighting is set on the arms of the umbrella so that the light reflects off the umbrella canopy rather than shining directly onto people below.

Dimmable LED



Dimmable LED / Warm White rendition @ 2850°K
Curve shaped light fixture complete with a "pearl" carbonate diffuser
Dimensions: L= 18" W= 1¼" H= 1¼"
Span: 120 degrees, forward bias
Power/Voltage / Current: 4 W / 24V DC / 170mA
Moisture ingress protection rating: IPX5 (NEMA 4)

Compact Fluorescent (Fixed Intensity):



Non-Dimmable / Warm White rendition @ 2750°K
Curve shaped light fixture complete with a "pearl" carbonate diffuser
Dimensions: L= 18" W= 2" H= 3"
Span: 120 degrees, forward bias
Power/Voltage / Current: 9 W / 120V DC / 75mA
Moisture ingress protection rating: IPX5 (NEMA 4)

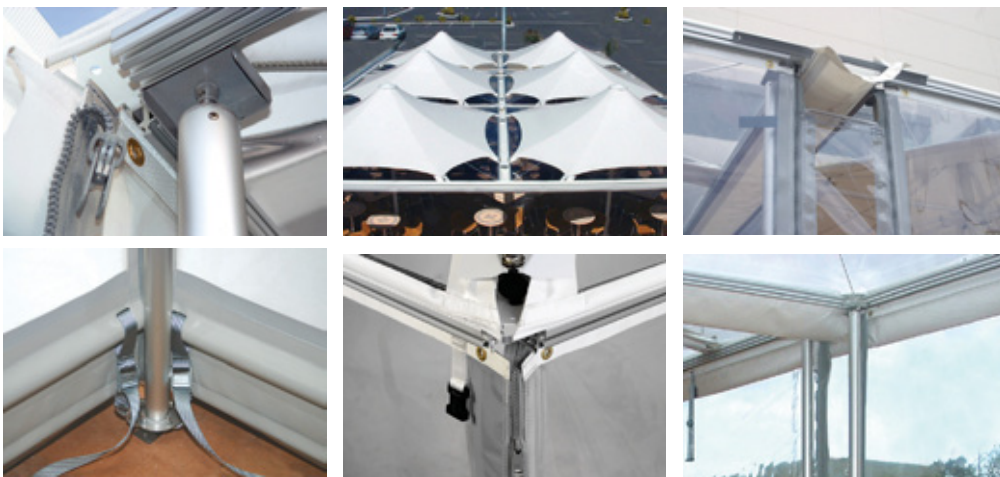
Weather Accessories



The Weather Protection Accessory range allows HeatRay Umbrellas to be linked together, provides protection from rain and wind and allows for extra strengthening of the structures. Weather protection is an essential part of the heating & cooling design for HeatRay umbrella structures.

Accessories include:

- Umbrella frames
- Linking gutters
- Roof infills
- Perimeter gutters
- Transparent Side cover
- Wind columns for extra strength



Umbrella Fabric Colors

				
502 - 8102 White	502 - 2160 Lagoon	502 - 2167 Concrete	502 - 2144 Mastic	502 - 2163 Turtledove
				
502 - 2159 Cornflower	502 - 1499 Shifting Grey	502 - 2168 Aluminium	502 - 2156 Spruce	502 - 8056 Tennis
				
502 - 2157 Aniseed	502 - 2172 Carrot	502 - 8204 Mandarin	502 - 2166 Buttercup	502 - 2165 Blackcurrant
				
502 - 2150 Raspberry	502 - 8284 Maroon	502 - 2149 Beetle	502 - 2158 Moss Green	502 - 2137 Walnut Stain
				
502 - 2138 Dead Leaf	502 - 2012 Pepper	502 - 2173 Tuscan	502 - 2145 Gold	502 - 2148 Cocoa
				
502 - 2141 Camel	502 - 8861 Vanilla	502 - 2164 Violet	502 - 2151 Pale Pink	502 - 1013 Chick
				
502 - 2135 Sandy Beige	502 - 8341 Champagne	502 - 2162 Slate	502 - 1125 Marine	502 - 2161 Night Blue
				
502 - 2136 Onyx	502 - 8450 Black	502 - 2171 Boulder	502 - 2152 Velvet Red	502 - 8255 Poppy

Steel Power Coat Colors



Primrose
84365

Yellow Gold
33617

Signal Red
50735

Blue Haze
19941



Classic
Hawthorne
33709

Silver Pearl
(Metallic)
57225

Mesh Black
Satin
88029

White
(Standard)

Maintenance

Umbrella membranes, fittings, heaters and lights should be cleaned regularly in order to maintain good appearance, high efficiency and long life. They should be cleaned as often as a window in the same area would be cleaned. This may be as frequently as weekly in areas close to the sea.

Heaters & Lights

Firstly rinse the heaters and lights to remove any build up of dust, insects, pollutants and salt deposits. If these are not removed, the build up will act as an abrasive and may damage the protective outer layers of the components causing surface stains.

In the case of ERH - gently clean the heaters and lights using a soft cloth or sponge, warm water and mild detergent (do NOT scrub the black face of ERH heaters). Do not sponge the units before rinsing off any build up caused by the environment.

Rinse off after cleaning using a soft spray setting, from approx. 0.5m away and avoid pointing directly into heater ends and turn the Heating System on after final rinsing to dry and eliminate possibility of steam formation at a later date.

Check local requirements regarding the use of water and/or cleaning agents in outdoor areas. You may need to rinse with a water saving high pressure unit if water restrictions apply. Grey water may be a requirement.

In between cleaning periods, water rinsing is recommended to clean off any build up of grime.

Side Covers & Weather Accessories

All transparent fabric covers and accessories should be treated no differently to that of a glass window. These accessories should be cleaned on a regular basis in order to maintain their clarity.

Spray or sponge cold or lukewarm water with a light concentration of car wash and wax detergent on the clear fabric.

Wash using a sponge or soft cloth then rinse off with low pressure clean water to remove dirt and detergent.

Under NO circumstances are abrasive cleaners, scrubbing brushes, bleach or high pressure water blast to be used on clear fabric. NOTE: The wax properties of the car wash provide a protective shield against pollutants and salty air.

If not maintained regularly, the transparent covers will blemish and become permanently stained, losing their translucent appeal.

Clear out all external and link gutters of dead leaves and foreign objects, using a brush and hose to clean. Ensure all drains 'if any' are free from blockage.

IF CLOSE TO THE SEA OR A POLLUTED ENVIRONMENT, RINSE THE HEATRAY UMBRELLAS, SIDE COVERS, ERH HEATERS AND LIGHTS ON A MORE REGULAR BASIS (AT LEAST WEEKLY) TO PREVENT CORROSIVE SALT AND DAMAGING GRIME BUILD UP.