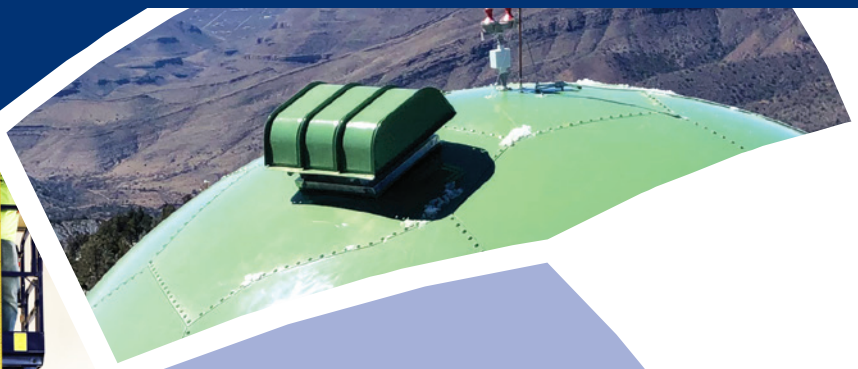
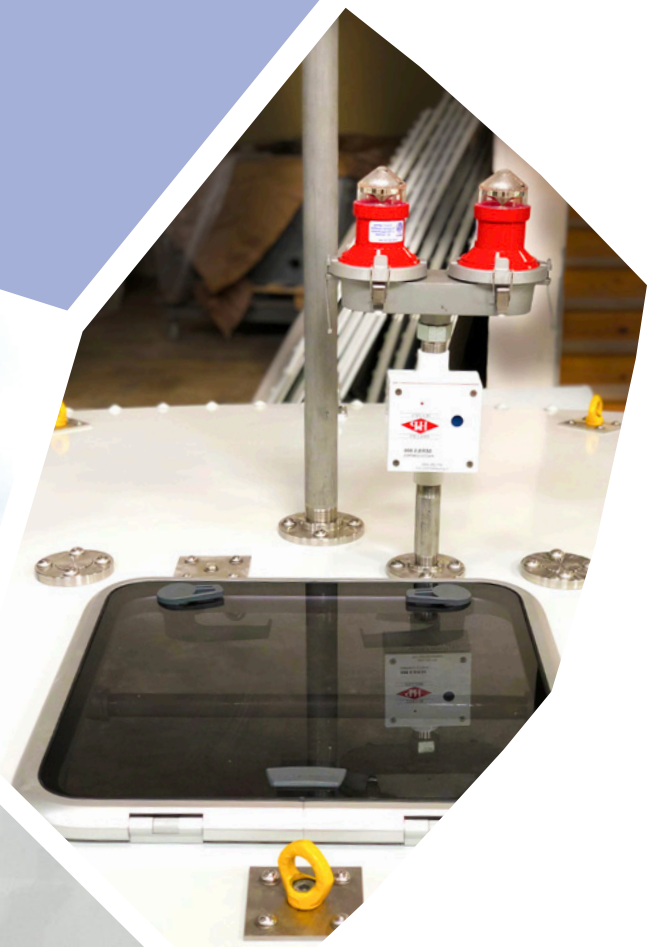


RADOME
ACCESSORY CATALOG



INFINITERCS TECHNOLOGIES, INC.

INFINITERCS TECHNOLOGIES

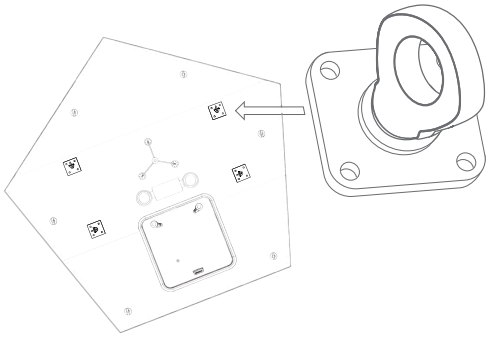
STANDARD ITEMS INCLUDED

All ITI-RCS composite radomes are constructed utilizing a fire-resistant polyester resin conforming to MIL-R-7575 Grade B, Class 1 and FED-STD-406, Method 2021 which provides strength and fire resistance properties to our radome products. Closed cell, non-burning, self-extinguishing foam is used in many cases as core material. The core is non-toxic, recycled material that produces minimal smoke.

ITI-RCS radomes are supplied with many items that aide in installation and maintenace programs, and our dome are shipped in ISPM/IPPC 15 rated crates. This catalog illustrates many of the items that are commonly requested as accessories. If you do not see a specific item required for your project, please feel free to request the item and we will do our best to accomodate your needs.

APEX MAINTENANCE POINTS

Dual apex mounted anchor points, used for exterior access, may be included with radomes from 22 to 77 ft (6.7 to 23.5 m) in diameter. The anchor points are configured with stainless steel anchors and pulling ropes used for securing access ropes. Items included with this accessory are: dual ring attach points, dual pulling ropes, and base mounted securing clevis.



ASSEMBLY TOOL KIT

The assembly tool kit is provided with every, segmented ITI-RCS radome. The kit includes items necessary to install the radome, seal the radome, and perform basic maintenance activities. A sampling of the type of items inculded are below.

- RTV sealant applicator tool
- Bottoming tap (captive inserts only)
- Hex key or wrench for panel bolts
- 3/8" Drive socket wrench
- Deep sockets for panel hardware
- Hole saw (sized for mounting holes)
- Gasket punch (for cutting holes in base gasket)
- Tie Down Rings

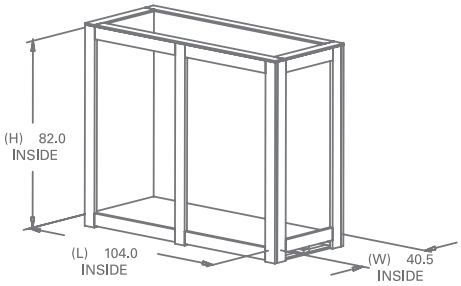
FIBERGLASS MAINTENANCE KIT

The maintenance kit is provided with every segmented ITI-RCS radome. The kit includes items that will allow for minor repairs during installation. A sampling of the type of items inculded are below. Liquid items cannot be transported by air.

- Maintenance / repair instructions
- Fiberglass cloth
- Resin and top coat
- Core
- Tools

SHIPPING CRATES

Each radome is packed in a fully enclosed wooden shipping crate(s) to protect the contents from accidental damage during transportation. Most radomes are configured to allow shipment by standard height shipping containers. ITI-RCS's crates meet ISPM/IPPC 15 requirements.



AVAILABLE ACCESSORY ITEMS

A wide variety of accessory items for ITI-RCS radome systems are available to meet your requirements. The most commonly requested items are shown in this catalog. Additional accessory options can be made available upon request. ITI-RCS chooses items that are cost effective but that still meet or surpass the the needs of our customers. We are ready to assist with identifying, designing, and configuring any accessory items needed for your application.

EXTERIOR COLORS

The standard color of ITI-RCS Radomes is white per RAL 9010. However, our radomes can be supplied in any color adhering to a recognized standard such as FED-STD-595 or RAL. We recommend choosing a light color to minimize degredation and maximize service life.

	WHITE	GREY	BLUE	TAN/YELLOW	GREEN	ORANGE
FED-STD-595	27875	26270	15466	20400	34108	18913
RAL	9010	7035	5012	1002	6002	2004

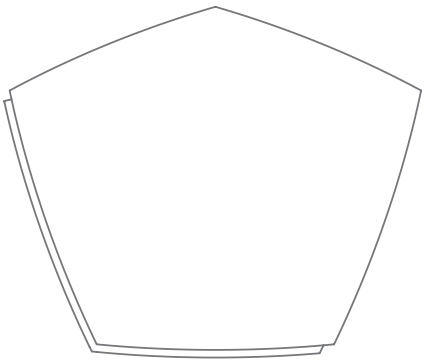
SUPER-HYDROPHOBIC SURFACE

A super-hydrophobic coating with contact angles great than 110 degrees is available. Typical service life is 4-7 years. Limited color options are available. Increased hydrophobicity allows for better system performance during periods of heavy rainfall. The system does not enhance performance during snow/ice events.

SPARE PANELS

Spare panels used for replacing damaged panels can be supplied for immediate availability. The basic spare panel kit includes 1 of each unique full-sized panel ('A', 'B', 'C', etc.) and assembly hardware. The basic kit does not include any special, base, or zenith panels. These panels can be supplied if desired by specifying an enhanced spare panel kit.

Spare panels can also be supplied after the radome has been delivered. Regardless of when the panels are supplied all panels will be 100% interchangeable, with panels of the same type.



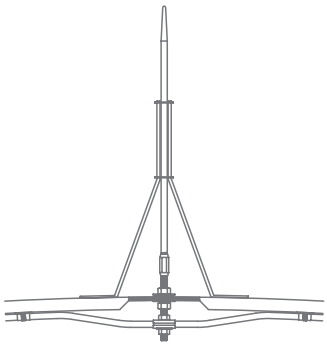
CAPTIVE ASSEMBLY HARDWARE

The captive panel assembly hardware utilizes a captive nut secured mechanically and adhesively bonded to the outside surface of the overlap flange. Access to the radome exterior is required only to apply RTV sealant between the panel joints and to seal any captive nut that has been inadvertantly spun during install.

MATERIAL:	Stainless Steel
FINISH:	Powder Coated Stainless Steel
ATTACHMENT:	Permanent, Mechanical and Adhesive Bonded

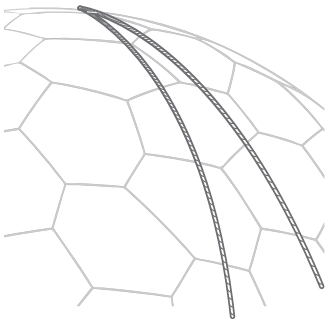
LIGHTNING PROTECTION

Our typical lightning protection kits are configured to NFPA "Rolling Sphere" or "Cone of Protection" guidelines. This kit includes the following: single or multiple rods, dual copper down conductors, NFPA / UL approved connectors, and interconnections loops, as required.



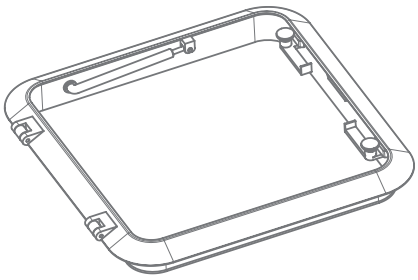
ROPE SYSTEMS

Mounted outside of the radome at the zenith, the snow removal rope is used to remove snow accumulations that may impact performance of the radome. When the radome is supplied with a multiple air terminal (NFPA "Rolling Sphere") lightning protection system, multiple snow removal ropes are used.



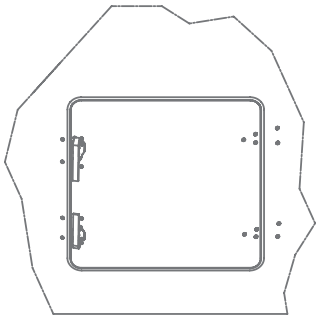
ZENITH HATCH

Access to the radome exterior to perform maintenance activities is accomplished via a zenith hatch. The hatch is constructed of a two-piece anodized aluminum frame and translucent lens. The hatch is operable from both the interior and exterior with lockable handles. A ladder bar is typically included with zenith access hatches.



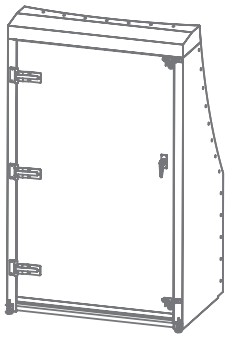
BASE HATCH

For access to the interior of the radome by personnel, a hatch fabricated using the same materials as the radome and using stainless steel hardware (including latches and hinges) is available. The standard size is 34" x 34" but can be altered in many cases should a larger or smaller hatch be required. The size of the hatch is limited by size of the panels available to place the hatch within. If a larger access area is required, please see the door section of this catalog.



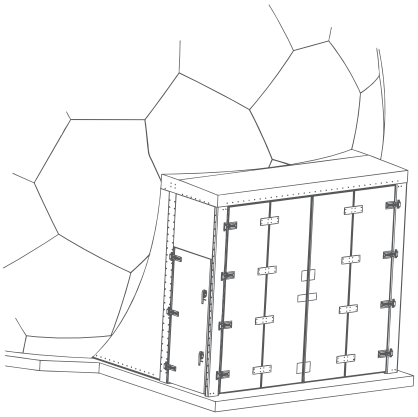
PERSONNEL ENTRY DOOR

For access to the interior of the radome, a flat door fabricated using the same materials as the radome and using stainless steel hardware (including latches and hinges) is available. Our door utilizes a standard lockset that is corrosion resistant. The standard size 36" x 60" can be altered in many cases should a larger, smaller or double door be required.



LARGE EQUIPMENT ACCESS DOOR

Optional access doors can be provided for most radomes. The door is pre-hung with structural fiberglass members that form an entry alcove outside the base diameter of the radome. The hinged, outward opening door comes complete with threshold, weatherstripping, lever-style latch, and deadbolt. It is a flush fiberglass door that matches the radome color, texture and finish.

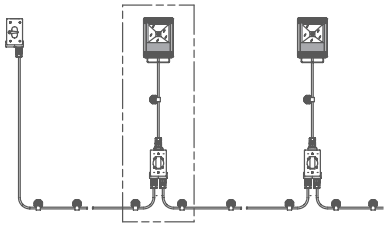


FEATURES INCLUDED:

- All composite construction
- Same materials and finish as the radome
- Stainless steel hardware
- Flush entryway
- Incorporation of man door with some configurations
- Lockable handles
- Inside/Outside operation
- Positive latching system

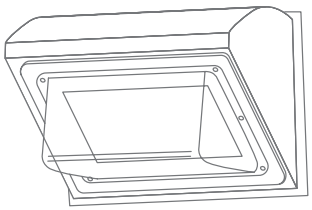
INTERIOR LIGHTING

Interior lighting kits are available for all radome models, and configuration is completely customizable. Our typical interior lighting kits include the following: one or more lamp fixtures, LED flood lamps (2,400 lumnes each) operating at 120 to 240v 50/60Hz, on/off switch, electrical junction boxes, and wiring. The lamps have a service life up to 30,000 hours and are easily replaceble should the need arise.



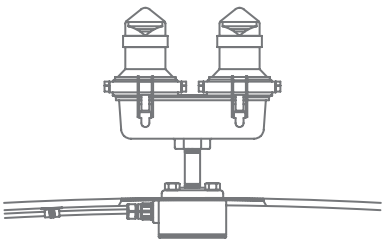
SECURITY LIGHTS

Security lights are sometimes required at sites to provide illumination outside the radome. ITI-RCS offers an adjustable LED floodlight operating on 120v to 240v 50/60Hz power. The 40w version is capable of 5,300 lumens, and the 80w light is capable of up to 10,300 lumens. The lights are photocell controlled for convienience and have a service life up to 30,000 hours.

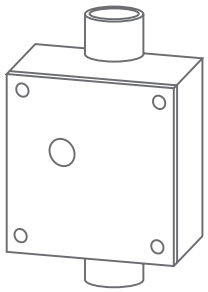


WARNING LIGHTS

Obstruction warning lights are commonly required by the FAA and as such, ITI-RCS offers a warning light kit that meets the necessary standards of FAA AC 70/7460-1 and ICAO Annex 14. The kit consists of the following items: LED or incandescent lamps, twin red globes, and optional photocell control.



PHOTOCELL CONTROL - OBSTRUCTION WARNING LIGHT



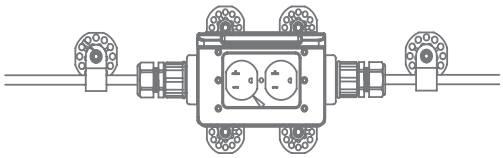
Photocell control automatically turns obstruction lights on and off to maximize service life and minimize power requirements. The unit is non-adjustable and normally closed circuit ensuring light ON in the event of control failure:

POWER:	120 or 240v 50/60 Hz
ACTIVATION:	ON @ 35 fc and below
	OFF @ 58 fc and above

Power ON indicator

Normally closed provides light ON in case of failure

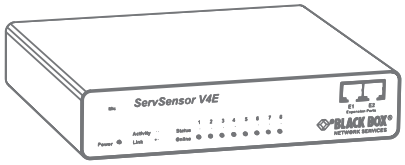
UTILITY POWER - CONVENIENCE OUTLETS

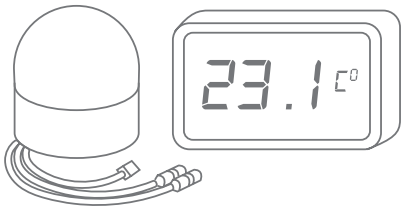


To facilitate activities by personnel inside the radome a convenience outlet/power kit to provide access to site power is offered. Outlet type supplied is NEMA (or based on local standards). The kit includes:

STYLE:	Single/double outlet with cover
POWER:	120v 15A or 240v 10A
UNIVERSAL:	North America - NEMA 1-15P, 5-15P, 5-20P, 6-15P, 6-20P
	International - European, United Kingdom, Switzerland Italy, Demark, Israel, Australia, China, Brazil, Japan, or Thailand

ENVIRONMENTAL MONITORING SYSTEM



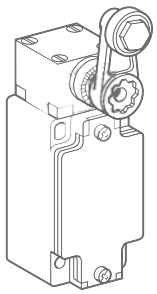


A system for monitoring environmental conditions inside the radome consists of a single device capable of monitoring temperature and humidity levels. The system connects via an Ethernet cable to a network and utilizes IP protocol. Exact configuration and functions to be determine per customer requirements. Customer is to supply a connection to the network or monitoring device (computer) and system rack.

TYPICAL KIT INCLUDES:

- Power over Ethernet SPOE IEEE 802.3af
- Power Requirements: 7.5 – 9 VDC, 1.2A
- Integrated data collection and graphing package
- Standard 1U rack mountable (rack not supplied)
- Network connection via Ethernet hub or switch
- Internal Web server
- Humidity from 20% - 80% non-condensing
- Door opened / closed monitoring capable.
- Video monitoring capable

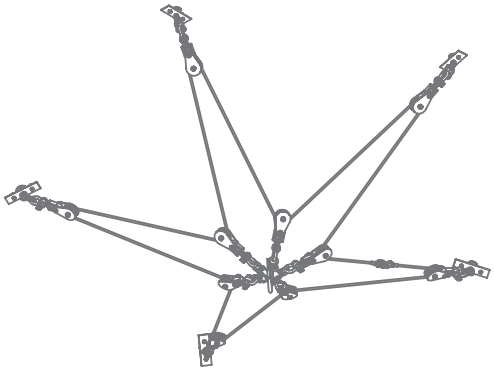
INTERLOCK SWITCH



An interlock switch provides a means of disconnecting power to electrical equipment whenever an entry access point is opened. ITI-RCS offers switches that can connect to hatches, doors, and other moveable interior equipment to ensure protection of personnel and moveable antennas.

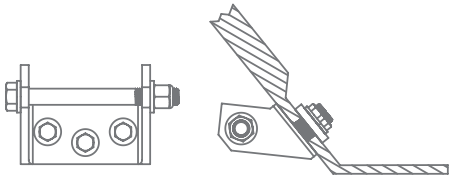
INTERIOR HOIST SLING

The interior hoist sling consists of a wire rope and pulley system secured to the interior of the radome at 5-points. The system is designed to lift a load up to 455 kg [1,000 lbs]. The sling is self-leveling to distribute the applied loads minimizing possible damage to the radome. The hoist is not included in the kit.



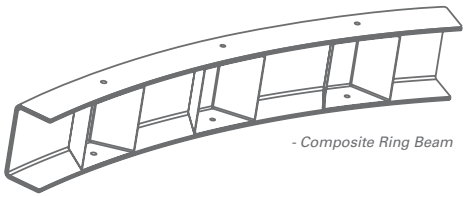
RADOME LIFTING SYSTEM

The radome lifting system is used for lifting a fully assembled radome on its foundation. The basic kit contains steel brackets which should be equally spaced about the radome. The brackets are installed by drilling holes through the solid fiberglass portion of the base panels and attaching the bracket with nuts and bolts.



MOUNTING RING BEAM

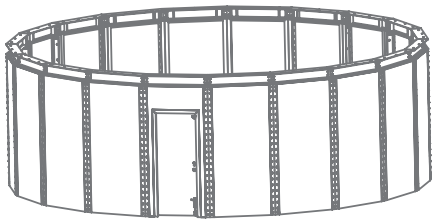
Mounting ring beams are not required with ITI-RCS radomes, but can be provided. A beam allows the mounting surface to be level with a uniform height. The beam is faceted and fabricated from structural "H" or "W" shapes. Beams come in galvanized steel, powder coatedsteel , or can be fiberglass. The kit includes the beam sections, hardware for attaching beam segments to each other and hardware for securing the radome to the beam. Anchor bolts for securing the beam to its foundation are NOT included, but are available.



- Composite Ring Beam

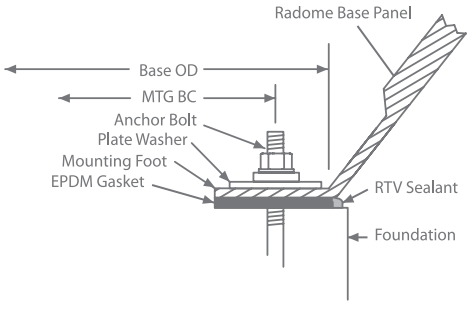
RISER WALL / RADOME COLLAR

A riser constructed out of steel, fiberglass or both which is bolted together for a quick height adjustment is available. Depending on its height this item can also serve as a ring wall eliminating additional civil work such as construction of a concrete or block wall. The wall can have the same finish as the radome including color, if desired. Hardware for securing the radome to the riser as well as securing the segments together is provided; however, anchor bolts for securing the riser to the foundation are NOT included but can be provided in a seperate kit.



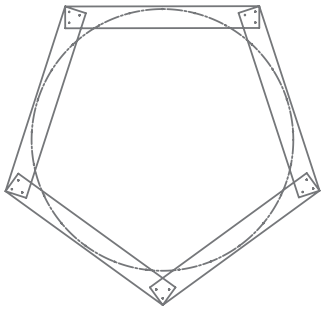
ANCHOR BOLT HARDWARE

An anchoring system used to secure the radome to its foundation is an available option. The type of kit supplied varies based on customer requirements. For concrete, concrete block or other foundations where only top-side access is possible, blind style anchors can be installed during initial fabrication of the foundation or after the concrete has properly cured. For applications such as metal decking or other foundations where access to both sides of the foundation is possible, through bolts can be supplied.



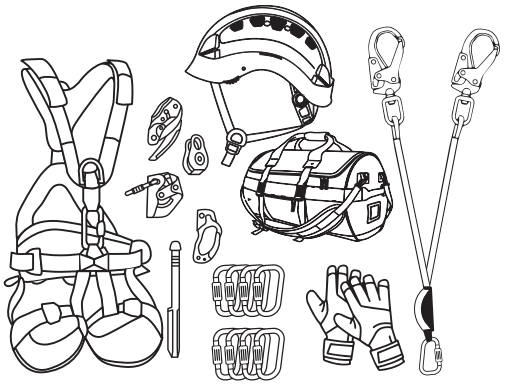
ANCHOR BOLT TEMPLATE

An anchor bolt template is used to properly locate the radome anchor bolts in the foundation. We can supply either an electronic CAD file to be used by the customer for fabrication of the template at no cost, or a fabricated template can be provided. Template segments are bolted together using hardware supplied with the kit forming a complete circle duplicating the radome base interface pattern.



CLIMBERS KIT

The climber kit is used by maintenance personnel for scaling the exterior of the radome to perform maintenance activities. The climber's kit includes an array of items necessary to work in a safe manner. It is strongly recommended that all personnel using the kit be professionally trained in rope access methods.

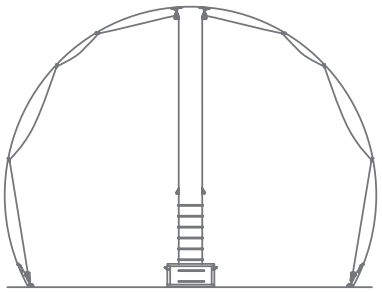


TYPICAL KIT INCLUDES:

- Helmet
- Gloves
- Climbing Rope (2 x 100')
- Full Body Harness
- Ascenders
- Decender
- Fall Arrest Device

ROPE LADDER

For access to the radome top cap to perform maintenance activities from inside the radome, a removable rope ladder to access the zenith access hatch is available. The rope ladder has a 300lbs max capacity and comes with a weatherproof storage box for when the ladder is not in use.



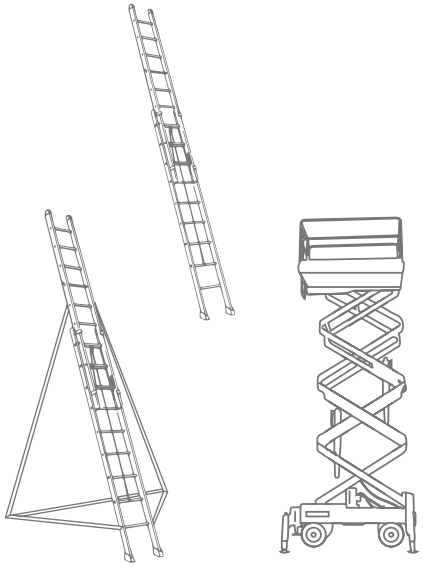
EXTENSION LADDER

For access to the radome top cap to perform maintenance activities from inside the radome a segmented extension ladder with hooks for attaching to a ladder bar is available. The ladder is an aluminum 2 section unit capable of up to 40ft reach.

FEED SERVICE ACCESS

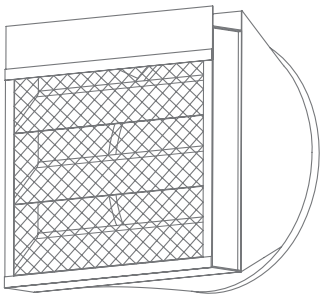
To provide access to the feed, we can offer an extension ladder with outriggers. This only provides immediate access for performing maintenance activities; it does not include a platform for maintenance personnel to stand on or for storage of tools and equipment.

An alternative means for providing access and a work platform is a scissors lift, or similar device, specifically designed and approved for the purpose of providing an elevated work platform.



VENTILATION SYSTEMS

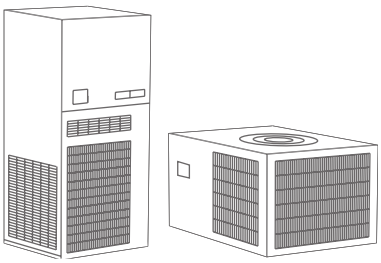
Passive ventilation systems are available to dissipate heat and minimize the effects of condensation. A typical ventilation system consists of louvered vents located in the base of the radome and a passive gravity ventilator in the zenith panel. The systems are equipped with bird or insect screens. Powered systems including intake fans, recirculation fans, exhaust fans, dehumidification units, or electrical heaters are available upon request.



AIR CONDITIONING

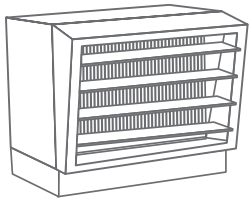
An air conditioner provides lower internal temperatures and a limited level of dehumidification to help with corrosion, mold growth, and condensation. For environments with high ambient temperatures and extreme moisture and or salt laden conditions it is recommended that a refrigerant or desiccant type dehumidification system be employed. In environments with mild ambient temperatures and high humidity, use of an air conditioner is not recommended for dehumidification purposes.

ITI-RCS uses established prediction methods to determine system capacity. Inputs to this model are; air infiltration, permeation, an air change factor, interior volume of the space, climatic data providing ambient temperatures as well as the desired interior temperature



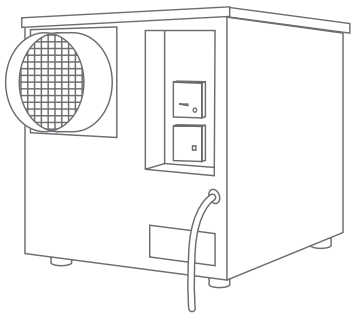
HEATING

Electric forced air heating units are available to provide elevated temperatures above ambient levels inside the radome. Heating systems are intended to provide interior temperatures adequate for internal equipment performance. They are not intended to provide personnel comfort or as a means of melting snow or ice from the radome exterior.



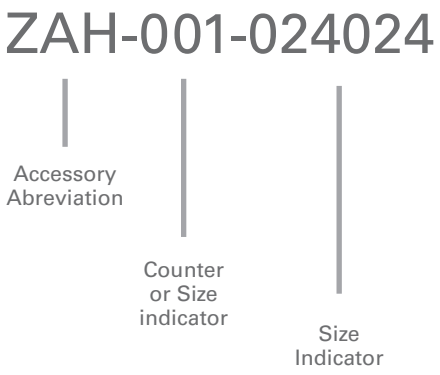
DEHUMIDIFICATION

Dehumidification is required whenever there is a need to prevent corrosion, mold growth, and condensation. Where installations are located in extreme moisture and/or salt laden environmental conditions, ITI-RCS can provide a refrigerant or desiccant-type dehumidification system.



ACCESSORY ITEMS PART NUMBER

Below is an example for how ITI-RCS assigns part numbers to our accessory items. The chart shows the most common items and their three digit identifier.



The first three digits identify the overall type of accessory, in this case ZAH is the abreviation for Zenith Access Hatch. The next three digits are usually a counter or size indicator depending on the kit type, in the example these digets are a counter as one unit is required for the kit. The final six digits are a size indicator , or 24" x 24".

ACCESSORY NAME:	PART ID:
Zenith Maintenance Points	AMP
Assembly Tool Kit Captive Hardware	TKC
Assembly Tool Kit Through Bolt Hardware	TKT
Fiberglass Maintenance Kit	FRK
Internationally Compliant Crating	CRA
Exterior Colors	SPC
Super-Hydrophobic Surface	SHC
Captive Assembly Hardware	CPF
Lightning Protection Systems	LPS
Snow & Debris Ropes	SNR
Spare Panels - Main	SPM
Zenith Access Hatch	ZAH
Base Entry Hatch	AHH
Personnel Entry Door	ADH
Oversized Doors	LAD
Interior Lighting	LSL
Security Lighting	SEL
Obstruction Warning Light	OBL
Photocell Control	OBP
Utility Power Outlets	EPK
Interior Hoist Sling	MLS
Radome Lifting System	RLA
Mounting Ring Beam Straight	RBS
Mounting Ring Beam Curved	RBC
Riser Wall	RSR
Radome Collar	CLR
Anchor Bolt Templates	ABT
Anchor Bolt Hardware (Other)	AKW , AKJ
Anchor Bolt Through	AKT
Anchor Bolt Chemical	AKC
Climber's Kit	CLB
Passive Ventilation Systems	VSP
Powered Ventilation Systems	VSA
Environmental Monitoring	MON
Air Conditioning	ECU
Heating	HTR
Refrigerant Dehumidifier	DHR
Dessicant Dehumidifier	DHD
Feed Service Access	FSL, FSE, FSM
Extension Ladders	LDR
Rope Ladders	LDR-ROP
Interlock Switch	SWC

Infinite Technologies RCS, Inc.
1-888-432-2533
info@itircs.com
www.compositeradomes.com