

CAP Series (CT, CT-PDS, ENV, ENV-PD, ENV-PDS) Infrared Windows Installation Manual

Preparation

The CAP series is a professional inspection device used in areas where extreme electrical potentials are present. Use caution at all times. Failure to follow the safety guidelines below could result in severe personal injury or death, in addition to equipment loss. These instructions apply to the IRISS CAP Series infrared windows and Ultrasound ports models. **CAP-CT and CAP-ENV** infrared windows, **CAP-CT-PDS, CAP-ENV-PD and CAP-ENV-PDS** infrared and Ultrasound inspection windows for use in environmental, electrical or mechanical systems.



Danger: Risk of Electrical Shock, Burn, or Explosion

- Gather all necessary permits prior to installation
- Remove power to the equipment prior to installation. Verify that power is off using an appropriately rated electrical meter
- Wear appropriate personal protective equipment (PPE)
- Observe and comply with the requirements of local mandates such as NFPA 70E and CSA Z462
- Remove extraneous materials and debris from the installation area after power has been switched off
- It is recommended that the door or panel into which the IR Window is to be affixed is removed, thereby allowing the installation to take place remotely, in a safe area
- Observe that the minimum dielectric clearance requirements are maintained when installing the product

Packing List

- 1 x IRISS CAP Series IR window
- 1 x Fitting template
- 1 x IR Window label
- 1 x Gasket

Fitting Hardware	
IRISS Unit	Number of Fitting Bolts
CAP-4	7
CAP-6	7
CAP-12	10
CAP-18	12
CAP-24	14

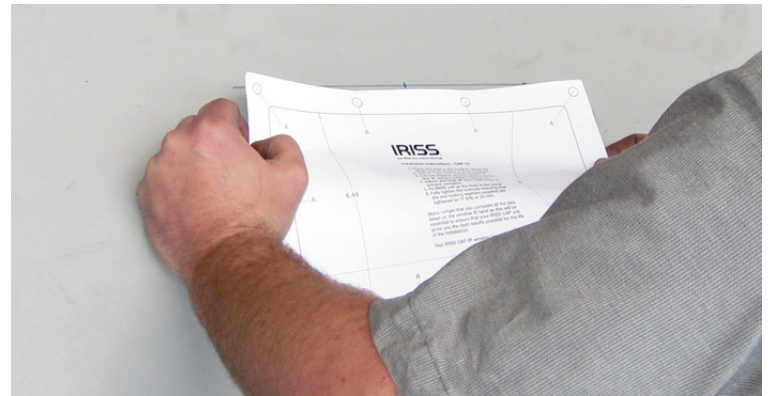
Tools Required for Installation

- Nibbler / grinder
- Electric drill
- 7 mm (9/32") drill bit
- Center punch
- De-burring tool / file
- 7/16" Socket or wrench
- Anti-corrosion metal treatment

Installation

1. Apply Fitting Template onto a Flat Surface

Once you have selected the installation location, you will need to apply the supplied cutting template on the side of the panel where the window is to be fitted.



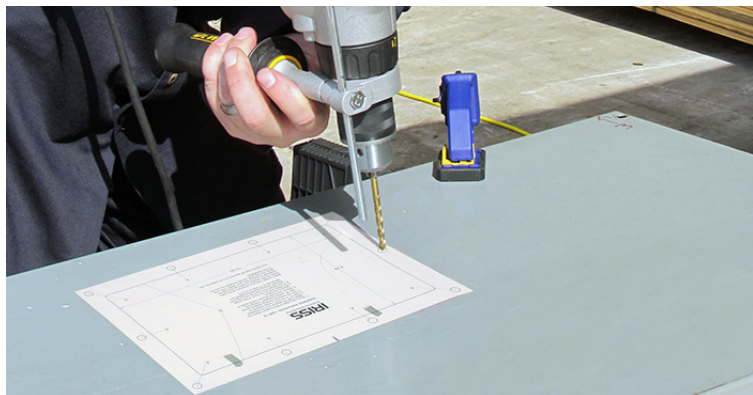
2. Center Punch Mounting Holes

Using a center punch, mark all the mounting holes labelled A.



3. Drill Mounting Holes

Use a 7 mm (9/32") drill bit to drill the center punched holes and if using a nibbler, drill a pilot hole along line B.



4. Cutting In IR Window

The table below details the hole size required for each of the IRISS CAP Series IR windows.

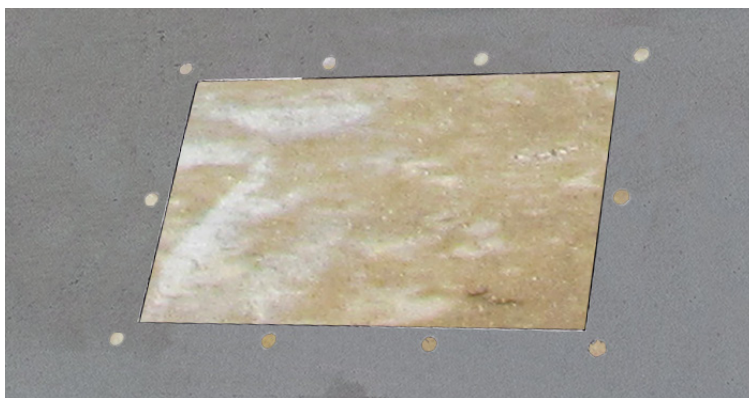
Center Hole Sizes		
IRISS Unit	Hole Size (mm)	Hole Size (In)
CAP-4	119.38 x 119.38 mm	4.7 x 4.7 In
CAP-6	123.825 x 180.975 mm	4.875 x 7.125 In
CAP-12	263.525 x 168.275 mm	10.375 x 6.625 In
CAP-18	418.1348 x 172.6819 mm	16.462 x 6.7985 In
CAP-24	571.5 x 179.3875 mm	22.5 x 7.0625 In

Cut the correct size hole using your chosen method (nibbler, grinder, etc.). The image below shows a hole being cut using an angle grinder utilizing a metal cutting disc. Once you have cut the hole, de-burr the rough edges and peel away the remaining portion of the cutting template.



5. Apply Anti-Corrosion Treatment

Finally, treat all bare metal surfaces with a protective anti-corrosion coating (paint, sealer etc.). This will ensure that the CAP IR window seals are not affected by long term corrosion and protect the integrity of the panel.



6. Fitting Your CAP Series IR Window

Once the hole cutting has been completed, your IRISS IR window can be installed.

- Place the body of the unit complete with gaskets on the front of the panel.
- Fit hardware (ensuring you fit the nut on each stud).
- Tighten hardware using a 7/16" socket or wrench. Ensure that the torque dose not exceed 4.52 N-m (40 in.-lbs).
- When your CAP Series unit is not in use ensure the cover is closed. On applicable CAP Series windows ensure that the cover screws are tightened to 1.7 N-m (15 in-lbs) to maintain the environmental seal of the unit.



Caution: Ensure that the CAP Series IR Window cover is closed and secured before restoring power to the equipment

Customer Support

For assistance and additional product information please contact support@iriss.com