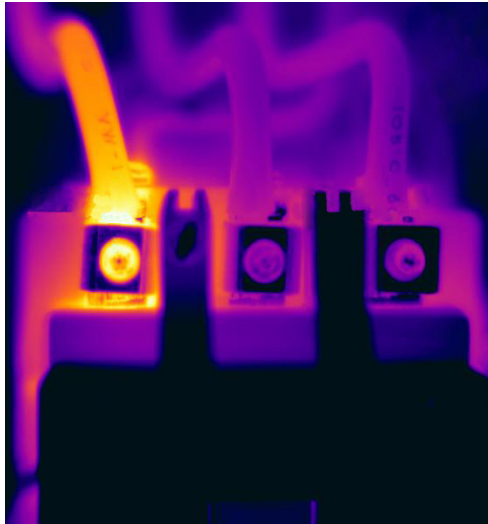


# CAP Series Installation Instructions



# CAP Series

## Instalation Instructions

### 1. Getting Started:

Before starting, you should ensure that you have all the tools and equipment required to successfully complete the installation and that the window is to be installed on a vertical flat surface or equivalent location . The holes can be cut using a nibbler or angle grinder.

#### Tool Requirements:

- 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

#### PPE Requirements:

- Working gloves (recommended)
- Comply with all site PPE requirements
- Safety glasses



FIG 1



FIG 2

### 2. Check the Contents:

Verify your shipment contains the following (FIG 2):

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

Note: Fitting hardware comes supplied with each IR window

### 3. Transmission Rates:

You must know the transmission rate of the IR window that you are installing. You must insert the data into the thermographers label that corresponds with the IRISS product that you are using.

### 4. Field of View:

Below is a field of view matrix showing what can be seen through the IRISS CAP Series of IR windows. This matrix is a guide only and is based on an IR camera that has a standard 24 degree lens with a lens diameter of 2 inches and a maximum viewing angle of 30 degrees (horizontal and vertical).

All dimensions are in inches and there are two charts: Chart 1 is CAP IR window only and Chart 2 shows the CAP-V, combining visual and IR window (this uses a smaller IR window than the CAP Series).

Chart 1: CAP Series

IR Target Distance	CAP-6	CAP-12	<b>CAP-24</b>
8 inches	Hor= 18.0 Ver= 14.7	Hor= 35.1 Ver= 18.6	Hor= 70.8 Ver= 20.4
12 inches	Hor= 28.2 Ver= 18.3	Hor= 39.9 Ver= 22.2	Hor= 75.6 Ver= 24.0
18 inches	Hor= 35.2 Ver= 23.55	Hor= 46.9 Ver= 27.45	Hor= 82.6 Ver= 26.25
24 inches	Hor= 41.7 Ver= 28.8	Hor= 89.1 Ver= 32.7	Hor= 89.1 Ver= 34.5

Chart 2: CAP-V Series

IR Target Distance	CAP-V-6	CAP-V-12	CAP-V-24
8 inches	Hor= 18.0 Ver= 10.8	Hor= 35.1 Ver= 10.8	Hor= 70.8 Ver= 10.8
12 inches	Hor= 28.2 Ver= 14.4	Hor= 39.9 Ver= 14.4	Hor= 75.6 Ver= 14.4
18 inches	Hor= 35.2 Ver= 19.7	Hor= 46.9 Ver= 19.7	Hor= 82.6 Ver= 19.7
24 inches	Hor= 41.7 Ver= 24.9	Hor= 53.4 Ver= 24.9	Hor= 89.1 Ver= 24.9

Caution: Do NOT cut prior to receiving your IRISS window and installation template

5. Fitting the cutting Template:

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 (FIG 3).

6. Center Punch Holes:

Using a center punch, mark all the fixing holes labelled A (FIG 4).

7. Drill Fixing 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 (FIG 5).

8. Hole Cut-Out Sizes:

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

IRISS Unit	Hole Size mm	Hole Size Inch.
CAP-6	177 x 119	6.96 x 4.7
CAP-12	262 x 164	10.30 x 6.44
CAP-24	568 x 176	22.36 x 6.92

9. Cutting In Windows:

Cut the correct size hole using your chosen method (nibbler, grinder, etc.). FIG 6 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 (FIG 7). 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.



FIG 3

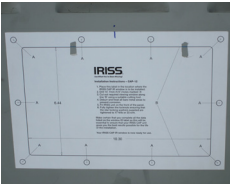


FIG 4

IRISS Unit	Fixing Holes
CAP-6	Eight
CAP-12	Ten
CAP-24	Fourteen



FIG 5



FIG 6



FIG 7

10. Fitting your IRISS IR window:

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

- Place the body of the unit complete with seals on the front of the panel.
- Fit hardware (ensuring you fit the nut on each stud) (FIG 8).
- Tighten hardware to 40 in.-lb or 4.52Nm using a 7/16" socket or wrench.

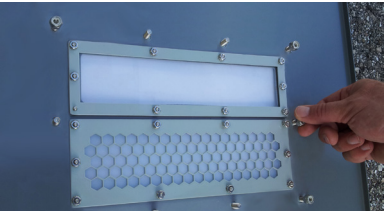


FIG 8

11. Fitting your IRISS IR window label:

Ensuring that your IR window is correctly labelled is essential. Without the correct information, it will not be used to its full effect. Each IRISS CAP IR window is supplied with a label for the use of the thermographer (FIG 10).

This label allows the thermographer to note the number of targets, emissivity of the targets, and transmission rates of the viewing pane with different IR cameras.



FIG 9

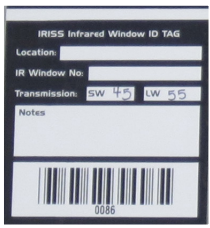
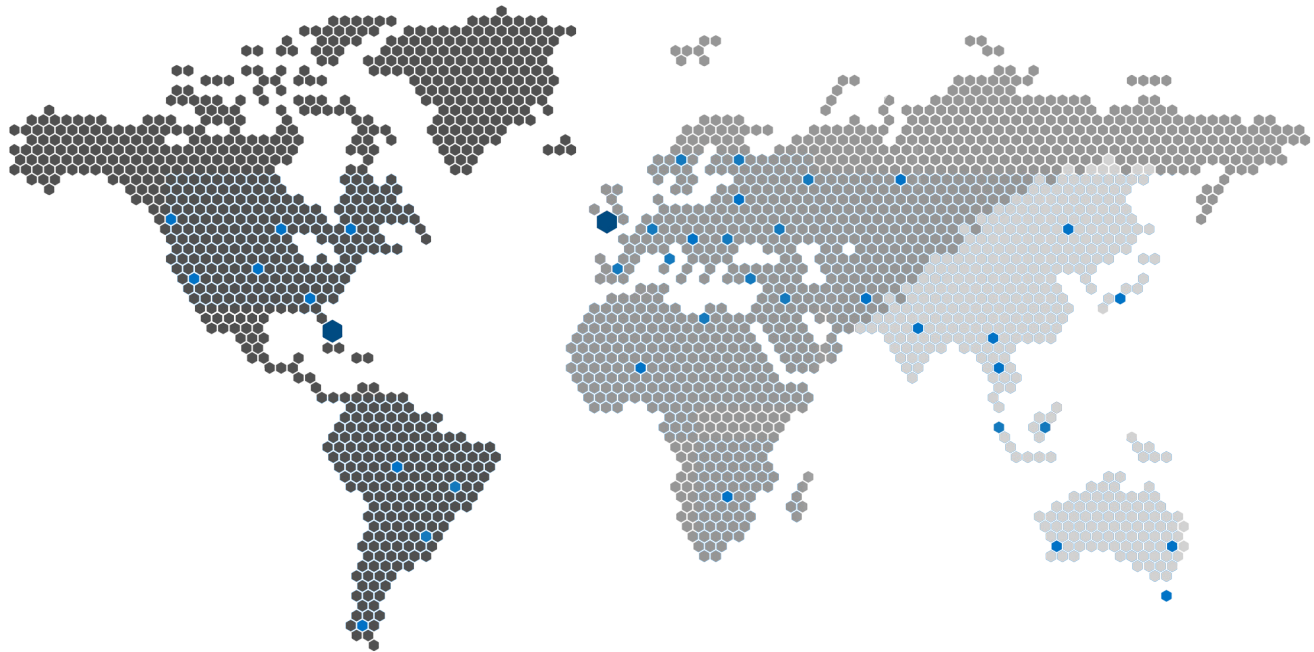


FIG 10

There may be multiple targets through the IR viewing window which need to be recorded on the thermographers label. The most common method of locating the targets required is by using the clock face method, i.e. bus bar connections at 4 o'clock, etc. This data can all be placed on the label. This label also has a pre-printed bar code system to allow for unique identification of each CAP IR window.

Your IRISS CAP IR window is now ready for use!



US



+1 941 907 9128



[info@iriss.com](mailto:info@iriss.com)

EMEA



+44 (0) 1245 399 713



[info-emea@iriss.com](mailto:info-emea@iriss.com)

APAC



+65 6572 5476



[info-apac@iriss.com](mailto:info-apac@iriss.com)

[iriss.com](http://iriss.com)

© 2016 IRISS, Inc.

Design and specifications are subject to change without notice. IRISS, FlexIR and all related trademarks are trademarks or registered trademarks of IRISS Group and its affiliated companies.

All other trademarks are the property of their respective owner.