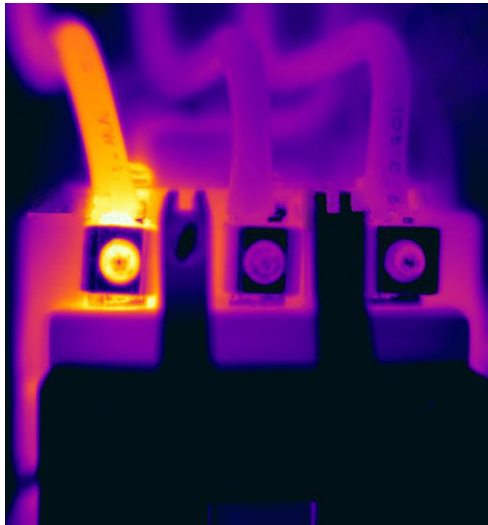


# VP Series Installation Instructions



VP Series

# Installation 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 either a hole saw or punch.

### Tool Requirements:

- Hole saw or punch
- Electric drill
- Cone drill
- 75 mm (3/16") drill bit
- Center punch
- De-burring tool / file
- Anti-corrosion metal treatment

### PPE Requirements:

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

## 2. Check the Contents

Verify your shipment contains the following (FIG 2):

- 1 x IRISS VP IR window
- 1 x Fitting template

- 1 x Instructions For Use Label
- 1 x IR Thermographer Label



FIG 2

## 3. Transmission Rates:

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

## 4. Field of View:

Below is a field of view matrix showing what can be seen through the IRISS VP 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.

IR Target Distance	VP-50 FOV	VP-75 FOV	VP-100 FOV
8 inches	Hor=13.2 Ver=9.9	Hor=16.2 Ver=12.9	Hor=19.2 Ver=15.9
12 inches	Hor=18.0 Ver=13.5	Hor=21.0 Ver=16.5	Hor=24.0 Ver=19.5
18 inches	Hor=25.0 Ver=18.75	Hor=28.0 Ver=21.75	Hor=31.0 Ver=21.75
24 inches	Hor=31.5 Ver=24.0	Hor=34.5 Ver=27.0	Hor=37.5 Ver=30.0

## 5. Fitting the Cutting Template:

Once you have decided on the location that you wish to fit the IRISS VP IR window, you will need to apply the supplied cutting template to the side of the panel where the window is to be fitted (FIG 3).

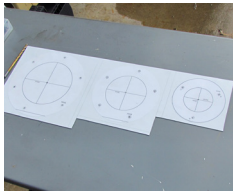


FIG 3

## 6. Center Punch Holes:

Mark all the fixing holes and the center hole for the chosen hole cutter (FIG 4).



FIG 4

## 7. Drill Fixing Holes:

Using a 5 mm (3/16) bit to drill the fixing holes and pilot hole for the chosen hole cutter (FIG 5 & 6).

IRISS Unit Fixing Holes	
VP-12	Three
VP-50	Three
VP-75	Five
VP-100	Six

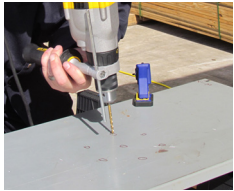


FIG 5

## 8. Center Hole Sizes:

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

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

For help with any instalation instruction please contact: [support@iriss.com](mailto:support@iriss.com)

IRISS Unit	Hole Size mm	Hole Size Inches
VP-12	30 mm	1 1/8
VP-50	50 mm	2.0
VP-75	75 mm	3.0
VP100	100 mm	4.0

### Recommended Hole Saw Details:

IRISS Unit	Champion Hole Saw mm	Steel (RPM)	St/Steel (RPM)
VP-12	CT5-1 1/8 (30)	500-800	200-450
VP-50	CT5-2 (50)	200-500	120-225
VP-75	CT5-3 (75)	150-300	80-150
VP-100	CT5-4 (100)	100-200	60-120

*\*For best performance, we recommend 1/2" corded power tools.*

### Recommended Hole Punch Details:

IRISS Unit	Greenlee Hole Punch
VP-12	GREENLEE 730BB -1 -1/8
VP-50	GREENLEE 730BB -2
VP-75	GREENLEE 730BB -3
VP-100	GREENLEE 741BB -4

## 9. Cutting Center Hole:

Cut the correct size hole using your chosen method; FIG 7 shows a hole being cut using a hole saw. Once you have cut the hole size to the correct diameter, de-burr, remove any metal shavings and the remaining portion of the cutting template (FIG 8 & 9). Finally, treat all bare metal surfaces with a protective, anti-corrosion coating (paint, sealer, etc.). This will ensure that the IR window seals are not affected by long term corrosion and protect the integrity of the panel.

## 10. Fitting Your IRISS IR Window:

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

1. Remove the back plate from the IRISS IR window.
2. Place the body of the unit, complete with seals, on the front of the panel.



FIG 6



FIG 7

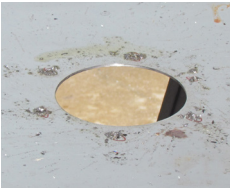


FIG 8



FIG 9



FIG 10



FIG 11

3. Place the back plate inside the panel and fit the screws through the back plate into the body of the IRISS IR window (FIG 10).
4. Tighten screws to 1.2 Nm (10.6 in-lb). This equates to fully hand tight using a screwdriver (FIG 11).

## 11. Fitting Your IRISS IR Window Labels:

Ensuring that your IR window is correctly labeled is essential. Without the correct information, it will not be used to its full effect. The IRISS VP IR window is supplied with two labels: The instruction for use label (FIG 12) and the thermographer label (FIG 14).

## IR Window Instructions for Use of Label:

This should be placed next to the window (FIG 13) and details the steps to be taken to ensure the unit is used correctly.

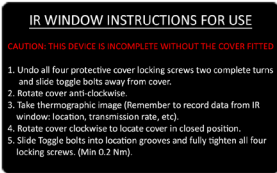


FIG 12



FIG 13

This label allows the thermographer to note the number of targets, emissivity of the targets, transmission rates of the IR window, etc.

## IR Thermographer Label:

There may be multiple targets through the IR window. These need to be recorded on the thermographer label. This label allows the thermographer to note the number of targets, emissivity of the targets, transmission rates of the IR window, etc. 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. An example of a completed label is shown below in FIG 14.

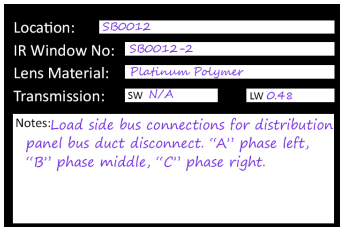
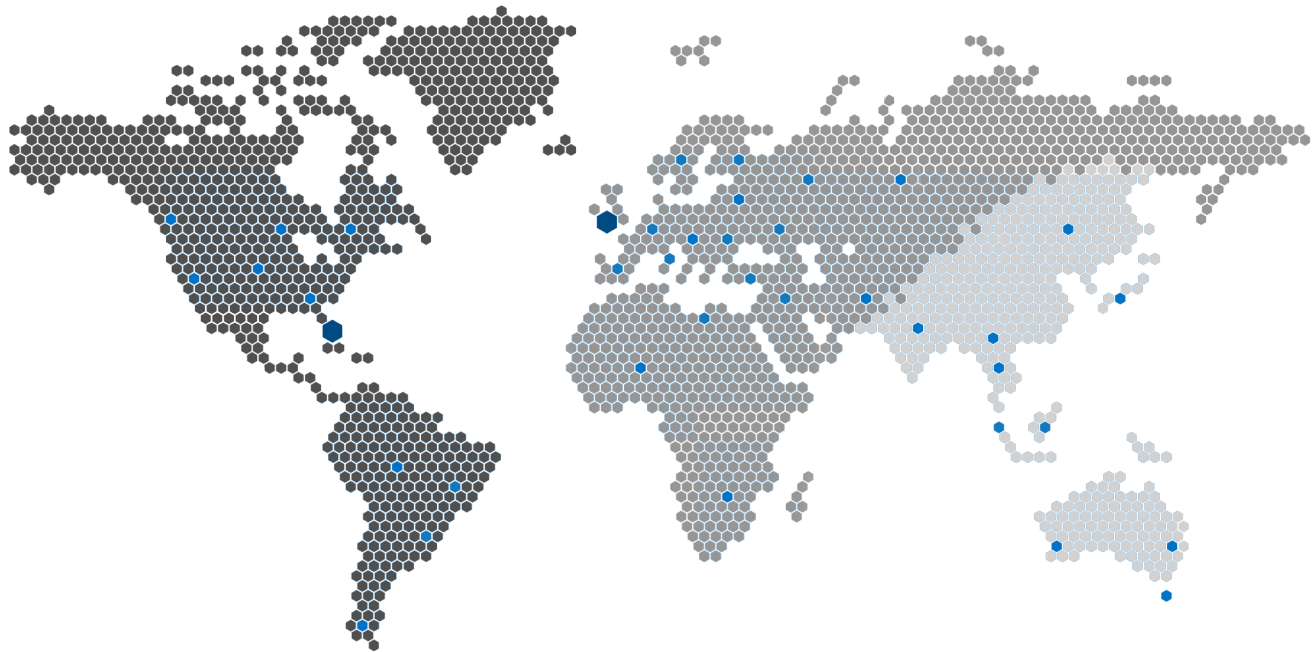


FIG 14



FIG 15

Your IRISS VP IR window is now ready for use!



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