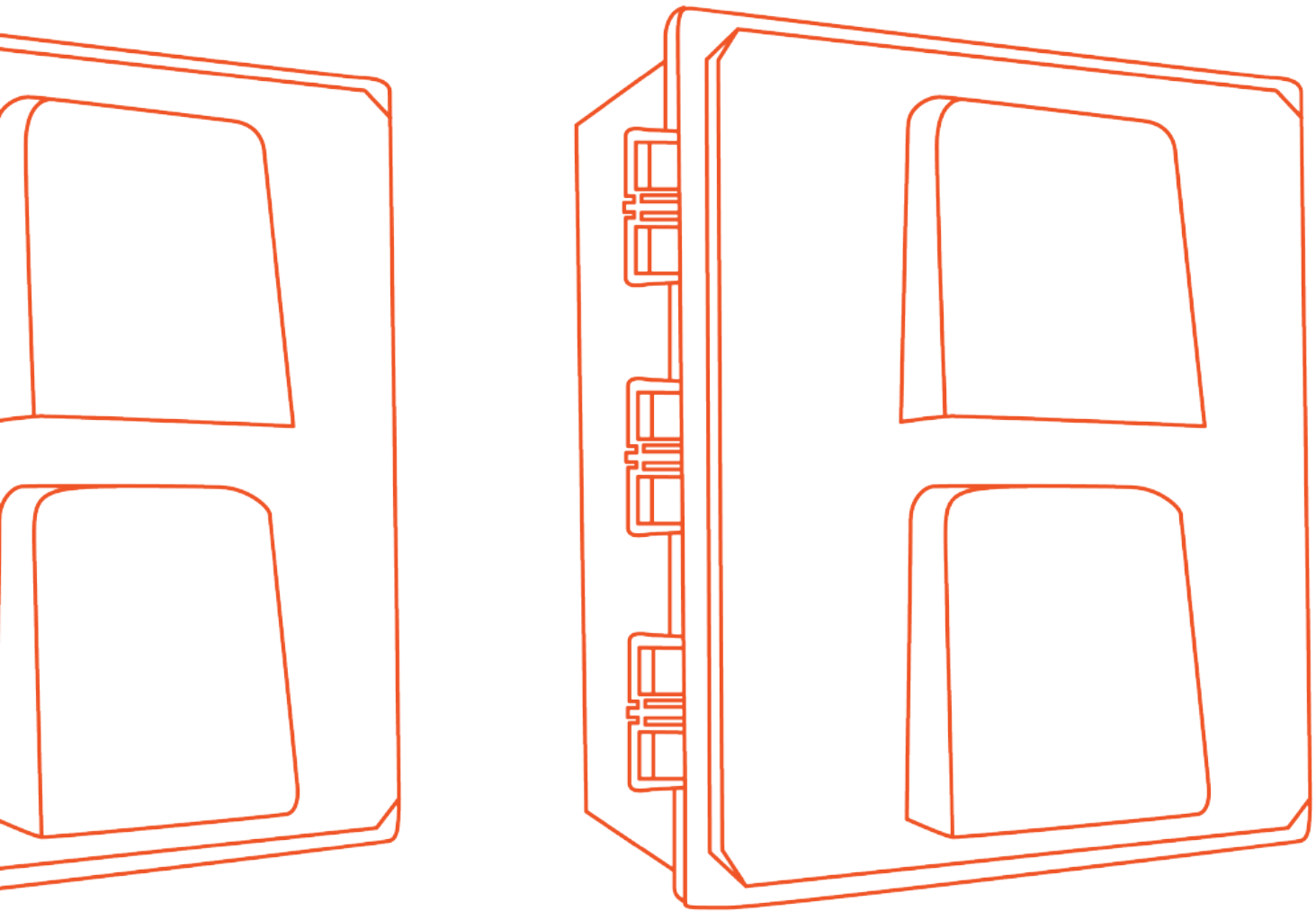


Installation Manual

Polycarbonate Enclosures

with Heated & Cooled Backplates



Introduction

This enclosure is intended to be used with WLAN/Networking devices both indoors and outdoors to provide NEMA 3R protection with cooling and heating. Maximum internal ambient temperature is 45°C. Before installing this product, read these instructions carefully. Failure to follow these instructions could lead to damage to the product or cause hazardous conditions. Check the ratings on the products you intend to place inside the enclosure solution to ensure that they are suitable for the application.

Precautions

Read and understand all instructions before you begin installing the unit. When installing and using this product, basic safety precautions should always be followed to reduce the risk of electric shock, fire, and injury to persons. All wiring that is connected to the equipment must meet applicable local and national building codes and network wiring standards for communication cable.

WARNING: To prevent the risk of electric shock and equipment damage, disconnect any and all supply mains connected to the enclosure before installing, maintaining, or trouble shooting this product or any products inside the enclosure.

Keep these instructions for future reference. Follow all warnings and instructions marked on the product.

Insulation on all cables and wires installed by the service center should be either PVC, TFE, PTFE, FEP, Neoprene, or Polyimide. Never touch uninsulated communication wires or terminals.

Never install cables, connectors, or jacks in a wet location unless they are specifically designed for wet locations.

Never install this product during a lightning storm. There is a risk of electric shock from lightning.

Disconnect power before cleaning or servicing the unit.

Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Mount the unit according to these instructions only using the recommended or supplied hardware.

Wear proper eye protection when using power and hand tools. Follow all safety instructions provided with the tools.

This unit should only be connected to the type of power source indicated. If you are unsure of the type of power supply, consult the local power company.

WARNING: Do not overload outlets as this can result in a risk of fire or electrical shock.

Disconnect power should any of the following conditions occur:

- The enclosure does not operate normally when following the operating instructions.
- The enclosure has been damaged.
- The enclosure exhibits a distinct change in performance

Heater/Fan

The enclosure includes a heating element as well as a cooling fan to provide protection to the internal components from extreme temperatures.



Caution

Never touch the moving parts of the fan with in operation. Never touch the heat sync of the heating element while in operation. The heat synch becomes very hot while in operation and could cause personal injury if touched.

Warning

WARNING: Do not overload outlets as this can result in a risk of fire or electrical shock.

Installation Instructions

Installation Environment

The enclosure is intended for both indoor and outdoor use.

Maximum internal ambient temperature is 45°C.

Always mount the enclosure with the rain shields facing down (figure 1). Failure to do so could cause the unit to fill with water; creating hazardous conditions and equipment damage.

WARNING: To prevent risk of electric shock and equipment damage, disconnect any and all power supplied to the enclosure before installing, maintaining, or trouble shooting this product or any products inside the enclosure.

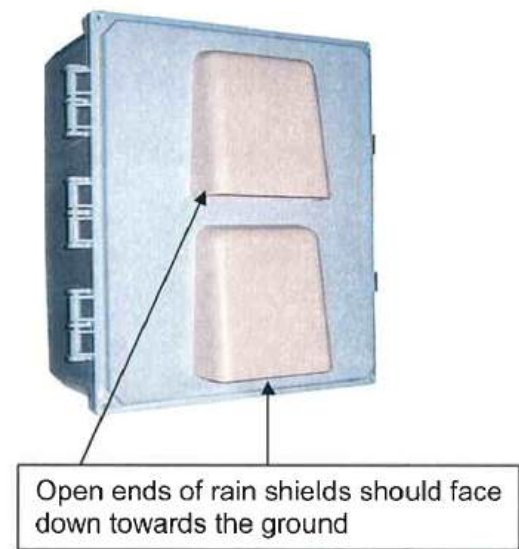


FIGURE 1

Included Components

The enclosure consists of the following components:

- Cooling Thermostat
- Heating Thermostat
- Heater
- Cooling Fan
- Mounting Plate
- Power Socket
- Terminal Block
- Cord Gland
- Mounting Feet with Screws

Installing WLAN/Networking Components

The enclosure will accommodate WLAN/Networking products to be installed inside the unit. This equipment should be installed on the mounting plate in the unit.

Wire/Cable Routing

It is recommended to use cable routing tie downs. These tie downs are used to provide convenient cable routing. It is important to use cable tie downs to ensure that the installed cables are kept away from the other components within the enclosure. Refer to figure 2 below to illustrate the use of these tie downs.

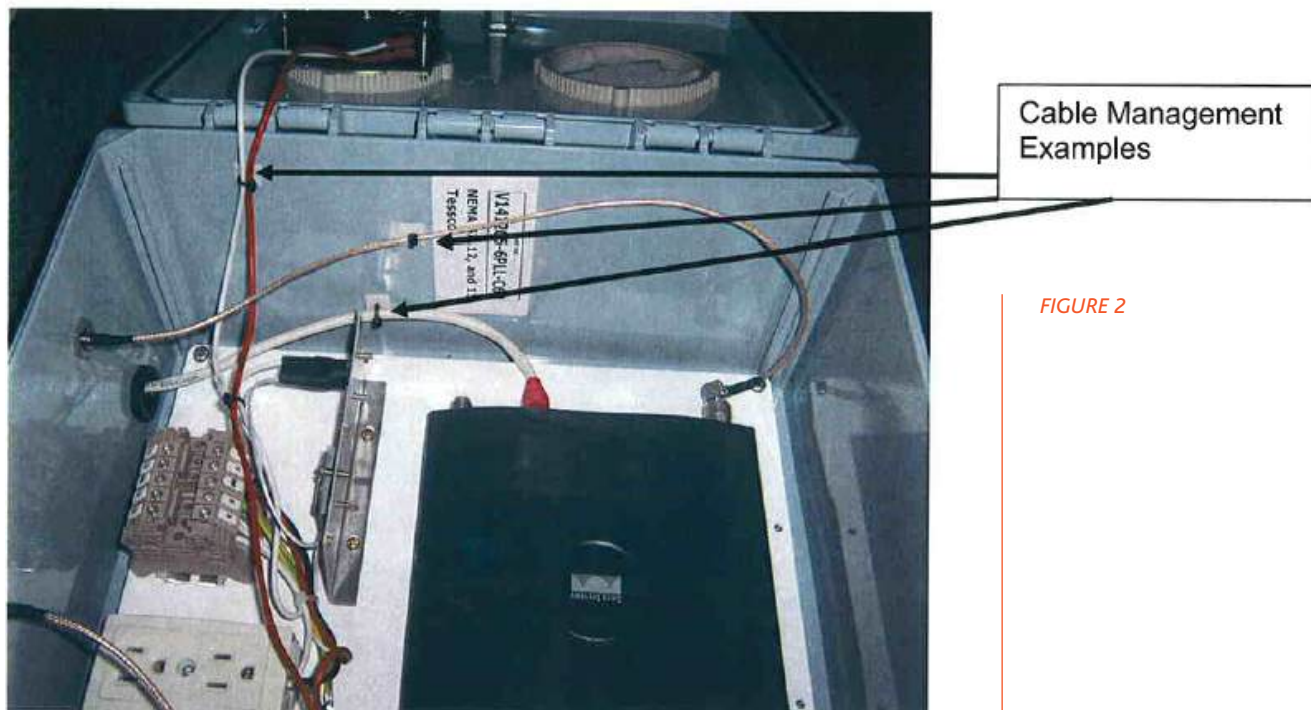


FIGURE 2

Ethernet Cable

When installing Ethernet cabling into the enclosure, you must first install the strain relief bushing that comes included with the enclosure. Be sure to install the strain relief bushing with the gasket of the outside of the enclosure. Also, the strain relief bushing nut should be tightened snugly by hand. Once the bushing has been tightened by hand, use a wrench to apply an additional quarter turn for final tightening. Do not over tighten the nut – over tightening the nut can cause the strain relief bushing to crack. Refer to figure 3.



FIGURE 3

Mounting Plate

The enclosure is supplied with a mounting plate to be used for attaching WLAN/Networking components. The following diagram (figure 4) shows which holes should be used when attaching approved products to the plate.



Caution

To reduce the risk of electric shock, do not drill any holes in the back plate.

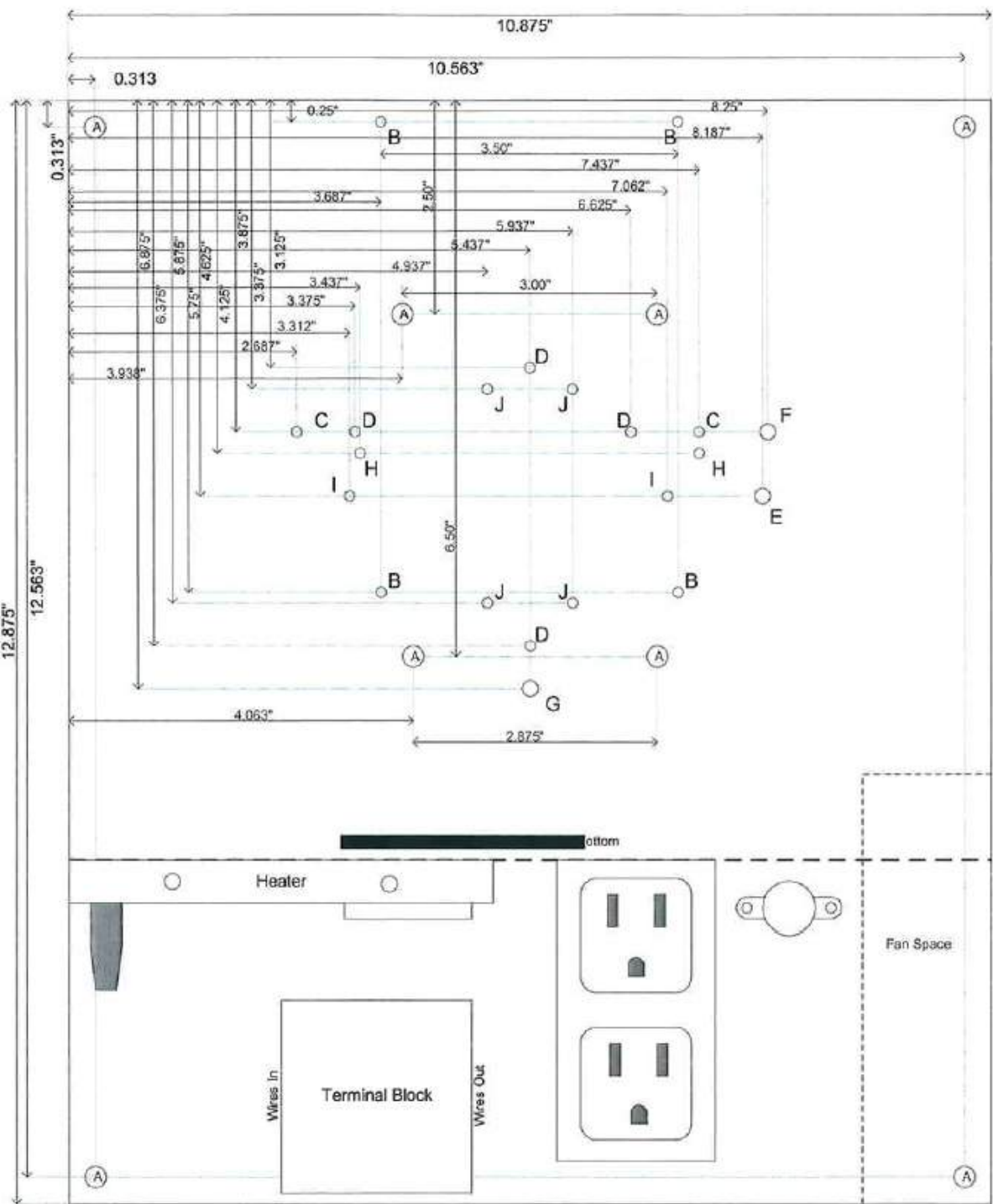


FIGURE 4

Hole Size Chart

Hole	Size & Thread
A	7/32 in. through hole – not threaded
B, C, D, I, J	8-32 threaded hole
E, F, G	10-32 threaded hole
H	6-32 threaded hole

Hole Usage Ledger

Hole	Used For
A	Mounting holes to mate up with 10-32 thread x 2 in. standoffs
B	Cisco 350 Metal Case
C & F	Cisco 340 & 350 Plastic Case (F is for 10-32 locking post)
D	Cisco 1200 & 3Com 8250
I & E	Proxim AP (I is for 10-32 locking post)
J	Cisco 1130 AP
H & G	Symbol 4141 (G is for 10-32 locking post)

Customer Provided WLAN/Networking Mounting Screws

Quantity	Description
4	10-32 x 3/8 in. counter sunk – Philips head
4	8-32 x 3/8 in. round Philips head
2	6-32 x 3/8 in. round Philips head
1	10-32 locking post (Ventev has sample)
3	8-32 x 3/8 in. flat head Philips head

Enclosure Mounting Feet

Mounting feet with screws have been provided in the enclosure. The feet provide easy and convenient mounting of the unit.

You may consider using an optional pole mount kit (VPMK412). This is sold separately

Attachment

Attach the enclosure to a wall or other structure using the provided mounting feet. Refer to figure 5.

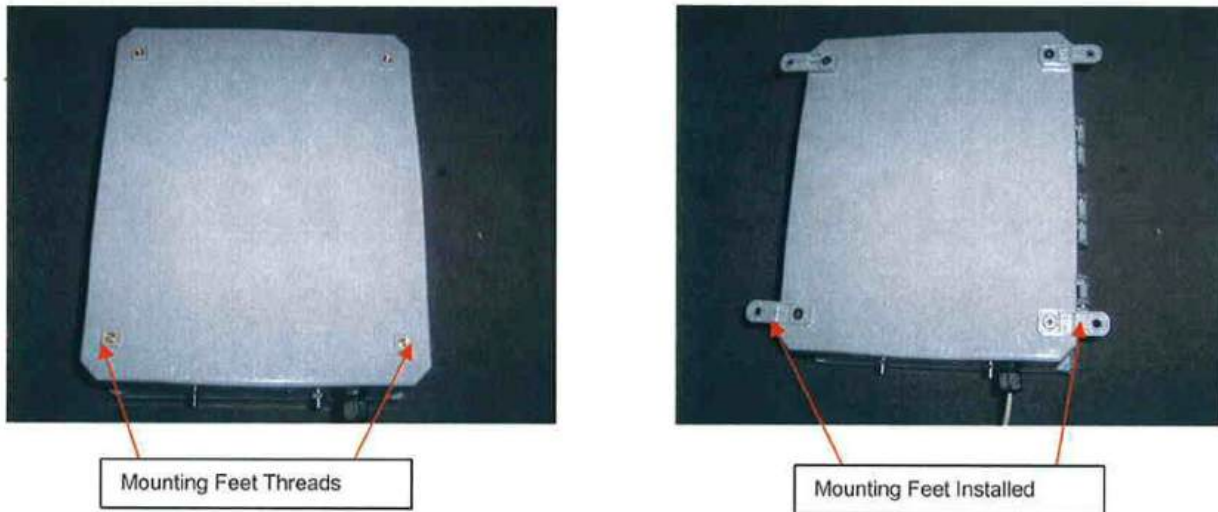


FIGURE 5

Electrical Wiring

NOTE: All electrical connections should be made by a licensed electrician. All local and national codes should be followed as applicable.

Circuit Requirements

The enclosure should be connected to a 120V, 15A feeder circuit.

The maximum capacity of the power receptacle in the unit is 120V, 12A.

The circuit breaker of the feeder circuit is considered to be the disconnect device for the enclosure. Therefore the circuit breaker should be readily accessible. The strain relief (liquid tight cord connector) is suitable for flexible cord with a diameter of 10 mm. We recommend using S-W or S-J cord, minimum of 16 AWG

WARNING: To reduce the risk of electric shock, disconnect supply mains before servicing.

Electrical Connection

Before running electrical power to the device, you must first install the strain relief bushing that comes included with the enclosure. Be sure to install the strain relief bushing with the gasket of the outside of the enclosure. Also, the strain relief bushing nut should be tightened snugly by hand. Once the bushing has been tightened by hand, use a wrench to apply an additional quarter turn for final tightening. Do not over tighten the nut – over tightening the nut can cause the strain relief bushing to crack. Refer to figure 6.

The electrical wiring should be routed through the strain relief bushing to the terminal block. Refer to wiring diagram – figure 7.



Strain relief bushing on outside of enclosure.

(Figure 6)



Strain relief bushing nut on inside of enclosure.

DO NOT OVER TIGHTEN!

FIGURE 6

Running Power to the Unit

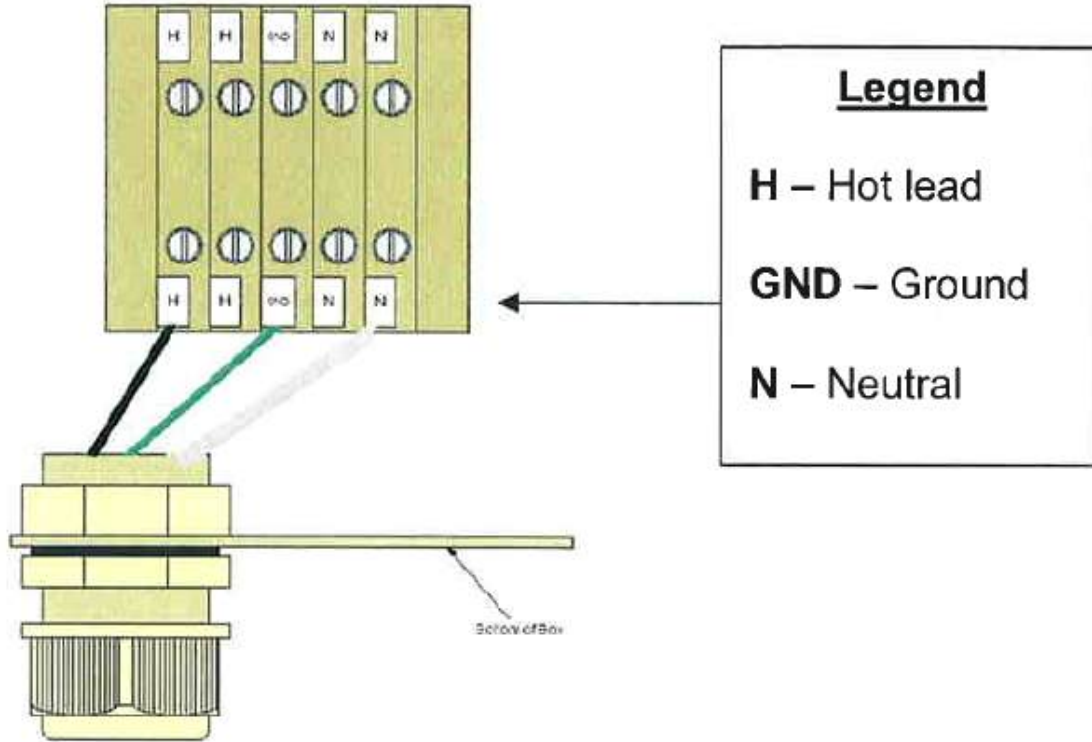


FIGURE 7

Note that all cables need to be rated for outdoor use and wet environments. Refer to the NEC and local codes as applicable.

Figure 7 represents the terminal block and power leads that are wired to the terminal block inside the enclosure.

The wiring should be as follows:

1. The **black** wire in figure 7 represents the hot lead and should be attached to the terminal block that is labeled 'H'.
2. The **green** wire in figure 7 represents the ground connection. The ground lead should be attached to the terminal block that is labeled 'GND'.
3. The **gray** wire in figure 7 represents the neutral. The neutral wire should be attached to the terminal block labeled 'N'.

Filter Maintenance

The enclosure is provided with easily removable filters. The filters are removed by squeezing the filter clip to remove the filter. The filter can be washed out with water and replaced in the unit. Once the filter is in place, replace the filter clip back in the vent and position the clip to lock into the provided slots. See figure 8 below.

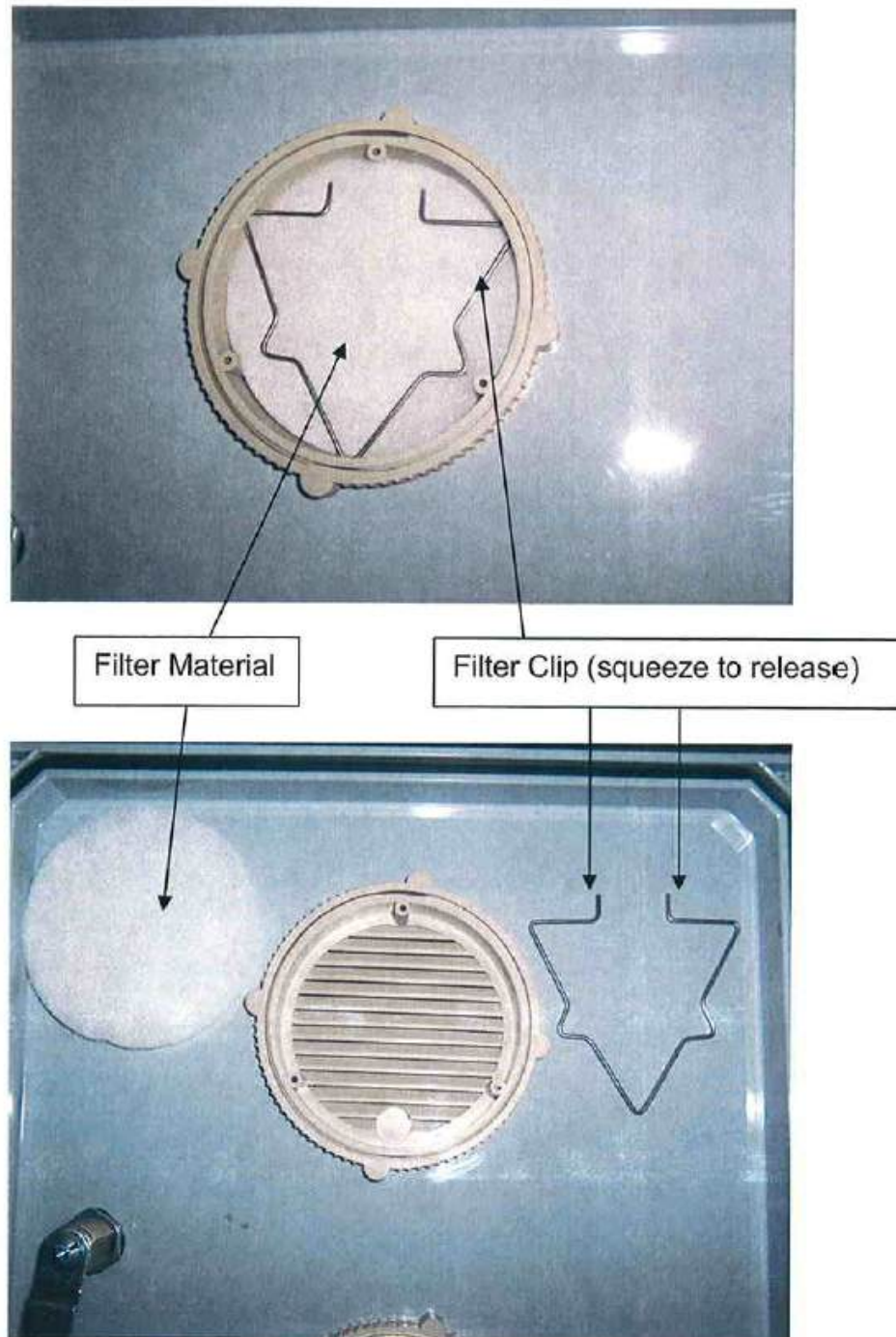


FIGURE 8



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