

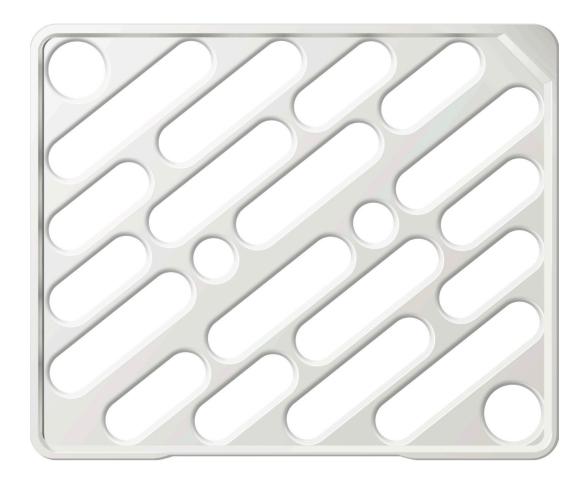


# **ENRG Panel**

Installation Guidelines for Installing Into Walls and Ceilings

Revised October 25, 2023

# The ENERG Panel® Protected With BioPCM®



The ENERG Panel® is a rugged, plastic panel that quickly snaps in and out of existing interior walls and ceilings. It is capable of maintaining a specific designed temperature, reducing the need to run HVAC equipment, adding to significant energy savings.

# **Important Considerations**

• Walls and Ceilings Compatible with ENRG Panel®
ENRG Panel® may be installed vertically or horizontally onto
any flat wall or ceiling surface that is capable of supporting
the weight of the material.

## Material Protection and Storage

All materials should be kept out of direct sunlight, clean and dry prior to installation. When stored outside or on a job site, materials shall be kept off the ground and adequately covered with protective covers or tarps. When unpacking the product, use caution to be sure that the product is not cut or punctured in any manner.

## Proper Ladder Use

The biggest safety concern is proper ladder use. In addition to using the correct height ladder always make sure to maintain 3 points of contact with the ladder. If this is not possible, reposition the ladder to assure proper safety. At all times, be aware of your surroundings when moving and positioning the ladder around sensitive electronic equipment.

## Stacking the ENERG Panels®

The panels have a little bit of weight when stacked up. The installers should use care when transporting the panels being careful not to stack them too high so that they fall over and become damaged.

## **SAFETY**



Follow all warnings and precautions listed on tools and equipment during the installation.

Use CAUTION while climbing ladders and working around electrical wiring.

- · Make sure installers use the correct height ladder.
- At some point, the installer may need to install facing away from the ladder and lose the 3 points of contact. If this happens, the installer must reposition the ladder.
- · Care should be taken when moving and positioning ladders around desks and furniture.

# Tools needed or recommended for the job:

## Appropriately Sized Ladder

Select an appropriately sized ladder for the structure. This requires a working knowledge of the structure and the ceiling heights that will be encountered once arriving on the job site.

#### Eye Protection

Eye Protection is recommended when working in any environment and should be worn at all times for your protection. Safety glasses should be worn to protect from falling debris as ceiling tiles are removed.

#### Skid Resistant Shoes

Skid Resistant Shoes are recommended when climbing a ladder and can reduce the risk of potentially dangerous situations that can occur while climbing ladders in a work environment.

#### Headlamp

A headlamp can be useful in some situations.

#### Rolling Cart

Use a rolling cart to transport ENRG Panels® from truck into building or installation structure.

#### · Clean Hands and Rubber Gloves.

The white ENRG Panels® can be easily stained with dirty hands and can be easily scratched so take care to keep them clean and undamaged during the install process.

#### · Clean Work Gloves.

Clean work gloves will provide safety for your hands in the event that you encounter sharp objects while working around the ceiling grid supports including wires and metal studs, metal light fixtures, heating and cooling vents, etc.

#### Paper Towels and Glass Cleaner

The ENRG Panels® can be damaged during transportation and handling. If damage to the thermal storage material inside the panel has occurred, there could be a film of oil-like BioPCM on the surface of the panel. Bring clean paper towels and a glass cleaner (such as Windex) and wet wipes in case clean-up of panels is necessary.

#### **DO NOT INSTALL DAMAGED PANELS**



BioPCM® is not toxic, however, we recommend washing hands if installers come into contact with the material. Set damaged panels aside and do not install.

#### Plastic Tarp

Plastic Tarp for covering any electrical equipment or desks. Tarp may or may not be needed depending on the available space inside the structure.

#### Feather Duster

Feather Duster or similar tool to sweep fallen debris from desks, chairs, all other surfaces.

#### Vacuum Cleaner / Cordless Vacuum

Vacuum Cleaner of reasonable size with clean filter to clean debris that may fall from overhead installs. A cordless vacuum works great for cleaning up the site after the install is complete.

#### Battery Powered Saw Or Hand Saw

Battery powered saw or hand saw can be used to shorten the plastic mounting rails in tight spaces. It is best to use full length rails if at all possible, but the product can be trimmed for smaller install areas if necessary. **DO NOT CUT** the ENRG Panels®.

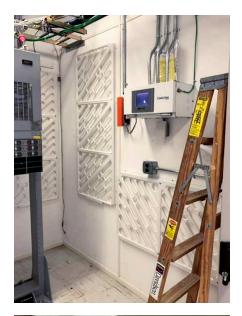
## Diagram of Building Layout and Installation Report

Proper reporting of the installation is critical to the success of each job. Use the diagram of building layout to record where ENRG Panels® were installed. Use Installation Report to record the amount of material installed and any problems of issued encountered.

#### Camera

It will be very important to take photographs of the installation. A camera (stand alone or a smart phone) is required. Take smartphone pictures of the installation to document that the installation was properly completed.

# **ENRG Panel® Installation**





- 1. Carefully inspect the panels for damage before installation.
- 2. Have a floor plan that shows the quantity of panels, type of BioPCM® and associated locations for the panels and review it at least one day prior to installation so that any questions can be addressed in advance. Heat rises so panels should be located at the highest points in the room with even distribution throughout the space.
- 3. It is recommended that installers work in teams where one person is holding the assembled ENRG Panel® product while the other is attaching the product to the wall or ceiling.
- 4. A pre-formed plastic rail made from light gauge PVC is used to attach the ENRG Panels® to a flat surface. These factory fabricated rails are required to be used. Other rail systems are not recommended or warranted for use with ENRG Panel. ENRG Panel is designed to achieve a snug fit into the tension slot such that the raw edge of the panel slides into the slot, securing the panel into place. Mechanical fastening of the ENRG Panel® to the support rail is not required.
- 5. Make sure brackets are securely fastened to the wall or ceiling. Mount single starting rail to wall/ceiling parallel to the floor or wall using pre-drilling or self-tapping screws directly through the exposed rail flanges with holes on top and bottom of the plastic rails for a total of 6 screws per rail. When using less than full rails, be careful when cutting the rails to shorter lengths making sure not to compromise the integrity of the tension slot which holds the panels into place.

# **ENRG Panel® Installation**





- 6. With one rail installed, place one side of the ENRG Panel® to single rail (ENSURE FILL PORT IS FACING UPWARD). Mount 2nd rail using ENRG Panel as measuring device. Snap in opposite side of ENRG Panel to 2nd rail (AGAIN WITH FILL PORT FACING UPWARD). Third rail can be mounted using the 2nd keel as guidance to achieve a grid-like structure (ENSURE FILL PORT ON PANEL IS FACING UPWARD). Repeat until target count of panels are achieved.
- 7. During installation, install the panels as near the heat source and as high possible so that they have the maximum effect to absorb the heat. Always maintain at least 2 inches clearance from heat sources. Consult the factory for applications involving higher than 140F to ensure appropriate material is being used and rated for the application.
- 8. Follow all warnings and precautions listed on tools and equipment during the installation process. Use CAUTION while climbing ladders and working around electrical wiring.



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