

1. What is a FLIR Thermal Camera?

Thermal imaging can see what your eyes can't. Thermal imaging cameras use color to show the relative temperature of objects: cold is purple, moderate is red, and hot is yellow. You'll see hot and cold spots where insulation is missing, identify where air is getting in or out of your house, and more.

Use this FLIR Thermal Camera to look for energy efficiency opportunities in your home or business.

- In the winter, **purple** spots inside your home indicate a lack of air sealing or insulation.
- In the summer, these spots would appear **yellow** instead.

The camera takes thermal and regular pictures simultaneously, so you can easily identify the location of hot and cold spots in your home.



In this image both walls look the same to the naked eye, but the thermal camera reveals that the exterior wall on the left is colder.



DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION**
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mygreenmontgomery.org/project/camera

2. Using the FLIR Camera with Android

This camera requires Android Version 5.0.0 or higher and a USB-C connection. Compatible devices include Google Pixel, Google Pixel XL, Google Nexus 6P, Samsung Galaxy S8, Samsung Galaxy S8+, and Samsung Galaxy A5. For questions, contact FLIR ONE at 844-283-5471 or FLIRONE-Support@flir.com.

1) Download and open the FLIR ONE app on your Android phone.



FLIR app
icon

2) Connect the camera to your phone facing out and press the camera's power button. The button's light will flash green when the device is ready. If you have a phone case, use the blue dial to adjust the connector height.

3) If the camera does not turn on, charge it with the USB cable provided. The small light next to the power connection blinks while charging and stays on continuously when fully charged. The camera requires about one hour to fully charge.

TIP: If the camera does not seem to work, reset it by holding the power button down for 30 seconds. Also try uninstalling the app, restarting your phone, and reinstalling the app.

4) The app opens to either the camera or home screen depending on if the camera is turned on. Use the Menu buttons to navigate between the two. To access the camera, FLIR requires that you create an account.

5) With the camera screen open, use the white circle to take pictures. Select the library button at the bottom left to view your photos. Swipe up or down on a photo to reveal the normal image.

6) For more info, go to the Help section on the Menu drop down or the Tips and Tricks section on the home screen.

3. Energy Saving Opportunities

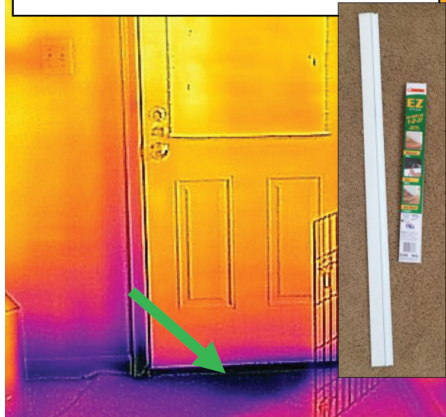
Thermal imaging cameras use color to show the relative temperature of objects: cold is **purple**, moderate is **red**, and hot is **yellow**.

- In the winter, purple spots inside your home indicate a lack of air sealing or insulation.
- In the summer, these spots would appear yellow instead.

For the camera to function properly, make sure there is at least a 20-degree temperature differential between the inside and outside of your home.

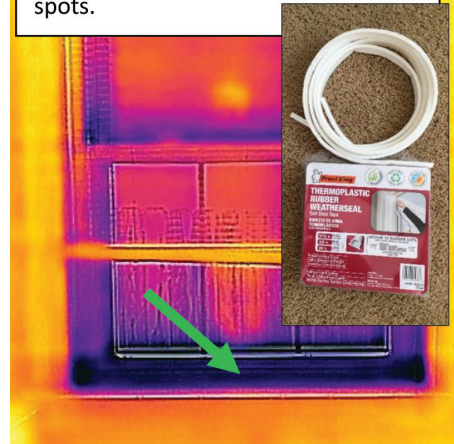
Drafty Door

Drafts often occur underneath doors. Add door sweeps to both regular and screen doors and check that existing door sweeps are in good condition.



Leaky Windows

Even new windows can let air pass through around the edges. Add extra weather stripping along drafty spots.

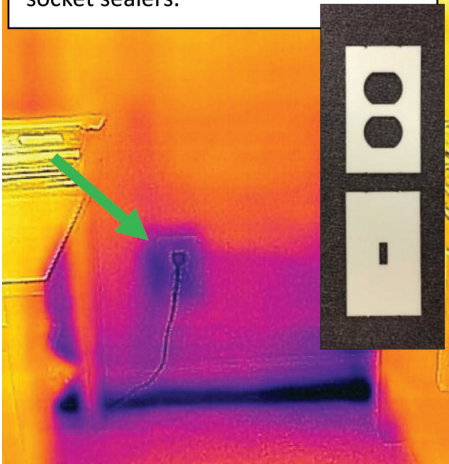


4. More Energy Saving Opportunities

For more energy saving opportunities that you can identify with a thermal imaging camera, and for before and after photos of the projects above, visit our website at mygreenmontgomery.org/project/camera

Leaky Outlets

Exterior wall electrical outlets are often uninsulated. Block airflow with socket sealers.



Electronics on Standby

Electronics can still use electricity when not being used. Install a smart power strip to stop electricity from flowing to unused devices.



Questions or comments?

Contact us at energy@montgomerycountymd.gov