

How to Repair an Air Leak

STEP BY STEP GUIDE



When you have air leaks in your windows, you will likely notice that rooms are drafty, or your energy bill is higher than usual. Your home can suffer from air leaks when outside air enters through small cracks or openings in your windows. During the winter, cold air can enter your home, and warm air will escape, and vice versa in the summer. In this step by step guide, we will walk you through three ways to spot and air leak and how to fix it.



EXTERIORS | INTERIORS | ADDITIONS



STEP

1

Find the Leak

To fix an air leak, you will have to figure out where it is coming from. Sometimes the cause of the leak is not immediately apparent. Follow the steps below to [identify the air leak](#) before you purchase anything to seal it.

- **Check for Light and Feel for Drafts**

The easiest way to check for an air leak is to look and feel around your windows. First, walk around the outside of your house and see if there are any obvious cracks or holes where the building materials from your siding and window meet. During the day, go inside, turn off the lights in your home, and look to see if there is daylight coming through on the sides or at the bottom of your window. On a cold day, hold your hands an inch away from the window frame and feel for any drafts.

- **Conduct a Flame Test with a Candle**

If you can't see or feel air leaks, then conduct a flame test with a candle. Light the candle and trace the outline of your window. If the flame and smoke pull in one direction, then you have found an air leak. If it isn't clear whether the smoke is moving or not, have someone stand outside the window with a hairdryer, again tracing the outline of the window. If the candle flickers, then the window is allowing air through. You can also do this test with an incense stick that lets off more smoke and may be easier to see.

- **Rent a Thermal Camera**

If you are having a hard time finding air leaks even with the smoke test, then you can also rent a thermal camera from your local hardware store. Thermal imaging cameras read infrared radiation to find temperature and heat differences. You will see a gradient of colors, with warmer areas displayed as brighter colors and cooler ones as darker colors. This view makes it easy to see where the air is coming through a window or door frame. The thermal camera can even help you detect energy leaks in your ductwork and roof as well as missing insulation all around your house.

STEP

2

Gather the Right Supplies

You can find these simple home improvement supplies at any major retailer or online at a relatively low cost.

Window Frame and Grille Air Leak

- Soap and water
- Putty knife
- Caulk
- Caulking gun

Lower Window Rail and Window Sill Air Leak

- Soap and water
- Weatherstripping





STEP

3

Seal the Air Leak

Once you have identified the location and gathered supplies, fixing small air leaks is a DIY project that won't take up your entire weekend.

WINDOW FRAME AND GRILLE AIR LEAK



1. Clean the area

Clean all areas to be caulked with soap and water, removing paint or old caulk with the putty knife. Wait for the area to dry so you do not seal in the moisture.

2. Apply caulk

Apply caulk to the areas to be sealed at a forty-five-degree angle in a continuous stream. Make sure the caulk sticks to both sides of the seam.

3. Ensure caulk is even and smooth

If caulk leaks out of the crack, push it back in with the putty knife. If the caulk shrinks, reapply in a smooth line that seals the crack completely.



LOWER WINDOW RAIL AND WINDOW SILL AIR LEAK

1. Clean the area

Clean the area where you will apply the weatherstripping with soap and water and let it dry.

2. Measure the window

Measure the window width and cut the weatherstripping to size.



3. Apply weatherstripping

Apply weatherstripping to both surfaces and ensure that the material compresses to form a seal when the window is shut.



Consider Window Replacement

It is important to note that fixing an air leak is a temporary solution. Caulking and weatherstripping will stop an air leak, but once you have a leak the window is no longer energy-efficient, and you should consider replacement.

[Brothers replacement window installers](#) have decades of experience working with all shapes, sizes, and styles of windows. From straightforward window replacement to unique designs, the windows we install are custom made for your home so that they fit the opening perfectly.

