

# What's a Furnace Heat Exchanger

## Why are they so expensive to replace?

The heat exchanger is the part in your furnace that's directly responsible for heating your home's air.

The part itself is a series of steel coils, located in the heart of the furnace.

Because the heat exchanger is vital to the entire furnace operation, it is naturally the most expensive part. Replacing a heat exchanger is also time consuming; it can take a team of technicians up to 10 hours to remove the old heat exchanger and replace it with a new one.

When you combine the price of the heat exchanger itself plus the labor time needed to install a new one, replacing a heat exchanger turns out to be one of the most expensive furnace repairs

## How do I know if my heat exchanger really needs to be replaced?

After seeing how expensive it is to replace the heat exchanger, you probably want to know how to verify you actually need to invest in a new one.

**You'll know you need to replace the heat exchanger if it's**

**cracked.** Visible cracks in the heat exchanger mean that harmful fumes (such as carbon monoxide) are leaking out of the metal coils, which could result in these dangerous gases mixing into your home's airstream.

Because of that safety hazard, if the heat exchanger is cracked, it means that you'll need to replace yours with a new one.

That said, you should always ask a technician to show you a photo or directly point to the cracks in the heat exchanger if they claim yours needs to be replaced. Unfortunately, some unscrupulous HVAC companies try and convince homeowners they need to replace a heat exchanger when there really is no need.

Some technicians may look for secondary signs that point to a cracked heat exchanger, such as soot buildup on the coils or high carbon monoxide levels in the air around the furnace, but these should always be confirmed by a visible crack in the coils.

## **Is it better to replace my furnace entirely or just the heat exchanger?**

Let's say it turns out you really do need a new heat exchanger.

In that case, you have two options:

1. Replace only the heat exchanger
2. Replace the entire furnace

We'll explain when you should pursue each option.

### **When to replace only the heat exchanger**

Furnace manufacturers include a warranty on the heat exchanger that generally lasts up to 20 years. If your furnace is still under warranty, the cost to replace the heat exchanger will be discounted or even covered in full. In that case, your best option would probably be to replace only the heat exchanger.

However, furnace manufacturers may not honor the warranty if:

- Your furnace hasn't been regularly maintained by a licensed professional
- Your furnace was never registered with the manufacturer

To know if your furnace warranty is still valid and if a heat exchanger replacement will still be covered, you can consult the warranty information for your furnace. (You can find the warranty information by searching for your furnace model number on the manufacturer's website, or by contacting the manufacturer directly.)

### **When to replace the entire furnace**

If your furnace warranty has expired or isn't valid anymore, it's probably better to replace the furnace entirely rather than to just replace the heat exchanger. Since your furnace is likely nearing the end of its lifespan (heat exchangers generally crack in older systems), it would be more cost effective to invest in a new unit. That way, you won't pour money into an old furnace that will likely need to be replaced soon, anyway.