

# **WI-FI WORRIES?**

The materials used to construct your home, your neighbor's networking activity, the layout of your furniture, even certain kitchen appliances can impede the performance of a home network. Basically, anything in your line-of-sight negatively affects your Wi-Fi signal. But what are the things we typically miss? Keeping your eyes open for these and other potential bottlenecks and can help you avoid Wi-Fi complications.

### **Top 9 Obstacles In Your Home That Are Killing Your Wi-Fi Signal**

## **MIRRORS**

### METAL/FOIL BACKINGS REFLECT LIGHT

Most mirrors are manufactured with a reflective metal coating on the back that is made to reflect light. The reflective coating also destructively interferes and reflects your Wi-Fi signal causing major dead spots.

## **GLASS WINDOWS**

#### ENERGY-EFFICIENT WINDOWS BLOCK WI-FI

Low-E-rated windows incorporate a metal-based coating to reduce heat-flow through the window. This coating is intended to help with energy consumption but blocks your Wi-Fi signal. Good for the environment - bad for your Wi-Fi.



## WATER

#### WATER AFFECTS RF ENERGY

Not only does water block radio waves, water also absorbs microwave

signals. Fish tanks, for example, create a shadow, preventing the signal from going through it. The closer the aquarium, the bigger the shadow will be. Thankfully it doesn't hurt the fish.

## **INTERIOR/EXTERIOR WALLS**

#### WI-FI PENETRATES WALL MATERIALS

Materials such as tile, metal, stone and brick all affect Wi-Fi signals, but concrete is one of the worst building materials for wireless signals to pass through. Some walls can be up to 12-inches, 14-inches or 16-inches thick, creating slow or intermittent connection issues.





## **HOUSEHOLD APPLIANCES**

#### MICROWAVES AND CORDLESS PHONES

The challenge is that microwave ovens and Wi-Fi operate on the same frequency. Even the tiniest amount of leaked radiation can cause massive interference. Other sources of interference include toaster ovens, baby monitors, radio or touch-controlled lamps.

## **ELEVATORS**

#### METAL ELEVATORS REFLECT WI-FI SIGNALS

Because an elevator is a fully enclosed metal box, the signals get attenuated and it acts as a Faraday cage. Elevators generally contain sheet metal that reflects and refracts Wi-Fi, and the steel frame doors can also absorb the signals. Even more, the large concrete shaft surrounding the elevator acts as a deterrent.





## **NEIGHBOR WI-FI ACTIVITY**

CHANGE YOUR ACCESS POINT

If multiple wireless networks are competing for the same channel, this can cause problems. However, it's an easy fix - you just need to change your access point's wireless channel. Many do this automatically, but if you're having issues, you may want to manually program the access point.

## **HEATED / DENSE FLOORING**

#### VERY LITTLE RF TRAVELS BETWEEN FLOORS

Very little RF energy travels between floors in modern homes. Wi-Fi has a very hard time passing through marble, concrete or very thick/dense floor materials. In addition, heated flooring absorbs, reflects and scatters radio waves causing massive Wi-Fi signal interference.





## **INTERIOR DESIGN**

#### FURNITURE AND ART AFFECT WI-FI SIGNALS

To create the perfect combination of look and feel with interior design involves many different materials, some of which disrupt Wi-Fi signals. Adding more access points is the best way to ensure stable, speedy Internet coverage throughout your home.



For answers to all of your Wi-Fi questions, call us at (661) 383-9100 Or visit our website at www.accessnetworks.com