

# SIDING WITH SAFETY

## *Understanding the Fire Performance Benefits of Vinyl Siding*

Vinyl siding manufacturers are committed to keeping you safe by offering products with a low fire risk. Vinyl—also known as polyvinyl chloride (PVC)—is created using two simple building blocks: chlorine from common salt and ethylene from natural gas. Due to its chlorine base, vinyl siding does not ignite quickly and is inherently flame-retardant.



### *Choose Protection:*

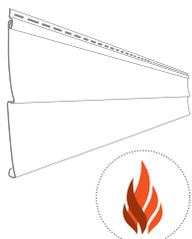
## MEET OR EXCEED THE INDUSTRY STANDARDS FOR SAFETY

According to the US Census Bureau, vinyl siding is the most common choice for exterior cladding in residential homes in the United States and Canada. It's not only a popular choice, it's a safe choice. For years, vinyl siding has been a recognized material that meets or exceeds building codes and industry standards for safety. Plus, vinyl siding is approved for use in all types of construction<sup>1</sup> including non-combustible rated structures up to 40 feet tall, one hour fire-rated assemblies, wild fire zones, and other fire resistive construction.

### *Harder to Ignite, Easier to Extinguish*

All organic materials—i.e., anything containing carbon—will ignite. But materials with higher ignition temperatures are naturally safer.

#### IGNITION POINTS:



**POLYVINYL CHLORIDE**

PVC WON'T IGNITE FROM ANOTHER FLAME, UNTIL IT REACHES ABOUT

**730°F** (387°C)



**FRAMING LUMBER**

COMMON FRAMING LUMBER WILL IGNITE FROM A FLAME AT

**500°F** (260°C)



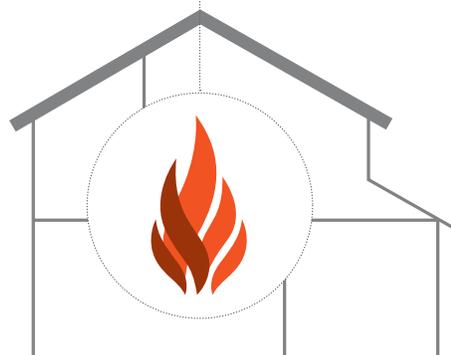
# THE FACTS ABOUT RESIDENTIAL FIRES

The facts show that exterior cladding is involved in only a fraction of all residential fires. Most residential fires begin inside the home and are contained within the structure of origin.

According to a report from the National Fire Protection Association (NFPA), **fewer than 3% of all fires go beyond the original source inside residential structures and fewer than 2% of these occurrences are related to the exterior wall surface.** In fact, only 4% of all residential fires start on the outside of the structure, but still do not necessarily originate with the exterior cladding.



NEARLY  
**96%**  
of all home fires start on the inside and have nothing to do with the cladding.<sup>2</sup>



## PVC SLOWS FLAMES FROM SPREADING

PVC, the primary ingredient in vinyl siding, doesn't release a lot of energy when it burns and will not readily spread flames on its own.<sup>3</sup> Vinyl siding also needs unusually high amounts of oxygen to burn and stay burning, so it extinguishes more easily.

Plus, when any organic material burns, it releases smoke that contains many different combustion products—including toxic gases. There is no research to substantiate claims that vinyl materials release unusually toxic combustion products.<sup>4</sup>

## *I-Code Approved Recognized for Safety*

Vinyl siding, insulated vinyl siding, and polypropylene siding meet the stringent requirements of building codes across the United States (and Canada). Properly installed certified vinyl products must meet or exceed various ASTM standards to ensure they can withstand high winds, and resist heat, cold, and moisture.

**Learn more about I-Code requirements at [vinylsiding.org](http://vinylsiding.org).**



1. International Code Council (ICC), Exterior Walls, 2008  
2. National Fire Protection Association Fire Analysis and Research Division, Home Structures Fires, April 2013.  
3. Results of ASTM E162-06 test, Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source  
4. Toxic Chemical Release Inventory Reporting Forms and Instructions, EPA, 2012.