

CASE STUDY

LIFESAVING MATERIALS

Our Portaflame™ and Securoc™ flame retardants slow down the rate at which fire burns and reduce smoke toxicity, dramatically increasing the chances of escape from a burning building.

Modern synthetic materials mean that house fires spread very quickly. Thirty years ago, you had around 17 minutes to escape a house fire, but today it is less than 5 minutes before flashover conditions take hold and a room becomes engulfed in flames. As the pace of urbanisation increases and more people are exposed to combustible materials, we need innovative new solutions to make buildings and transport safer.

When added to materials such as plastics, fabrics or electrical wiring, our Portaflame™ and Securoc™ flame retardants slow down the rate at which a fire propagates, extending escape time from 5 minutes to up to 15 minutes.

Sibelco's Flame retardant solutions are based on alumina trihydrate (ATH), hydromagnesite / huntite and colemanite. These materials efficiently release water molecules in an endothermic reaction. This not only slows down the spread

of fire but also suppresses smoke, the inhalation of which is the primary killer in house fires. All of our flame retardant solutions are halogen-free, addressing growing health and environmental concerns associated with halogenated flame retardants.

We are working with our customers to continuously enhance our range of flame retardants, developing material solutions that create safer environments for everyone.



Smoke and toxic gases are a **bigger killer** than flames

2 mins



A house fire can become **life-threatening** in just 2 minutes and within 5 minutes an entire room can be engulfed in flames

80%



Approximately **80%** of all deaths from fire occur **in the home**