

# TODAY'S FLASHOVER

Think you know flashover? Think again. Today, modern furnishings and building materials are producing deadly fires that burn faster and hotter. That's why modern flashover training is essential and could save your life.

## FASTER

50 years ago, the average time it took a home fire to transition to flashover was **29 minutes and 30 seconds**. Today's homes transition to flashover in **3 minutes and 40 seconds**.<sup>1</sup>

When ventilation is introduced, the time from the onset of firefighter untenability until flashover can be less than **10 seconds**.<sup>2</sup>

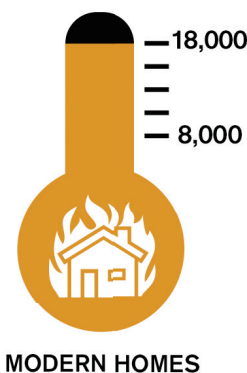
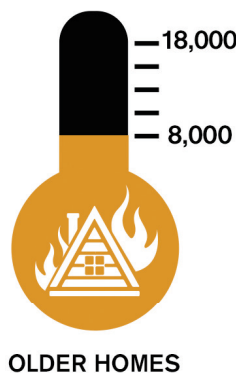


## HOTTER

Wood, cotton, and paper, materials more commonly found in house fires in the 1950s, give off about **8,000 BTUs** per pound when burned.

Polyurethane, the plastic often used in today's soft materials like cushions and carpeting, gives off **12,000 BTUs** per pound when burned.

Polystyrene, the hard plastic used in TVs, toys, and other plastic items in modern homes, gives off **18,000 BTUs** per pound when burned.<sup>3</sup>



## DEADLY

Flashover is still one of the leading causes of firefighter deaths in the U.S.<sup>4</sup>

Between 2000 and 2012 there were **114 on-duty firefighter deaths** due to being caught or trapped (including flashover).<sup>5</sup>



**114** on-duty firefighters died in flashover-related incidents between 2000-2012.

In the U.S., on average, firefighters receive less than 1% of their training on the topic of fire behavior. Essential training could mean the difference between life and death. [For more education on flashover, visit www.draeger.com/Flashover.](http://www.draeger.com/Flashover)

1. Kerber, S. (2014). *Analysis of Changing Residential Fire Dynamics and Its Implications on Firefighter Operational Timelines*. Retrieved August 11, 2014, from [http://newscenter.ul.com/wp-content/uploads/sites/30/2014/04/Analysis\\_of\\_Changing\\_Residential\\_Fire\\_Dynamics\\_and\\_Its\\_Implications\\_on\\_Firefighter\\_Operational\\_Timelines.pdf](http://newscenter.ul.com/wp-content/uploads/sites/30/2014/04/Analysis_of_Changing_Residential_Fire_Dynamics_and_Its_Implications_on_Firefighter_Operational_Timelines.pdf)  
 2. Kerber, S. (2010). *Impact of Ventilation on Fire Behavior in Legacy and Contemporary Residential Construction*. Retrieved August 12, 2014 from <http://site.ul.com/global/documents/offering/industries/buildingmaterials/fireservice/ventilation/DHS%202008%20Grant%20Report%20Final.pdf>  
 3. Flatley, C. (2005). *FLASHOVER AND BACKDRAFT: A PRIMER*. Retrieved August 12, 2014 from <http://www.fireengineering.com/articles/2005/03/flashover-and-backdraft-a-primer.html>  
 4. U.S. Fire Administration. (2013.) *Firefighter Fatalities in the United States in 2012*. Retrieved August 12, 2014 from [http://www.usfa.fema.gov/downloads/pdf/publications/ff\\_fat12.pdf](http://www.usfa.fema.gov/downloads/pdf/publications/ff_fat12.pdf)  
 5. U.S. Fire Administration. (2013.) *Firefighter Fatalities Statistics and Reports*. Retrieved August 12, 2014 from <http://apps.usfa.fema.gov/firefighter-fatalities/fatalityData/statistics/>