

## BlastLine® HydrocarbonFire™ window

The Fendor Hydrocarbon Fire™ window has been designed to give fire protection from the extreme fire conditions associated with ignited gas and petroleum based products. So called Hydrocarbon Pool Fires emit far higher temperatures, more quickly, than other cellulosic fires where typically timber based products are the main fuel source. The Fendor Hydrocarbon Fire™ window provides valuable time for safe shutdown, evacuation and other safety and emergency measures should a Hydrocarbon pool fire incident occur.

### Common approaches

The common approach of many chemical process sites, where there is a risk of a hydrocarbon fuel fire, is to brick up the windows of buildings close to the hazard.

This is not only unpopular with employees with long term exposure leading to potential health and motivational issues but it can also create its own process safety issues, as the ability to visually checking of hazards is a valuable asset.

Quick View	
Product	Fendor HydrocarbonFire™ window is a fire rated, thermally efficient double glazed unit.
Application	Petrochemical sites, power stations, refineries, chemical works
U-Values	U value (U <sub>w</sub> ) 1.9 W/(m <sup>2</sup> K) or lower
Weather Test	To meet current British and European Standards
Warranty	Warranty of up to 25 years (deliberate damage excluded)
Quality	Designed, manufactured and installed in accordance with ISO 9001 (certificate available)



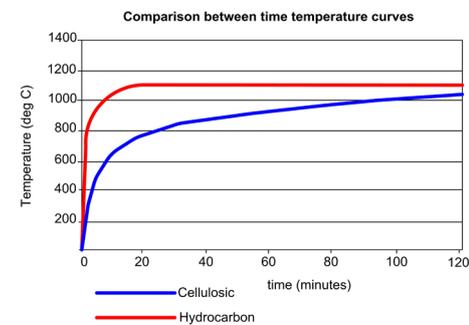
Hydrocarbon Fire 1 Minute



46 Minute Insulation



66 Minute Integrity



Hydrocarbon Temp. Curve

## HydrocarbonFire™ window features

### Test Evidence

The Fendor HydrocarbonFire™ window was tested by Exova Warrington Fire under the BS 476 part 20, time-temperature curve for Hydrocarbon. The results indicate that the insulation of the window was maintained for 50 minutes. This means that the average temperature of the non exposed side of the window was less than 140°C above the ambient temperature. This in spite of the exposed face of the glass being subjected to temperatures of 1100°C. The window continued to prevent the spread of flame for over 60 minutes.

### Implications

This innovative development presents a unique opportunity for the chemical processing industry to re-evaluate its building stock with a view to improving working conditions for its employees. Formerly bricked up windows can be opened up again and new buildings can be designed with the Fendor HydroCarbon™ window. Windows are no longer the weakest part of buildings and now they can offer excellent resistance to the spillage of inflammable hydrocarbons, offering extra time for safe evacuation and shutdown.

### Blast Resistance

The Fendor HydrocarbonFire™ window will also resist blast over pressure. Details available on request.

### Other Products

Fendor's BlastLine range comprises of an extensive portfolio of blast resistant doors and windows to protect against petrochemical and terror threat events.

Product Data	
Material	Manufactured using high grade fire rated steel
Orientation	Fixed pane
Sustainability	All materials used are environmentally sustainable and can be fully recycled supporting building energy performance criteria
Finish	Full RAL/BS powder range/dual colour/bespoke finish
Glazing	Fendor FireLine™ HydroCarbonGlass™

Product Testing/Standards	
Standard	In accordance with Approved Document L
Weather	To meet current British and European Standards
LT	67% light transmission (LT)
Glazing	Fendor FireLine™ HydroCarbonGlass™
Specific	BS 476 part 20 (hydrocarbon)