



Security Direct
property protection

- Free Advice
- Free Quote
- Nationwide

Fire Shutter Buying Guide



SECURITY DIRECT
www.securitydirect.uk.com

Fire Shutter Buying Guide

Fire Shutters were not very common 10 years ago. However, they are now being specified more and more as Legislation has tightened particularly on new and renovated buildings, but knowledge is limited. So the Security Direct Buyer's Guide should help you understand the options that are available and hopefully make it easier to specify your actual requirements.

WHAT IS A FIRE SHUTTER?

A Fire Rated Roller Shutter has been specifically designed to stop the spread of a Fire. The shutters are independently tested by Warrington Fire Research to latest standard BS EN 16034:2014 & CE Marked to BS EN 13241-1:2003.

From the 1st November 2019, fire products Tested to 2008 Certification and not CE marked will be prohibited by law.

A Roller Shutter is **NOT** a Fire Shutter unless it has been tested and certified. We have known companies to supply a normal roller shutter and say it should hold back a fire for 30mins. Lives and Property is at stake, **PLEASE DO NOT FALL FOR THIS!!**.

HOW ARE FIRE SHUTTERS TESTED?

The Grenfell inquiry has highlighted the issues with all fire rated products in the UK and how they are tested. The government has basically improved the standards on how fire products are tested and installed. All Fire Rated Shutters and Steel Doors in the UK have had to be retested to the new fire standards BS EN 16034:2014 and must be CE Marked to BS EN 13241-1:2003. This is because compliance with the Construction Product Regulations (EU) 305/2011(CPR) becomes mandatory for both manual and powered fire-resisting industrial doors on this date.

All our Fire Rated Shutters and Steel Doors have been independently tested, approved and certified by Exova Warrington Fire Test facility. The testing has become a lot stricter, the main differences are:

- The whole product has to be tested, including any options.

Previously, the steel door could be certified if it was fitted with a door closer that is independently tested, but they were never actually tested together.

- The testing now stipulates what type of structure and fixings are required for the product to be certified.

Previously, it was a Grey area if the product was fitted to a fire rated stud walls. This can no longer happen, it has now been stipulated that it must be masonry or structural steel.

- The product MUST fail closed under its own steam. You can no longer rely on people's intervention in closing the product.

Previously, you could have a fire shutter on a normal open and close switch and it wasn't wired into the fire alarm. This was common in small village halls, where there may not have been a fire alarm or the shutter was closed 95% of the time or budget was very limited. The problem with this, is you are relying on someone closing the shutter when evacuating the building if they didn't the shutter would stay open and the fire shutter would be useless.

If you would like to read more on the Fire Testing and New Regulations – [CLICK HERE](#)

WHAT TYPES OF FIRE SHUTTER ARE AVAILABLE?

There are basically Two types of Fire Protection available, both of which are very different;

FIRE SHUTTERS - This is a specially designed Steel Roller Shutter which can be used on a daily basis, just like a normal Roller Shutter for both Fire and Security Protection. The Fire Shutter can be wired into a Fire Alarm or Independent Detector.

- **COMPACT FIRE SHUTTER**

The compact Fire Shutter is ideal for smaller openings ie; Kitchen Serveries and Reception Counters. The box is smaller, neat and compact because it uses a single phase tube motor, located inside the barrel. The compact Fire Shutter is tested and certified to new fire standards BS EN 16034:2014 and is CE Marked to BS EN 13241-1:2003. It's available in 30mins, 60mins, 120mins and 240mins Fire ratings to suit all levels of fire protection.

- **INDUSTRIAL FIRE SHUTTERS**

Our industrial Fire Shutters are designed for large openings (up to 12m wide) or in locations where a power source is limited. They use a Single Phase (240V) or 3 Phase (415V) Chain Drive Industrial motor that sticks out from the endplates making the box size very large, even on small openings. The Industrial Fire Shutter is tested and certified to new fire standards BS EN 16034:2014 and is CE Marked to BS EN 13241-1:2003. It's available in 60mins, 120mins and 240mins Fire ratings to suit all levels of fire protection.

FIRE CURTAINS - This is a bit like a roller blind which has a Kevlar fabric curtain. The advantage of a Fire Curtain is it has a smaller box at the top, compared with a Fire Shutter. The biggest difference is that a Fire Curtain is always in the Open position and the only times it closes is in a fire situation. A Fire Curtain cannot be used on a Daily basis.

WHAT MATERIAL ARE THE FIRE SHUTTERS MANUFACTURED FROM?

Fire shutters are manufactured with from Galvanised Steel. The Box, Guides and curtain is a Galvanised Steel Solid Lath. The thickness or gauge of lath will depend on the fire rating required. The standard finish on the Steel Lath is Galvanised finish, which can then be powder coated at an additional cost.



SINGLE SKIN STEEL LATH



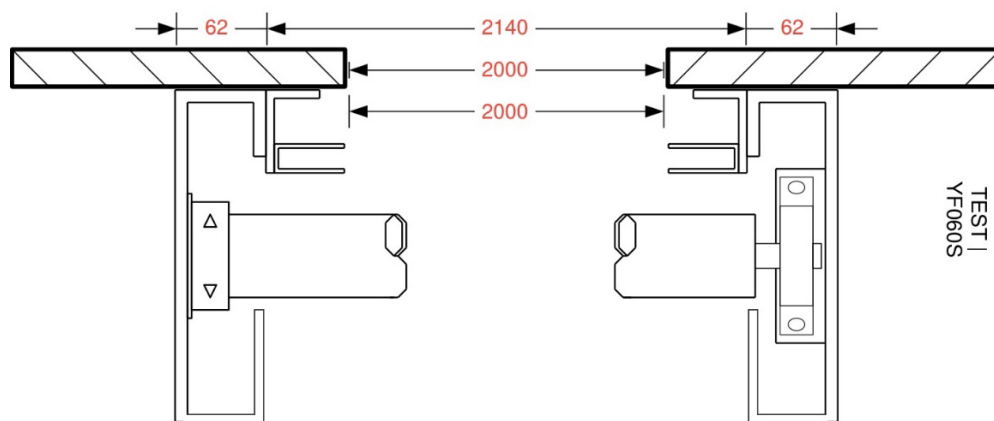
FIXING REQUIREMENTS?

Under the new Regulations that came into place on the 1st November 2019, fire shutters can ONLY be fitted to 6mm Structural Steel or Masonry. These then have to be fire rated to the same fire rating as the fire shutter.

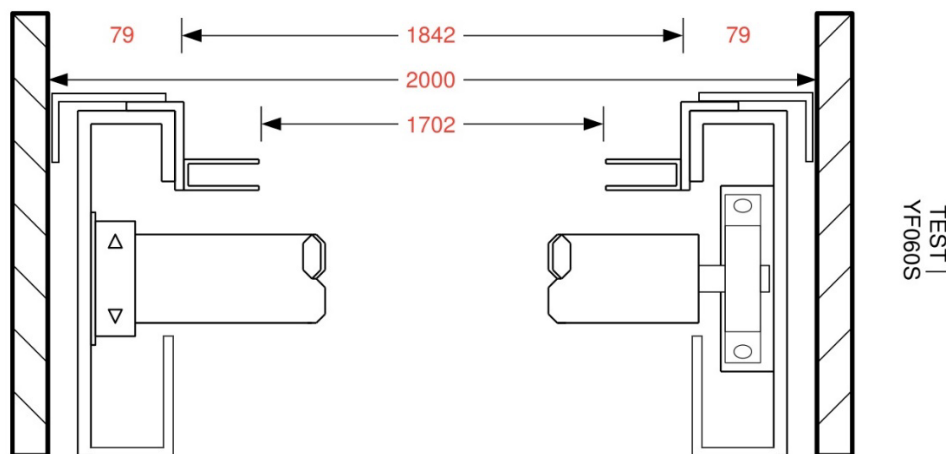
PLEASE NOTE:- Under the new testing regulations, fire shutters have not been tested to Stud Walls, so they are NOT certified.

Fire shutters can be fitted on the Face of the opening (Shutter is bigger than the opening and leaves the opening clear) or Recess Fixed (Fitted within the opening). Most Fire Shutters are face fixed as its neater option. When fitting the shutter within the opening the shutter is fitted with wide angles which allow the shutter to expand in a fire situation and the box reduces the height of the opening.

STANDARD FACE FIX GUIDE DETAIL – INSET GUIDES



STANDARD REVEAL FIX GUIDE DETAIL



WHAT TYPE OF OPERATION?

MANUAL OPERATION

Manual Fire Shutters no longer comply with the new fire regulations that came into force on the 1st November 2019.

The old Manual Fire Shutters still used a motor gearing with a lead joint on the brake. When the lead joint melts at 680 then it realises the brake and the shutter drops. They also have a weighted bottom rail which gives the shutter extra weight to ensure it free falls into the closed position. They are designed to be in the up position at all times and only drop when the heat around the shutter is above 670C.

Manual fire shutters could not be tested easily by end users and require Fire Shutter engineers to attend testing which is expensive. It is a legal requirement that fire shutters are tested at appropriate intervals.

ELECTRIC OPERATION

COMPACT FIRE SHUTTERS

The compact Fire Shutters are ideal for smaller openings ie; Kitchen Serveries and Reception Counters. The box is smaller, neat and compact because it uses a single phase tube motor, located inside the barrel.

As standard it comes with a Battery Backup, so the shutter can self close in the event of a power failure. A manual override is fitted to the shutter, so the shutter can be manually raised by the fire brigade if required. The fire shutter has to be wired into a Fire Alarm System or an independent heat detector.

INDUSTRIAL FIRE SHUTTERS

The Industrial Fire Shutters are designed for larger openings (up to 12m wide) and are tested to stop the spread of fire from 1-4 hours. The industrial fire shutters use Single (240V) or 3 Phase (415V) Inline Industrial Motors, depending on the size of the opening.

The Industrial Fire Shutters are supplied with a Fusible Link, which melts at 67 degrees and will automatically close the shutter. It also comes with a Solenoid Release, which allows the shutter to be connected to the fire alarm.

CONTROLS FOR FIRE SHUTTERS

The majority of Fire Shutters are connected into a Fire Alarm System. When the fire alarm is activated the roller shutter closes automatically.

Where there is no Fire Alarm system, then they can be connected to a local Heat or Smoke detector, which is fitted next to the fire shutter. If the smoke or heat detector is activated, then it closes the shutter. This is used on doorways and when there is no fire alarm system available.

If the fire alarm does not provide any Audio or Visual Warning, then you MUST fit Audio Visual Warning Panels to the roller shutters. We would advise that these are installed on both sides of the openings. These Audio Visual Panels also have the facility for time delays and provide staged closing.

On our Deluxe Panel we have the option of emergency escape. If someone gets trapped behind the shutter, they can press the escape button and the shutter will raise. After a set period, it will then auto close. This is recommended when fitted over doorways.

HOW TO OPERATE IN THE EVENT OF A POWER FAILURE

Sometimes we get a power failure and you may need to still open or close the roller shutter. We have Three types of Manual Overrides;

COMPACT FIRE SHUTTER

Winding Handle - With the new regulations, manual override on compact fire shutters was made compulsory. The idea is that the Fire Brigade can open the fire shutter, if they need to get to the other side.

This is simply a winding handle with a Hex Bar attached which you feed into the shutter box and locate into the motor drive. You then simply wind the shutter open or closed, this can be a slow process.

Battery Backup Unit - With the new regulations Battery Backups on compact fire shutters was made compulsory. This is to ensure the fire shutter would still automatically close if the power fails.

This is a Large Battery that is constantly plugged into the power source. The shutter is then wired into the Battery Backup. If the Power fails, the shutter draws its power from the Battery. The batteries are only designed to give a few operating cycles, enough to lower the shutter in the event of a power failure.

INDUSTRIAL FIRE SHUTTERS

























Chain Override - The industrial motor comes with a chain override, which is connected to the motor drive. To operate you have to deactivate the motor drive and activate the chain drive. You simply then pull the chain up or down.

WHAT FINISHES ARE AVAILABLE?


The Fire Shutters come in a Galvanised Finish as standard. We can then Powder Coat this any BS or RAL Colour at an additional cost.

We carry a large range of colours in stock, which can be seen on our website. If we don't have the colour in stock, then we can buy it in especially at an extra cost.

























BAND A - For complete shutter (or curtain) using a colour listed in the band below.

 Beige RAL 1001	 Oyster White RAL 1013	 Gentian Blue RAL 5010	 Light Blue RAL 5012	 Moss Green RAL 6005	 Anthracite RAL 7016	 Pale Grey RAL 7035
 Agate Grey RAL 7038	 Chestnut Brown RAL 8015	 Chocolate Brown RAL 8017	 Grey White RAL 9002	 Graphite Black RAL 9011	 Grey Beige RAL 1019	 White RAL 9010
 Iron Grey RAL 7011	 Graphite Grey RAL 7024	 Grey Brown RAL 8019	 Traffic Black RAL 9017	 Grey Goose BS 00A005	 Brown BS 08B29	
 Cream RAL 1015	 Brown RAL 8014	 Black RAL 9005	 Brilliant White RAL 9016			

BAND B -

 Ivory RAL 1014	 Oxide Red RAL 3009	 Royal Blue RAL 5002	 Navy Blue RAL 5011	 Pale Blue RAL 5015	 Fir Green RAL 6009	 Pale Green RAL 6021
 RAL 9001	 Off White RAL 9003	 Signal Black RAL 9004	 Papyrus White RAL 9018	 Sand Yellow RAL 1002	 Olive Yellow RAL 1020	 Signal Blue RAL 5005
 Dark Grey RAL 7015	 Pale Grey RAL 7047	 Clay Brown RAL 8003	 Red Brown RAL 8012	 Mahogany RAL 8016		
 Grey Blue RAL 5008	 Pigeon Blue RAL 5014	 Water Blue RAL 5021	 Ochre Brown RAL 8001	 Silk Grey RAL 7044		

BAND C -

 Green Beige RAL 1000	 Dafodil Yellow RAL 1007	 Yellow RAL 1018	 Signal Orange RAL 2010	 Signal Red RAL 3001	 Dark Red RAL 3011	 Traffic Red RAL 3020
 May Green RAL 6017	 Mint Turquoise RAL 6033	 Telegrey RAL 7046	 Olive Brown RAL 8008	 Orange brown RAL 8023	 Lemon Yellow RAL 1012	 Night Blue RAL 5022
 Dark Blue RAL 5003	 Capri Blue RAL 5019	 Ocean Blue RAL 5020	 Leaf Green RAL 6002	 Black Olive RAL 6015		
 Distant Blue RAL 5023	 Rosedale Green RAL 6011	 Copper Brown RAL 8004	 Beige Brown RAL 8024	 Poppy Red BS 04E53		