









A Hand Book on

Roller Shutter Doors



TABLE OF CONTENTS

Industrial Door Manufacturing By Kaiser Doors Limited 3
Fire & Security Doors for Safety & Protection
PVC Strip Doors From Kaiser Doors
Overhead Doors - Design & Application
Multipurpose PVC Strips for Doors and Windows
High Speed Energy Saving Doors 1
Industrial Doors By Kaiser Doors Limited
Energy Saving Doors- Reduces Energy Costs and Contamination 14



INDUSTRIAL DOOR MANUFACTURING BY KAISER DOORS LIMITED

If you are looking for suitable doors for use in an industrial or commercial unit, you can do no better than consult Kaiser Doors Limited, who provide an unrivalled, full service capability in the supply, installation, repair, and maintenance of all types of commercial and industrial doors.

Kaiser Door's products cater to the food processing, distribution, engineering and retail industries with the scope of works ranging from a door repair to the fitting out of newly built factories.

Kaiser manufactures both traditional single-skinned and twin-skinned roller shutter doors. Our Roller Shutter Doors consist of a curtain of interlocking slats. This curtain of slats, which forms a hinge along its length, can be rolled up or down onto a revolving spring loaded barrel mounted on steel support brackets. This rolling mechanism can be enclosed in a canopy hood. A bottom rail is fitted to the curtain and enables us to add handles and locks as required. Side channels and endlocks are provided to prevent the sideways movement of the curtain especially during high winds. Options include manual or power operated, a full range of lath options such as perforated, punched and lattice, powder coated and colour variants, additional security enhancements and built-in pedestrian doors and vision panels.

Kaiser's High Speed Doors are used to control expenditure on energy, as well as noise and contamination levels. With high operating speeds they reduce energy costs with quick capital payback, create a more comfortable working environment and improve productivity due to markedly reduced operating times. Kaiser's High Speed Doors can be placed within or on the exterior entrance of a factory.

Kaiser's PVC Strip Curtains can also be used within or on the exterior entrance of a factory. PVC Strip Curtains reduce draughts, heat loss, airborne pests, pollutants and



noise and enable visible access for pedestrians and vehicles. PVC Strip Curtains are cost-effective, easily repaired and require little maintenance.

Kaiser Doors also supplies and installs a full range of loading bay equipment, including dock levellers, shelters, lighting, steps, vehicle restraints and alignment guides, bumper supports, door protection bollards and dock seals, shelter aprons and curtains. These enable rapid loading and unloading of goods at factories and other industrial units.

To get information on the pricing details for each product, you can request an online quotation at the Kaiser Doors site. You can also download data sheets, specifications and order forms from our web site.

If you are on a lookout for suitable Industrial Doors for your factory, why not get in touch with us at Kaiser Doors.



FIRE & SECURITY DOORS FOR SAFETY & PROTECTION

Whatever your building type we have products that satisfy current building requirements. Our experienced technical staffs are always on hand to offer a swift response to your queries regarding prices or specification and with a wide range of doorsets and hardware held in stock we can offer a quick turnaround from initial enquiry to delivery to site.

The level of protection of our fire door product range spans from thirty minutes to four hours and includes a two hour rated sliding steel door. There are also four levels of security doors providing a protection level from opportunistic attack with light hand tools to a determined attack with hand and power tools. CNC machining techniques allow for a high level of consistency and very tight tolerances meaning that you can rely that the doorset you require will meet your individual requirements.

From fire escape doors to sophisticated access controlled entrance systems steel doors are replacing traditional wooden doors in many applications. With the advent of good quality, durable and attractive veneers and laminates into the market the inherent benefits of steel; strength, security and durability can be merged with the aesthetic design appeal of timber of offer doors that can protect from fire an theft whilst also withstanding the day to day rigours of rusting, warping or rotting and also withstand infestation by vermin and insects.

PVC STRIP DOORS FROM KAISER DOORS

Strip doors and strip curtains are overlapping PVC strips mounted in door openings. These are generally used in places where usage of a solid door is not feasible i.e. there is a heavy foot and machine traffic though that passage.

Strip doors and strip curtains are available in standard clear that provides for maximum visibility whilst double ribbed strips can be used to minimise the inevitable scratching of curtains due to forklift traffic. Polar grade strip is available for cold room applications.

Strip doors are great if energy conservation is a big concern. Some of their benefits are:

- ✓ They are excellent noise barriers thus creating better working ambience for the workers.
- ✓ They are very cost effective since they help in conserving energy by preventing heat loss.
- ✓ Strip doors and strip curtains control environment by trapping the warm and the cool air. They also prevent dust and other air borne pollutants from spreading from one work section to another. They also maintain optimum ventilation.
- ✓ They have rounded edges and are made of self extinguishing flexible PVC which
 does not support combustion. Hence they help in preventing fire hazards.
- ✓ Strip doors and curtains are easy to install, maintain and repair. They are very versatile and can adapt to a wide range of applications.
- ✓ Strip doors and curtains help solve doorway visibility problems. As a result there are fewer doorway accidents and worker safety is enhanced. The PVC strips are available in various colours which can be used to mark entrances and restricted areas.

Strip doors and strip curtains from Kaiser Doors are used in industrial and commercial applications such as walk-in coolers and freezers, loading docks, conveyor openings, crane



ways, noise barriers, interior partitions, animal doorways, clean rooms, weather protection in shipping and receiving doors and sound control around machinery and between rooms.

Kaiser Doors has a track record of successful strip doors and strip curtains installations in a wide range of applications from pharmaceutical plants, dairies and bottling plants to hospitals, concert halls and supermarkets.



OVERHEAD DOORS-DESIGN & APPLICATION

The sectional overhead door glides up under the roof when opened, allowing free space around the door opening and leaving the door opening completely free. Sectional Overhead Doors offer a versatile, high security insulated door, perfect for any external industrial application. Different options for track arrangements, operating systems, colours, materials, vision panels and colours offer a huge choice for the specifier.

Ideally suited to industrial applications, the door panels are formed from galvanised steel sheets bonded together with high density C.F.C free polyurethane foam to provide a 'U' value of 0.43 W/m2K with thermal break between panels. Vertical and horizontal tracks, hinges, brackets, cappings and hardware are galvanised, with the assembled door running on adjustable galvanised roller carriers, bolted to each individual panel. Each door is counterbalanced by means of tempered helical springs at high level, mounted on bright steel plates with self aligning roller bearings for smooth quiet operation. Cable tensioning devices are fitted as standard to all doors. Rubber seals are fitted to the top and bottom of each door with PVC seals to each side of the opening for protection against weather.

Manual operation is by means of continuous galvanised hand chain, or in smaller cases, 'push up' with pull down cord. All manually operated doors are fitted with a recessed lifting handle and spring loaded shootbolt as standard. Electric operation is by means of 415 volts 3Ph. supply drive motor with emergency disconnection and hand chain or push up operation in the event of power failure.

Our Technical Team are always available to advise the most suitable track arrangement and opening activation.

MULTIPURPOSE PVC STRIPS FOR DOORS AND WINDOWS

PVC strip doors and curtains are cost effective way to have a controlled environment, heat retention, noise barrier and air borne pollution barrier. They are basically made of PVC strips vertically overlapping each other, mounted in door openings. They are generally used at places where having solid doors is not feasible. Due to these reasons, many customers worldwide choose PVC strips for doors and windows.

PVC strips for strip doors and windows are available in standard clear giving high visibility and transparency without interfering with the natural light. Thus, they ensure increased worker security & fewer doorway accidents. They have rounded edges that provide these PVC strips long life and safety.

PVC strips are available in a variety of colours. Doors made of these coloured strips can be installed at entrances or to mark restricted areas. PVC strips for strip doors and windows are made of high quality PVC compounds. This material resists most inorganic acids, bases and salts thus making strip doors and windows most suitable for units such as chemical manufacturing units where caustic environment prevails. Strips will not crack or shatter and remain flexible even when the temperature is well below zero. So you can find strip doors being very frequently used in freezers and walk-in cold storages.

Multipurpose PVC strips for strip doors and windows are made of high quality, low toxic, cadmium free PVC. They are easily operable in the temperature range of -5 degree C to + 60 degree. They have an oxygen index of 23-34% i.e. the percentage of oxygen required to maintain combustion is 23-34%. This makes them self-extinguishing and hence, fire resistant.

PC strip doors and windows have found application in various industrial and commercial setups due to their unique properties. You can spot strip doors and strip windows in



setups like food service plants, pharmaceutical plants, dairies, bottling plants, restaurants, hospitals, school cafeterias and supermarkets.

So, if you need durability for your doors, choose the PVC strips and enjoy long-term efficiency.



HIGH SPEED ENERGY SAVING DOORS

For most companies controlling energy costs is a top priority and High Speed Doors can offer very quick payback periods. Noise and contamination levels can also be substantially reduced. Whether your requirement is for internal use, freezer room, hygienic environment or high wind conditions let us show you how we can save you energy and money. Our High Speed Doors with their high operating speeds reduce energy costs, create a more comfortable working environment and improve productivity due to markedly reduced operating times. As a typical industrial door takes about ninety seconds to complete its operating cycle, with typical usage this means that the door could be open for over three hours per day. Often the aggravation of opening and closing a conventional door means that it might be left open all day. A high speed door operating at one metre per second with a paused time in the open position of 10 seconds would mean that the door would be closed for two and a half hours more per day

However, another very significant advantage of using high-speed doors is that it reduces (dampens) the industrial noise level in the work area. This results in a better working environment. Continual exposure to excessive noise over a long period of time can result in damage to hearing ability. Those working in noisy workplaces, factories, foundries, working with tools, plant and machinery are amongst those most at risk.

INDUSTRIAL DOORS BY KAISER DOORS LIMITED

The requirements of an Industry vary greatly from those of a residential setup. While in a residential usage, product aesthetics are of primary concern along with durability, longevity and cost effectiveness, in a commercial Industrial setup the product needs to be durable, robust and cost effective. However, aesthetics are an added advantage.

To meet the durability, aesthetic, performance and flexibility needs of the Industrial market, we present a complete collection of durable Industrial Doors. The substantial proportions, sturdy hinges, hardware options and overall functional design make these door a great choice for many different commercial applications. These durable Industrial Doors offer high degree of functionality and ease of operation. They are fabricated for versatility so that they suit all kinds of customer requirements and specifications. A perfect product for light and heavy Industrial applications where structural performance, water resistance and thermal performance are critical factors.

For different kinds of commercial environments and their unique requirements we offer various kinds of durable Industrial Doors. Whether your requirements include swinging, folding or manual power sliding doors we cater to all your needs for a robust and durable Industrial Door. We can provide both the usual and the "unusual" style of doors and door designs. You want resistance against fire, water, chemical effects, corrosion, pressure or blast and missile; we offer special customized doors for each of these specifications. Besides if your requirements include acoustical doors, sight dividers, radiation shield doors, car wash doors, traffic doors, or any other kind of doors we can deliver it for you. We fabricate doors in materials like steel, wood, fiberglass, lead, vinyl, canvas, glass and stainless steel.

We have a successful track record of installations in commercial systems as diverse as warehouses, fire stations, municipal buildings, recreational facilities, multipurpose buildings, restaurants, theatres, retails stores, car washes, Government buildings, food



processing plants, Chemical manufacturing plants etc. Our Industrial Doors stand out amongst the rest on firm pillars of Quality, Strength and Security. All our Industrial Doors meet the stringent guidelines laid down for international quality adherence. There are doors are designed to maintain natural airflow and at the same time provide security from forced break-in.



ENERGY SAVING DOORS- REDUCES ENERGY COSTS AND CONTAMINATION

Energy saved is money saved; time saved is a fortune saved. Which is why, energy saving doors is preferred in a variety of environments, to reduce costs. These doors reduce energy costs due to their reduced operating time.

Energy Saving or high speed doors are fast-operated doors, used mainly in industrial setups. It is ideal for high traffic flow, as its fast action ensures maximum heat retention capability. Apart from reducing heat loss, it also helps to control noise pollution and airborne pollution. Due to its controlled environment, reduced repair cost, reduced operating time and improved traffic flow, this door is a popular choice in industrial buildings. It creates a comfortable working environment and improve productivity. In addition to special duty applications for food processing and cold room environments Kaiser Doors offer two main model ranges:

The Kaiser-Pack is designed in response to industry demands for a strongly constructed high speed energy saving door ideally suited for external use. Its fold-up action, coupled with integral steel windbars, ensures that it can resist winds of over 60mph. For the most severe of wind conditions a double skinned honeycomb version is available. It is available in sizes up to 6m x 6m.

The Kaiser-Roll is a high speed energy saving door with roll-up action ideally suited for internal use. Its compact design, thanks to its fully integrated curtain, is the answer to the problem of limited space and it can be installed with the minimum of disruption and site preparation making it the ideal choice for separating internal areas.

Save time, energy and money with our energy saving doors. Right from preparation, installation, wiring, commissioning and staff training to any in-fills/flashings, we ensure that you get the most out of your energy saving doors.

