SeceuroDoor
Industrial Doors

Manual Chain Operation

Installation Instructions

Issued: 16/11/15 MK242B0 Rev: 1

Contents

Safety Obligations

Your safety, your end user's safety and that of the general public are our primary concern. To that end, please read, understand and follow our advice. These installation instructions are intended for qualified and trained installation engineers. Installation, initial operation, servicing, repairs and dismantling of this product should only be carried out by a qualified and trained installation engineer.

Conformity and CE marking

To comply with the Machinery Directive both the shutter and the motor and controller used in the installation must have a **Declaration of Performance** from the manufacturer.

- On completion of the installation the installer must provide a **Declaration of Conformity** and apply a CE mark giving details of the installations to the shutter/motor and controller combination, which is now classed as a machine.
- The installer must issue to the customer a Declaration of Conformity, operating and maintenance instructions on completion of the installation.
- The installer must hold copies of both the Declaration of Performance and the Declaration of Conformity on a technical file for inspection by the relevant authorities.
- If any of the above requirements are not fulfilled, the installation is illegal.

Please ensure for your own safety and peace of mind that whoever installs your shutter is both willing and able to fulfil these requirements; if they are not – do not use them. As a member of the DHF we CAN and WILL install your shutter safely and legally.

General Operating Information

Upon completion of the installation the end user/operator of the shutter must be trained how to operate the product safely paying particular attention to the following points;

- ✓ The shutter should only be operated when in view
- ✓ The operator must ensure there are no objects or persons in the opening before and during operation.
- ✓ The end user must read and follow the instructions given in the operating and maintenance instructions.
- ✓ In the event of a malfunction the end user should follow the instructions given in the operating and maintenance instructions and if required contact the installer.
- ✓ Their responsibility in law to maintain a regular and appropriate service and maintenance schedule.

Recommended service period

The recommended service period for a shutter which will operate on average two cycles per day is once every 12 months. If the shutter will perform a greater number of cycles per day the service period should be shortened accordingly. One cycle is a full open and close sequence.

Warranty/Life Cycles

The warranty for this product is only granted if;

- ✓ The installation is carried out by a competent installation engineer following these instructions.
- ✓ Only original parts are used.
- ✓ No additional objects are attached to the door.
- ✓ Regular and appropriate maintenance checks are performed.
- ✓ For further details on the product warranties please contact us.
- ✓ To comply with the Construction Products Directive, all products have been durability tested for a minimum of 11,000 cycles.

Site installation safety guidance

This checklist is not exhaustive, but a guidance on the minimum amount of safety levels required. Your company needs to comply with relevant safety directives to ensure your and others' safety. Modern building sites are safe places to work and they will simply not allow an installation to proceed if they are not in agreement with your company's proposal for installation.

- ✓ Relevant work site induction procedures are complete. Permits to work have been obtained as required.
- ✓ Method statements and risk assessments have been read and understood.
- ✓ Appropriate Personal Protective Equipment (PPE) to be used.
- ✓ Site specific hazards are understood and mitigated.
- ✓ Work area cordoned as appropriate.
- ✓ Other trades or persons in area to be briefed as to ongoing installation.
- ✓ Where appropriate, use motorised work platforms for working at height (scissor lifter).
- ✓ Keep work area tidy and free from trip hazards, etc.

Installation criteria

The structure of the opening must be adequate to take the weight of the door and suitable to take the appropriate fixings. The strength of the fixings must be enough to support a minimum weight of 25kg per square metre of the roller shutters. Be aware that this is a dynamic loading.

Introduction to the new SeceuroDoor Industrial Door system

The new SeceuroDoor has been designed to be a flexible system, which easily allows different installation configurations from the same fundamental components. Channel angles can simply be reversed on site to have an inset or outset layout. Channel angles are pre-punched to allow adaptability of fitment to the building's structure.

Endplates are laser cut to ensure accuracy and aid bracket fitment. The channels can now be fitted to the pre-punched slots in the channel angles with no reworking of the holes. Top slats are now punched and attached to the curtain rather than the axle.

Fittings kits have been thoughtfully sealed in labelled bags which can be selected as required during the installation process. The labels contain information such as the type of fitting, tool required for the fitting and where the fitting goes. We have also rationalised the number of different tools required for the assembly of our new industrial door.

Tools required for SeceuroDoor assembly

The new SeceuroDoor system has fittings pre-bagged in kits specific to each door type. They are labelled clearly indicating the tools required for each kit. This list gives guidance on the tools required for the assembly of the roller shutter.

Your responsibility as the installer is to have appropriate tools, equipment and fixings appropriate to the installation. Good quality tools are vital to ensure a safe and efficient installation - investment in quality will return productivity dividends. We suggest you have a broad range of tools available.

Recommended tools for assembly

- 13mm ratcheting spanner/socket
- 17mm ratcheting spanner/socket x 2
- 19mm ratcheting spanner/socket x 2
- 24mm spanner/socket x 2
- 27mm spanner/socket x 2 (very large doors only)
- 5mm T-bar allen key
- 6mm allen key
- 8mm allen key
- Large flat bladed screwdriver
- Hand riveter

Roller shutter parts

Whether you have collected your roller shutter or it has been delivered, check you have all the components required before proceeding with installation. Notify Security Direct immediately if there are any parts apparently missing or any damage visible. They will then be able to advise how to proceed. Each roller shutter order will have parts common to each installation, parts dependent on a particular configuration and parts dependent on optional extras.

Parts common to each installation

- ✓ Customer information sheet
- ✓ Assembly drawing
- ✓ 1 x Axle assembly
- ✓ 2 x Channel
- ✓ 2 x Channel angles
- ✓ Curtain – several bundles. Labelled from 1, being the top section.
- ✓ 2 x Endplates

Parts dependent on configuration

- ✓ Fittings kits
- ✓ Hand chain kit
- ✓ Safety brake and bracket
- ✓ Reveal fitting kit

Parts dependent on optional extras

- ✓ Hood, fascia
- ✓ Hood fitting kit

General sequence of installation

Each SeceuroDoor installation is unique, but they all share some commonalities. The following list gives the intended sequence of installation;

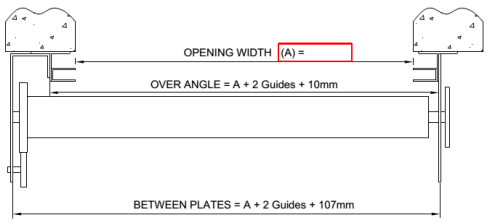
- Read and understand all installation instructions
- Check all parts and sizes
- Fit guide channel angles
- Fit endplates
- Fit axle
- Fit Chain guide & Chain
- Load curtain
- Attach guide channels
- Commission shutter

General diagram of variations of layouts

There are many configurations of the SeceuroDoor available, but these two configurations represent the most common variants. Any other configurations will be a variation on the diagrams shown below.

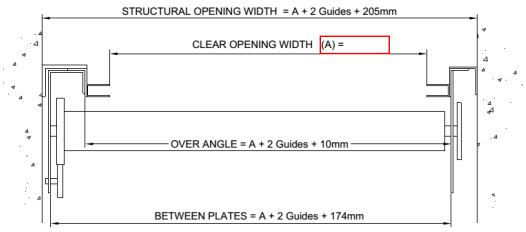
Installation around an opening

This installation arrangement tends to be the most common. You may be aware of it as a ‘flag fix’, ‘face fix’ or ‘plant on’. The channel angles can easily be swapped to be outset or inset – with inset being the default standard.



Installation within an opening

This installation arrangement tends to be less common than installations around an opening. You may be aware of it as a ‘reveal fix’. The channel angles are designed for an ‘outset’ fit. Extra stand-off angles are provided, which enable a ‘face’ to be created to fix the channel angles to.



SeceuroDoor installation around an opening

Check parts and sizes

With reference to the Customer information sheet and the specific assembly drawing, ensure that all components are present and the size and specification of the supplied roller shutter is appropriate to structural opening before proceeding with installation or dismantling an existing installation.

Fit channel angles

The position of the channel angles around an opening is the most critical part of the installation, as it determines whether the curtain will fit down the channels. The Assembly Drawing will provide you with the dimensions for *Clear Opening Width* and *Back Of Angle* size.

To help ensure a speedy installation process, the channel angles are pre-drilled for fixing to the structure. The installer *must* install using fixings appropriate to the weight of the shutter and the structural integrity.

The *Back Of Angle* size is derived by adding the width of the channels to the thickness of the channel angles. Generally, the Back Of Angle size is best used by the installer for initial layout as the channel angles are the first components required to be fitted.

The channel angles *must* be fitted to the correct spacing per the Assembly Drawing, *plumb and parallel* to each other and also the top end of each angle *must* be level with each other.

Fit endplates

The supplied brake shelf should be fitted to the relevant endplate before fitting endplates to the channel angles. The brake shelf is fitted to the outside of the relevant endplate with the fittings from the 'Brake Pack' of the fittings kit.

These fittings can be tightened at this stage, but be aware that there will be movement on this shelf to allow for minor level discrepancies if required.

The supplied endplates are pre-drilled and are to be attached to the matching holes on the channel angle. Attach the endplates to the channel angles using the screws, washers and nuts from the 'Endplates' section of the fittings kit. The bolts feed through from the channel angle and the nuts and washers are inside the endplate return flap.

Once the endplates are secured to their channel angles, they must be fitted to the structure. Holes have been pre-drilled in the back face to aid this if required. The endplates must be square and parallel to each other. Sometimes there will be a deflection caused by an uneven structure – this should be compensated for by using shims.

Fit axle

The supplied axle will have a drive end shaft, which is square and is shorter than the non-drive end shaft which has a keyway. Remove the pre-fitted curtain attachment screws and washers, and keep safe.

Lift the axle up to the endplates and slide the drive end shaft through its endplate hole first. Then slide the non-drive end shaft into its hole. The drive end now needs to be secured to its spring cup using the fittings supplied in the fittings kit. Now secure the non-drive end to the safety brake using the fittings supplied in the fittings kit.

Mount hand haul chain keep

The chain keep must be fitted securely to the structure and used to keep the chain away from the opening and any danger of snagging. The end user may decide to use a padlock with this keep, so it is important to ensure the keep is accessible.

Tension axle

The supplied axle is un-tensioned and will need tensioning before loading the curtain.
The number of suggested turns to apply the tension is stated on your paperwork as a guide - you will require on site adjustment to balance.

Load curtain

The curtain will be in bundles of approximately 35kg and clearly numbered from 1 (top) in order of attachment. The sections are rolled in their bundles so the top part is presented first. The top lath of the top section has pre-punched slots to enable easy attachment without having to move various attachment strips around.

Offer the top section up to the axle from the far side of the axle and pull over the axle to align the slots with the attachment holes. Loosely fit two screws and washers towards either end of the axle to take the weight of the first curtain section, which can now be uncoiled and hung down. Now ensure the curtain section is aligned evenly between the channel angles. The rest of the screws and washers can now be attached and screwed in firmly, as well as the original loosely attached screws.

The remaining curtain sections can now be installed;

Single skin lath

The bottom lath of each section will be end-locked. There will be enough flexibility in the lath and end-lock to pull it away from the lath to enable the next section of curtain to be slid on. It may help if a medium sized flat bladed screwdriver is used to carefully prise the end-lock clear of the lath. If this is done, ensure that the end-lock is returned to its correct position.

This should be repeated until all of the curtain sections are attached. Depending on the situation, the installer may prefer to haul the curtain up on the haul chain after each section is attached. Otherwise, the installer can allow the curtain to hang all the way down and attach the last sections from the ground rather than from an access platform. Care should be taken if it is a windy day, as the curtain will act like a large sail.

Once the curtain has been fully installed, haul it up until the bottom lath is hanging about 100mm down from the underside of the endplates.

Insulated lath

The bottom lath of each section will have only one end-lock riveted in place, with the other end-lock loose and ready to be riveted in place. Slide the next section of curtain on from the open end and then rivet the loose end-lock into place with the supplied rivets. If sliding on from the open end isn't possible due to the nature of the structure, take the last lath off the upper section and slide it onto the top of the next section.

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Attach channels

Offer up the appropriate channels to the channel angles. With single skinned curtains, the channel may have welded on tab-stops which will need to be guided over the T-rail bottom lath. With insulated lath curtains there are no tab-stops, so it will be straightforward to position the guide channels.

Loosely fit all the channel screws and nuts to allow optimal positioning of channels before tightening.

Check Tension

Now the axle is fully loaded check and adjust the spring tension as required to achieve the best balance for the door. A well balanced door should neither shoot up or drop down rapidly on its own. Generally it will just pull itself tight up against the top stops and also require pulling down on the hand chain as it nears the floor.

Installation within an opening

Check parts and sizes

With reference to the Customer information sheet and the specific assembly drawing, ensure that all components are present and the size and specification of the supplied roller shutter is appropriate to structural opening before proceeding with installation or dismantling an existing installation.

Fit stand-off angles

The stand-off angles must be fitted plumb and parallel to each other. There will be a small allowance in the size of the roller shutter to allow for any structural discrepancies, but you should attempt to fit the angles to the spacing defined in the Customer information sheet and the Assembly Drawing. The installer *must* install using fixings appropriate to the weight of the shutter and the structural integrity.

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