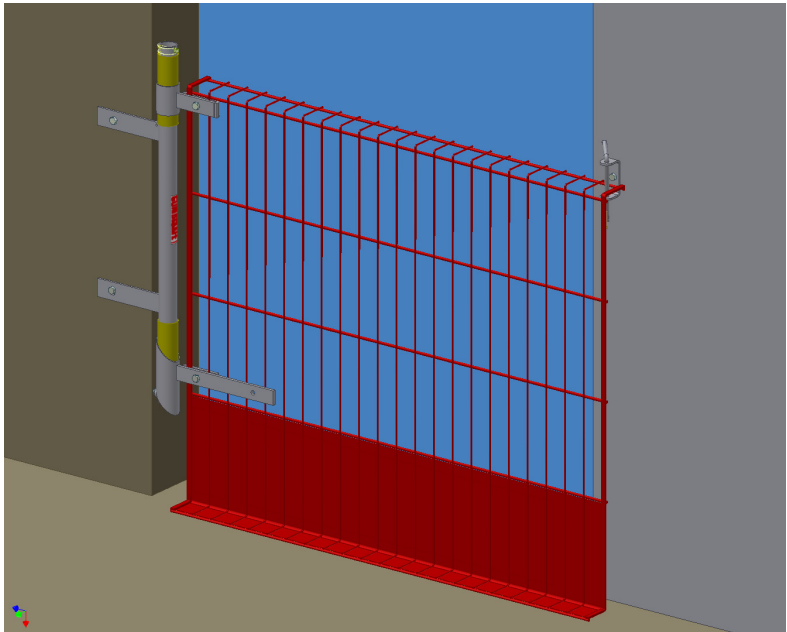


COMBISAFE®

3232 Lift Shaft Gate Mk II



INSTRUCTIONS

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Subject to alteration

General

The Combisafe lift shaft gate is used as a self-closing gate on areas such as lift shaft openings and loading bays, etc. solving a common work site problem. Fixed hand rails that have to be removed for access, are frequently forgotten and not replaced, leaving a significant site hazard.

The lift shaft gate consists of a hinge that can be mounted in a variety of ways. A suitable length of steel mesh barrier is mounted on the hinge to form a gate. The steel mesh barrier has a built-in toe board that is 27 cm high.

The lift shaft gate is easy to install on the wall using two bolts. The gate can be hung to operate on either the right or left, as well as fitted on the outside of the wall or in the reveal.

The lift shaft gate can also be installed on a scaffold system using a swivel coupler. Assembly, installation, inspection and repair should always be carried out by competent personnel. We therefore recommend that all persons using the lift shaft gate complete a training course covering the above.

Safety instructions

Always check products and equipment before use

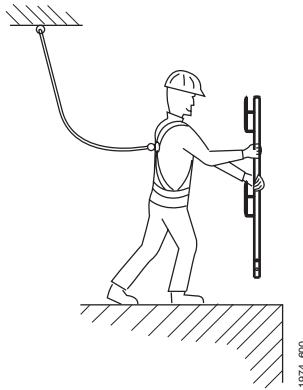
Check all component parts of the lift shaft gate before installation. Never use damaged or rusty materials as this can affect safety and operation.

Do not combine products

It is not recommended to install, combine or interconnect gates using products other than those supplied by COMBISAFE. Combisafe product liability only applies to combinations with correctly fitted, COMBISAFE products.

Always use personal fall arrest equipment

Personal fall arrest equipment must always be worn during assembly and dismantling when a risk of falling exists. This also applies to work carried out from a MEWP (mobile elevating working platform)



Picture 1. Personal fall arrest equipment

Inspection after a fall

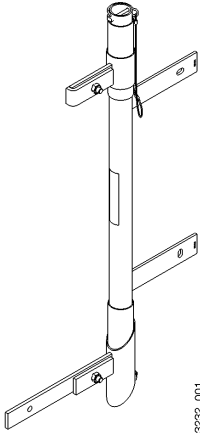
If any safety equipment is exposed to a (high) load, for example after a fall, all components must be removed from service and inspected by a competent person. Contact Combisafe in the event of uncertainty.

Things to remember

- Plan the fall protection at an early stage within the project, this will benefit everyone.
- Only use inspected safety products.
- Restrict access below and around the installation area to prevent risk of injury to others from the fall hazard, or from falling materials during installation.
- Use suitable tools designed for the type of work to be carried out.
- Tighten bolts correctly and check that split pins lock securely.
- Keep threads clean and lubricated.
- Keep the installation area safe and tidy.
- A tidy workplace is a safe workplace.
- Many fall accidents occur from a low height.

Technical data

3232 Lift shaft gate



Protected of design

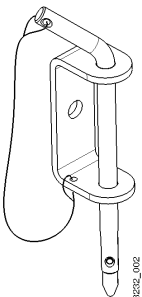
Weight: 7.7 kg

Surface finish: Hot-dip galvanized

The lift shaft gate post acts as a hinge for the steel mesh barrier

3202/3204 to act as a gate. It can be installed in a variety of ways, see "Installation".

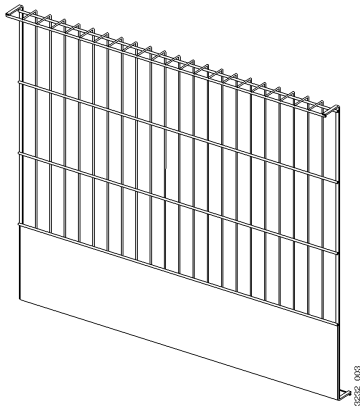
3231 Lift shaft gate lock



Weight: 0.5 kg

Surface finish: Hot-dip galvanized / Electrogalvanized

The lock is used to secure the gate so that it can not be opened "unintentionally".

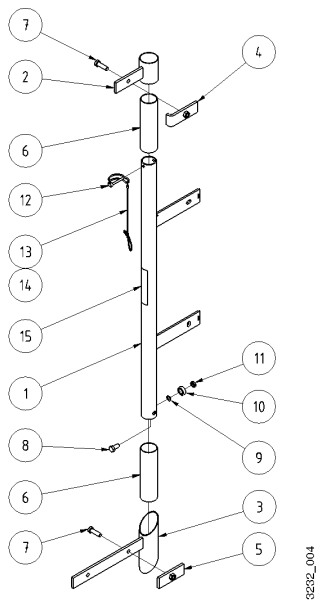
3204 Steel mesh barrier 1.3 m

Weight: 12 kg Surface finish: Phosphatized / Powder coated Red. This barrier has a length of 1.3 m and is suitable for openings that are max. 1.3 m.

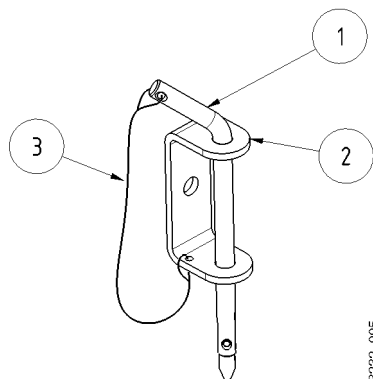
Naturally this depends on how the hinge is installed. The mesh connection is easily adapted to suit other opening dimensions.

Component parts

Lift shaft gate



Pos.	Quantity	Part no.	Description
1	1	10556	Body Mk II
2	1	10483	Top hinge
3	1	10558	Bottom hinge Mk II
4	1	10480	Shaped nut washer
5	1	10479	Flat nut washer
6	2	10559	Plastic sleeve 190 mm
7	2	100182	Screw for nut washers
8	1	100058	Screw
9	1	100176	Washer
10	1	100177	Ball bearing
11	1	100178	Low nut
12	1	100165	Split pin
13	1	100117	Wire
14	2	100118	Wire lock
15	1	100001	Decal

Lift shaft gate lock

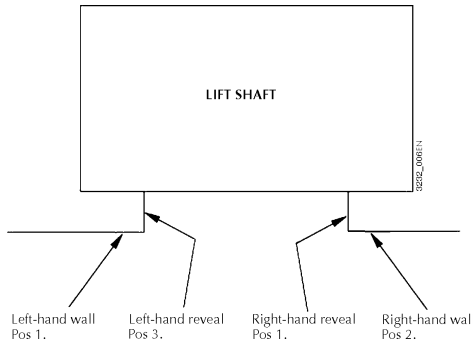
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Pos.	Quantity	Part no.	Description
1	1	10006	Single pin long
2	1	10485	Lock shackle
3.1	1	100117	Wire
3.2	2	100118	Wire lock

Installation

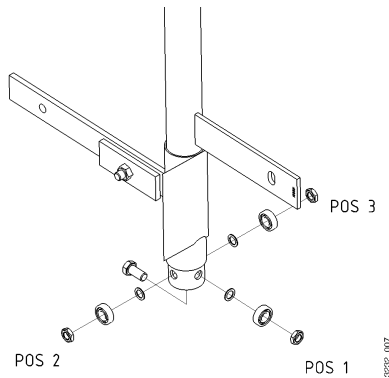
Installing the gate

The gate can be hung to operate either left or right. It can be installed on the wall or in the reveal. The position of the screw, washer, ball bearing and are dependant on the desired hanging position of the gate.



Picture 2. Gate locations

The position of the ball bearing is chosen as above depending on the position of the gate. See the explanation for the different positions below.



Picture 3. Placement of the ball bearing

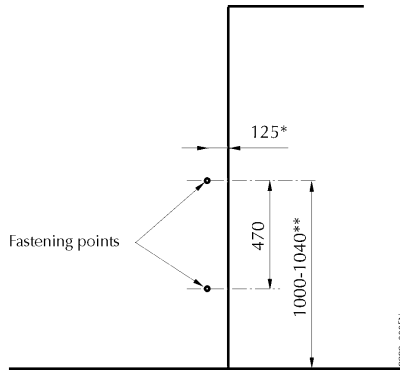
Fit in the chosen position by first pushing the screw through the selected hole from inside the pipe, then fit the washer, ball bearing and nut.

Ensure that the nut washers on the top and bottom brackets face in the right direction. The washer should face outwards towards the lift shaft and the screw head should face inwards so you can access it.

Hole layout

Installation on the wall is carried out using concrete fixings or the like. The minimum pull out capacity required for each anchor is 2 kN.

Drill the appropriate sized hole for the selected anchors according to the following hole configuration.



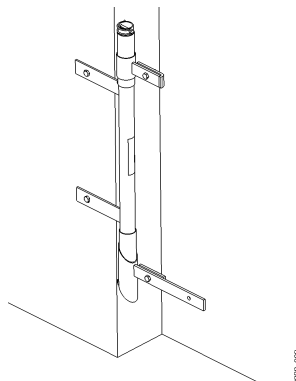
Picture 4. Hole configuration

*the measurement 125 can be made larger so the gate gives better coverage if necessary. The fastening plates should then be spaced off the wall surface, using a 45 x 95 batten.

** the measurement 1040 allows a larger lift allowance for the mesh.

When installing in the reveal, it is usual to drill in the centre of the wall and the measurement will then be less than 125 mm, this will extend the barrier slightly off the wall, and improve the self closing operation.

Fit the hinge and tighten the screws well.



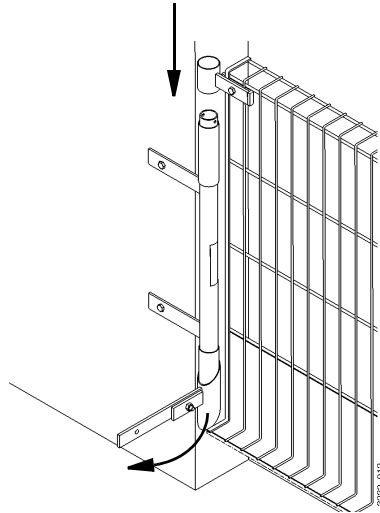
Picture 5. Hinge

Installation of the steel mesh barrier

The length of the mesh barrier should be about the same length as the opening. Accordingly, 3204 mesh barrier 1.3 m is ideal for openings that are 1.3 m. Of course there are exceptions depending on how the lift shaft gate is installed. The mesh barrier is easily adapted to suit other dimensions.

The outer hole on the bottom bracket is used if you want the gate to open in both directions. Drill a hole in the toeboard and fit a nut plate for extra stability.

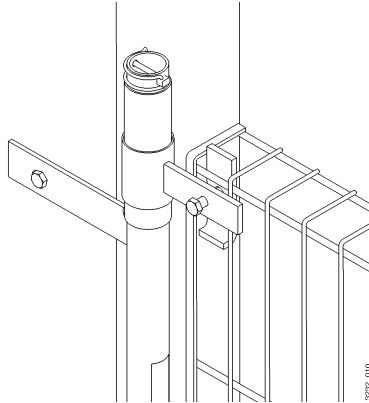
1. Remove the top bracket by removing the split pin.
2. Fit the bracket against the upper wire on the mesh barrier. Turn the lower hinge out so that the mesh comes on the right side of the bottom bracket. Now hook the mesh barrier on to the hinge with the help of the top bracket. Make sure that the plastic sleeve does not become loose.
3. Refit the split pin.
4. Fit the bottom bracket.



Picture 6. Installation of the mesh barrier

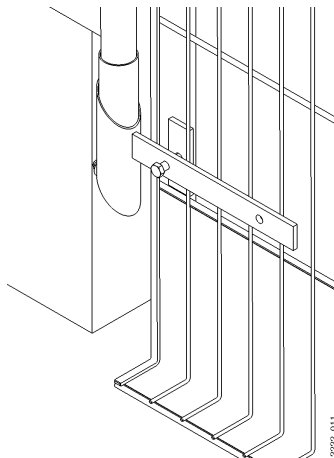
Alternative installation

1. Position the mesh, loosen the screw on the top bracket and turn the nut plate so it passes through the mesh barrier. Turn back the nut plate with the bend outwards and align with the top wire in the mesh barrier. Centre the bolt between the wires and tighten.



Picture 7. Top bracket

2. Loosen the screw on the bottom bracket, turn the nut plate so it passes through the mesh barrier and turn back the nut plate. Place two spacers approximately 5 mm under the mesh barrier so it is raised from the floor. Tighten the screw and remove the spacers.

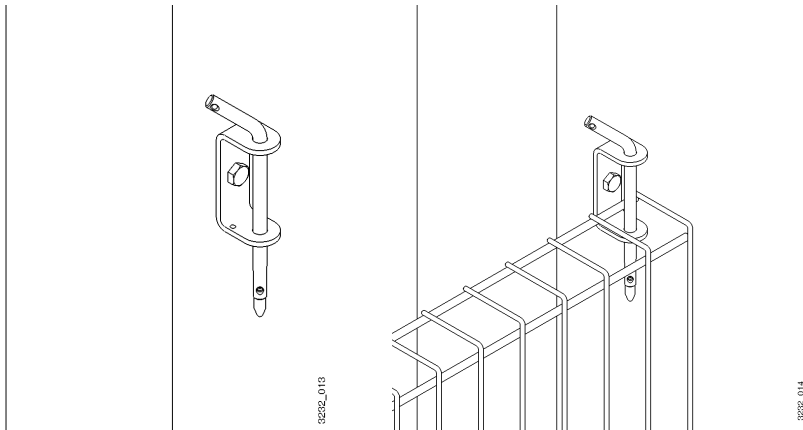


Picture 8. Bottom bracket

Installation of the lift shaft gate lock

When the mesh barrier is supported against the wall it is not necessary to fit a lock, however it is often used to prevent unnecessary traffic and to prevent the gate from being opened "unintentionally".

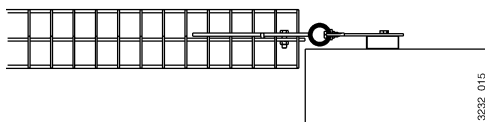
The lock is mounted so that the upper wire of the mesh barrier is secured with the pin. It is easy to position the lock once the mesh barrier has been installed. Measure out the position of the lock and fit using concrete fixings or the like. Remember that if you wish to raise the gate at a later date, the lock should be fitted so that the mesh barrier wire is as far down as possible in the lock. Also consider the edge distance when installing in the concrete; concrete screws usually have less edge distance than expanding bolts.



Picture 9. Lift shaft gate lock

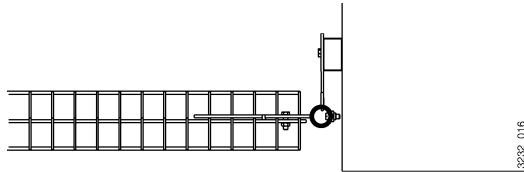
Spacers and support

At times you may want to position the hinge further in on the wall so that the mesh barrier gives better coverage or when there is a wall on the opposite side that you must align the gate against. You must then use spacers on the fastening plates. This is ideally done using a 45x95 mm batten or the similar.



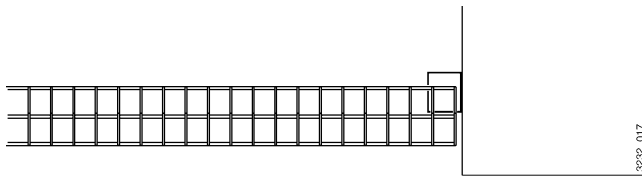
Picture 10. Straight spacer

You will also need to fit a spacer for the fastening plates if you want to mount the lift shaft gate on a wall that is perpendicular to an opening.



Picture 11. Angled spacer

A stop must be fitted if the lift shaft gate is installed so that the end of the mesh barrier hits a perpendicular wall. This applies even if you install the lock, which then acts as a stop as the gate must also be supported at the bottom.



Picture 12. Stop

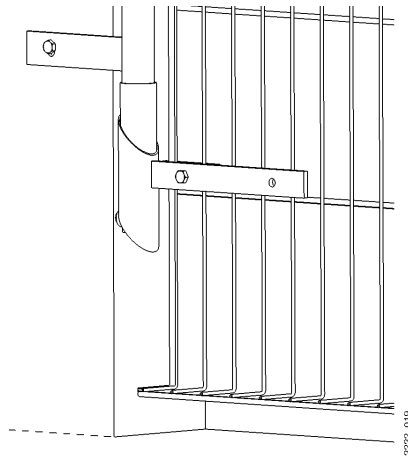
Raising the mesh barrier

If work is to be carried out on the floor under the gate, for example, topping or filling, it is possible to raise the barrier so the floor can be accessed.

NOTE

The upper fastening point should in this case be at a height of 1040 mm. See hole configuration on page 11.

This is done by loosening the screw on the bottom bracket, lifting up the barrier and tightening the screw again. When the lift shaft gate has been installed correctly it should be possible to lift the gate approximately 5-6 cm.



Picture 13. Raising the mesh barrier

Inspection

An full inspection of the installation must be carried out by the installer, before the shaft gate is put into use.

The following inspection checklist can be used:

Checklist for installing the lift shaft gate

- Has the lift shaft gate been inspected and have the specified demands been met?
- Has the lift shaft gate been configured with ball bearings and fastening plates?
- Are the installation measurements correct?
- Are the mounting anchors strong enough?
- Has the lock been fitted where necessary?
- Has the mesh barrier been secured correctly?
- Has the mesh barrier been mounted at the right height in relation to the floor?
- Have spacers and supports been used where necessary?
- Does the gate open and close correctly?

Dismantling

The installation procedure should be performed in the reverse order when dismantling.

Maintenance

Safety checks

Safety checks are to be made before use and after dismantling and before parts are placed in stock.

Safety checks are to be carried out by competent personnel. Combisafe recommends that only competent personnel trained by us carry out the safety checks.

Check that:

- no parts are cut or joined
- no parts are buckled or heavily bent/damaged
- no new drill holes have been made
- no corrosion has occurred that can affect strength
- no visible cracks have occurred in welds or the material
- the parts fit together.

Reconditioning

Some repairs can be carried out on parts identified by the safety checks according to the conditions below.

Reconditioning must be carried out by qualified personnel. Combisafe recommends that only qualified personnel trained by us carry out these measures.

- Recondition according to the following guidelines.
- Clean the parts.
- Only cold processing is permitted.
- Parts that after straightening show any signs of fracture must not be used but should be discarded.
- Replace damaged parts that can not be reconditioned and parts that have been lost during handling.

Scrapping

Those parts identified during the safety checks and which have not been possible to recondition should be discarded and destroyed so that they can not be used.

Most Combisafe products are manufactured of steel and can be scrapped as steel in their entirety. Some non conformity does occur, check with Combisafe if in doubt.

Storage

Store COMBISAFE products protected from external influences in a dry and ventilated area protected from the effects of the weather and from corrosive substances.

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