OSA
DOOR PARTS
TRADE SUPPLIERS

SECTIONAL OVERHEAD DOORS

ASSEMBLY AND INSTALLATION GUIDE

www.osadoorparts.co.uk

INTRODUCTION

The OSA door kit has been designed and prepared to ensure its assembly and installation with minimum disruption and with safety in mind. It should be noted that these guidelines are intended for use by competently trained installers with the required product knowledge and to be read in conjunction with the received drawings.

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For further information please contact us:
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SECTION 1

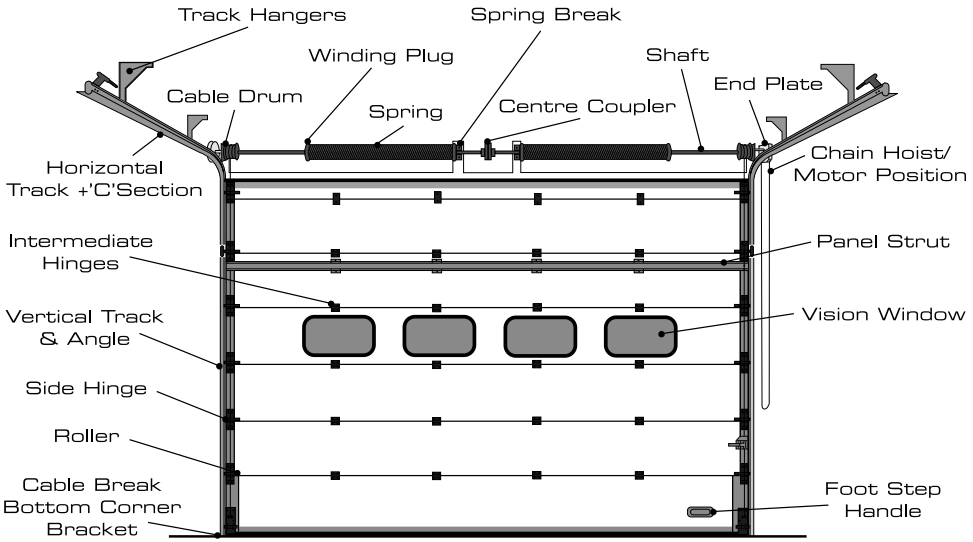
ON RECEIPT OF DELIVERY

Every order received by OSA is given a unique five figure reference number eg 27789. This reference number appears on all documentation including drawings, bills of materials (BOM's) and delivery notes; it is also marked on all panel packs, track sets, springs and hardware boxes. If more than one door variation eg different sizes, then each variant will be marked 27789/1/2 etc or door reference numbers may be used as a reference.

Check the following:

- Have the correct number of packages been delivered with the correct OSA reference number. The delivery note will indicate how many Panel Packs, Track bundles (shaft and punched angle count as a track bundle), Springs and Boxes. Springs and boxes may come on a pallet.
- Is there any damage to the goods – please mark the delivery note accordingly, make the driver aware and inform OSA immediately.

  In the hardware box there is a packing list (BOM) in four sections marked Panel, Track, Spring and Hardware. There is also a copy of the approved production drawing to check against and a users manual which should be handed to the appropriate person on completion of installation.
- Check specification is correct against BOM and drawing
- Check all parts delivered are the correct size and quantity.



SECTION 2

PRE-INSTALLATION PROCEDURE

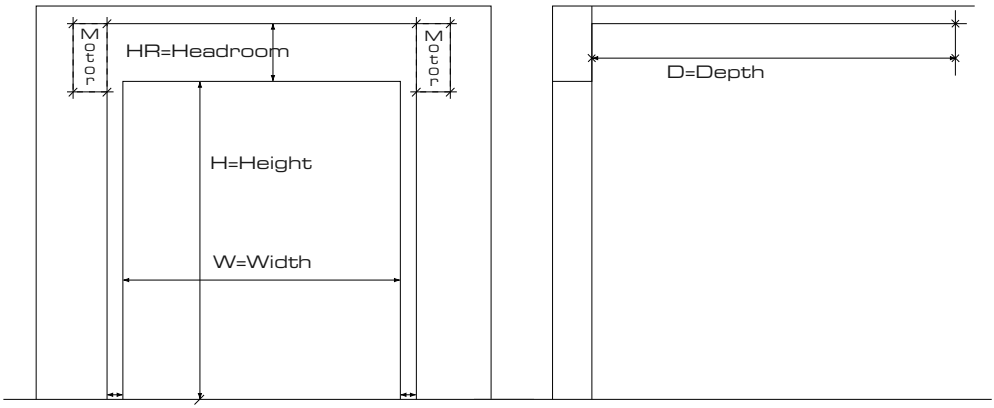
With reference to the BOM and approved drawing check the following:

- Clear opening width
- Clear opening height
- Headroom – dimension to centre of shaft plus half cable drum diameter plus clearance as a minimum.
- Also check clearance above horizontal track at rear as shown on drawing.
- Dimension to shaft centre will allow bearing plates to be fitted to spring support steel.
- Projection of horizontal track into building.
- Height of horizontal track as drawing and check clearance.
- Side room: the minimum requirement on non drive side is 150mm for 2" track and 165mm for 3" track. On the drive side ideally 400mm in all cases although in restricted circumstances it may be possible to "pre-mount" the drive unit whilst installing spring assembly.

Then check the following:

- Fixing surfaces are plumb, free from any projections and in the same plane with special attention to door head.
- Floor across opening is level (within 5mm) and smooth enough to allow bottom seal to seat properly .
- The threshold should always fall away from the opening to minimise water ingress: in some cases a weather bar cast into the floor slab just behind the door leaf will help prevent water ingress or better still a slotted channel may be located just in front of the external face of the door.

GENERAL OPENING DETAIL



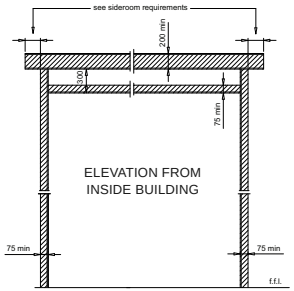
GENERAL STEELWORK DRAWINGS

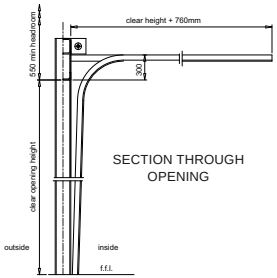
STANDARD LIFT TRACK

SIDEROOM REQUIREMENTS:

Push up doors (up to 3000 x 3000)	150 x 150mm
Chain hoist doors	350 x 150mm
Electrically operated doors	400 x 150mm

PLEASE NOTE: All fixing faces (shown hatched) must be flush and in the same plane.



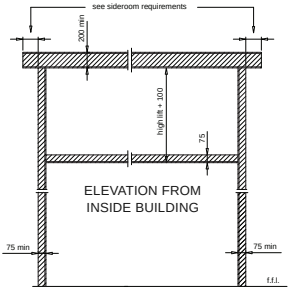


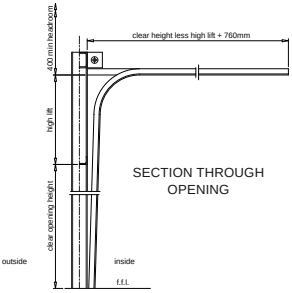
HIGH LIFT TRACK

SIDEROOM REQUIREMENTS:

Push up doors (up to 3000 x 3000)	150 x 150mm
Chain hoist doors	350 x 150mm
Electrically operated doors	400 x 150mm

PLEASE NOTE: All fixing faces (shown hatched) must be flush and in the same plane.





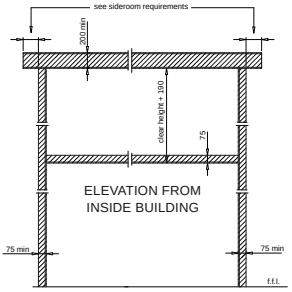
VERTICAL LIFT TRACK

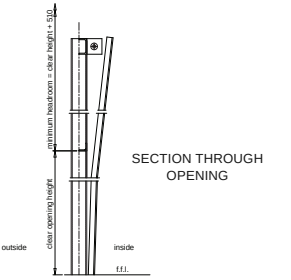
SIDEROOM REQUIREMENTS:

Push up doors (up to 3000 x 3000)	150 x 150mm
Chain hoist doors	350 x 150mm
Electrically operated doors	400 x 150mm

FOR DOORS OVER 5500mm IN HEIGHT PLEASE CONSULT OSA

PLEASE NOTE: All fixing faces (shown hatched) must be flush and in the same plane.

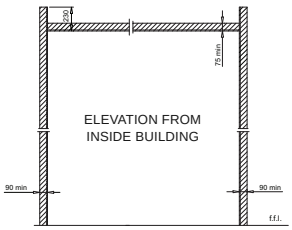


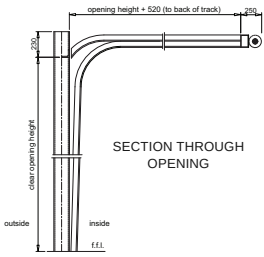


LOW HEADROOM LIFT TRACK

MAXIMUM DIMENSIONS:	5000 x 5000mm
MAXIMUM WEIGHT:	300kg

PLEASE NOTE: All fixing faces (shown hatched) must be flush and in the same plane.





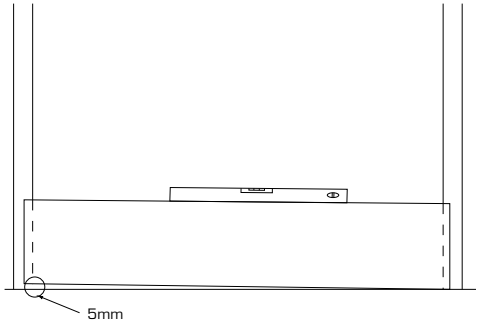
SECTION 3

VERTICAL TRACK INSTALLATION

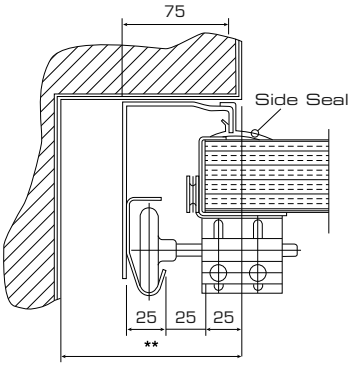
It is important that when vertical tracks are installed they are level, plumb and square.

The overall width of a panel is designed to give an overlap of 25mm at each jamb and 25mm overlap at lintel.

Set out vertical tracks as follows:

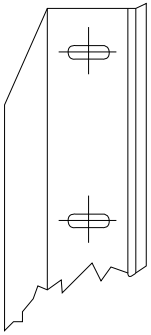


- Using an intermediate panel as a guide, check level across opening using spirit level. If opening more than 5mm out of level, tracks on one side must be raised up so that top of tracks are level; any adjustment more than 25mm may effect the way the bottom seal seats on the floor and care must be taken to ensure that bottom roller will be positioned fully within the track.
- When panel level, mark a point on each jamb at say, top of the panel (alternatively mark a point 1000mm above floor and transfer level to the other jamb using a water or laser level and check measurement above floor, as with panel method this does not want to exceed 5mm).
- If opening is too wide by maximum 20mm, adjust overlap equally each side.
- If opening too narrow do not set tracks closer together, minimum clearances must be maintained.
- Where opening is correct the back of vertical angle is set back 75mm from opening ie 50mm from end of panel, if opening varies in width maintain this 50mm clearance.
- Mark position of "back of vertical angle" on each side and use to ensure tracks are parallel all the way up.



Now that setting out points have been established vertically and horizontally proceed as follows:

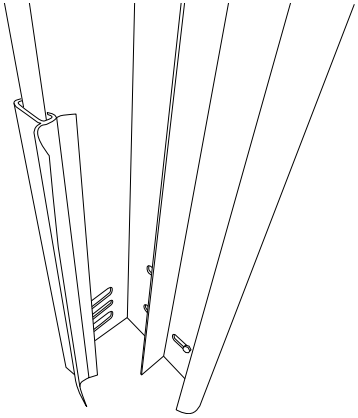
- Place tracks against the jamb and clamp in place.
- Check that side seal or extended side seals are fitted and the correct way round, i.e. pointing towards the face of panel.
- Ensure back of vertical angle lines up with setting out marks.
- Before marking/drilling fixing positions, check again that there is 50mm clearance between back of angle and end of panel.



Drill in centre of track slot to allow for adjustment in either direction

- Check that top of tracks will be level, packing up as necessary.
- Mark centre of pre-punched slots to allow for any final adjustment; fixing at alternate slots is generally adequate.
- Before drilling check that the diagonal measurement between top of LH track and bottom of RH track and vice versa is the same. If tracks are set at same level this ensures tracks are vertical.
- Drill and fix at the marked positions removing clamps as necessary.
- Re-check clearances and diagonals and adjust if necessary.

EXTENDED SIDE SEAL



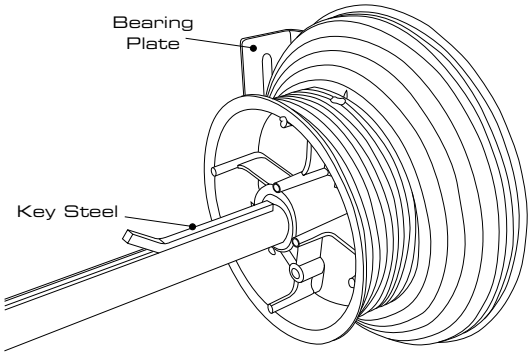
SECTION 4

SPRING ASSEMBLY INSTALLATION

The drawing supplied with each door gives a dimension from finished floor level (FFL) to centreline of shaft. The following should be checked against this dimension.

- Bearing plates will sit on spring support steel to allow secure fixing.
- Cable drum has enough head clearance to operate correctly.
- Top panel will clear underside of cable drum as door opens.

CABLE DRUM



The majority of doors are supplied with two springs but there are occasions when there is just a single spring or sometimes three or four springs.

Therefore to save time set out spring assembly on ground to determine position of bearing plates and spring breaks (where supplied) in relation to cable drums, shaft couplers and keys.

Note that springs will extend when tensioned. This extension is determined by the spring wire diameter multiplied by the number of required turns. Therefore a spring with 9.5mm dia wire with 12.0 turns will extend 114mm.

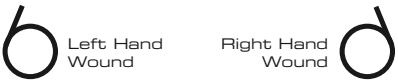
In general there is a bearing plate for each cable drum and a bearing plate or spring break (where supplied) for the anchor end of each spring.

Additional bearing plates will be supplied to give additional shaft support where duplex or particularly heavy springs are supplied.

The bearing plates at each end are normally fitted in line with the vertical track angle and the cable drums are positioned immediately inside these plates, although it may be possible to set bearing plates back to ensure cable is located just inside vertical angle.

In the case of a two spring door the springs are generally anchored either side of the centre shaft coupler. There will be a left hand wound spring and a right hand wound spring.

The left hand wound spring is anchored on the left hand end and therefore mounted on the right hand shaft; and vice versa for the right hand wound spring.



SPRING HANDING: When looking end on at the spring.

Having established position of bearing plates, transfer these dimensions to the spring assembly steel, mark fixing positions and drill - **do not fix bearing plates at this stage.**

It is very IMPORTANT that bearing plates are fitted in a true and straight horizontal and vertical plane at the given centre of shaft position to prevent excessive wear or damage to bearings.

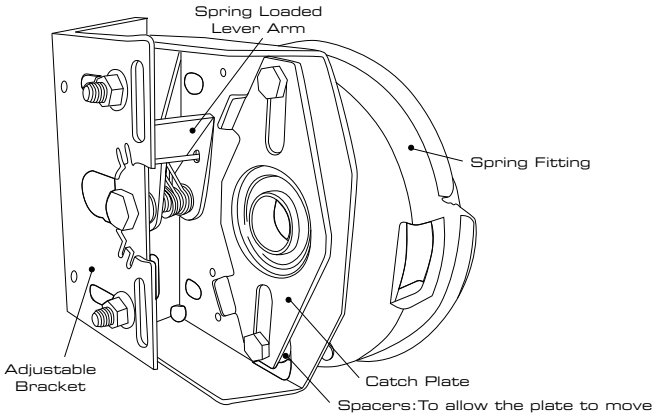
Positioning spring on to shaft:

- First the shaft has to be assembled with all fittings. Unless the door is supplied with a single spring, the shaft will be supplied in two parts; the longer piece should be positioned on the chain hoist/motor side.
- Lay the spring on the floor and mark a horizontal chalk or paint line along the length of the spring, this may already be pre-painted.
- Ensure that the screws are fully open on the winding plugs.
- Pass the steel shaft through the winding plug, spring and spring filler (where supplied).
- Where supplied separately, slide on a 25mm bearing until it sits inside the stationary plug and then bolt the universal intermediate bearing bracket to the stationary plug locking the bearing inside the plug – otherwise bolt the stationary plug to centre bearing plate which has in situ bearing, with bolts provided.
- Where spring break supplied in lieu of centre plates see assembly details below.
- Slide the appropriate cable drum onto the end of the shaft ensuring that the cable drum bolts are facing the spring (drums are marked left hand and right hand and painted red for left hand and black for right hand).
- Slide the shaft into the end bearing plates.
- Lift the entire assembly and secure the end and intermediate bearing plates to the pre-drilled holes in spring support steel
- Position centre coupling on shaft and repeat for other half of spring assembly and fix to support steel.

SPRING FAILURE DEVICE

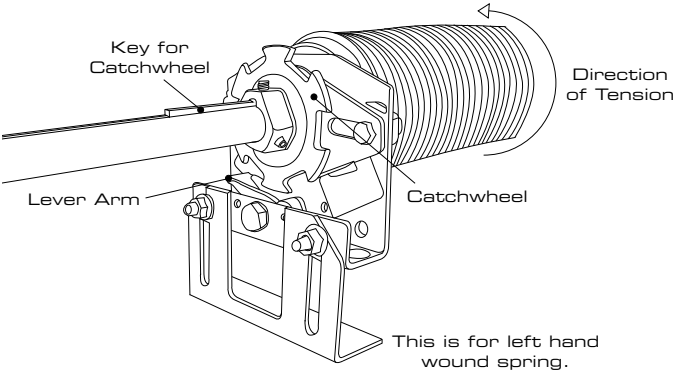
- The spring failure device replaces a traditional centre bearing plate.
- The catchplate is bolted tight through the bearing bracket to the stationary spring casting (for 152 dia spring use $1^1/_2$" unc bolts provided).
- The catchwheel is secured to the shaft using key and grub screws and must be positioned in line with the centre of the spring loaded lever arm.
- **Ensure spring loaded lever arm is at the top and that cotter pin is not removed until AFTER tensioning is complete.**

SPRING BRAKE (Catchwheel not shown for clarity)
Reinforced type spring brake and adjustment bracket shown below.



SPRING BRAKE ASSEMBLED:

Also shows standard spring brake. Assembly and adjustable bracket. N.B. Lever arm always at top.



NOTE: Ensure spacers allow catch plate to swivel after tightening.

SECTION 5

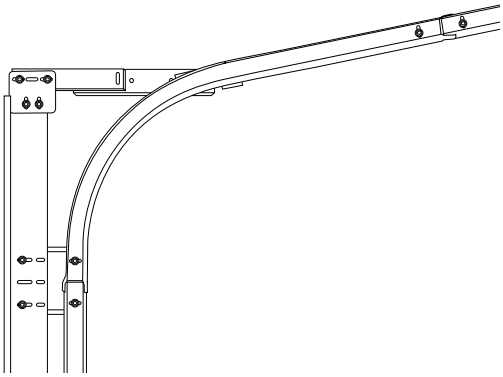
HORIZONTAL TRACK INSTALLATION

(not applicable for vertical lift)

Depending on size of horizontal track, consider using temporary rope supports to help position tracks safely and easily before assembly starts.

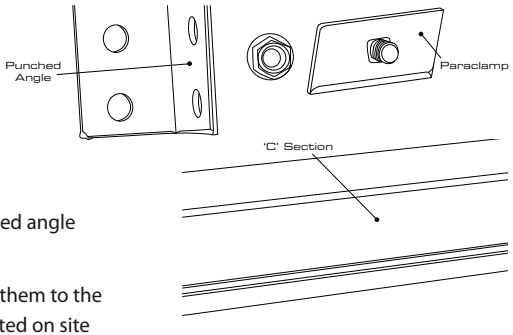
- Place the curve of the horizontal track against the top of the vertical track and secure using bolts supplied with the connection plate.
- Bolt the horizontal "C" section to the outside of the vertical angle – this is pre-drilled to allow for the pitch that tracks have been made to.

VERTICAL HORIZONTAL TRACK INTERFACE



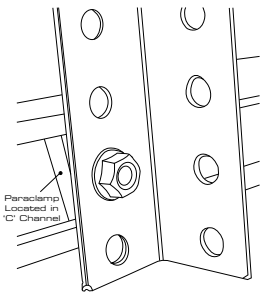
- Ensure that the horizontal tracks are set at the correct pitch – as a guide the dimension from the back of the horizontal track to the finished floor level is shown on the relevant drawing supplied in hardware box.
- It is vital to ensure that the horizontal tracks are at the same height and square to the fixing face/door opening to ensure that the door does not twist during operation. This can be checked by measuring the diagonals between the back of the horizontal "C" section and the opposite vertical angle – these dimensions should be equal.

PARACLAMP CONNECTION EXPLODED



- The tracks are supported using lengths of punched angle supplied.
- When the tracks are positioned correctly, secure them to the building structure with hanging brackets fabricated on site from punched angle and to the "C" section using diamond shaped "paraclamps" supplied – this allows hangers to be positioned correctly and simply tightened up without the need to drill and bolt.
- The rear hangers should be positioned within 500mm of rear of track and a maximum 2500mm centres.
- Ensure that the tracks are rigid and unable to move: if necessary provide additional bracing – not supplied as standard.

PARACLAMP CONNECTION

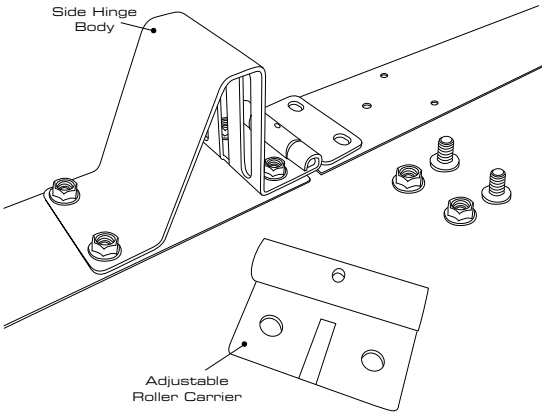


SECTION 6

DOOR PANEL ASSEMBLY AND INSTALLATION

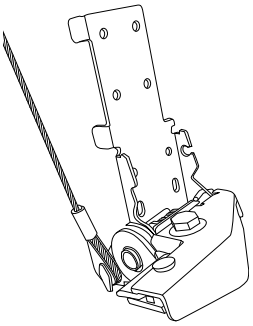
- Always handle panels with care; they should be laid on protected timbers or trestles to avoid damage during preparation.
- Fixing holes for bottom brackets, side hinges, intermediate hinges and top corner brackets are already pre-drilled.
- As much work as possible should be carried out at ground level.
- Place the bottom panel on trestle or protected timber with the inside face upwards nearest to the opening, trim back bottom seal in line with aluminium seal retainer and fit footstep handle (if supplied) to cut out in panel.
- Then leave a gap and lay out an intermediate panel.
- Repeat for all intermediate and top panels.
- From the hardware box lay out the bottom corner brackets (cable breaks), side hinge/roller carrier brackets, top roller brackets, intermediate hinges and fasteners (see note about wind bracing struts).
- Separate the roller carriers from the side hinge brackets.
- On the bottom panel, position and secure the bottom corner brackets or cable breaks, one pair of side hinge brackets and the intermediate hinges - remember larger hinge flap at top for intermediate hinges.
- Repeat for all intermediate panels.
- Position and secure top roller brackets to top corners of top panel.
- Take bottom panel to opening and stand between vertical tracks checking that panel/track clearances still OK.
- From fittings box take 1 pair of long stem rollers and slide them into cable break bottom brackets, position roller in vertical track and secure bottom brackets to panel.
- Place short stem rollers (if single hardware) in vertical track and secure roller carrier to side hinge bracket – do not tighten bolts fully as panel adjustment may be required.
- At this point it is often best to connect lifting cable to cable break bracket and feed cable behind roller stems and bring up as you build up panels. Always ensure the "foot" of the cable break sits properly under the aluminium seal retainer.

SIDE HINGE ASSEMBLY



TYPE 1: Adjustable Cable Break (Wire attachment with loop)
Attach cable to cable break by passing cable loop over teardrop lug on side of the bracket. Slide long stem roller into bracket, angle the roller into vertical track and fix main body of cable break to pre-drilled end cap using fixings supplied. The locking pin holds the blade away from the vertical track – remove pin to ensure the bracket arm can rotate freely and then RE-INSERT locking pin. When cables have been attached to drums and springs tensioned as described in Section 7, use the bolt on top of bracket arm to level the door if required – see leaflet supplied with cable breaks. Finally, click black cover (where supplied) into place.

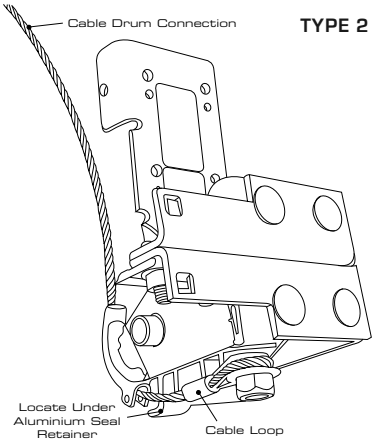
TYPE 1



TYPE 2: Non-Adjustable Cable Break
Undo lock nut and washer, place cable loop over threaded stud and refit washer and lock nut securely. Ensure cable sits in cable guide at base of bracket.

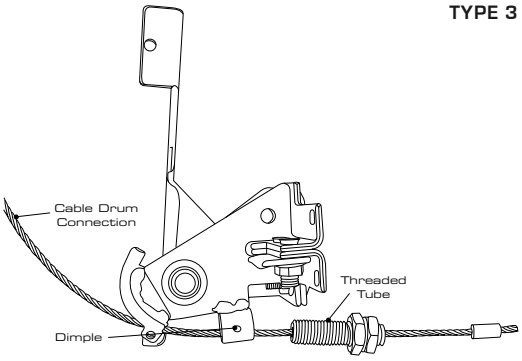
TYPE 3: Adjustable Cable Break
Instead of a cable loop a pre-assembled tube and stop end is attached to the tube holder under the bracket; the nuts will allow adjustment for levelling door (see section 7). Ensure cable sits in cable guide at base of bracket and that groove in threaded tube lines up with dimple in tube holder.

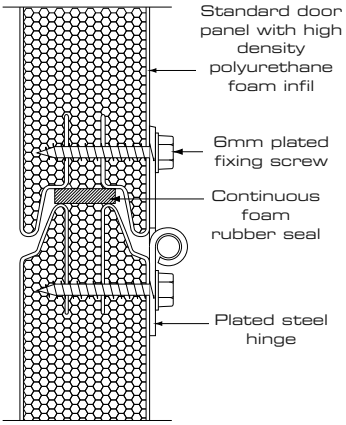
TYPE 2

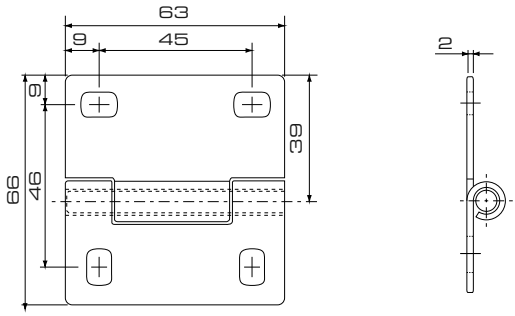


- Take the next intermediate panel and sit it on the bottom panel ensuring that the joint engages correctly and that edges of panel line through.
- Place roller in track and secure roller carrier to side hinge – do not tighten bolts fully as panel adjustment may be required. Note that roller carriers can be reversed to attain best panel adjustment against side seal.
- Secure side hinges and intermediate hinges from bottom panel to intermediate panel.
- Repeat for all intermediate panels.
- Check clearances for each panel – hinges have some adjustment to allow good alignment.
- For top panel note that OSA supply long stem rollers for top corner brackets even if single hardware.
- When all panels have been fixed together, adjust panels to sit equally between tracks.
- Finally, ensure cables are connected properly to bottom brackets and that they are positioned correctly to allow attachment to cable drum later.

TYPE 3







Typical Hinge Dimensions

NOTE: If wind bracing struts have been supplied, they must be fitted to the panel in conjunction with the intermediate hinges (see section 10).

The struts are cut to size and designed to be positioned between the end caps at the top of the panel.

Retain the edge of the strut with clips supplied using bottom fixings of intermediate hinges and additional fixings and clips to retain remaining edges.

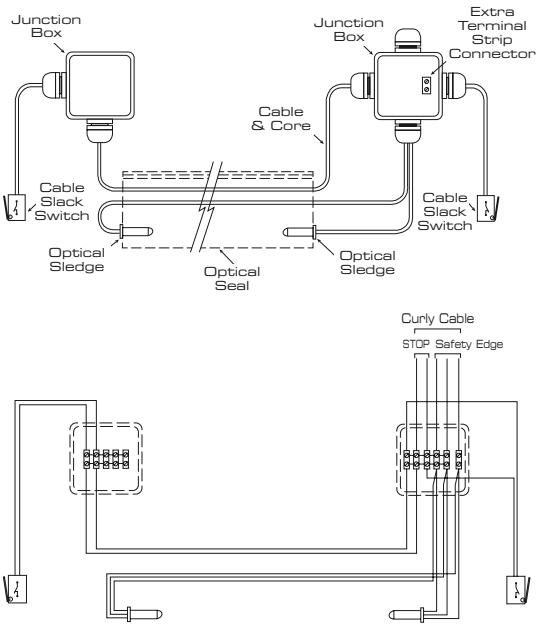
It is important to note that all fixings must have pre-drilled holes and only 'OSA" type fasteners are to be used.

SLACK CABLE SWITCHES INSTALLATION

Slack cable switches are designed to immediately cut power in the event that the lifting cable(s) become slack. These are always supplied on fully automatic doors (impulse open, impulse close) and there will be one switch for each bottom corner bracket (normally a cable break device), a junction box for each switch and a spiral cable. The connecting cable between the two switches can be threaded through the upper cavity of the bottom seal - often shared with the transmitter cable for optical edge beam - or through surface mounted trunking (not shown). The switches are "normally closed" and must be wired in series as shown.

If, for whatever reason, the lifting cables slacken and switches are activated it is important to determine what has caused the activation.

To move the door leaf after activation it will be necessary to use the motor manual override if safe to do so.



SECTION 7

LEVELLING AND BALANCING

At this stage of the installation it is expected that the vertical and horizontal tracks are plumb, square and in the same plane, the door is level, the shaft and spring assembly are level and set at the correct height.

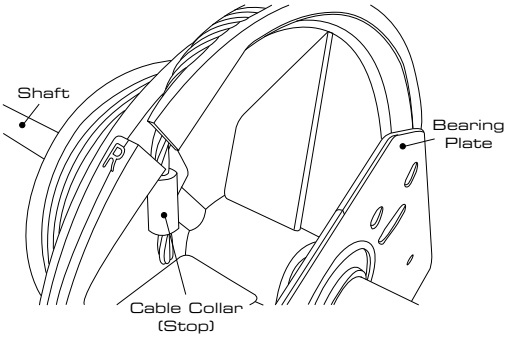
This being the case cables can be attached and springs tensioned; small amounts of adjustment to the door level can be made after tensioning by adjusting centre coupling or by adjustable cable breaks.

- Ensure cable drum is in the correct position on the shaft generally immediately inside the end bearing plate.
- Locate the cable within the track and locate the round collar at the "stopped end" at the cable entry point – the cable will run at the back of the drum: do not secure the drum yet.
- The cable is likely to appear "too long" so wind the slack cable onto the drum ensuring that the cable is located properly within the grooves. The cable lengths should always be equal on both sides and any difference in tension needs to be adjusted.
- Slide in the key into the keyway and tighten grub screws.
- Secure the door against the opening by placing a clamp at low level on the tracks above the second set of rollers.
- Clamp shaft using 'mole grips' or similar to prevent rotation during tensioning.
- The springs are now ready to tension.
- Find the number of turns required; written on end of spring casting or spring label and also on copy of BOM in hardware box.
- Ensure that tensioning bars (not supplied) fit properly into the holes of the winding plug.

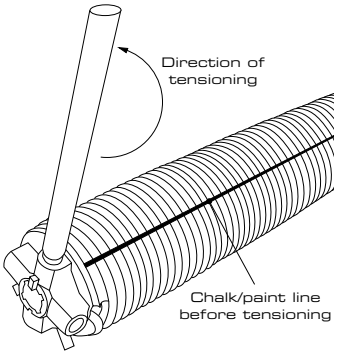
Tensioning springs requires absolute care and attention

- Tension the springs upwards.
- As the springs are tensioned you will see the chalk/paint line on the spring break and move.
- As tension is applied spring diameter will get smaller and the spring will become longer – unless springs fitted with the wrong handing which means they will backwind and be damaged.

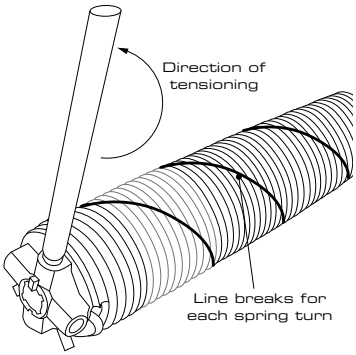
CABLE ATTACHMENT TO DRUM
This shows cable attachment for right hand drum



SPRING WITH DIRECTION OF TENSION



CHALK LINE BROKEN ON SPRING

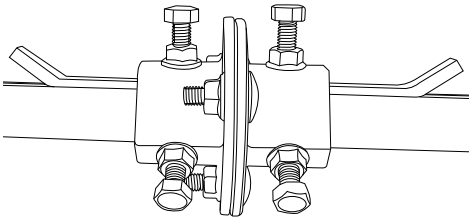


- When the number of chalk marks match the number of turns, hold the tension with the bar insert key into the keyway – if there is a key way in the winding plug - and tighten the set screws in the winding plug onto the shaft not into the keyway – do not over tighten.
- Gently release the tensioning bars.
- Repeat for the opposite spring (assuming door has more than one spring).
- Gently release clamps from above the rollers and check the operation of the door. Always be in control of the door leaf movement – push door up gently – only a little way - to check that tension is correct.
- Should you require more or less tension, close the door and re-clamp above rollers, adjust tension – both springs must be equally adjusted.
- In closed position, the bottom of door should be level; if not release adjustable shaft coupling and turn appropriate part of shaft to level door and re-tighten or where supplied, adjust bottom brackets via adjustable 'Pig Tail' or cable breaks.

Type 1 - Instructions on box

Type 3 - Adjust nut on threaded tube

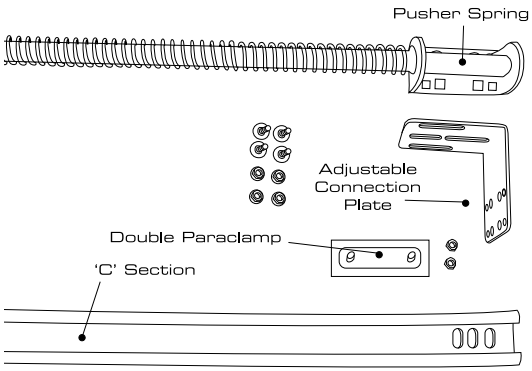
ADJUSTABLE CENTRE COUPLER



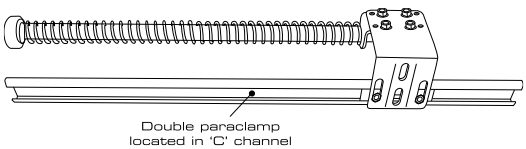
Before opening the door fully it is important to fit the spring bumpers.

- Fit the spring bumpers to the rear of the horizontal "C" section using the double "paraclamp" supplied.
- Lift the door panels until the bottom of the bottom panel is at opening height.
- Then adjust the spring bumpers into the correct position ensuring that the bumpers hit the top panel and that the cables are tight when the door is fully open.
- For manual doors no compression of the spring bumper is required
- For electric doors, depending on the type of track arrangement, the spring bumpers should be compressed to give door leaf a good push when closing but ensure cables do not lose tension.
- Check that all bolts are fully tightened and that the cable is sitting in the cable drum grooves correctly throughout its cycle.
- Remove film from panel.

SPRING BUMPER ASSEMBLY PARTS



SPRING BUMPER ASSEMBLY



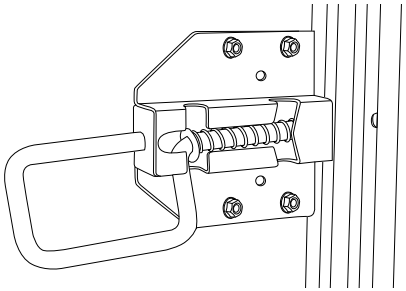
SECTION 8

DELTA SHOOT BOLT INSTALLATION (where required)

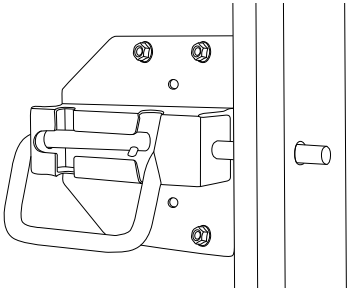
- Before fitting the delta shoot bolt, check and adjust the door for level.
- Mark and drill 12mm dia. hole in side track at required lock position (normally centre of second panel from floor).
- Slide bolt of delta shoot bolt into lock position. Place bolt of delta shoot bolt through drilled hole in side track. Check that the bottom seal fits tightly with the floor.
- Now position shoot bolt on the end cap and mark fixing holes.
- Ensure delta shoot bolt does not protrude past the end cap when unlocked as this could cause jamming in the track radius.

NOTE: If fitted to an electrically operated door, an interlock switch is required to prevent door operation when locked.

DELTA SHOOT BOLT



SHOOT BOLT INSTALLED & LOCKED



SECTION 9

INSTALLATION OF WICKET DOOR (where supplied)

The wicket door is supplied as an integral part of the panel set, prepared and ready to fit.

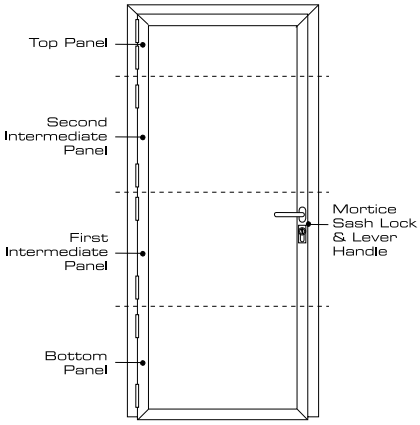
All panel sections are cut to size and fitted into the wicket door frame, pre-assembled in the works to check alignment and packed for site delivery - **NEVER STACK ON TOP OF WICKET DOOR PANEL PACK.**

There will be no need to adjust or undo any of the frame profiles if assembly is carried out correctly.

This is a two man operation; always allow plenty of time to install a wicket door, they always need extra care and attention to fit correctly.

Bottom Section - The floor should be level and therefore the underside of vertical tracks should be level; if not, vertical tracks must be set to allow for small imperfections in the floor.

WICKET DOOR



- Install bottom panel as normal complete with low threshold bottom rail, first hinged section of wicket gate, bottom brackets and rollers and make sure it is level.
- The bottom section is made up in factory and acts as the "setting out template" for the rest of the wicket gate.
- Check that outer frame profile is vertical and square by checking the diagonals.

First Intermediate Section - This is a critical part of the installation as the panel is in two halves and must be aligned properly.

- Install each panel half with side hinges and rollers and align the outer frame profiles with the outer frame profiles on the already fixed bottom section.
- Once sections and profiles are level and aligned using any slight adjustment in the hinges, tighten and check sash lock is aligned and engages correctly.

Second Intermediate Section - As previous section but without sash lock.

Top Section - This section comes made up in one piece and installation is as intermediate sections above.

At this stage all sections will be in place, level and square.

- Check that door opens and closes properly and that mortice sash lock engages correctly.
- Fit door closer

Wicket door is now complete.

For electrically operated doors an interlock switch must be fitted to prevent main door from operating when wicket door not properly closed.

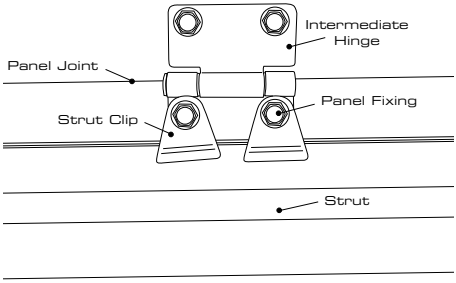
SECTION 10

PANEL STRUT INSTALLATION (where required)

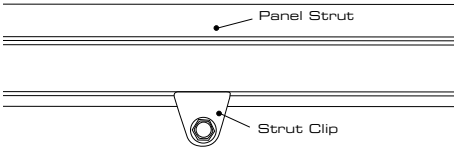
Panel struts are fitted to the inside face of the door panel when supplied using a series of "strut clips".

- Fit strut clips to intermediate hinges as shown but do not fully tighten.
- Locate each panel strut (wind brace) between end caps and to the underside of intermediate hinge, and secure by tightening panel fixings and strut clips.
- Add additional strut clips as required to underside of strut.

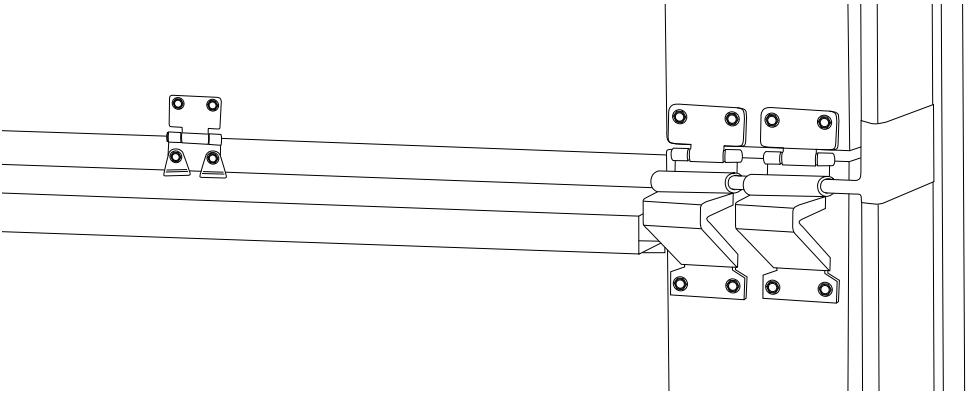
INTERMEDIATE HINGE



STRUT CLIP



PANEL STRUT ARRANGEMENT



SECTION 11

HAND-OVER CHECKLIST

CHECK	MECHANICAL COMMISSIONING	Y/N
1	DOOR TRAVEL: Fully Open/Closed: Door should run freely without tight spots or unnecessary noise.	
2	DOOR BALANCE: Within reason the door leaf should remain stationary within the door opening. See trouble shooting notes.	
3	ROLLER ADJUSTMENT/SPACING: Adjustment of the roller brackets should allow for free movement throughout the door travel and afford efficient sealing in the closed position. The roller spacing should be constant and within safety tolerances.	
4	FIXINGS: All fixing should be in position and tightened accordingly. The fixing should be as specified.	
5	DOOR LEAF FOR LEVEL: The door leaf should remain level throughout its travel to avoid binding and excessive roller spacings. At the closed position the best seal should be achieved without placing the door out of level.	
6	LOCK ADJUSTMENT: Ensure lock is free to operate and maintains a good seal when engaged.	
7	SEALING: Ensure the integrity of the seals are maintained in the closed position without hindering the door travel.	
8	CHAIN HOIST, if applicable: Ensure the chain hoist is able to operate without undue effort in both directions.	
9	DAMAGE: Check door leaf and seals for damage.	
10	SIGNAGE AND DOCUMENTATION: Attach signage where required. Ensure sign off sheets are completed and handed over with the door maintenance schedules etc.	

SECTION 12

TROUBLE SHOOTING

In the event of the door not operating correctly, please refer to the following check points.

When you are able to answer yes to all the points the door should operate properly.

CHECK	ACTION	Y/N
1	Have the correct cable drums been delivered?	
2	Have the drums been correctly installed? Left drum - red, right drum - black.	
3	Has the cable been installed correctly? i.e, Has the cable stop end been located at the cable entry on the drums.	
4	HIGH LIFT DOORS: Does the cable run on the flat part of the cable drum as soon as the first roller passes the curve? FULL VERTICAL LIFT DRUMS: Cable should fill the the entire drum when door is in open position including the "reverse spiral" at narrow end of drum.	
5	Have the correct torsion springs been delivered? Check the information given on the spring tag against the following and measure: The wire diameter (measure 10 coils and divide by 10) • The internal spring diameter • The spring length.	
6	Have the springs been fitted correctly? Viewed from the inside and if springs anchored at centre of spring assembly: The left hand spring must be installed on the right hand side • The right hand spring must be installed on the left hand side. For SINGLE SPRINGS or other configurations: A left hand wound spring is anchored at left hand end • A right hand wound spring is anchored at right hand end.	
7	The roller carriers must be adjusted to minimise the friction between the door panels and vertical weather strip. You should be able to turn the rollers by hand when the door is in the closed position.	
8	Do the tracks run parallel in the vertical and horizontal planes? Measure width and height, and check diagonal dimensions.	
9	Are there any obstructions during opening/closing? Check the tolerances between the door panel and track.	

SECTION 13

DISMANTLING PROCEDURE

If an existing door needs to be taken down from an opening the following procedures should be carried out.

Ensure normal health and safety procedures are adhered to and that the immediate area around the door is cordoned off.

- Door must be in the closed position
- If the door is electrically operated then isolate the power.
- To make the door safe the spring tension needs to be released, this is always a job for two people.
- Insert a tension bar into the winding plug and take the force of the spring tension, remove the key (if there is one) from the keyway, undo set screws and start to un-tension spring. Insert another tension bar (in the same way as when tensioning spring), take the strain, remove first tension bar and continue to un-tension spring. Repeat until spring tension removed.
- Repeat un-tensioning procedure for all springs.

You are now in a position to take down spring assembly which essentially is the reverse installation procedure.

- Remove chain hoist or motor where supplied.
- Remove cables from cable drums.
- Remove centre coupling where supplied and remove pawl wheel (catch wheel) from spring break device where supplied.
- Support spring and shaft in suitable and safe manner, carefully undo fixings to bearing plates and lower spring and shaft into a safe position.
- Repeat for other springs and shafts.

You are now in a position to remove panel assembly.

- Make sure panel being removed is supported at all times.
- Carefully undo top corner brackets, rollers, side and intermediate hinges immediately below and remove top panel and place in a safe position.
- Repeat for remaining panels removing one at a time until complete.

You are now in a position to remove horizontal tracks (where supplied).

- Support one side of the horizontal track in a safe and secure manner, un- bolt track hangers, un-bolt connection to vertical angle and connecting plate. The track can now be lowered and placed in a safe position. Remove track hanger assembly and lay to one side.
- Repeat for other horizontal track.

It only remains to take down the vertical tracks.

- The vertical track and angle on each side of the opening may be supplied in either one complete section or two parts – upper and lower.
- Support upper section where applicable, remove fixings from structure, take down carefully and place into a safe position.
- Repeat for lower section and then repeat for the other side.

Dismantling procedure is now complete.

SECTION 14

DECLARATION of PERFORMANCE

1. Door Type — Insulated Sectional Overhead Door
2. Serial no — Unique drawing reference
3. Operation — Manual operated door
4. Intended use — External door for vehicle access
5. Manufacturer — OSA Door Parts Ltd, Ashville Industrial Estate, Runcorn, Cheshire UK WA7 3EZ
6. Assessment — Level 3
7. Harmonised Standard — BS EN 13241-1:2003 + A1:2011
   0402-CPD-40 70 12
   SP Technical Research Institute of Sweden performed
   Initial Type Tests under system 3 and issued test report SP
   No. P403429 and TNO 2005-BCS-R0014.
8. Declared Performance

ESSENTIAL CHARACTERISTIC	DECLARED PERFORMANCE	HARMONISED STANDARD
Water tightness	Class 1	EN 13241-1:2003 + A1:2011
Dangerous substances	None	
Resistance to wind load	2	
Thermal resistance	0.9 W/m2.K	
Air Permeability	Class 2	
Safe opening - for vertically opening doors	Pass	
Definition of geometry of glass components	Pass	
Mechanical resistance and stability	Pass	
Durability of water tightness, thermal resistance and air permeability	Pass	

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 5.

   Signed for and on behalf of the manufacturer by:

Bill Hammond - Director

OSA DOOR PARTS

SECTION 14

DECLARATION of PERFORMANCE

1. Door Type — Insulated Sectional Overhead Door
2. Serial no — Unique drawing reference
3. Operation — Power operated door
4. Intended use — External door for vehicle access
5. Manufacturer — OSA Door Parts Ltd, Ashville Industrial Estate, Runcorn, Cheshire UK WA7 3EZ
6. Assessment — Level 3
7. Harmonised Standard — BS EN 13241-1:2003 + A1:2011
   0402-CPD-40 70 12
   SP Technical Research Institute of Sweden performed
   Initial Type Tests under system 3 and issued test report SP
   No. P403429 and TNO 2005-BCS-R0014.
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ESSENTIAL CHARACTERISTIC	DECLARED PERFORMANCE	HARMONISED STANDARD
Water tightness	Class 1	EN 13241-1:2003 + A1:2011
Dangerous substances	None	
Resistance to wind load	2	
Thermal resistance	0.9 W/m2.K	
Air Permeability	Class 2	
Safe opening - for vertically opening doors	Pass	
Definition of geometry of glass components	Pass	
Mechanical resistance and stability	Pass	
Operating forces	Pass	
Durability of water tightness, thermal resistance and air permeability	Pass	

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 5.

   Signed for and on behalf of the manufacturer by:

Bill Hammond - Director

OSA DOOR PARTS