

ADVANCED DOORS LTD



'THERMALEX 401' **SECTIONAL OVERHEAD DOOR**

**INDUSTRIAL DOOR OWNERS LOGBOOK
OPERATING & MAINTENANCE INSTRUCTIONS
SERVICE INSTRUCTIONS
MAINTENANCE RECORDS
CERTIFICATION**

CONTENTS

'THERMALEX 401' SECTIONAL OVERHEAD DOOR

1.1 Introduction	3
1.2 Door Warranty	3
1.3 Operating Instructions	4
1.4 Automation	6
1.5 Cleaning Methods	7
1.6 Service	7
1.7 Safety Devices	8
1.8 General Safety	9
1.9 Maintenance	9
1.10 Service Check Sheet	10
1.11 Maintenance / Repairs Log	11
1.12 Certification	12

'THERMALEX 401'

SECTIONAL OVERHEAD DOOR

1.1 INTRODUCTION

An industrial door is a vital everyday piece of machinery in the operation of almost every industrial building. If a door is not maintained properly it can become extremely dangerous and, if un-useable, can even stop your business operations. To comply with Health & Safety regulations and to keep within our warranty it is imperative that the door be operated and maintained in accordance with these instructions. Should you require any further information or assistance with this logbook, please do not hesitate to contact us.

These operating instructions must be passed to the owner of the door and read and understood by all personnel who will have cause to operate the door.

1.2 DOOR WARRANTY

All equipment manufactured or supplied by the Company is guaranteed against faulty materials and workmanship for a period of 12 months from the date of installation (or delivery in the case of supply only). This warranty is subject to fair wear and tear and having been maintained to our recommendations.

All equipment manufactured in compliance with the following standards...

BS EN 13241-1
BS EN 12424
BS EN 12425
BS EN 12427
BS EN 12453
BS EN 12444
BS EN 12489
BS EN 12445
BS EN 12604
BS EN 12605
BS EN 12635

Each product is CE marked and labelled in accordance with BS EN 13241-1.

Please Note:-

To comply with BSEN 13241-1 and Regulation 5 of the Workplace (Health, Safety and Welfare) Regulations 1992, it is the responsibility of the owner of the door to maintain a fully detailed service and maintenance record and ensure it is serviced in accordance with the our recommendations.

1.3 OPERATING INSTRUCTIONS

“THERMALEX 401” **PUSH UP OPERATION**

Application

These operating instructions apply to a Sectional Overhead Door, which is push-up or hand operated. The door is counterbalanced by springs and should only be operated by competent personnel.

Basic Operation

The door shall be manually opened or closed by the handle in the bottom panel of the door and/or by the pull down cord supplied, as the height dictates.

The door must be kept under control at all times and should not be allowed to free travel.

A locking device is usually supplied with the door, which will be placed on the third panel from floor level. Locating the bolt into the hole provided in the sidetrack activates the shoot bolt lock. The lock is designed to accept a standard pad lock if required. The bolt is spring loaded, and to unlock, simply retract the bolt. Please note that it is important to ensure the bolt is fully retracted prior to operating the door.

To open the door.

Carefully lift the door via the handle to a comfortable position at head height. The door can then be pushed to its fully open position whilst being controlled via the pull down cord. Spring buffers at the end of each door track will stop the door at its fully opened position and will prevent the door from opening too far.

To close the door.

Pull the door down via the pull down cord to a comfortable position at head height. Then fully close the door via the handle. You may need foot pressure on the handle to obtain a good seal with the floor and to locate the shoot bolt lock.

Safety Devices

The door will be fitted with cable breakage devices and may be fitted with spring breakage devices. These will activate automatically. Please refer to Cable Breakage and Spring Breakage section of these instructions.

“THERMALEX 401” **HAND CHAIN OPERATION**

Application

These operating instructions apply to a Sectional Overhead Door, which is operated via a continuous haul chain. The door is counterbalanced by springs and should only be operated by competent personnel.

Basic Operation

A locking device is usually supplied with the door, which will be placed on the third panel from floor level. Locating the bolt into the hole provided in the sidetrack activates the shoot bolt lock.

The lock is designed to accept a standard pad lock if required. The bolt is spring loaded, and to unlock, simply retract the bolt. Please note that it is important to ensure the bolt is fully retracted prior to operating the door.

To open or close the door.

Release the haul chain at the side of the door from its keep. Pull the chain in the required direction, always maintaining a steady speed and control. Never release the chain during operation. Once the door has reached its required position, place the haul chain back in to its keep. The keep is supplied to accept a standard pad-lock so that the haul chain can be locked in place if required.

Safety Devices

The door will be fitted with cable breakage devices and may be fitted with spring breakage devices. These will activate automatically. Please refer to Cable Breakage and Spring Breakage section of these instructions.

“THERMALEX 401” ELECTRICAL OPERATION

Application

These operating instructions apply to a Sectional Overhead Door, which is electrically operated. The door is counterbalanced by springs and should only be operated by trained personnel.

Basic Operation

A locking device is not usually supplied with the door as the motor drive system prevents the spring assistance of the door.

If supplied, the lock will be placed on the third panel from floor level and will be fitted with an electrical interlock switch that will prevent the door from being operated whilst locked. Locating the bolt into the hole provided in the sidetrack activates the shoot bolt lock. The lock is designed to accept a standard pad lock if required. The bolt is spring loaded, and to unlock, simply retract the bolt. Please note that it is important to ensure the bolt is fully retracted prior to operating the door.

To open the door.

Check the door is not locked in any way and that there are no obstructions that may prevent the door from opening.

DO NOT ATTEMPT TO OPERATE THE DOOR UNTIL ALL OBSTRUCTIONS HAVE BEEN REMOVED.

Apply continued pressure to the “UP” button, positioned at the side of the door, and the door will travel vertically until it reaches its upper limit switch and the spring buffers at the end of each track. At this point the control circuit will open and the brake will engage to stop the door at its fully open position. If at any point the button is released, the door will stop at its current position. To restart the open operation, simply press the “UP” button again. If an additional means of safety is supplied with the door, such as a photoelectric safety beam, then continued pressure would not be required on the button. If at any time you need to stop the door, simply press the red emergency “STOP” button.

If a key switch is supplied in lieu of push buttons, enter key into cylinder and turn towards “UP” to activate the door. The key switch will require continued pressure, as it is spring loaded to its “OFF” position.

To close the door.

Check the door is not locked in any way and that there are no obstructions that may prevent the door from closing. Check that the area is clear of all personnel.

DO NOT ATTEMPT TO OPERATE THE DOOR UNTIL ALL OBSTRUCTIONS HAVE BEEN REMOVED.

Apply continued pressure to the “DOWN” button, positioned at the side of the door, and the door will travel vertically until it reaches its lower limit switch. At this point the control circuit will open and the brake will engage to stop the door at its fully closed position. If at any point the button is released, the door will stop at its current position. To restart the close operation, simply press the “DOWN” button again. If an additional means of safety is supplied with the door, such as a safety edge or photoelectric safety beam, then continued pressure will not be required on the button. If at any time you need to stop the door, simply press the red emergency “STOP” button. If a key switch is supplied in lieu of push buttons, enter key into cylinder and turn towards “DOWN” to activate the door. The key switch will require continued pressure, as it is spring loaded to its “OFF” position.

Emergency Manual Over Ride Operation

In the event of a power failure, the door is supplied with a manual over ride system. This is via a continuous haul chain and should only be used in emergencies.

PLEASE NOTE that the emergency manual over ride system is not designed for everyday use and that excessive use will cause premature failure.

To engage the manual over ride system, remove the haul chain from its keep and pull the haul chain in the required direction. Once the chain is used, an in built micro-switch is activated to prevent the door from being operated electrically. It is important that, in the closing position, the haul chain operation is stopped as soon as the door reaches the floor. If the chains are pulled

beyond the door reaching the floor the lifting cable will become slack and may detach from their housing at high level. To return to electrical operation the haul must be put into a neutral position which is somewhere between the upwards engagement and the downwards engagement. This will remake the micro-switch and re-instate electrical control. Return the haul chain to its keep.

Some systems are supplied with red and green toggles. To activate the over ride on these systems simply pull the green toggle at the side of the opening that is marked "MANUAL / HAND". This will isolate the electrical control buttons and will engage the haul chain. To disengage the manual over ride system, return the haul chain to its keep and pull on the red toggle at the side of the opening that is marked "MOTOR". This will re-instate the electrical control buttons and will disengage the haul chain.

The emergency manual over ride system cannot be used if the safety brake has been activated.

Automatic Operation

Where a door control system is fitted, such as timed return, radio control, or induction loop activation, additional safety features will be installed on the door to give the required protection. Please refer to the automation section in the instructions.

1.4 AUTOMATION

Basic Timed Close Operation

The door is opened via the normal method, however, the door will self close after a period of time. An Opto-Electronic self-monitoring safety edge is installed on the leading/bottom edge of the door. This will stop and then re-open the door if it comes into contact with an obstruction. A Photo Safety Beam is also provided across the door opening, which will prevent the door from closing if the beam is broken. This safety beam will also stop and re-open the door if broken during its closing cycle.

Remote Operation

The door is to be operated from a remote location via push buttons of a key switch.

An Opto-Electronic self-monitoring safety edge is installed on the leading/bottom edge of the door. This will stop and then re-open the door if it comes into contact with an obstruction. A Photo Safety Beam is also provided across the door opening, which will prevent the door from closing if the beam is broken. This safety beam will also stop and re-open the door if broken during its closing cycle.

Radio / Infra Red Operation

The door is operated from a remote location via hand held transmitters. It can be closed by the transmitter or can be timed closed.

An Opto-Electronic self-monitoring safety edge is installed on the leading/bottom edge of the door. This will stop and then re-open the door if it comes into contact with an obstruction. A Photo Safety Beam is also provided across the door opening, which will prevent the door from closing if the beam is broken. This safety beam will also stop and re-open the door if broken during its closing cycle.

Induction Loop Operation

The door is operated from induction loops set into the floor. The loops also act as a means of safety so the door will not self-close whilst the vehicle is parked on the loops. The door will self close via timed closing.

An Opto-Electronic self-monitoring safety edge is installed on the leading/bottom edge of the door. This will stop and then re-open the door if it comes into contact with an obstruction. A Photo Safety Beam is also provided across the door opening, which will prevent the door from closing if the beam is broken. This safety beam will also stop and re-open the door if broken during its closing cycle.

Movement Sensor

The door is operated by means of a motion detector. The door will self close via timed closing.

An Opto-Electronic self-monitoring safety edge is installed on the leading/bottom edge of the door. This will stop and then re-open the door if it comes into contact with an obstruction. A Photo Safety Beam is also provided across the door opening, which will prevent the door from closing if the beam is broken. This safety beam will also stop and re-open the door if broken during its closing cycle.

1.5 CLEANING METHODS

Galvanised Steel

Some door sections are manufactured from galvanized steel, are designed for external applications and require little or no maintenance under normal operating conditions. Any general build up of dust or grime should be removed with a damp cloth using a proprietary soap and water mixture.

Plastisol Faced Steel

Some door sections are manufactured from HP 200 plastisol coated steel, which require little maintenance under normal conditions. Any general build up of dust or grime should be treated as above.

Floor Guide Channels

Floor guide channels should be kept clear of debris build up on a daily basis. Build up may cause the door to jam or not close properly. Simple brushing will suffice.

Winding Gear, Motor Unit, Barrel Assemblies

Winding gear, motor units (electric doors), and barrel assemblies are generally under cover at high level and do not require regular cleaning between planned maintenance periods.

Cleaning Materials, Solvents etc.

Heavy industrial cleaners such as trichloroethylene, paint thinners, formaldehyde petrol, diesel, sodium bicarbonate or "Gunk" should not be used. Nor should sand or shot blasting techniques, nor oxidizing agents. White spirit may be used to remove graffiti but the door should be thoroughly washed and rinsed using a proprietary soap and water mix afterwards.

1.6 SERVICE

It is essential that the door operation remains functioning in accordance with the operating instructions. To ensure this happens a documented maintenance regime shall be established and maintained by the employer in accordance with Regulation 5 of the Workplace (Health, Safety and Welfare) Regulations 1992.

Failure to do so may result in prosecution in the event of an accident.

The company operates a service contract scheme. If you require information on Service Contracts please contact our after sales department.

Service Frequency

Note: Failure to keep the door regularly maintained could invalidate the warranty.

The following recommendations are for maintenance and repairs to ensure that the door remains in full working order throughout its service life. To ensure safe and reliable operation regular inspection and maintenance is essential. The frequency is dependent on the use.

Door cycles per day (1 cycle = open & close)	Recommended Maintenance period
Up to 15	6 months
Up to 30	4 months
Up to 45	3 months
Over 45	2 months

Prompt service and repairs will avoid unnecessary stress on components, which could lead to premature wear or failure.

Warning – Activities, which interfere with any part of the door that is under tension, must not be undertaken by untrained personnel. Interference with these components can be dangerous and should only be undertaken by trained personnel as part of regular maintenance.

1.7 SAFETY DEVICES

Safety Edge

An Opto-Electronic safety edge will be fitted to a door if any level of automation is required. The safety edge is connected to a control panel and will be self-monitoring. If any problem occurs with the safety edge, it will fail-safe and the door will only be able to be operated via continual pressure on the control buttons.

Safety Beam

A photoelectric safety beam may be fitted to the door to work in conjunction with a safety edge. If the beam is broken, the door will not close. If the beam is broken during closing, the door will stop and re-open to its fully open position. Please note that if the beam is out of alignment, the door will not operate.

Spring Breakage

`Thermalex` sectional doors may be fitted with spring breakage devices. If so, they will be an integral part of the counter balance springs at high level. They are designed to lock the spring shaft in the event of spring failure. This will prevent the door from dropping in the event of spring failure. These devices should never be tampered with in any way and if activated, should only be replaced by qualified engineers. Some systems will be provided with electrical micro-switches built into the devices. These will isolate the electrical controls if activated.

Cable Breakage

`Thermalex` sectional doors will be fitted with cable breakage devices. These devices are an integral part of the bottom lifting brackets at each bottom corner of the bottom panel. These are designed to completely stop the door in the event of cable failure. These devices should never be tampered with in any way and if activated, should only be replaced by qualified engineers. Please note that poor maintenance may cause inadvertent operation of these safety devices.

1.8 GENERAL SAFETY

The following safety instructions should be adhered to at all times, failure to do so could lead to an accident and injury:-

1. Keep openings clear at all times.
2. Do not operate a damaged door, or one that is difficult to operate. In the event that the door is found to be damaged or difficult to operate, lock the door, remove the key, leave a warning notice on the door and ensure that a qualified person inspects the door.
3. Do not lean ladders against the door, the guides, or the casing.
4. Stand well clear of the opening whilst the door is being operated.
5. Operate the door only by the means provided.
6. Do not remove the casing over the curtain roll and the headgear unless the door is stopped, the chain is secured and locked in position or the power switched off at the isolator on power operated doors.
7. Do not use doors to lift materials or personnel.
8. Do not dash through a closing door. Wait for it to close and then re-open.

1.9 MAINTENANCE BY THE USER

On a daily basis the user should ensure that:

There is no damage to any parts of the door.

Excessive force is not required to operate the door.

Any damage to the door or excessive force needed to operate the door is reported and action taken as necessary to put the door in good working order.

Components of the door and the guides are free from dirt and dust build up likely to affect the operation.

The door operation continues to comply with the safety requirements.

Maintenance – by Specialist Engineer

A specialist service engineer, in accordance with the service work instructions and task sheets, should carry out the service and maintenance in accordance with the recommended service frequencies.

1.10 SERVICE CHECK SHEET

Note: - Before operating the door, carefully inspect both internal and external sides of the door for obvious signs of wear or damage. If badly damaged, do not operate the door.

Horizontal and Vertical Tracks

- Check all fixings & tighten or replace if necessary.
- Check vertical alignment.
- Check horizontal alignment.
- Check wear on track.
- Check alignment of track buffer springs.

Spring Assembly & Cable Drums

- Check all bearings & bearing brackets.
- Check fixings in bearing brackets & tighten or replace if necessary.
- Check spring shaft coupling, adjust & tighten if necessary.
- Check condition of cable drums.
- Check that cable drums are aligned correctly and that they are secured to the spring shaft.
- Check all keys & keyways on shaft.
- Check spring breakage devices (if installed).
- Check haul chain assembly (if installed).
- Visual check of counterbalance springs & lubricate if necessary.

If the door is used and maintained correctly, the springing system is designed to operate for at least 15,000 cycles. At this point the springing mechanism should be replaced.

Door Lifting Cables

- Check cables for signs of fraying.
- Check cables are correctly secured to bottom fixing pin.
- Check cables are correctly secured to cable drums.
- Check any anti-cable slack devices.

The door lifting cables should be replaced every 10,000 cycles or immediately if any signs of fraying or kinking. A simple check for cable damage is to wipe a cotton wool pad along the cable and where it sticks inspect for fraying.

Door Panels and Fittings

- Check general condition of panels (externally & internally).
- Check condition of all guide rollers.
- Check all hinges and hinge pins.
- Check alignment of adjustable side hinges and adjust if necessary.
- Check that all panel fittings are securely fixed.
- Check operation of lock (if installed).
- Check operation of integral pass door (if fitted).
- Check all vision panels for damage (if fitted).
- Check condition of bottom seal.
- Check condition of top seal.
- Check condition of both side seals.

If Electrical Drive System

- Check motor drive is securely fixed.
- Check drive gearing and lubricate.
- Check operation of manual over-ride system.
- Check electrical interlock of manual over-ride system.
- Check door travel limits and adjust if required.
- Check correct operation of control buttons.
- Check correct operation of safety edge (if installed).
- Check correct operation of safety beams (if installed).
- Check all other control systems (if installed).

Service Label

- Complete the service label adhered to the door and logbook if available.

1.11 MAINTENANCE / REPAIRS LOG

Date:	Work Carried Out:
Engineers Name:	
Date:	Work Carried Out:
Engineers Name:	
Date:	Work Carried Out:
Engineers Name:	
Date:	Work Carried Out:
Engineers Name:	
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Engineers Name:	

1.12 CERTIFICATION

EC DECLARATION OF CONFORMITY

Product:- Sectional Overhead Door
Manufacturer:- Advanced Doors Limited
Park Mill Way
Clayton West
Huddersfield
West Yorkshire
HD8 9XJ

The above product is in conformity with the essential Health & Safety requirements of the Products Standard BS EN 13241-1 and the following transposed harmonised standards...

BS EN 292: parts 1 & 2: 1991
BS EN 294: 1992
BS EN 60204: part 1: 1997
BS EN 418: 1992
BS EN 12453: 2001
BS EN 12604: 2004
BS EN 12445: 2001
BS EN 12635: 2002
BS EN 12424: 2000
BS EN 12425: 2000
BS EN 12426: 2000
BS EN 12427: 2000
BS EN 12444: 2001
BS EN 12428: 2000
BS EN 12489: 2000

All relevant certificates and test reports are included in the technical construction file.

Signature:-



Name:-

P A Whyatt
Managing Director

EC DECLARATION OF CONFORMITY

Product:- Power Operated Sectional Overhead Door

Manufacturer:- Advanced Doors Limited
Park Mill Way
Clayton West
Huddersfield
West Yorkshire
HD8 9XJ

The above product is in conformity with the essential Health & Safety requirements of the Machinery Directive 89/392 as amended by the EC Directives 91/368 and 94/44 and following the transposed harmonised standards....

BSEN 292: parts 1 & 2:1991
BSEN 294:1992
BSEN 60204: part 1: 1993
BSEN 349:1993
BSEN 418:1992
BSEN 12445:2008
BSEN 12453:2008
BSEN 13241-1

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Signature:-



Name:-

P A Whyatt
Managing Director

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BSEN 12424:2000
BSEN 12425:2000
BSEN 12426:2000
BSEN 12427:2000
BSEN 12444:2001
BSEN 12428:2000
BSEN 12489:2000

The product to which this Declaration of Incorporation relates must not be put into service until the relevant machinery into which it is to be incorporated has been declared in conformity with the Products Standard BSEN 13241-1.

Signature:-



Name:-

P A Whyatt
Managing Director

EC DECLARATION OF INCORPORATION

Product:- Power Operated Sectional Overhead Door

Manufacturer:- Advanced Doors Limited
Park Mill Way
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BSEN 418:1992
BSEN 12445:2008
BSEN 12453:2008
BSEN 13241-1

The product to which this Declaration of Incorporation relates must not be put into service until the relevant machinery into which it is to be incorporated has been declared in conformity with the Machinery Directive.

Signature:-



Name:-

P A Whyatt
Managing Director

