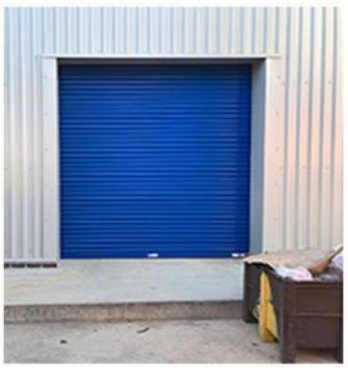


Roller Shutter Maintenance

Maintenance Brochure

anglia door systems

Safety Overview

Description

This document covers the anatomy of a roller shutter door, where wear and tear usually occur and how our maintenance contract covers you and your doors, saving you money long term.

Important Notice

Maintenance on a roller shutter door may only be carried out by suitably trained and authorised personnel. When commissioning the door, the engineer responsible for performing the work must check for any potential hazards and make sure that the door is correctly functioning, with the ability to be operated by hand.

Safety Guidelines

- Personal safety is paramount and as such strict guidelines must be adhered to when scheduled maintenance takes place. Safety equipment will be worn by engineers on site at all times.
- There may be access requirements to sites, as well as access equipment needed, for example a scissor lift. This may be provided as part of our fee or by the customer and will be determined during the sales period.
- Switch off the power before any maintenance is to be carried out as contact with components that are normally covered can occur.
- 'Maintenance in progress' signage required on site.

Maintenance of doors and gates

All doors and gates will require some maintenance; the frequency and type of maintenance will depend upon the nature of the door or gate and its use.
The general maintenance duties for doors and gates of all types can be summarised as follows:

The principal responsibility for ensuring that essential maintenance is undertaken lies with the person in control of the premises in which the door or gate is installed. In a workplace, this is usually the employer.

The objective of maintenance is primarily to ensure that the door or gate is safe; efficiency and convenience are secondary issues. The question of whether a particular door or gate is in fact safe will be determined by reference to the current "state of the art", not what may have been considered safe when the door or gate was first installed.

Any contractor employed to carry out maintenance or repair work is legally required to ensure that their work results in a gate or door which is safe for anyone who could be affected by it.
If, having informed the person in control of the premises about the risks, it proves to be impracticable to make the door or gate safe for further use, the only recourse for the contractor is to leave the door or gate out of service.

Your Responsibilities

All owners/managers of premises, including homeowners, have a duty of care to persons who may be affected by doors and gates on their premises. In the event of loss or injury caused by an unsafe gate or door, the injured party may be able to sue in a civil court to recover damages.
Insurance cover is available for such risks, but may be prejudiced if the owner/manager has failed to maintain a door or gate to a reasonable standard..

Safety Overview Cont.

Our Responsibility

Maintenance contractors may be held liable in a civil court for any breach of their contract with the owner/manager of premises or for any loss occasioned by their negligence. More importantly, however, if their work fails to safeguard the health and safety of any person who may be affected, they may also have a criminal liability.. This liability may affect an employer, a self-employed person and an individual employee.
If an unsafe door or gate causes a fatality, a charge of manslaughter may be considered.
Note that these duties under criminal law apply to the contractor irrespective of the type of premises involved. - **http://www.DHFonline.org.uk/publications/technical-specifications/1.htm**

Maintaining Safety

Component parts can wear and fail, sometimes catastrophically. Like most machinery, powered doors and gates need to be maintained in order to remain safe. Powered doors/gates forming parts of workplaces or in common parts of residential complexes will be subject to health and safety law. Owners, occupiers, landlords and managing agents will have on-going responsibilities for the safety of all users and all those who may encounter the doors/gate.

Those undertaking work on powered gates are responsible for what they do, and for leaving the machinery in a safe condition, which may include switching off and isolating from power, if it needs to be left in an unsafe condition. Substantial modifications may require re-assessment and in some cases re-CE marking by the person undertaking the modifications.

Use Of Standards For Design, Assessment And Testing

There are a number of current standards which are relevant to powered doors/gates, including:

BS EN 13241-1 the Product Standard for powered doors and gates (and most relevant to the CPR)
BS EN 12604 & BS EN 12605 on mechanical requirements and tests
BS EN 12453 & BS EN 12445 on requirements and test for powered gates
BS EN 12635 on installation and use
BS EN 12978 on safety devices for power operated doors and gates
EN 60204-1, Safety of machinery - Electrical equipment of machines, general requirements
ISO 13857, Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs.
European Commission - Machinery Directive 2006/42/EC - https://ec.europa.eu/docsroom/documents/9202/attachments/1/translations/en/renditions/native
European Comission - Guide to Machinery Directive compliance - https://osha.europa.eu/en/legislations/guidelines/guide-application-machinery-directive-200642ec

Code Of Practice - DHF TS012

The Code of Practice for the Design, Manufacture, Installation and Maintenance of Industrial Doors and Domestic Garage Doors (DHF TS 012:2019) is the 14th in a series of DHF technical specifications covering the range of industry sectors represented by DHF.
Providing a framework to ensure the safe and compliant installation of industrial doors and roller shutters, the code draws on safety legislation, European standards, and industry best practice. It gives practical help to all those involved with industrial doors by providing clear guidance on their legal obligation and responsibilities. - **http://www.DHFonline.org.uk/publications/technical-specifications/1.htm**

Safety Overview Cont.

Unsafe Notice Procedcure

If during maintenance a door is found to be hazardous/defective, a “safety critical” or “requiring improvement” tag is to be issued.

Where a hazard has been classified “requiring attention” and the system is left in service, the system manager remains potentially liable to criminal prosecution or civil legal action in the event of a near miss or injury incident and hence must be given the opportunity to take the system out of service.

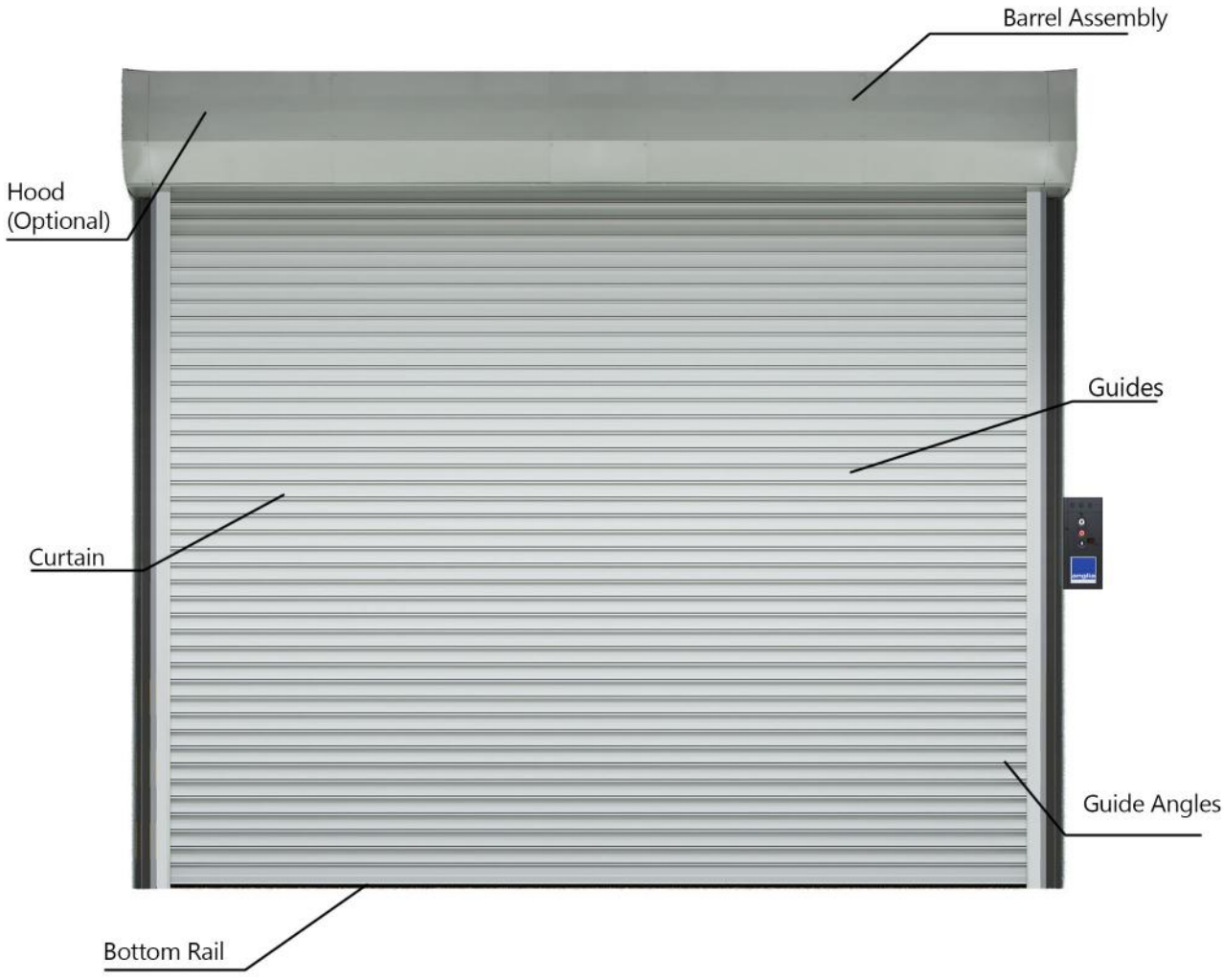
The maintenance contractor should not however leave a system with “safety critical” defects in service, and only leave a system with “requiring improvement” defects in service with written permission from the client. The maintenance contractor must explain to the client (and the users on site where appropriate) how the system has been isolated or secured (e.g. explain where the switch is or how it has been secured against collapse).

The maintenance contractor should inform the client in writing (using the Unsafe System Notice) about the outstanding safety defects and that there could be legal consequences for them in the event of an incident involving the system if it is returned to service in its current state. It is strongly advised that the unsafe system notice is delivered in a traceable and recordable manner, e.g. by email with delivery and read receipt requests, regardless of whether it is appropriate or even possible to issue a paper copy on site.

Please see for safety and conformity overviews. -
https://www.dhfonline.org.uk/pg/legislation-and-standards/37.htm

Roller Shutter Technical Breakdown

A overview of relevant parts for a roller shutter door,. All Roller Shutter Doors are checked against a rigorous checklist by our engineers during maintenance to keep to DHF regulations & standards.



Guides - Guide channels manufactured from 3mm steel, width according to size opening.

Bottom Rail - Inverted "T" bottom rail assembly made from 1.6m galvanised steel

Guide Angles - Either 75 x 50 x 6mm or 100 x 65 x 6mm steel angles painted.

Curtain - 76mm single skin scrolled lath. Thickness dependant on opening sizes and wind load. Galvanised as standard.

Barrel Assembly - Steel tube housing counterbalance spring. All chain operated roller shutters wil have anti fall brake as standard to comply with the latest regulations

Hood - Optional install hod to cover barrel assembly

Engineer Checklist

Our maintenance checklist for our engineers. Please be aware that not all of these are checked as it is dependant on the brand and type of door being checked. Our checks are thorough and meet DHF standards.

	Roller Shutter Maintenance Checklist
1	Log door cycle counter actual (if applicable)
2	Estimate the door cycle counter, based on number of open/close operations per day (if actual unavailable)
3	Take a photo of the door viewed from endplates side
4	Photo of serial number/manufacture plate (if applicable)
5	Is there any damage to the door? (view from endplates side)
6	Is there any damage to the door? (serial number/manufacture plate)
7	Has door got a good cover or lack of access to headgear?
8	Can you gain access to the headgear to enable inspection of the barrel assembly? (if not, then fail the door)
9	Check is there lifting hazard protection
10	Assess the general condition of the guide assembly
11	Check guide weather brush sales
12	Check the guide stops for welds, alignment and condition
13	Check the guide to angle fixings are tight and none missing
14	Check the guide angle fixings are tight and none missing
15	Check the endplates and support for fixings, alignment and condition
16	Check the cup and retainer for fixings, alignment and condition
17	Check the barrel bearings and discs/cast block for fixings, alignment and condition
18	Check the spring counterbalance
19	Check the drivetrain/gearing/chain for alignment and condition (lubricate if required)
20	Check the safety brake device for fixings, alignment and condition
21	Check the top lath fixings for alignment and condition
22	Check the end locks for fixings, alignment and condition
23	Check the wind locks for fixings, alignment and condition
24	Check the bottom rail and cutouts for alignment and condition
25	Check the alignment of the curtain
26	Check the general condition of the curtain
27	Check the condition of the weatherseal
28	Check the hand chain keep for fixing and condition
29	Operate the door to both the fully open and closed position to ensure the free running and alignment of the door
30	What type of operators are fitted?
31	Check the push/pull handles or straps for alignment and condition
32	Check the manual hand chain for fixing and condition
33	Check the condition of the motor to barrel fixings
34	Check the motor security retaining pins/clips for fixing and condition
35	If mechanical limits, check limit collar secure
36	UPS (battery backup) – turn off mains power and perform open/close cycle to check battery for back up operation
37	Check the control board for wiring, fixings and operation
38	Check the condition and operation of all limits
39	Check the condition of the motor and wiring for fixings, alignment and seels
40	Perform a manual override on the facility
41	Perform a manual override on the cutout switch
42	Check the pushbutton for condition and operation
43	Check the radar/activation sensor for condition and operation
44	Check the key switch for condition and operation
45	Does the door have a safety system?
46	Check the photocells for alignment, condition and operation
47	Check the light curtain for alignment, condition and operation
48	Check the presence sensors for alignment, condition and operation
49	Check all wiring, cable conduit, glands and junction boxes for condition and fixings
50	Check the ironmongery for alignment, fixings and condition
51	Does the door have a wicket door?
52	Check the hinge points for alignment, fixings and condition
53	Check the leaf construction for alignment, fixings and condition
54	Does the wicket door have a cutout switch fitted?
55	Does the door have a locking system?
56	Check the pinson locks for welds, key operation, alignment, fixings and condition
57	Check the ground locks for key operation, alignment, fixings and condition
58	Check the shoot bolts for operation, alignment, fixings and condition
59	Does the locking system have a cutout switch?
60	Check the status of door
61	Is the relevant door and service information correctly displayed?
62	Identify any further works/recommendations
63	Ensure inspection of all fixtures and fittings
64	Finalise the check with an engineer signature