



DATA SHEET

AERO-SWING™ HYDRAULIC DOOR SYSTEM

REVISION 1B - OCTOBER 2011

CONTENTS

PAGE

1.1	The AeroSwing Hydraulic Door	3
1.2	Information & Power	3
1.3	Mounting the door	3
1.4	Primer Finish	3
1.5	Panels & Insulation	3
1.6	Wind Load	3
1.7	Drive System	4
1.8	Operating The Door	4
1.9	Locking System	4
2.0	Webbed Truss	4
2.1	Seals & Climate Protection	5
2.2	Warranty	5
2.3	Options - Warranty	5
2.4	Options - Finish	5
2.5	Options - Power	5
2.6	Options - Man Doors & Windows	6
2.7	Options - Webbed Truss	6
2.8	Options - Inside Skin Framework	6
2.9	Options - Safety Equipment	7
3.0	Options - Operating Controls	8

DATA SHEET : AERO·SWING™ HYDRAULIC DOOR SYSTEM

1.1 TYPE OF DOOR : HYDRAULIC

A tube steel door, pre hung inside it's own tube steel frame. Door is operated by a wall mounted, hydraulic unit. Hydraulic unit is composed of a pump, motor and reservoir which drives hydraulic fluid through a pair of hydraulic hoses - to a pair of hydraulic cylinders.

Each hydraulic cylinder is connected to an upper pinpoint on the doors framework and a lower pinpoint on the door. The direction of hydraulic fluid will determine if the cylinders extend (door opens) or retract (door closes).

1.2 DOOR INFORMATION

- Maximum Width:** 80 feet or 960 inches
- Maximum Height:** 24 feet or 288 inches
- Door Weight :** 5lb sq/ft - Unconfirmed
- Power Supply:** 220V, Single Phase
- Steel Specification :** Variable - See drawing
- Opening Speed:** Variable - See drawing
- Operating Conditions:** -20°C to +70°C.

1.3 MOUNTING STYLES - Choose 1

Door mounts to inside of your framework:

- Loss to opening at Jamb 1 : 5.5-inches
- Loss to opening at Jamb 2 : 5.5-inches
- Loss to opening at header : 5.5-inches
- See drawing ADI_HD_MI

Door mounts to outside of your framework

- Loss to opening at sides : None
- Loss to opening at header : None
- See drawing ADI_HD_MO

1.4 FINISH

- Steel:** ASP-4035 3.5 VOC Red Oxide
- Hinges:** ASP-4035 3.5 VOC Red Oxide
- Cylinders:** ASP-4035 3.5 VOC Red Oxide
- Hydraulic Hose:** Black synthetic rubber, abrasion resistant.

1.5 PANELS / INSULATION

- Sheeting Panels:** Client to specify & supply
- Insulation Membrane :** Client to specify & supply

AeroDoor™ will not specify insulation or wall panel systems unless specified in writing by client. AeroDoor™ will then provide a separate written quotation and order form.

1.6 WIND LOAD

Will withstand external wind load in accordance with Uniform Building Code design and wind loads specified by the client.

DATA SHEET : AERO·SWING™ HYDRAULIC DOOR SYSTEM

1.7

DRIVE SYSTEM

A single electric powered hydraulic pump operates the door. Pump shall be mounted to the adjoining wall and connects to the AeroSwing™ door via four (4) black synthetic rubber hydraulic hoses.

Door motion is achieved by the hydraulic pump - driving hydraulic fluid through the rubber hoses to the two hydraulic cylinders.

1.8

OPERATION CONTROLS

Actuation: lever operated

Functions: Up. Stop. Return

Note: Unless additional closing safety features are installed i.e. photocell or safety edge, actuator will operate like a deadman switch.

1.9

LOCKING

An automatic lock valve secures the door in the selected position (i.e. closed) when no motion is desired, creating a tight seal between door, seal and door frame.

2.0

TRUSS SYSTEM

For engineering purposes, a webbed truss is positioned across the outside edge of the door. Truss will include anti-slip platform if optional man door [Section 2.4] is specified.

DATA SHEET : AERO·SWING™ HYDRAULIC DOOR SYSTEM

2.1 SEALS

Seal fitted to the top and bottom of the door is 1-Ply cloth reinforced rubber. Shore hardness 70
 Temperature -20°C to +70°C.

Seal fitted around the doors frame is 40mm closed cell neoprene foam seal.

2.2 WARRANTY

Steel door, steel framework, fittings : 5 -Year
Cylinders and hydraulic pump : 1 -Year

2.3 OPTIONS - WARRANTY

Steel door, steel framework, fittings : 5 -Year
Cylinders and hydraulic pump : 3 -Year

or

Steel door, steel framework, fittings : 7 -Year
Cylinders and hydraulic pump : 7 -Year

2.4 OPTIONS - FINISH

Steel, Hinges & Cylinders : Primer coated in a choice of over 20 stock colors.
 or Powder coated in a choice of over 20 stock colors.

Hydraulic Hose Lines: Replace the synthetic rubber hose on the hydraulic -
 cylinders with carbon steel hydraulic hard lines.

2.5 OPTIONS - POWER

Power Supply: 220V, Three Phase

DATA SHEET : AERO·SWING™ HYDRAULIC DOOR SYSTEM

2.6

OPTIONS - MAN DOORS & WINDOWS

Man Door (Window Optional)

35.4-inches x 82.4-inches / Left or Right hinge available

Door opens outwards. Single cylinder satin chrome commercial keyed entry lever with metal chassis and 2-keys.

Emergency Escape Door (Window Optional)

35.4-inches x 82.4-inches / Left or Right hinge available

Door opens outwards. Hardware comprises panic bar, single cylinder satin chrome commercial keyed entry lever with metal chassis and 2-keys.

Windows

24-inches x 36-inches or 36-inches x 24-inches are standard sizes (1 or more available)

Custom window sizes are available.

Note: AeroDoor™ can fabricate just the framework if you prefer to source your own windows and doors.

2.7

OPTIONS - TRUSS

Truss positioned on the inside edge of the door.

Truss will not be visible from the outside of your hangar.

Note: This option will restrict access to your opening (height), but you can request in writing that the AeroSwing door is engineered to open beyond 89° which will alleviate the problem.

2.8

OPTIONS - INSIDE SKIN COATING

Framework added to the inside of the AeroSwing™ door for customer to apply their own internal sheeting/insulation.

DATA SHEET : AERO·SWING™ HYDRAULIC DOOR SYSTEM

2.9

OPTIONS - SAFETY EQUIPMENT

Safety Edges - Requires Power *

A full height opto-electronic safety edge is mounted within leading edge seal of the door. An impact on the edge during closing will automatically stop and re-open the door.

Photocells - Requires Power *

A thru-beam synchronized photocell is fitted. Each photocell comprises a transmitter and a receiver, which sends a beam between the two. Photocells can be fitted for closing safety, opening safety, or a combination of opening and closing. If a closing safety beam is broken during the closing cycle, the door will automatically stop. If an opening safety beam is broken during the opening cycle, the door will automatically stop.

Light & Audio Beacon - Requires Power *

Beacon combines visual indication together with a loud siren to alert people of door operation. When activated, the beacon will flash and generate a sound to alert the user of present situation. Two colors available to differentiate between alarm types or types of call.

* must be installed during or after door installation by AeroDoor™ or general contractor.

DATA SHEET : AERO·SWING™ HYDRAULIC DOOR SYSTEM

3.0

OPTIONS - OPERATING CONTROLS

Push Button Station – (replaces actuator described in section 1.8) - Requires Power *

Buttons on the front : Push to open, Stop button stops and holds doors. Close button closes door. You can locate this control panel any distance away from the main hydraulic unit.

Note: All options in the safety (Section 2.7) and operation (Section 2.8) category must use this push button station.

Key Switch *

Sprung return key switch in separate enclosure for opening of the door by key holders only. For internal or external use.

Digital Keypad - Requires Power *

Illuminated code lock for operation of the door by authorized persons only. For internal or external use.

Radio Control *

Radio control system for remote operation of the door from a vehicle or limited distance. Plug-in radio receiver supplied with 1 twin channel transmitter. Additional transmitters available for multi-user systems.

12V DC Backup Power Supply

Provides battery assisted door operation (battery not provided).

* must be installed during or after door installation by AeroDoor™ or general contractor.

END OF DATA SHEET

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PAGE 8

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