



## **HYDROSWING DOORS**

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FAQ AND TECHNICAL SPECIFICATIONS

## FAQ

### **Does the door attach to the building or is it pre hung in its own frame?**

Pre hung in its own steel frame, anything else is not a Hydroswing®

### **How does the door work?**

Two dual acting hydraulic rams powered by a single or three phase motor and pump.

### **How does the Hydroswing® compare to other door systems?**

Very well, a little more expensive than a Bifold but in real terms you get more headroom and less in life service issues, beware of hidden costs with Bottom rolling (rail installs), Header beams with fabric doors and wall, external space taken up with leaf style sliding bottom rollers.

The overall efficiency of install, maximized opening and simplicity of operation and building thermal efficiency all outweigh any other door systems cost of acquisition (see Airbus Case study).

### **Can I have man doors, remotes, windows and a choice of cladding/treatments?**

Yes.

### **What are the wind loads a Hydroswing can withstand?**

See detailed explanation in the TECH section. In essence the door acts like a wall of your structure when closed and a canopy in the open. Subject to engineering, in the closed position 200MPH and in the open 100MPH can be achieved.

The as standard loads in most cases will not require addition, however Hydroswing® will design to your specific region for wind and Internationally Eurocode 1 and IBC, as examples.

### **How long does it take to open and close the door?**

Dependant on size and weight of your door — 45 secs to 1 min 30 secs to open and the same to close is normal.

### **How much does the door weigh?**

The weight of the door is dependent on several factors such as wind load, door width and height and your choice of cladding.

The moving part of the door comes in its

own framework and is not attached directly to the building.

### **Is the door certified for fire and security?**

The flexibility of the Hydroswing® door allows for almost unlimited choice in the cladding system for the door which means the finished solution can meet any almost any fire or security requirement.

### **Can the door be made for explosion proof environments?**

Yes the door can be clad to provide a level of explosive protection. The door operation system can be located remotely, outside the risk zone meaning there is no need for expensive explosion-proof motors.

### **How much side room does the door take?**

Very little. The Hydroswing® can be mounted inside the opening or on the face of your building. Average height and width loss is 4-6 inches (100 — 150mm).

### **How long does the door last?**

The door frame and cylinders are made of

S275 steel and should last as long as the building to which it is attached.

The electric motor and pump should give no maintenance service for a minimum of 10 years.

### **How secure is the door compared with other door types?**

The Hydroswing® is almost impossible to open without access to the control unit.

The Hydroswing seals on three sides against its frame and the cylinders are locked closed when the door is unpowered.

### **How energy efficient is the door?**

Very. The door can be clad in virtually any material which can be specified to achieve the energy rating or U-value required.

### **What will happen if there is a failure in the hydraulics?**

Nothing. The door will stop in the position it is in when the failure occurs. Hydroswing® doors are equipped with dual operating load control (or you may know them as over-centre) valves. They are located on the cylinders and will engage to stop

the door should there be any drop in pressure in the system. Even a sudden catastrophic failure such as a hydraulic hose breakage will cause them to activate.

### **How would you operate the door in case of a power or motor failure?**

There are several ways:

Any Hydroswing® door can be connected to a standby generator to provide power.

The standard hydraulic pump can be modified to allow a by-pass hose connection to an agricultural spool valve.

Hydroswing® can provide a back-up unit.

Hydroswing® can provide an essential spare parts kit should you require them on site to cover any eventuality.

### **Does the door come with cladding?**

Not as standard. We have designed the Hydroswing® to carry just about any cladding system and from single skin agricultural solutions to glass cladding wall systems for high end residential solutions. Dependant on

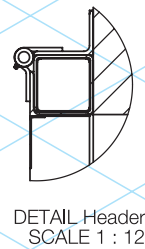
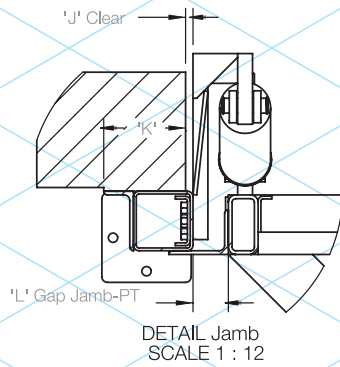
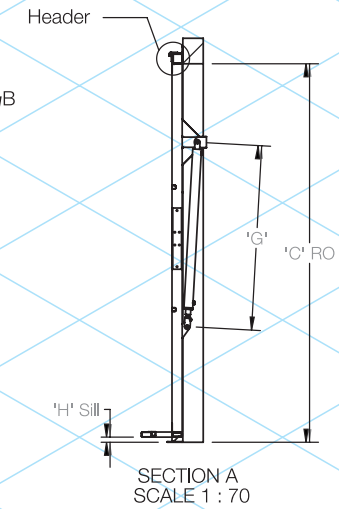
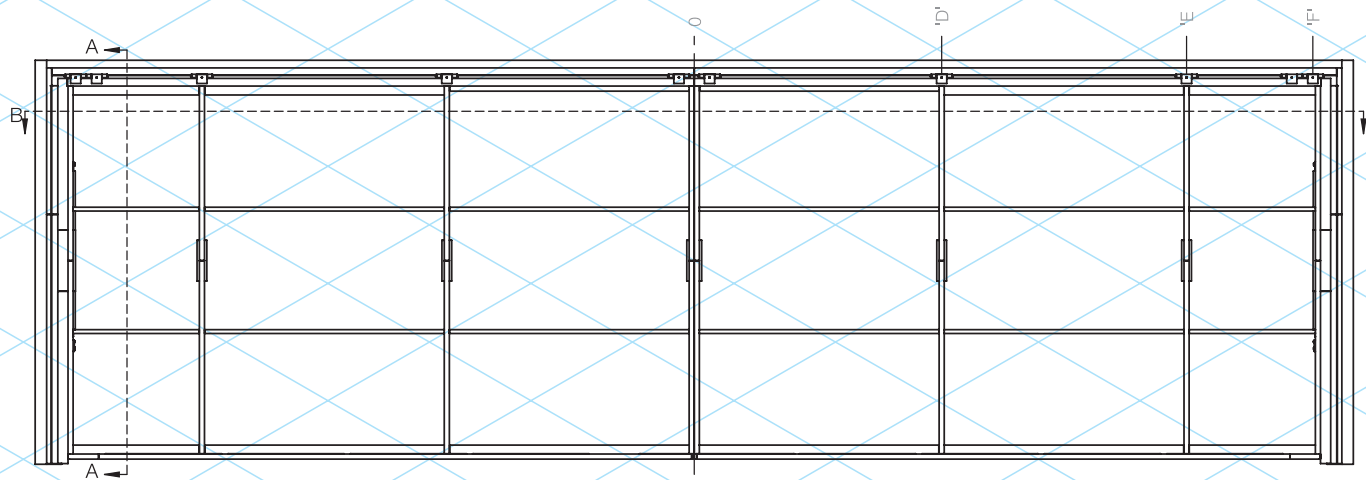
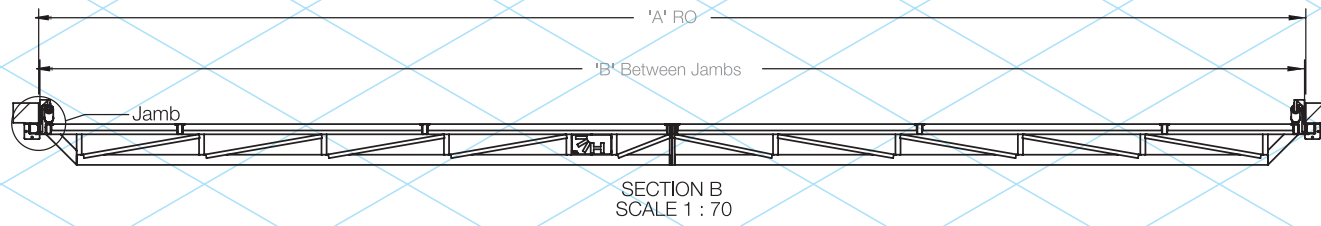
your region we may be able to provide the cladding as an option — please contact us for more information.


### **How much does the door cost to maintain?**

The Hydroswing® has very low in-life service costs when compared to other door systems. There are no complicated chain and motors systems or track to worry about. All that is required is regular visual inspection, application of grease to the hinges and an occasional top-up of the hydraulic fluid.

### **How do you finish the door at the factory ?**

All Hydroswing® doors come primed and ready for painting or cladding on site.



DRAWN	NAME	DATE	 Hydraulic Doors & Walls	
APPROVED				
MOUNT STYLE			PROJECT	
BUILDING TYPE			CUSTOMER	
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			TITLE	SHEET
ROUGH OPENING WIDTH		ROUGH OPENING HEIGHT	A1	

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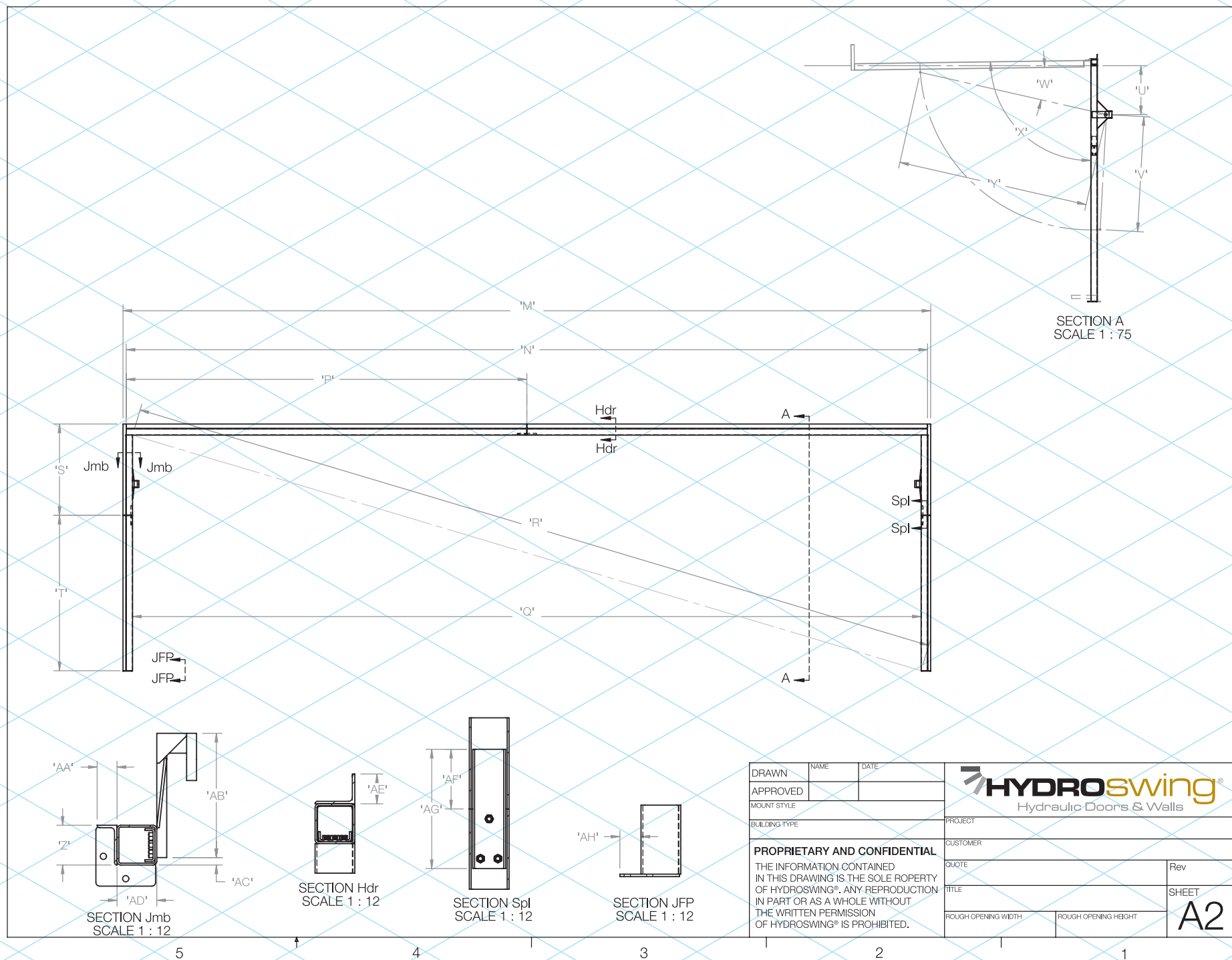
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1



SECTION A  
SCALE 1 : 75

SECTION Jmb  
SCALE 1 : 12

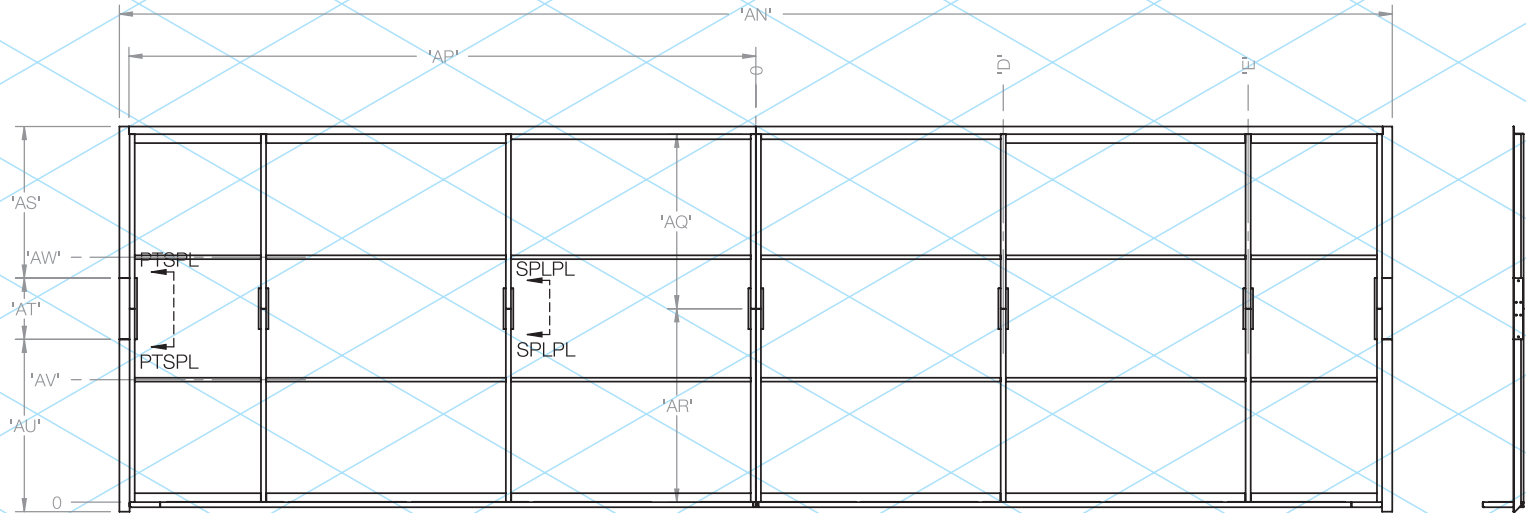
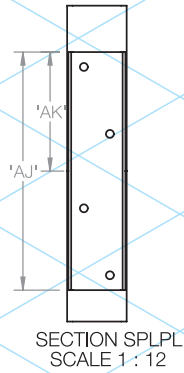
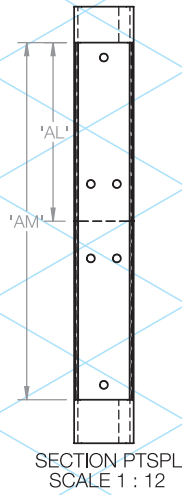
SECTION Hdr  
SCALE 1 : 12


SECTION Spl  
SCALE 1 : 12

SECTION JFP  
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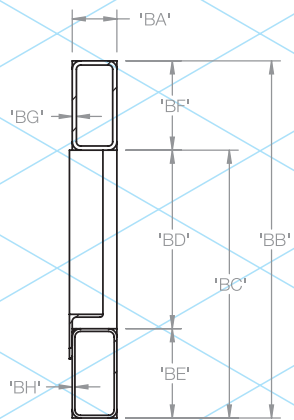
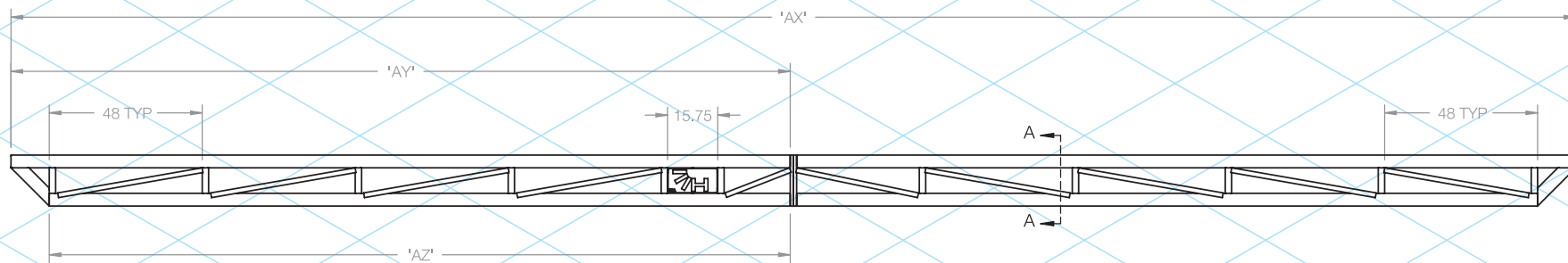
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APPROVED		
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BUILDING TYPE		
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 Hydraulic Doors & Walls		PROJECT
		CUSTOMER
QUOTE	Rev	
TITLE	SHEET	A2
ROUGH OPENING WIDTH	ROUGH OPENING HEIGHT	



DRAWN	NAME	DATE	 Hydraulic Doors & Walls	
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BUILDING TYPE			CUSTOMER	
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			TITLE	SHEET
			ROUGH OPENING WIDTH	ROUGH OPENING HEIGHT
			A3	

5      4      3      2      1



DRAWN	NAME	DATE	 Hydraulic Doors & Walls	
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			TITLE	SHEET
			ROUGH OPENING WIDTH	ROUGH OPENING HEIGHT
			A4	



Sheet	Detail	Description
A1	Elevation	Full elevation of a standard door showing single/double uprights, position of hinges and door geometry.
	Section A	Showing section details including cylinder position and rough opening.
	Detail - Jamb	Plan section showing relative positions of building column (shaded), Hydroswing® Jamb, Cylinder and Push Tube.
	Detail - Header	Section view showing relationship between (Outside Mount) Hydroswing® and building header (shaded). <b>Note:</b> This door is mounted to the face of the building structure. The Hydroswing® can also be mounted underneath (Inside) of the building header.
A2	Elevation	Part elevation showing the Hydroswing® door Jamb (Jmb) and door Header (Hdr) only.
	Section - Jamb (Jmb)	Isolation showing Hydroswing® Door Jamb, Jamb Footplate and Cylinder in plan view.
	Section - Header (Hdr)	Isolation showing Hydroswing® Door Header in section view (no building header is shown).
	Section - Splice Plate (Spl)	Isolation showing Hydroswing® Door Splice plate in location on door jamb. The Hydroswing® is spliced for transport.
	Section Jamb Foot Plate (JFP)	Isolation showing Jamb Foot Plate only ( no Hydroswing® Door jamb as in Section - Jmb)
	Section A	Elevation of Hydroswing® door in open position.
A3	Elevation	Part elevation of the moving portion of the Hydroswing® showing single/double uprights, position of hinges and door geometry.
	Section PTSPL	Section view Push Tube Splice Plate
	Section SPLPL	Section view showing Upright Tube Splice Plate
A4	Elevation	Elevation detail showing bottom truss ( see Sheet A1 Section A for location detail at foot of the door).
	Section A	Section view through bottom truss showing top and bottom cord details.



# Steel Fabrication Certification/Approvals



**NOTE:** All quality and final inspection procedures carried out by Hydroswing® Staff Prior to dispatch.



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[www.hydroswing.com](http://www.hydroswing.com)