Hydroswing® Hydraulic Single Panel Door System

Mounting Protocols
Mounting Protocols for the Hydroswing® Single Panel Hydraulic Door System

- Header beam can be existing or added prior to install. This can be an I beam or dropdown stub columns from the purlin. The Hydroswing® attach angle welds to either, whichever is present.
- The Hydroswing® is pre-hung in its own frame of tube steel with attach angles for attaching to building columns and header.
- The moving frame of the Hydroswing® is attached to the hinges via means of a sealing attach angle. The rigidity of the moving frame is internally created from the uprights and is spaced according to load and wind requirements.
- The Hydroswing® is fabricated to American Welding Society Standard D1.1 and inspected to ISO 9001 for weld integrity compliance and strength.
- The Hydroswing® can be attached to the building via welding or bolting and can be attached to steel, post and frame, and concrete/brick structures.
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Inside(Flush)/Outside/Rear mount: There are generally three ways to install your door. Inside or Flush mounting is the most common type of installation for new buildings.

- **Inside or flush mounting** fits the door inside the building header and jamb making it flush with the face of the building.
- **Outside mounting** is common on existing buildings. Outside mount doors fit against the face of the building.
- **Rear mounting** connects the door to the rear of your building header usually due to building construction method.

**Product Attachment:**
- Attach Angle can be customised to attach the door on metal girders, concrete, block or wood buildings.
- The door will be bolted or welded in place as per drawings supplied.
- Hydroswing® does not normally supply headers and door pillars. We do survey large doors and will engineer flanges to brace the existing door pillars and the Hydroswing® door jamb.

**Mounting Positions for the Hydroswing® System**
The door is hung in its own frame and it can be attached to your building in many ways, even to non tensile structures. (Entirely Self supporting Hydroswing® door systems will need to be specially engineered)

- Building header by others, could be steel I Beam or square section, concrete, block or wood.
Mounting Protocols for Hydroswing®
Hydraulic Single Panel Door System

Simple Strong Secure
Hydroswing®

How are you going to use yours?
Hydroswing® Single Panel Hydraulic Door System.

This is a visual aid to assist communication between customers and us and our suppliers so as to enable us to talk together effectively about the door and its component parts.

• The Hydroswing® door system is a single moving panel which is pre-hung by hinges in its own frame which then attaches to the building structure.

• The Hydroswing® is fabricated & welded to ISO 9001 and American Welding Society D1.1 standards with each door stringently audited for welding and quality assurance.

• The Hydroswing® is an industry leader in all aspects, but especially in its finish with full post fabrication shot blast. We use a Carboline Carboguard 890 Epoxy paint finish with a certificate of conformance for integrity of the finish.

• Electrical controls are UL certified and can be single, three phase or even DC driven pumps.

• The Hydroswing® is the latest generation of our design incorporating the latest hydraulic and welded steel technology, unparalleled in design, strength and integrity, boasting over 7,000 units world wide.

• Fabricated and welded to AWS D1.1 and ISO 9001 standards.

• Wind load up to 200mph.

• Fully engineered ASTM 275 steel pre-hung frame.

• Hydrolac® (zero drop)

• Two way hydraulic cylinder

• Jamb tube

• Push tube

• Splice plate (Interior) (easy connect jamb splice)

• Splice plate (exterior push tube)

• Hard lines/softline optional

• Spherical bearings with zirks

• Lower pin point

• Remote opener antenna

• Key

• Hydroswing® logo

• Cane bolt (optional)

• Frame out (window shown) Walk door option

• Base plate fixing

• UL certified control box

• Pump and Motor

• Power cables

• Fully engineered 5275 steel pre-hung door frame

• Hydroswing® Patented bow truss (US D584,831 S)

• Carboline carboguard 890 primer
Steel I Beam Header: Inside (Flush) Mount

Typical existing I beam steel header, the Hydroswing® door’s attach angle ideally will be welded to the inside of the added plates with welded angle iron supporting metal work.

Steel I Beam Jamb: Inside (Flush) Mount

Typical mount to existing I beam steel Jamb, the Hydroswing® door’s attach angle will be welded straight to the I beam. (Some large doors will be supplied with jamb stiffener plate’s, see Hydroswing® specifications for further information)

Hydroswing® Single Panel Hydraulic System
(The door system is shown in blue)
Mounting Protocols for Hydroswing®
Hydraulic Single Panel Door System

Steel I Beam Header:
Outside Mount

Outside Mounted to Steel I Beam Header (Quick look)

Typical existing I beam steel header, the Hydroswing® door’s attach angle ideally will be welded to outside of the added plates with welded angle iron supporting metal work.

Steel I Beam Jamb:
Outside Mount

Outside Mounted to Steel I Beam Jamb (Quick look)

Typical mount to existing I beam steel Jamb, the Hydroswing® door’s attach angle will be welded straight to the outside of the I beam.
Rear Mounted to Steel I Beam Header (Quick look)

Typical existing I beam steel header, the Hydroswing® door’s attach angle ideally will be welded to the inside of the added plates with welded angle iron supporting metal work.

Rear Mounted to Steel I Beam Jamb (Quick look)

Typical mount to existing I beam steel Jamb, the Hydroswing® door’s attach angle will be welded straight to the I beam. (Some large doors will be supplied with jamb stiffener plate’s, see Hydroswing® specifications for further information)
Mounting Protocols for Hydroswing® Hydraulic Single Panel Door System

**Steel I Beam Stub Column Header: Inside (Flush) Mount**

Typical existing I beam column header, the Hydroswing® door’s attach angle will be welded to the inside of the supporting metal work.

**Steel I Beam Jamb: Inside (Flush) Mount**

Typical I beam mount to existing jamb, the Hydroswing® door’s attach angle will be welded straight to the I beam.

(Some large doors will be supplied with jamb stiffener plate’s, see Hydroswing® specifications for further information)
Mounting Protocols for Hydroswing® Hydraulic Single Panel Door System

Steel I Beam Stub Column Header: Outside Mount

Outside Mounted to Steel I Beam Stub Column Header (Quick look)

Typical existing I beam column header, the Hydroswing® door’s attach angle will be welded to the outside of the supporting metal work.

Steel Building Header (I Beam Sub Column by others)

Attach Angle

Grease Zirks

Top Chord

Door exterior

Upright Member

Hydroswing® Single Panel Hydraulic System

Rough (Structural) opening is measured from the floor of the building to the building door header.

Steel Building Header (I Beam column by others)

Rough (Structural) opening is measured from both building door jamb.

Attach Angle

Clevis Keeper

Push tube

Bottom Chord

Cross member

Rough (Structural) opening is measured from both building door jamb.

Attach Angle

Weather Seal

Sealing angle

Door exterior

Upright Member

Hydroswing® Single Panel Hydraulic System

• Cladding will be attached to the cross members and upright members.

Steel I Beam Jamb: Outside Mount

Outside Mounted to Steel I Beam Jamb (Quick look)

Typical I beam mount to existing steel Jamb, the Hydroswing® door’s attach angle will be welded straight to the outside of the I beam.

Steel Building Jamb (I Beam by others)

Main Plate

Weld point

Upper Pin Point

Clevis Keeper

Push tube

Cross member

Closing angle

Hydroswing® Single Panel Hydraulic System

(The door system is shown in blue)
Hydroswing® Single Panel Hydraulic System

Steel Tubing Stub Column Header: Inside (Flush) Mount

- Door Header
- Attach Angle
- Grease Zirks
- Top Chord
- Upright Member

- Steel Building Header (Stub column by others)
- Rough (Structural) opening is measured from the floor of the building door header.

Inside (Flush) Mounted to Steel Tubing Stub Column Header (Quick look)

Typical mount to existing steel tube stud column header, the Hydroswing® door’s attach angle will be welded inside of the supporting metal work.

Steel Tubing Jamb: Inside (Flush) Mount

- Upper Pin Point
- Clevis Keeper
- Push tube
- Cross member
- Bottom Chord
- Jamb
- Weather Seal
- Flange

- Steel Building Jamb (Square tubing by others)
- Jamb
- Weather Seal
- Flange (Stiffener plate only fitted in certain circumstances)

Inside (Flush) Mounted to Steel Tubing Jamb (Quick look)

Typical mount to existing steel tube Jamb, the Hydroswing® door’s attach angle will be welded straight to the tube steel.

(Some large doors will be supplied with jamb stiffener plate’s, see Hydroswing® specifications for further information)

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(The door system is shown in blue)
Mounting Protocols for Hydroswing®
Hydraulic Single Panel Door System

Steel Box Section Column Header:
Outside Mount

- Attach Angle
- Grease Zirks
- Top Chord
- Door Header
- Upright Member

Steel Box Section Jamb:
Outside Mount

- Steel Building Header (Stub column by others)
- Rough (Structural) opening is measured from the floor of the building to the building door header.
- Cross member
- Push tube
- Clevis Keeper
- Bottom Chord
- Jamb
- Attach Angle
- Weather Seal
- Sealing angle

Outside Mounted to Steel Tubing Stub Column Header (Quick look)

Typical mount to existing steel tube stud column, the Hydroswing® door’s attach angle will be welded outside of the supporting metal work.

Outside Mounted to Steel Tubing Jamb (Quick look)

Typical mount to existing steel tubing jamb, the Hydroswing® door’s attach angle will be welded straight to the steel tubing.

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**Mounting Protocols for Hydroswing®**

**Hydraulic Single Panel Door System**

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**Wood Beam Header:**
**Inside (Flush) Mount**

Hydroswing® single panel door system attachments to wooden structures.

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**Wood Jamb:**
**Inside (Flush) Mount**

Rough (Structural) opening is measured from the floor of the building to the building door header.

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**Inside (Flush) Mount to Wood Beam (Quick look)**

Typical mount to existing wood header, the Hydroswing® door’s attach angle will be bolted through the wood header.

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**Inside (Flush) Mount to Wood Jamb (Quick look)**

The Hydroswing® door attach angle will be typically lag bolted or bolted through the wooden building upright jamb. There are three methods of fixing including the attach angle, pre-drilled access through the Hydroswing® door jamb as well as connection tabs along the length of the Hydroswing® door jamb tube.

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Outside Mount to Wood Header (Quick look)

Typical mount to existing wood header, the Hydroswing® door’s attach angle will be bolted through the wood header.

Outside Mount to Wood Jamb (Quick look)

The Hydroswing® door attach angle will be typically lag bolted or bolted through the wooden building upright jamb. There are three methods of fixing including the attach angle, pre-drilled access through the Hydroswing® door jamb as well as connection tabs along the length of the Hydroswing® door jamb tube.
**Wood Header:**
- **Rear Mount**

  * Hydroswing® Single panel hydraulic system

  **Rear Mounted Wood Beam to Column Header (Quick look)**

  Typical mount to existing wood header, the Hydroswing® door’s attach angle will be bolted through the wood header.

**Wood Jamb:**
- **Rear Mount**

  * Rough (Structural) opening is measured from both building jamb.

  **Rear Mounted Wood Beam to Jamb (Quick look)**

  The Hydroswing® door attach angle will be typically lag bolted or bolted through the wooden building upright jamb. There are three methods of fixing including the attach angle, pre-drilled access through the Hydroswing® door jamb as well as connection tabs along the length of the Hydroswing® door jamb tube.

  *(Note: Some large doors will be supplied with jamb stifferner plate’s, see Hydroswing® specifications for further information)*

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Hydroswing® Single Panel Hydraulic System
(The door system is shown in blue)
**Concrete or block Header:**
**Inside (Flush) Mount**
Hydroswing® single panel door system attachments to wooden structures.

**PRODUCT Information:**
Pros and cons of inside (flush) mounting:
- Small loss of rough (structural) opening.
- Inside mounting is aesthetically more pleasing.

**Inside (Flush) Mount to Concrete or Block Header Beam (Quick look)**
Typical mount to existing concrete or block header, the Hydroswing® door’s attach angle will be anchor bolted to the header.

**Concrete or block Jamb:**
**Inside (Flush) Mount**
Rough (Structural) opening is measured from the floor of the building to the building door header.

**Inside (Flush) Mount to Concrete Block Jamb (Quick look)**
The Hydroswing® door attach angle will be typically concrete anchor bolted into the building upright jamb. There are three methods of fixing including the attach angle, pre-drilled access through the Hydroswing® door jamb as well as connection tabs along the length of the Hydroswing® door jamb tube.

**Hydroswing® Single Panel Hydraulic System**
(The door system is shown in blue)
**Concrete or block Header:** Outside Mount

**PRODUCT Information:**
- Pros and cons of outside mounting:
  - Full use of the building’s raw (structural) opening.
  - Building cladding will need to reflect the shape of the door.

**Concrete or block jamb:** Outside Mount

**Outside Mount to Concrete or Block Header Beam (Quick look)**

Typical mount to existing concrete or block header, the Hydroswing® door’s attach angle will be anchor bolted to the header.

**Outside Mount to Concrete or Block Jamb (Quick look)**

The Hydroswing® door attach angle will be typically concrete anchor bolted into the building upright jamb. There are three methods of fixing including the attach angle, pre-drilled access through the Hydroswing® door jamb as well as connection tabs along the length of the Hydroswing® door jamb tube.
Concrete or block Header: Rear Mount

Rear Mount to Concrete or Block Header Beam (Quick look)

Typical mount to existing concrete or block header, the Hydroswing® door’s attach angle will be anchor bolted to the header.

Concrete or block Jamb: Rear Mount

Rear Mount to Concrete or Block Jamb (Quick look)

The Hydroswing® door attach angle will be typically concrete anchor bolted into the building upright jamb. There are three methods of fixing including the attach angle, pre-drilled access through the Hydroswing® door jamb as well as connection tabs along the length of the Hydroswing® door jamb tube.
Notes: This document is a generic mounting protocol guide for most wood, steel or block building structures in conjunction with the Hydroswing® hydraulic single panel system.
Options available:

- CCTV camera to monitor outside of the door prior to opening.
- Audible warning alarm to operate while the door is in motion.
- Visual (flashing light) warning signal to operate while the door is in motion.
- Motion detectors on the sides of door to stop door if activated by personnel or a vehicle.
- Hand pump for manual operation.
- Anemometer safety shut off
- Cane bolts to lock the door to the floor on the inside.
- Personnel door within the main door.
- Vision panels (std size 27.56” x 27.56”)
  Other sizes available.

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