GWSS Multilateral Strut and Panel Usage

Panel Types

GWSS Panels are divided into newer generation Multilateral panels, and older generation MB panels. As shown below, Multilateral panels have three pin holes in the lugging connection, and MB panels only have one. The multiple pin holes on the Multilateral panel allow for use of different strut types. Strut types are explained on the following page.





Strut Types

GWSS Struts are divided into newer generation Multilateral struts, and older generation MB struts.

GWSS Multilateral struts have 4 positions for the bottom strut tube, as shown below. These positions are labeled on each strut with a numbered tag near the pin hole. This strut is shown in POSITION 2, which is a common clearance height for 6ft and 8ft tall panels.



MB struts have a **fixed clearance**, with no adjustment positions for bottom strut tube height. MB36 struts were designed for use on 6ft and 8ft tall MB panels. MB48 struts were designed for 10ft tall MB panels.





Using Multilateral Struts on Multilateral Panels

MULTILATERAL STRUT POSITION <u>MUST</u> BE NOTED TO SELECT THE CORRECT DEPTH RATINGS FOR MULTILATERAL PANELS. CHANGING STRUT POSITION WILL AFFECT PANEL DEPTH RATINGS

Shown below is a GWSS Multilateral Strut (in Position 2) on a Multilateral Panel. Multilateral panels can be identified by three pin holes in the lugging connection, which allow the use of different types of GWSS struts.





Changing the strut position (moving the bottom strut tube up or down) can result in a significant change in the panel depth rating. It is <u>VERY IMPORTANT</u> that strut position is noted as the proper table <u>MUST</u> be referenced from the Multilateral panel tabulated data sheet. The example below is highlighted for POSITION 2, using an MM 8X10 panel.

This style of tab data, with depth charts relating to strut position and clearance, is specific to GWSS **Multilateral** Panels.





Using MB Struts on Multilateral Panels

WHEN USING MB36 STRUTS ON MULTILATERAL PANELS, POS 2 DEPTH RATINGS MUST BE USED

WHEN USING MB48 STRUTS ON MULTILATERAL PANELS, POS 4 DEPTH RATINGS MUST BE USED

The lugging connection on GWSS Multilateral panels (identifiable by the three pin holes) also allows for the use of MB36 and MB48 struts, while still using the tabulated data for the Multilateral panel.

Shown below are the Multilateral panel pin locations for each strut. It is recommended that the lowest available pin position is used, as some struts may align with more than one pin hole.





COMPATABILITY NOTE: Some Multilateral panels may not have an MB48 pin hole. These panels cannot be used with MB48 struts that only have a single pin location, due to the pin holes not aligning with each other. If using an MB48 strut that has been updated to have a pin hole at the higher MB36 position, the MB36 pin hole on the multilateral panel can be used. A complete compatibility diagram is shown below.



MM PANEL WITHOUT MB48 HOLE - MB48 STRUT WITH UPDATED MB36 HOLE



MM PANEL WITHOUT MB48 HOLE - MB48 STRUT WITH SINGLE PIN LOCATION









MM PANEL WITH 3 PIN HOLES – MB36 STRUT





MM PANEL WITH 3 PIN HOLES – MB36 STRUT



MM PANEL WITH 3 PIN HOLES - MB48 STRUT WITH UPDATED MB36 HOLE



When MB36 struts are used, the gravity latch **MUST** be moved to the upper MB36 latch position to ensure proper operation. Multilateral and MB48 struts can use the lower latch position.

The example below is a 6ft tall panel, however the lugging remains the same for 8ft and 10ft panels.

Also shown below is an example of an MB36 strut on a Multilateral panel. Note the latch has been moved to the upper MB36 position. This scenario would use the POSITION 2 table from the tab data sheet.





Using Multilateral Struts on MB Panels

WHEN USING A MULTILATERAL STRUT ON AN <u>MB 6FT OR 8FT</u> TALL PANEL, <u>POS 2, 3, OR 4</u> ARE ACCEPTABLE, HOWEVER, THE DEPTH RATINGS ON THE TAB DATA SHEET DO NOT CHANGE

WHEN USING A MULTILATERAL STRUT ON AN <u>MB 10FT</u> TALL PANEL, <u>POS 4</u> MUST BE USED

Use of Multilateral struts in any other position on an MB panel must be approved on a site specific basis by GroundWorks Safety Systems.

GWSS Multilateral struts have pin holes that allow for their use on MB 6ft, 8ft, and 10ft tall panels. These are shown below.



When using a Multilateral strut on a 6ft or 8ft tall MB panel the Multilateral strut can be set at POS 2, 3 OR 4. 10ft tall MB panels must use a Multilateral strut set at POS 4.

TABULATED DATA SHEET GROUNDWORKS Page 1 of 2 SAFETY SYSTEMS MODEL #: MB08X10 MAXIMUM DEPTH CHART SOIL TYPE EFP* MAX DEPTH (ft) UNIT #: 25 93 A 45 53 В FABRICATION DATE: С 60 41 80 32 C UNIT WEIGHT: Equivalent Fluid Pressure (psf per ft depth) 3,650 lbs 1.655 kg SHIELD CAPACITY: 2,240 psf FAILURE TO COMPLY WITH MANUFACTURERS TABULATED DATA WHEN USING THIS EQUIPMENT MAY LEAD TO INJURY OR DEATH

This allows the MB panel tabulated data sheet, as seen below with a single depth chart, to be used properly.



Shown below is an example of Multilateral strut on an MB panel. This strut is in POSITION 2 as it is on an 8ft tall MB panel. Note that the Multilateral strut is utilizing the MB36 pin location.



