

LiquiLevel STGB

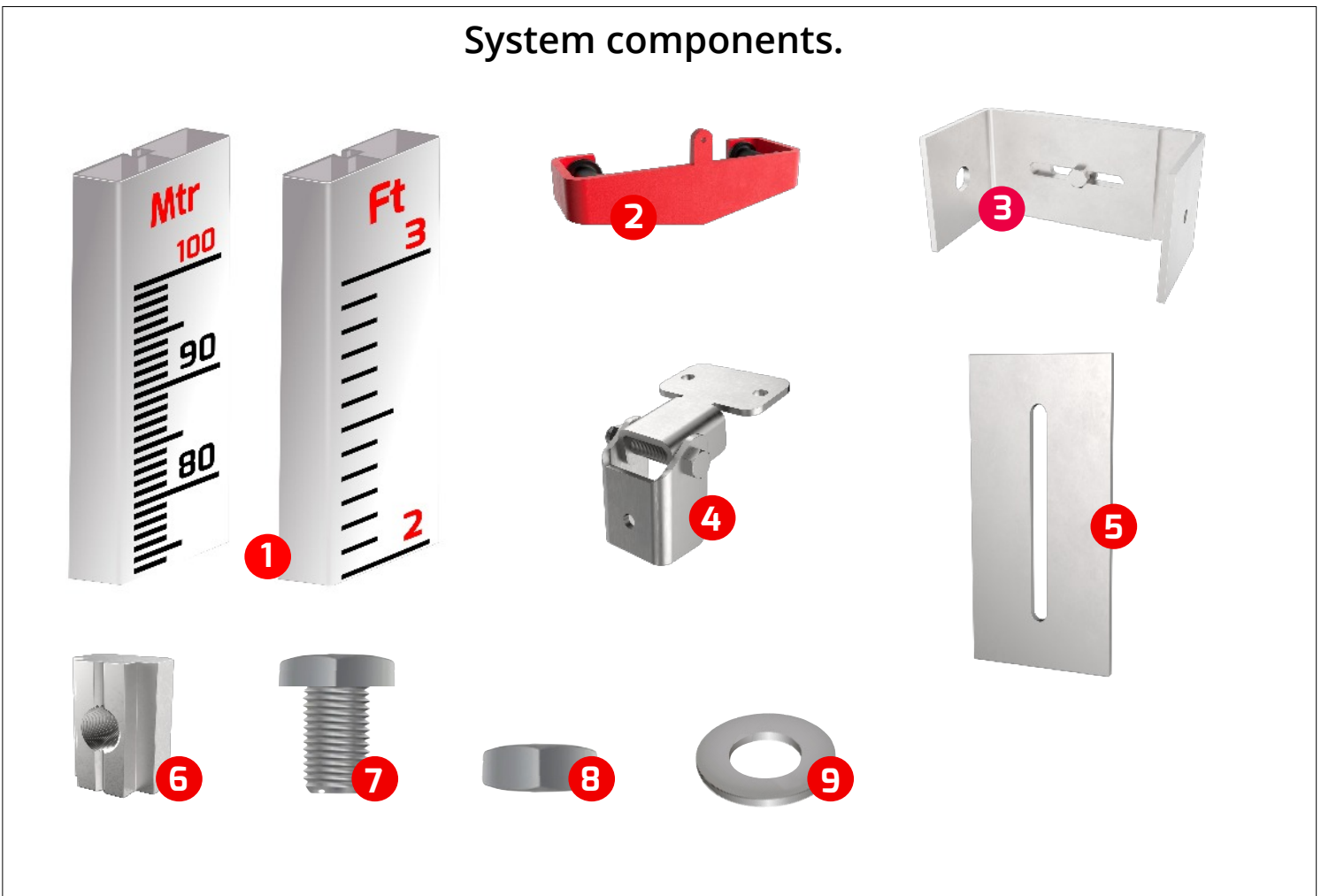
Installation and operating instructions



LiquiLevel ST Level Gauge Board System



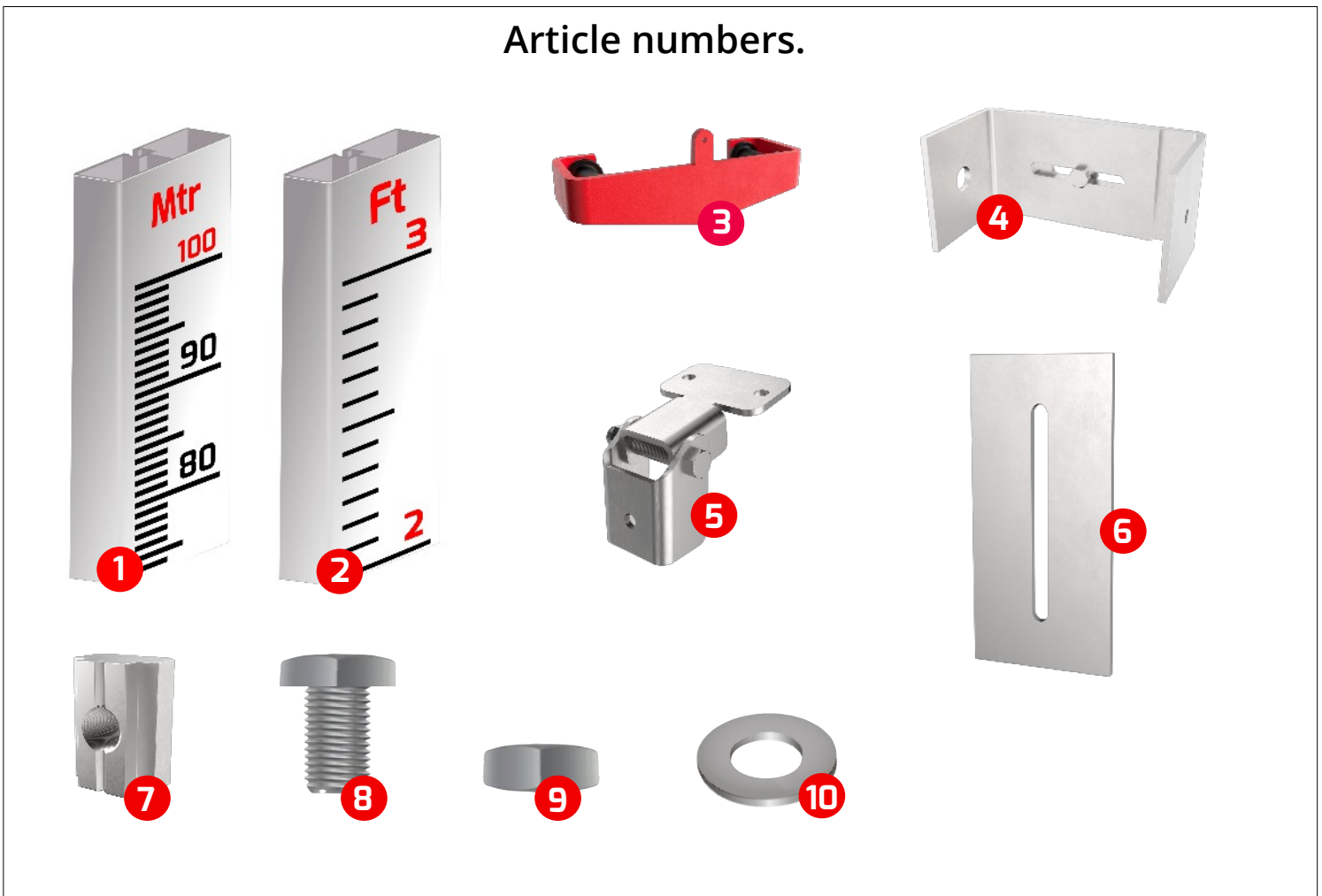
System components.



No: Product description	Qty per system	Qty per 3'/ 1mtr	Aluminium	St. Steel
1. Gauge board with calibrated level marking.		1	●	
2. Powder coated level indicator.	1			●
3. Adjustable Gauge board & Tank Bracket.	1			●
4. Adjustable indicator & gauge board bracket.		1		●
5. Gauge Board connector		2		●
6. M6 Tee nuts.		3		●
7. M6 x 14mm Hex Bolt		6		●
8. M6 Hex Nut		3		●
9. Plain Washer		5		●

The liquilevel ST Gauge board system is supplied in kit form designed for simple and quick assembly to storage tanks on-site. Full installation and instruction manual is supplied with all LiquiLevel tank level indicators to cover installation of Level indicator to your storage tank. This manual explains the installation of the Gauge board to your storage tank.

Article numbers.

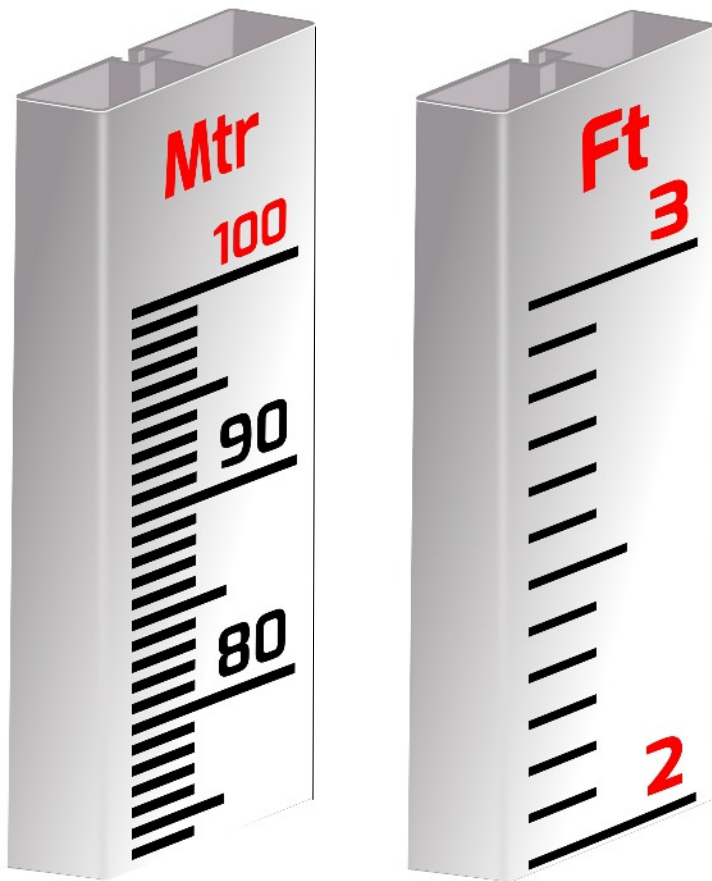


No: Product description

Article number

1. Cm & mtr Gauge board with calibrated level marking.	11023
2. Inches & Feet Gauge board with calibrated level marking.	11024
3. Powder coated level indicator.	11031
4. Adjustable Gauge board & Tank Bracket Kit	11033
5. Adjustable indicator & gauge board bracket Kit	11032
6. Gauge Board connector	11008
7. M6 Tee nuts.	11019
8. M6 x 14mm Hex Bolt	10011
9. M6 Hex Nut	10225

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Gauge Board

Article number: 11023. Cm and metres

Article number: 11023. Inches & feet

The Gauge board is available in 2 options:-

A) Metric CM and Metres. Length of each gauge board: 1 mtr

B) Imperial inches and feet. Length of each gauge board: 3'

The Aluminium gauge board has been specifically designed for visual tank level monitoring. Strong, and weather resistant this gauge board is lightweight yet very strong and durable making installation safe and simple.

Fixing brackets and fixings to the gauge board is simple thanks to the slotted rail on the reverse side of the gauge board. Everything is fixed to the gauge board using this rail system and M6 tee nuts.

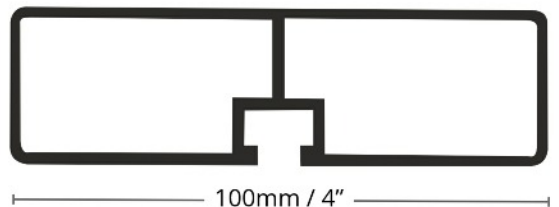
No fixings protrude through the face of the gauge board ensuring smooth running of the level indicator up and down the gauge board.



Gauge Board Fixings

All brackets including the level indicator are installed using a M6 Tee nuts designed to fix to the back of the gauge board for quick installation on site.

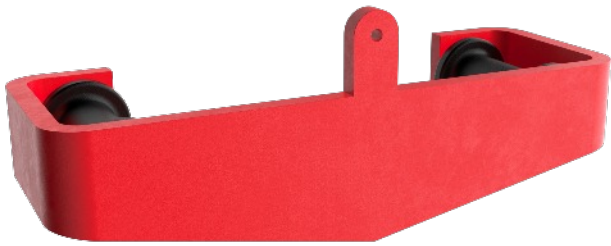
Tee nuts are supplied with the installation pack.



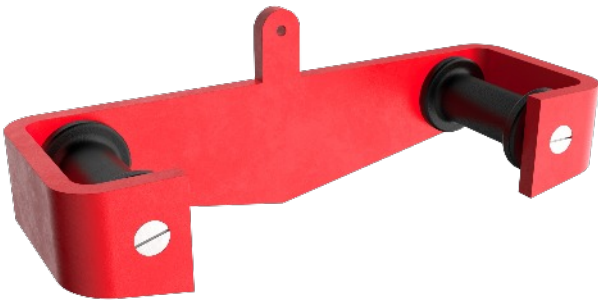
Ribbed design adds strength and durability to the aluminium profile.

Back of Aluminium gauge board showing M6 tee nut which can slide and be fixed at any point along its length.

Level Indicator
Article number: 11031



Front view of level indicator



Back view of level indicator

Heavy duty stainless steel 316 with a Red powder coated finish for clear level monitoring. Built-in heavy duty rollers engineered specifically for the gauge board for smooth, reliable and maintenance free operation.

Supplied as a finished product ready for installation with the gauge board.

Dimensions: mm 155x55x60 (WXHxD)

Dimensions: inches 6 1/8" x 2 1/4" x 2 3/8"

Adjustable Level indicator and Gauge Board Bracket
Article number: 11032



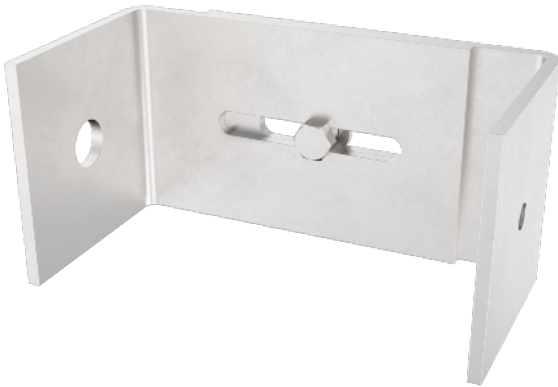
Heavy duty stainless steel 3mm adjustable hinged bracket designed for tanks with a variable cover of 90° to 135°

The top part of the bracket fixes to the base of the LiquiLevel STXL tank level indicator using 2 x M6 x 14mm Hex bolts, nuts and washers.

The bottom part of the bracket is installed at the top of the gauge board and fixed to the back of the gauge board using 1 x M6 x 14 Hex bolt, Tee nut and washer.



Image showing gauge board connected together



Gauge board Connecting brackets
Article number: 11008

3mm slotted plate 100mm/4" x 55mm 2 2/8" for connecting gauge boards together. 1 kit supplied together with each gauge board (1 kit per 100mm/3') length.

Kit includes: 4 x M6 x 14mm Hex Bolts, 4 x M6 Tee nuts and washers.

Gauge board/Tank fixing Bracket
Article number: 11033

Heavy duty stainless steel 316 3mm thick 90 degree brackets for installation of gauge board to tank.

We recommend that you install 1 kit per aluminium gauge board (1 per 1 mtr/ 3')

Kit includes:-

1 x 90°Angle bracket with M10 / 3/8" drilled hole for fixing to storage tank. If you are installing to a bolted steel tank, you can use the existing tank bolts.

1 x 90°Angle bracket with M6/1/4" hole for fixing bracket to gauge board.

- 2 x M6 x 14mm Hex Bolt
- 3 x M6 washers
- 1 x M6 Hex nut
- 1 x M6 Tee nut

Fixings/fasteners

All necessary fixing and fasteners are supplied with the kits. All fasteners are M6 meaning that you only require 1 tool to install the gauge board system.

All components are made from stainless steel for long life.

Please note, we do not supply the fastener to fix brackets to your storage tank as this can vary in size depending on the type, shape and size of your tank.

Overview of the product

Use: 1-1

This visual tank level gauge when installed together with **LiquiLevel STXL** is used to measure and indicate liquid levels in industrial facilities for water, water treatment, fire fighting storage tanks, Rainwater harvesting and power generation. This level gauge is mostly used in checking storage, maintaining constant water levels, and measuring certain amounts of liquids in batch processes.

Places of application

- Water storage: Rainwater, waster water, drinking water, elevated water storage tank
- Power plant: Water and distillation tank
- Fire fighting water tanks for industrial and commercial buildings
- Water treatment: waterworks and sewage facilities, waste water
- Food Industry: Beer, Liquor, soy sauce,
- Dam: water gauge, gate opening indicator.

Characteristics: 1-2

- Simple visual level gauge using a weighted balance/level indicator to be read in either cm/mtrs or inches/feet units.
- Designed for easy and quick installation to storage tanks on-site with minimum DIY knowledge and minimal tools.
- Simple calibration.
- When installed with LiquiLevel STXL tank level indicator it will always indicate the actual water level in the tank, unlike other gauges which read back-to-front.
- Aluminium profile with stainless steel brackets and fixings designed for long trouble-free life.

Operation principle: 1-3

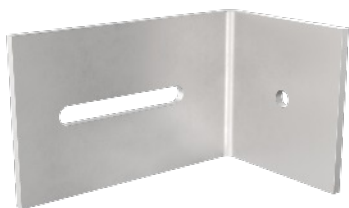
STXL Tank level indicator float on the surface of the liquid in the tank floats at a certain submerging depth where the weight of the float, the buoyancy of the float, and the tank counterweight and level indicator maintain their equilibrium. Measured levels are indicated by the external red level indicator which will always show actual water level within the tank as well as measurements in either imperial or metric measurements (cm/inches)

Technical Specification

Product	Metric	Imperial	Note
Gauge board article number	11023	11024	
Installation pack article number	11033		
STXL Tank level indicator system	10080 for tanks up to 5 mtrs/16' high	10085 for tanks up to 10 mtrs/32' high	Sold separately
Measuring Range	0 - 10mtrs	0 - 33'	
Gauge Board Length	1mt / 1000mm	3'	
Gauge Board width	100mm	4"	
Gauge Board Depth	30mm	1 1/8"	
Net weight per Gauge Board	1.4 kg per 1mtr/3' length		
Material	Aluminium		
Calibration markings and numerals	Vinyl cut heavy duty label to suit both metric and imperial systems		
Level Indicator	5mm thick laser cut & folded stainless steel plate with Red powder coated finish		
Level indicator bearings	Black heavy duty Nylon roller with stainless steel shaft/screw		
Fixing method	brackets and gauge board profile uses M6 channel tee nuts		
Brackets	Stainless steel		
Fixings	Stainless steel		
Tank bracket adjustment	+/-50mm/2"		
Fixing Size	M6		
Spanner/ratchet size: mm	10		
Tank cover/top	90° - 120°		

Installation

The Gauge board system can be installed to a wide range of tanks, and specifically designed for steel sectional tanks. By using existing tank bolts the bracketry can easily be fixed using these bolts. If this system is being installed to other types of tanks, a M10 or 3/8" fixing point will be required every 1mtr/3'



Gauge board/Tank fixing Bracket Kit Article number: 11033

Heavy duty stainless steel 316 3mm thick 90 degree brackets for installation of gauge board to tank.

We recommend that you install 1 kit per aluminium gauge board (1 every 1 mtr/ 3')

Kit includes:-

1 x 90°Angle bracket with M10 / 3/8" drilled hole for fixing to storage tank. If you are installing to a bolted steel tank, you can use the existing tank bolts.

1 x 90°Angle bracket with M6/1/4" hole for fixing bracket to gauge board.

2 x M6 x 14mm Hex Bolt

3 x M6 washers

1 x M6 Hex nut

1 x M6 Tee nut

Diagram of Gauge board/Tank fixing Bracket Kit

Each kit is supplied with 2 90 degree stainless steel brackets.

Although they look similar the hole sizes are different. Please see diagram.

1. 90 degree bracket with M6 hole. This bracket is connected to the gauge board

2. 90 degree bracket with 10mm / 3/8" hole for connecting to your storage tank.

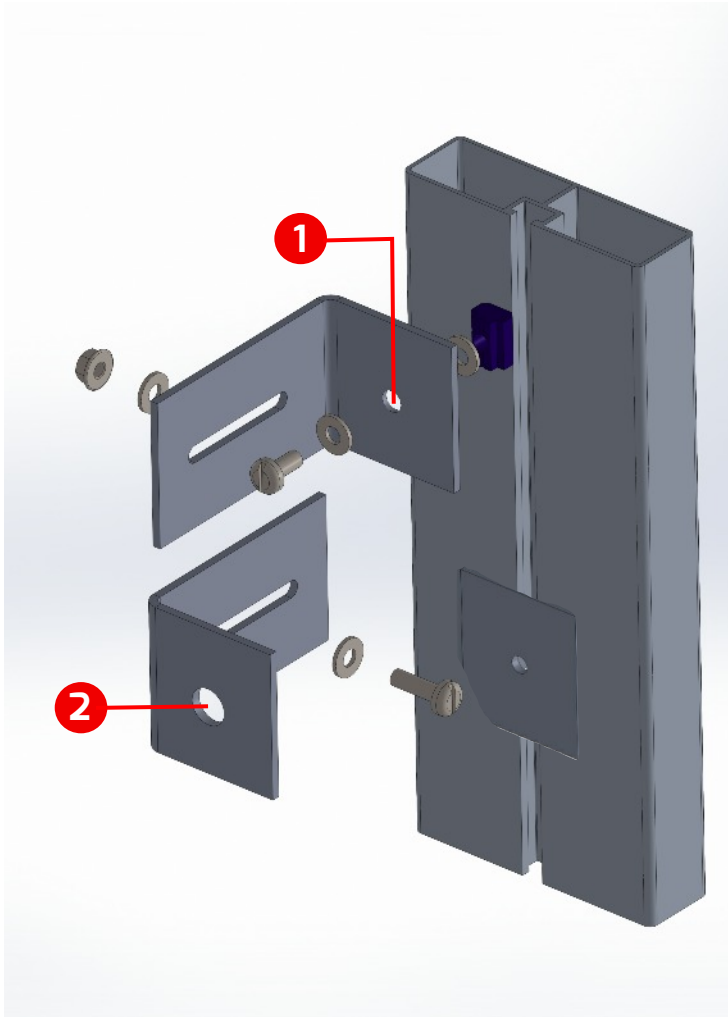


Diagram of Gauge board/Tank fixing Bracket Kit

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1. 90 degree bracket with M6 hole. This bracket is connected to the gauge board

2. 90 degree bracket with 10mm / 3/8" hole for connecting to your storage tank.





Diagram of Tank fixing Bracket Kit

Starting at the bottom of the tank, install the Gauge Board/tank Brackets 1 mtr/3' apart (approximately). If fixing to sectional bolted steel tanks, use existing tank bolts to fix brackets to your tank as shown in the diagram making sure they are plumb.

There is no need to install a bracket at the top of the tank if using the gauge board with LiquiLevel STXL tank level indicator as the top of the gauge board is fasten to the tank level indicator.

Now you have all your tank brackets installed you can now install the gauge board brackets.



Image showing tank brackets installed onto tank 1 mtr/3' apart.



Joining gauge boards

Determine the height of your tank and cut the gauge board to length. As its made from aluminium it is easily cut using a hack saw or electric saw with TCT blade.

Taking care. And lay the gauge boards out in order face down, so that the slotted side is facing up.

Slide M6 gauge nuts along channel and line up with gauge board connector. Insert M6 Hex bolts and washers and fasten.

Depending on the height of your tank you may want to make up the gauge board in 4 mtr/12' sections. And then join the complete gauge board when installing to the tank brackets.



When joining the gauge boards together slide an extra tee nut into the channel before connecting to the next gauge board. This nut will be used for connecting the Gauge board bracket as shown in this image. 1 tank bracket required per 1 mtr/3' length. Do not tighten the bolt completely as this bracket need to slide freely and line up with the Tank brackets which are now installed to the tank.

