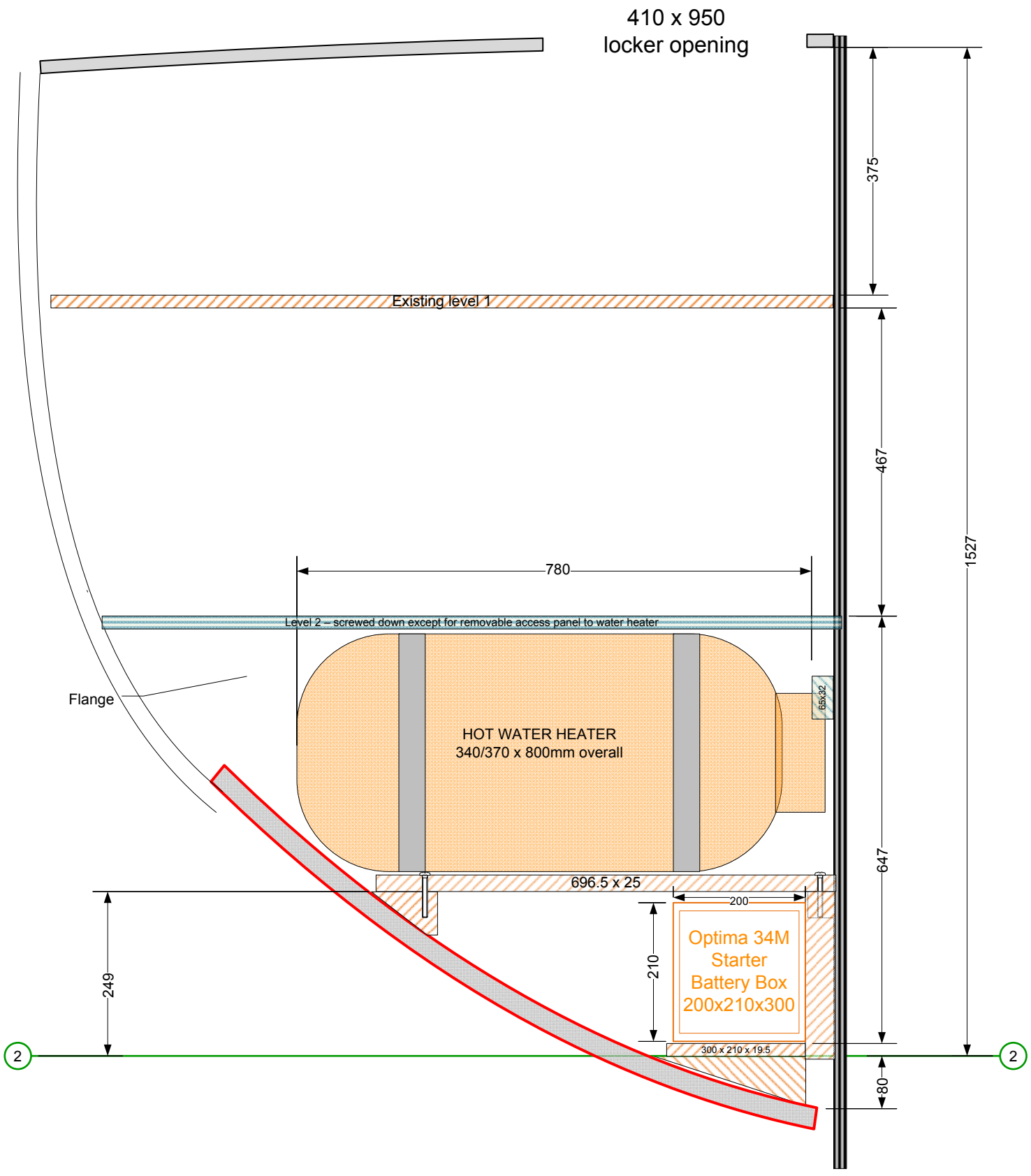
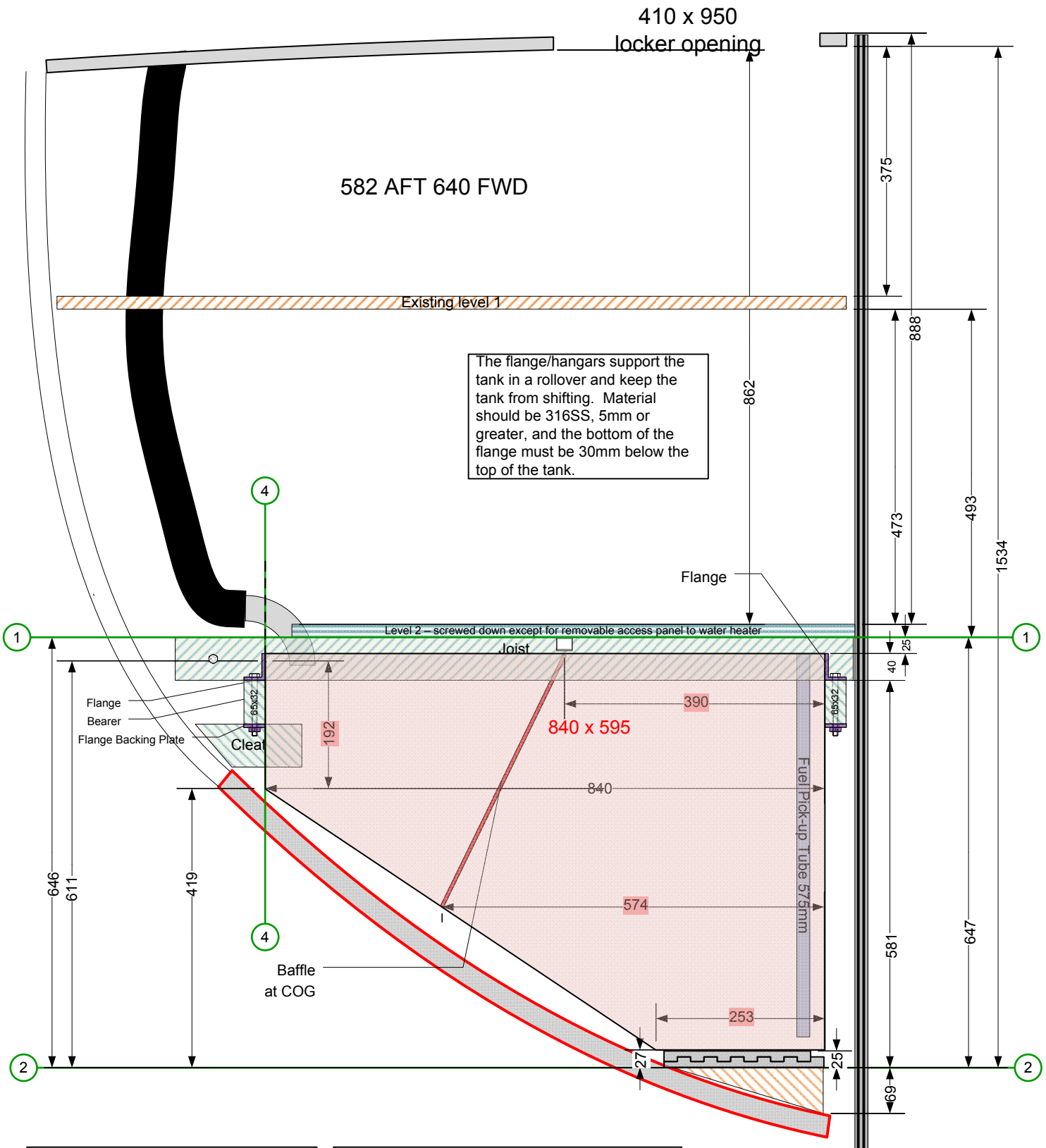


Reference Plane ① set at top of floor joists

Reference Plane ② set at top of AFT tank base support

S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE: Port Diesel Tank Rebuild - Vertical Cross Section Hot Water Heater	REV: H	SCALE: 1: 8	PAGE: 1 OF 29	UNITS: mm	DATE: 24/09/18	DRAWN BY: JMS



BAFFLES

- "they introduce immense rigidity to the design of the tank"
- "they limit the dynamic movement of contents, minimizing the destructive pounding forces against the tank body. 300mm or narrower needs no baffles."

Consider building one baffle side to side on each tank, mainly for rigidity.

Max Moeller stock pick-up
Length is 23" or 560mm. We will need 36"

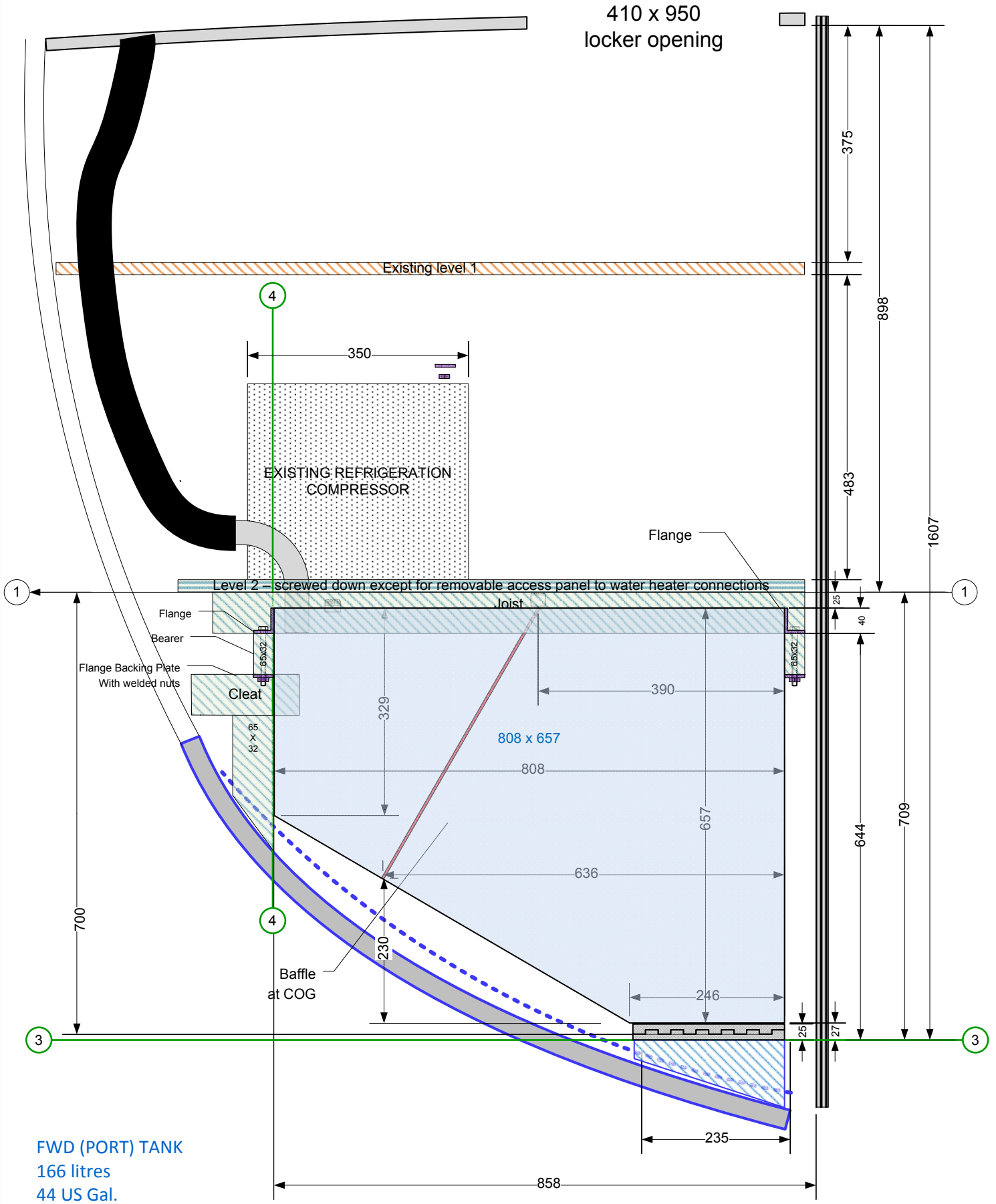
Note: Tek-Tanks (UK) metal tanks are manufactured from ... 2 mm 316 marine grade stainless steel ... known to be very corrosion resistant.

Reference Plane ① set at top of floor joists

Reference Plane ② set at bottom of AFT tank base support

AFT (DAY) TANK
145 litres
38 US Gal.
385 wide
2 mm 316L Stainless
1.897 m^2
30.4 empty wt.(kg)
151.1 full wt.(kg)

S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE	REV	SCALE	PAGE	UNITS	DATE	DRAWN BY
	Port Diesel Tank Rebuild - Vertical Cross Section Aft Tank	H	1: 8	2 OF 29	mm	24/09/18	JMS



FWD (PORT) TANK
166 litres
44 US Gal.
385 wide
2 mm 316L Stainless
1.972 m^2
31.6 empty wt.(kg)
169.4 full wt.(kg)

Reference Plane ① set at
top of floor joists

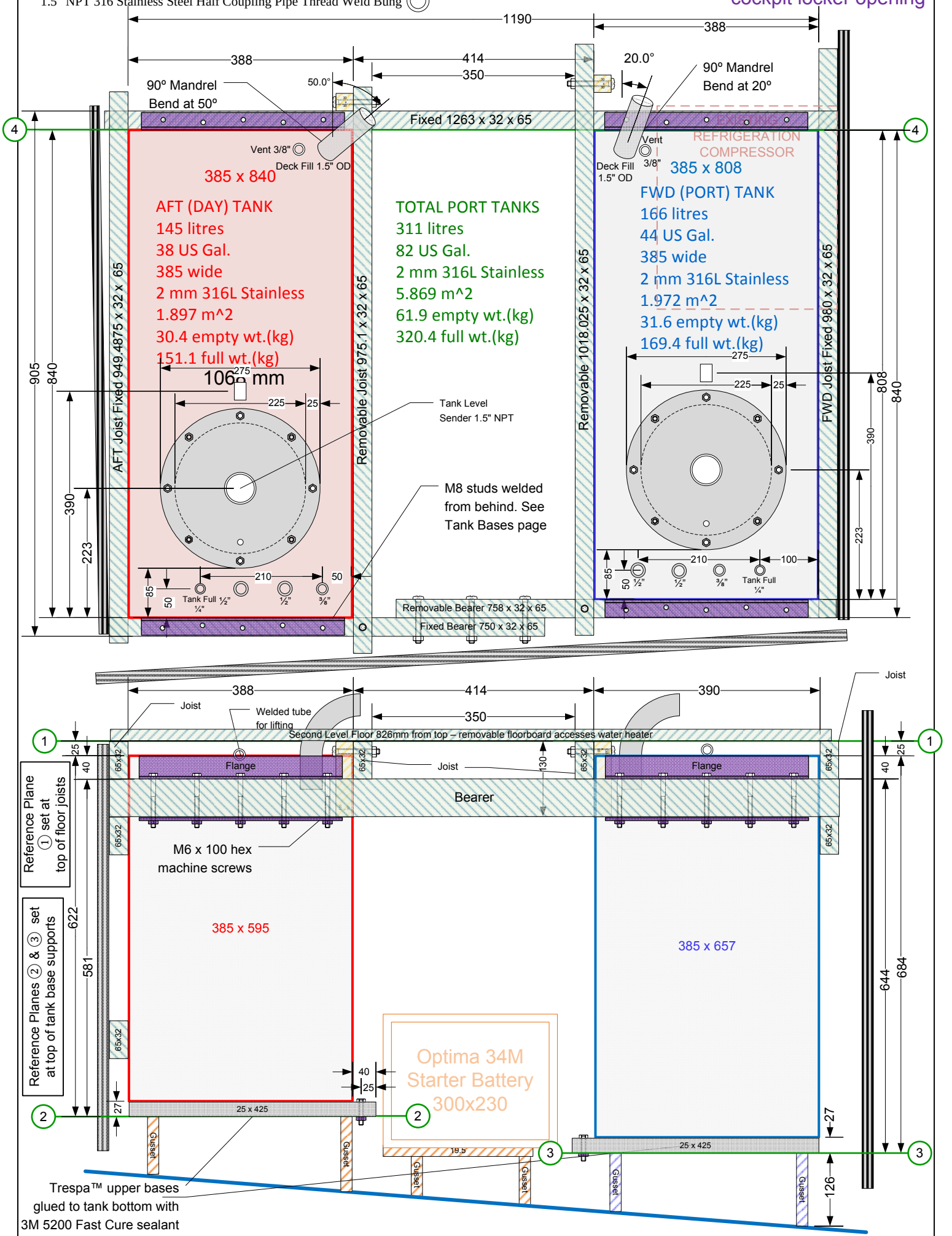
Reference Plane ③ set at
bottom of FWD tank base support

S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE	REV	SCALE	PAGE	UNITS	DATE	DRAWN BY
	Port Diesel Tank Rebuild - Vertical Cross Section Forward Tank	H	1: 8	3 OF 29	mm	24/09/18	JMS

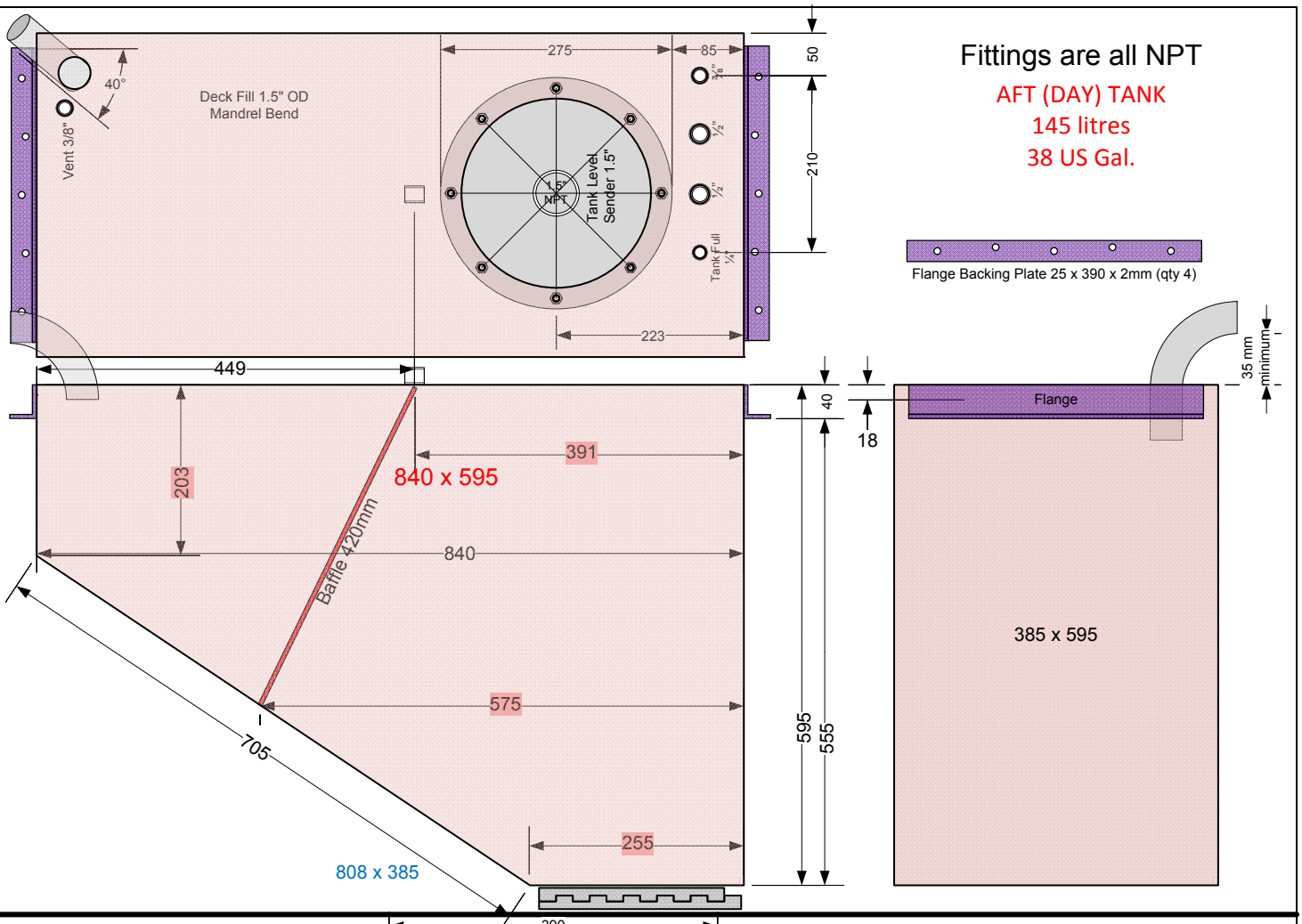
3/8" NPT 316 Stainless Steel Half Coupling Pipe Thread Weld Bung

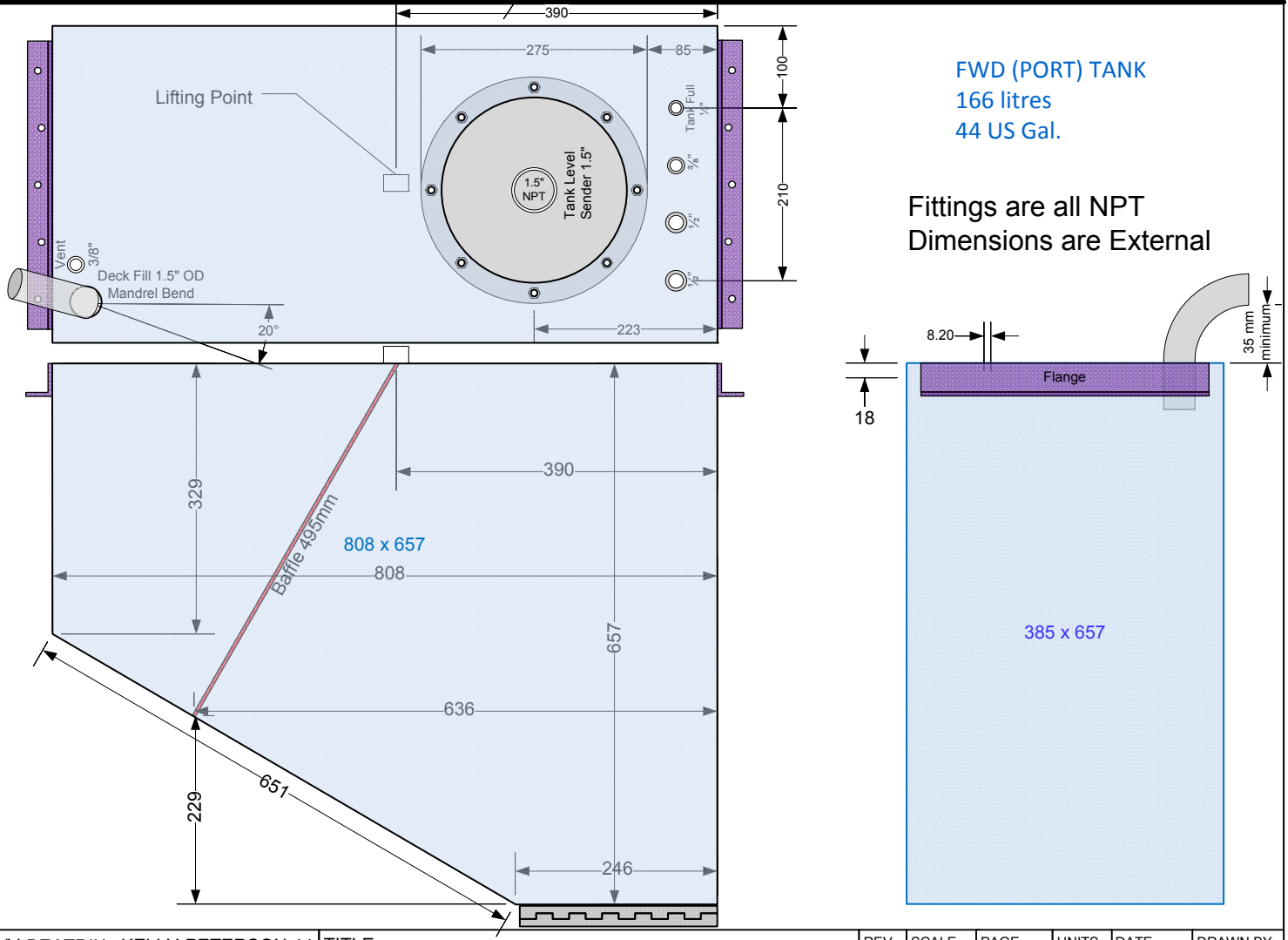
1.5" NPT 316 Stainless Steel Half Coupling Pipe Thread Weld Bung

Must fit 400 x 940 cockpit locker opening



S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE	REV	SCALE	PAGE	UNITS	DATE	DRAWN BY
	Port Diesel Tank Rebuild - Top and Face View	H	1: 8	4 OF 29	mm	24/09/18	JMS

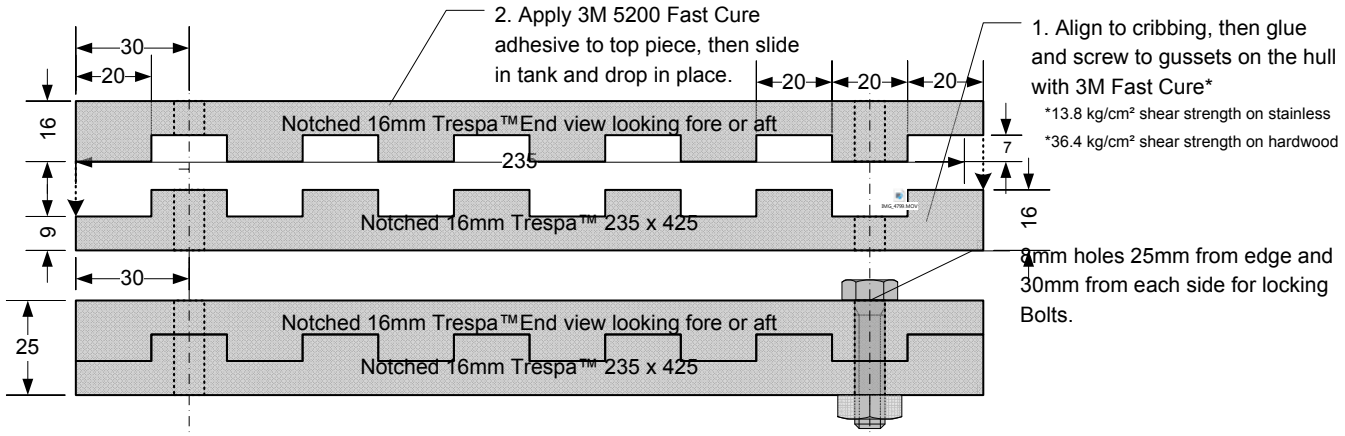


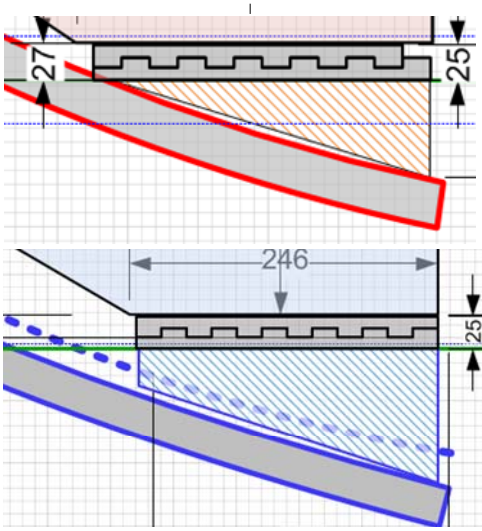


S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE: Port Diesel Tank Rebuild - Tank Fabrication Drawings	REV: H	SCALE: 1: 8	PAGE: 5 OF 29	UNITS: mm	DATE: 24/09/18	DRAWN BY: JMS

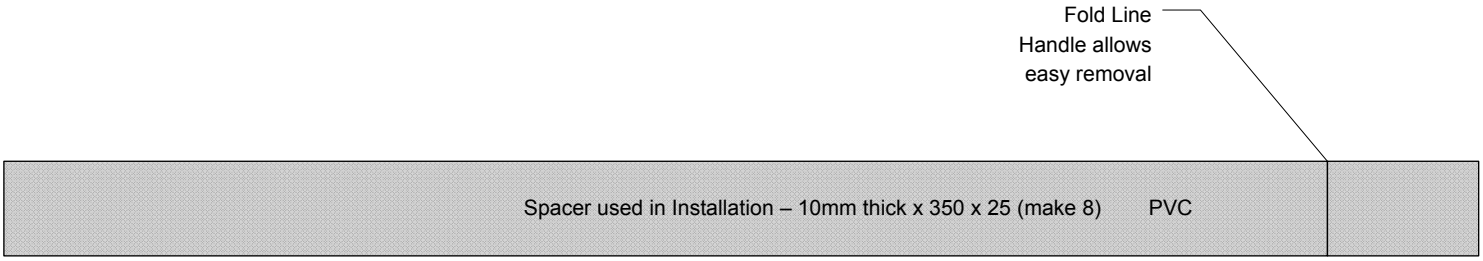
The flanges at the top of each tank rest on the bearer beams. Studs are welded at the top of the tank to fasten the flange to the tank. Flange mounting holes are ovals to allow for vertical adjustment. Once the tank is in place the flanges are bolted or lag-screwed to the bearer beams and then bolted to the studs.

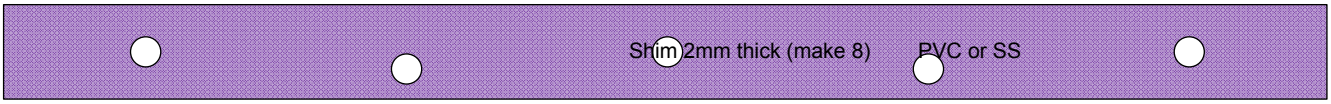
For the base of each tank, make interlocking dados (slots) in two pieces of 16mm Trespa™. One piece is attached to the hull, the other glued to the base of the tank.



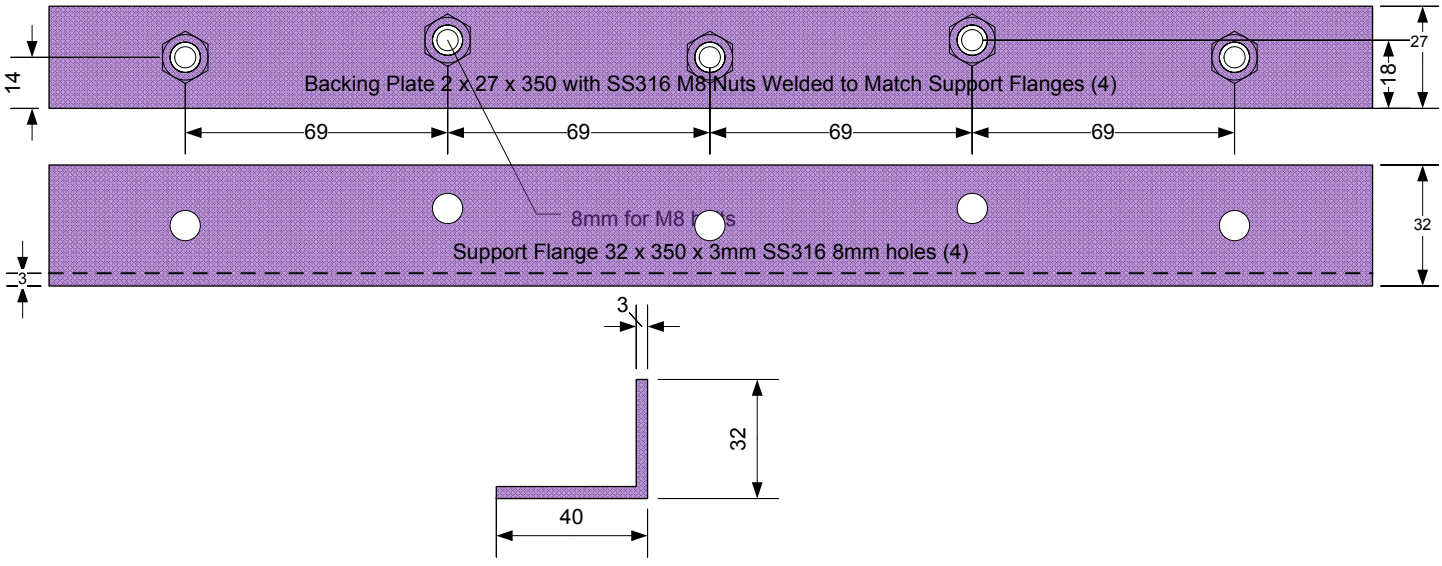


S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE: Port Diesel Tank Rebuild - Tank Bases	REV: H	SCALE: 1: 2	PAGE: 6 OF 29	UNITS: mm	DATE: 24/09/18	DRAWN BY: JMS





Flanges are welded to the tanks.
Material: Folded 2mm or 3mm 316 stainless.
Can be gusseted for strength if necessary.
Four flanges and four backing plates are required.

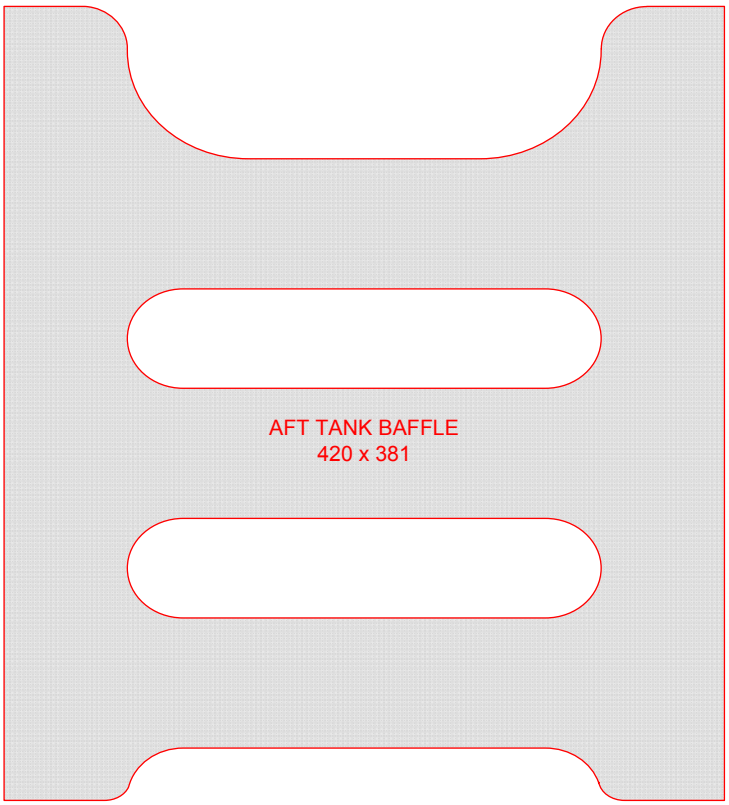


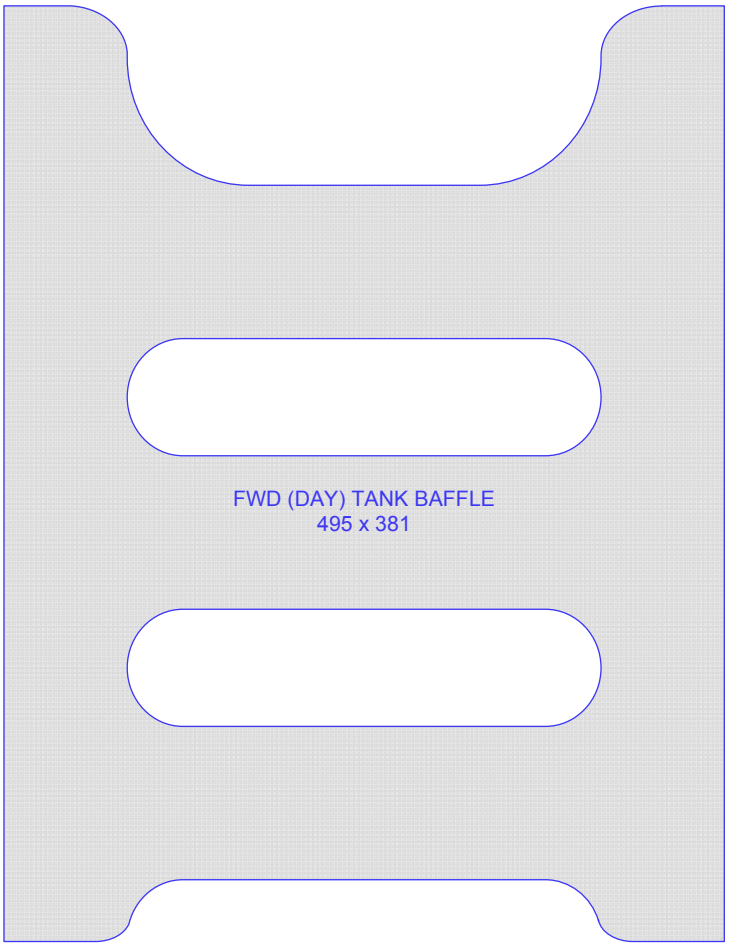
S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE	REV	SCALE	PAGE	UNITS	DATE	DRAWN BY
	Port Diesel Tank Rebuild - Support Flanges	H	1: 2	7 OF 29	mm	24/09/18	JMS

BAFFLES

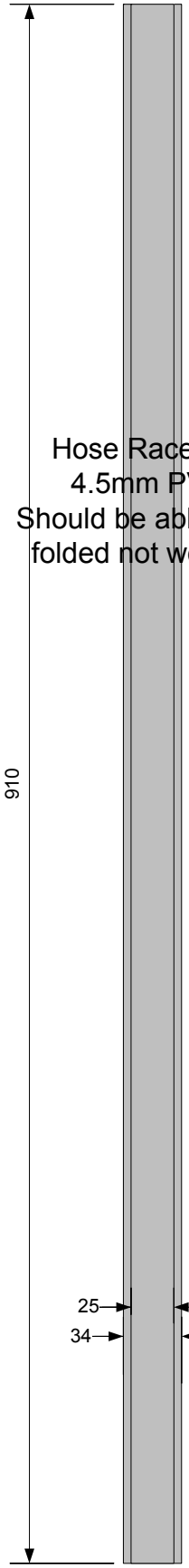
- they introduce immense rigidity to the design of the tank
- they limit the dynamic movement of contents, minimizing the destructive pounding forces against the tank body. 300mm or narrower needs no baffles.

Construct one baffle side to side on each tank, mainly for rigidity.
Dimensions shown are 4mm less than finished tank width.

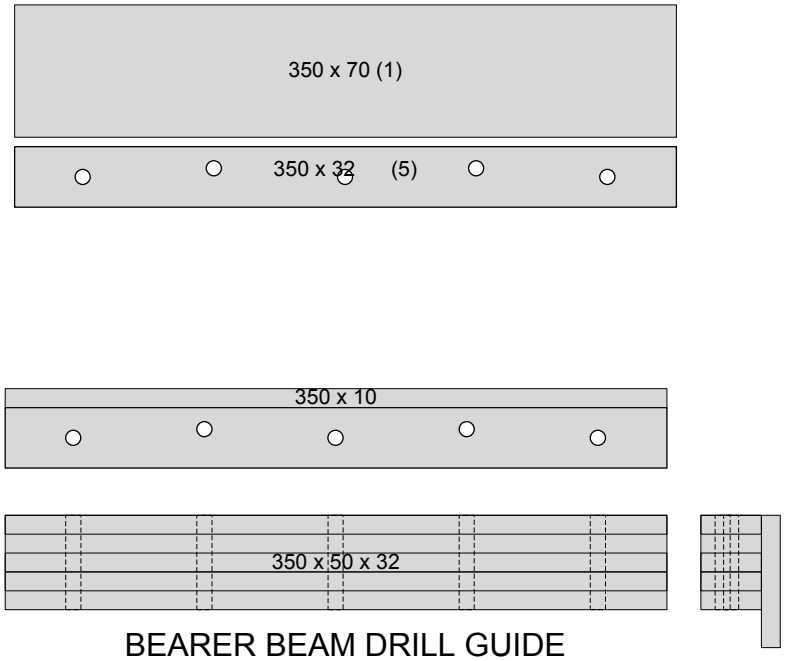




S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE	REV	SCALE	PAGE	UNITS	DATE	DRAWN BY
	Port Diesel Tank Rebuild - Baffles	H	1: 4	8 OF 29	mm	24/09/18	JMS

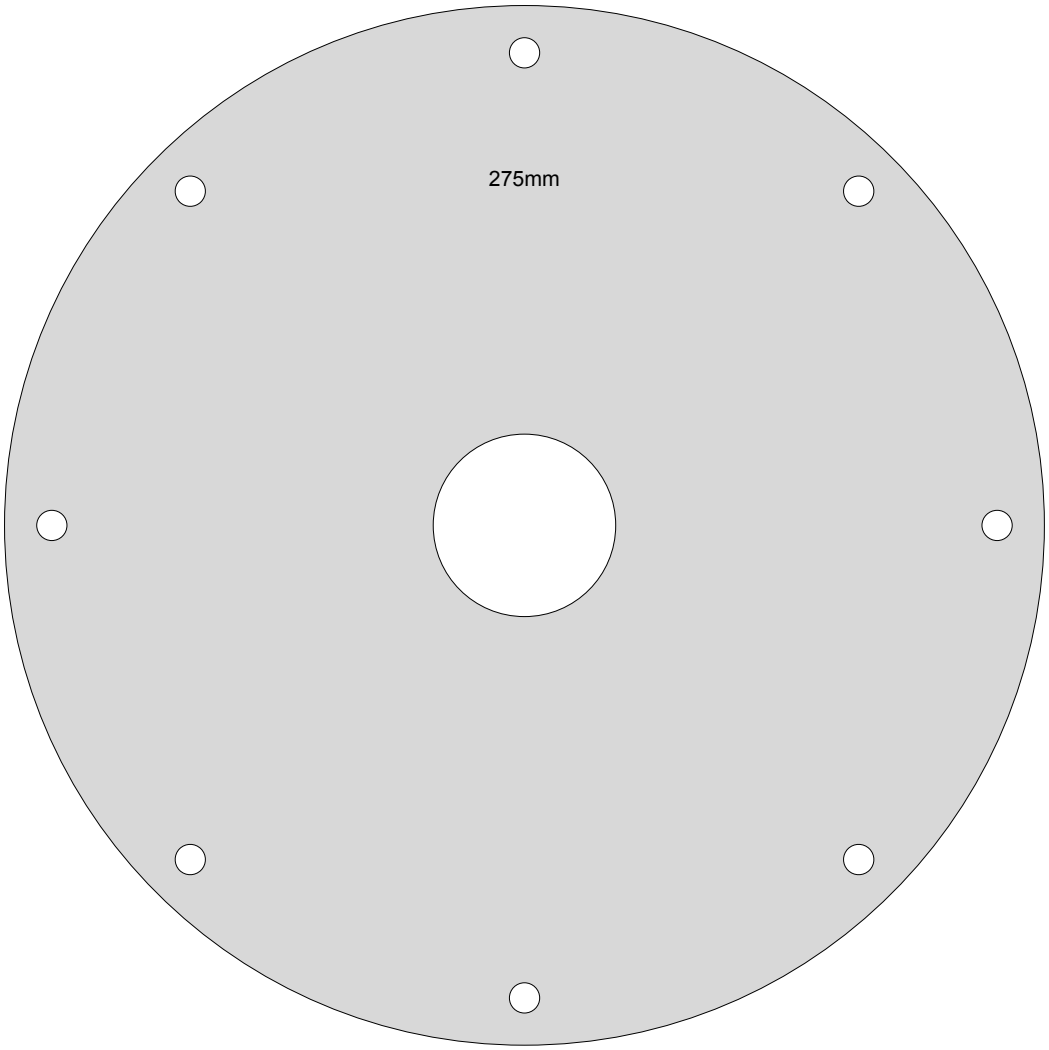


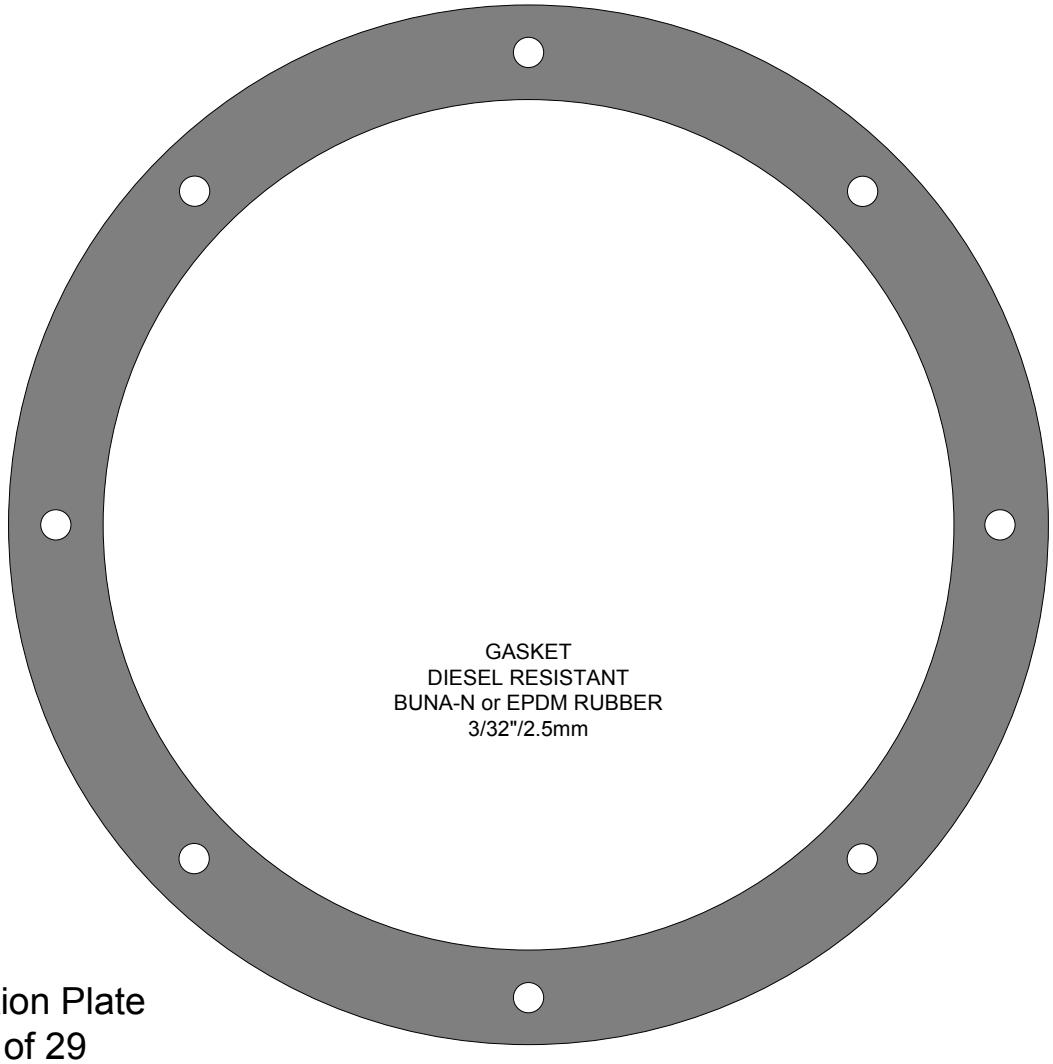
Hose Raceway
4.5mm PVC
Should be able to be
folded not welded.



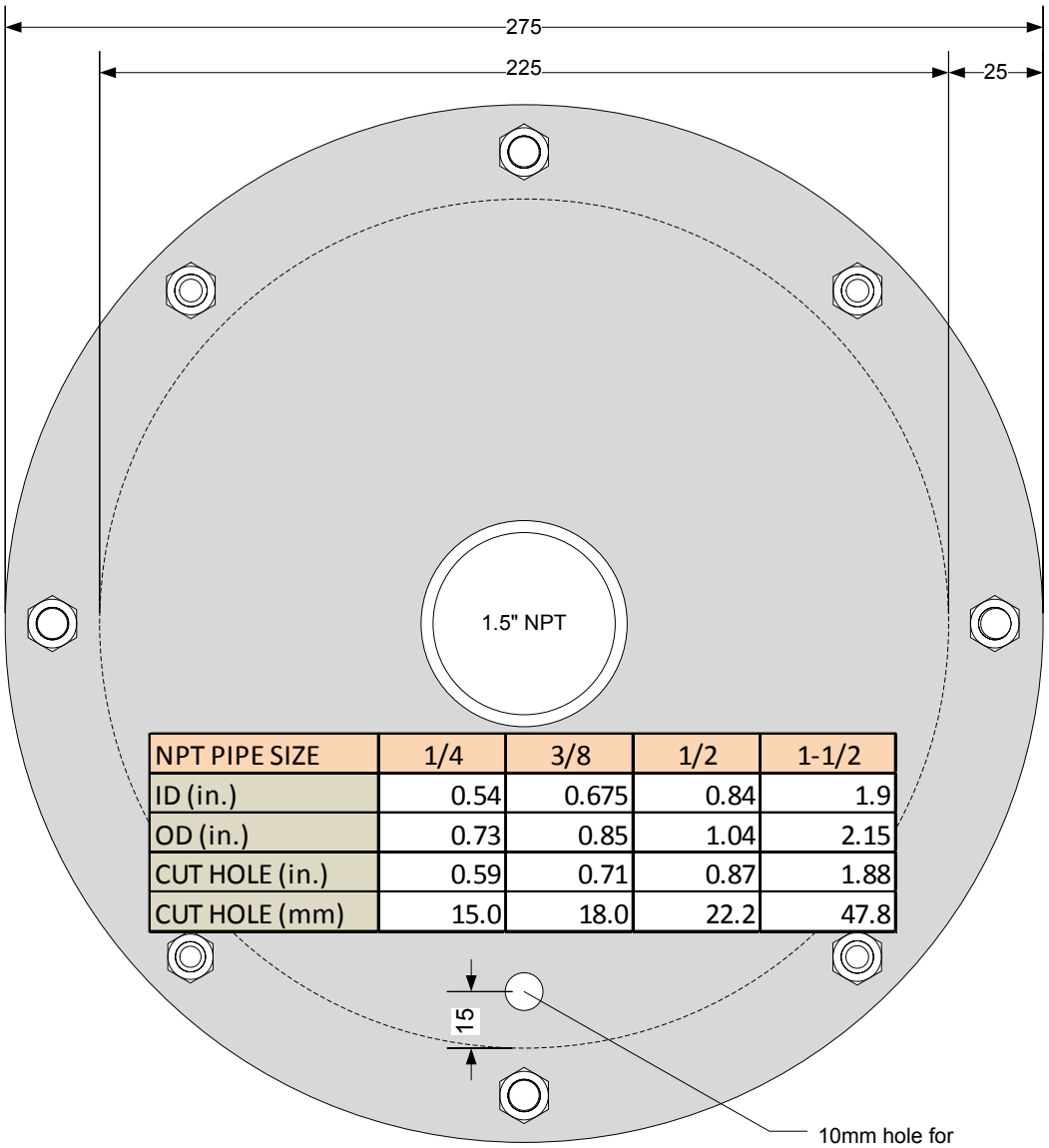
BEARER BEAM DRILL GUIDE
Make out of 5 pieces of 10mm PVC glued together.
Holes are 8mm
Edge guide is one piece 35 x 70

S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE	REV	SCALE	PAGE	UNITS	DATE	DRAWN BY
	Port Diesel Tank Rebuild - Wire Raceway and Drill Guide	H	1: 4	9 OF 29	mm	24/09/18	JMS

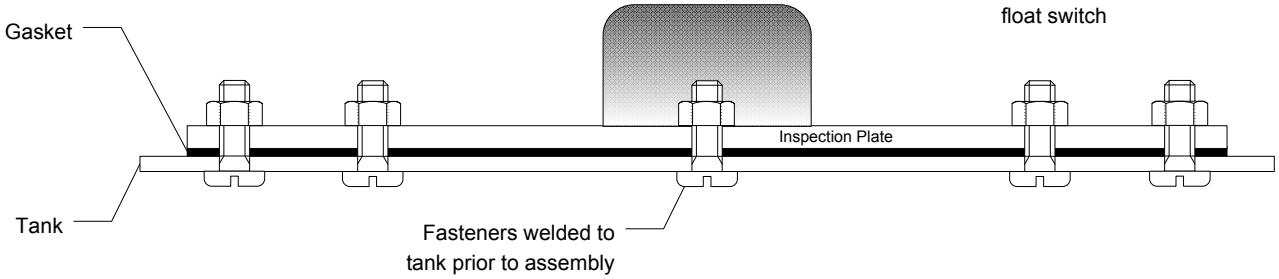

275mm


GASKET
DIESEL RESISTANT
BUNA-N or EPDM RUBBER
3/32"/2.5mm

Inspection Plate
4-6mm 316/304 Stainless steel



NPT PIPE SIZE	1/4	3/8	1/2	1-1/2
ID (in.)	0.54	0.675	0.84	1.9
OD (in.)	0.73	0.85	1.04	2.15
CUT HOLE (in.)	0.59	0.71	0.87	1.88
CUT HOLE (mm)	15.0	18.0	22.2	47.8

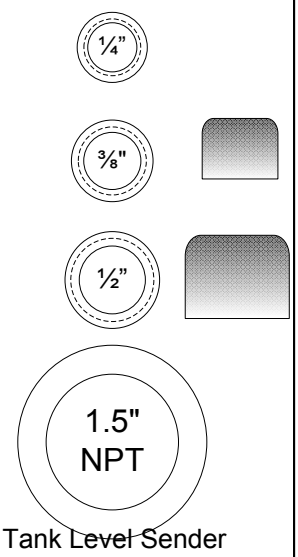


1/4" NPT 316 Stainless Steel Half Coupling Pipe Thread Weld Bung
Length = 0.52" OD = 0.73". Thread Inside Diameter 0.54"

3/8" NPT 316 Stainless Steel Half Coupling Pipe Thread Weld Bung
Length = 0.54" OD = 0.85" with street ell Length = .54" + 1.5" = 52mm
Thread Inside Diameter 0.675"

1/2" NPT 316 Stainless Steel Half Coupling Pipe Thread Weld Bung
Length = 0.7" OD = 1.04"
Thread Inside Diameter 0.840"

1.5" NPT 316 Stainless Steel Half Coupling Pipe Thread Weld Bung
Length = .96" or 24.8mm' OD = 2.15" or 54.6mm
Thread Inside Diameter 1.900"



Tank Level Sender

S/V *BEATRIX* - KELLY-PETERSON 44 #286 (1980)	TITLE	REV	SCALE	PAGE	UNITS	DATE	DRAWN BY
	Port Diesel Tank Rebuild - 275mm Inspection Plate	H	1: 2	11 OF 29	mm	24/09/18	JMS