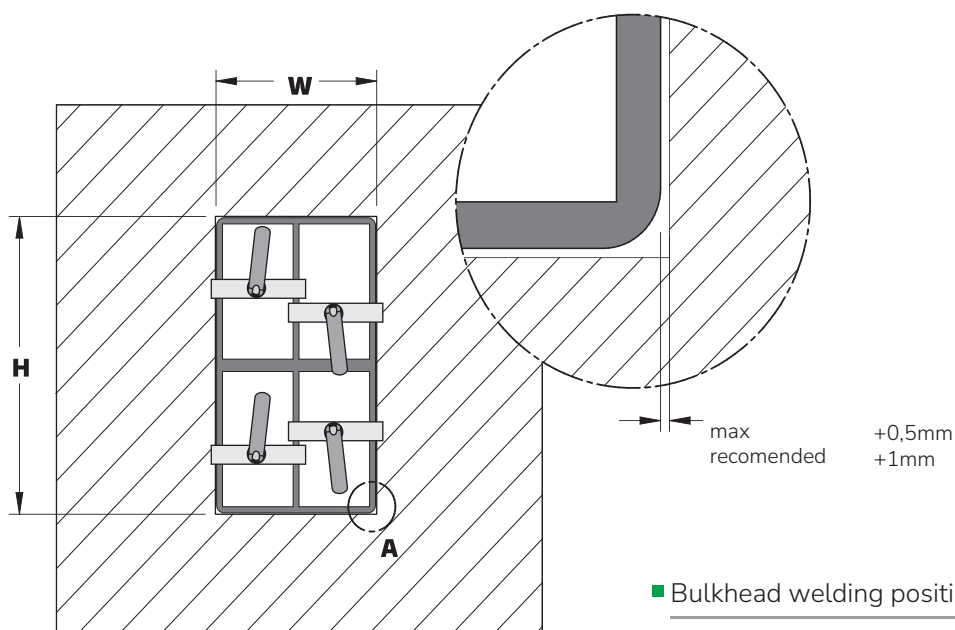
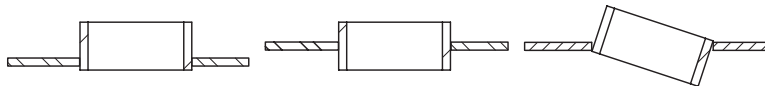


## STANDARD WELDING INSTRUCTIONS

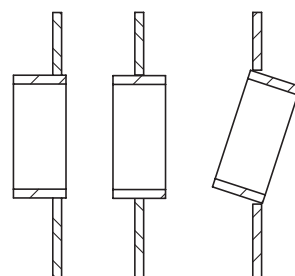
1. Check the measures of the precut hole and external dimensions of the frame. Recommended gap around the frame is in between 1mm and 2mm (0.5-1mm on every side of the frame).



### Deck welding positions



### Bulkhead welding positions

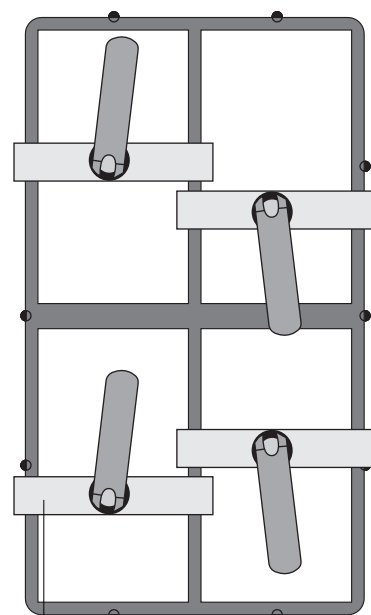
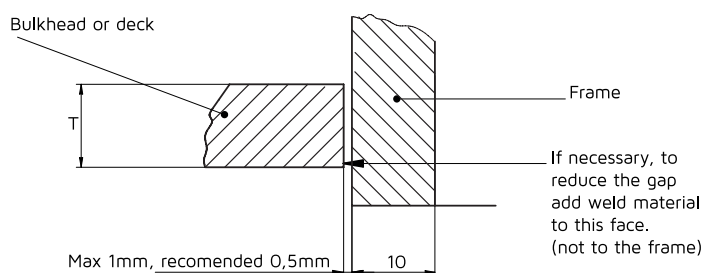


2. Tack weld on the front side, centring the frame onto the cut-out hole:

- Horizontally, one tack on every aperture.

- Vertically, one tack on every aperture and on every vertical division.

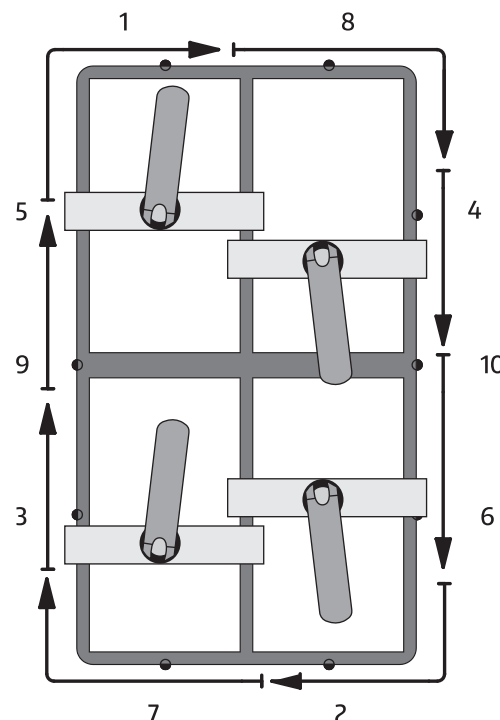
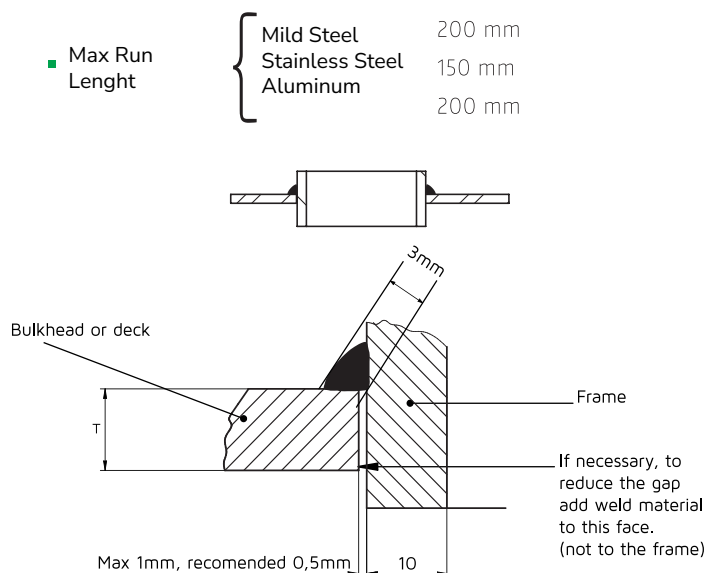
Check the gap measures all around the frame are maintained. If necessary, add weld material to the bulkhead/deck to reduce the gap (not to the frame) Use HTS welding tool to prevent frame deformations during welding process.



- Welding tool (See page.80) can be used to prevent deformation during the welding.

- Start welding the frame with a sealing fillet weld on the backside. Follow appropriate welding sequence. This welding throat should not excess of 3mm.

The interpass temperature should not exceed 200°C for mild steel and aluminium and 150°C for stainless steel.



$$\text{Heat Input (KJ/mm)} = \frac{V \cdot I \cdot \eta}{\text{vel} \cdot 1000}$$

V = volts / I = amperes / vel = mm/s

$\eta = \begin{cases} 1 & \text{SMAW} \\ 0,8 & \text{GMAW / FCAW} \\ 0,6 & \text{GTAW} \end{cases}$

	Máx. Heat Input (KJ/mm)		
	Mild Steel	Stainless Steel	Aluminium
a = 3 mm	1,2	1,1	2

- Grind off weld tacks before start filled weld. Weld runs should not start or stop at a tack weld but should run over a tack.

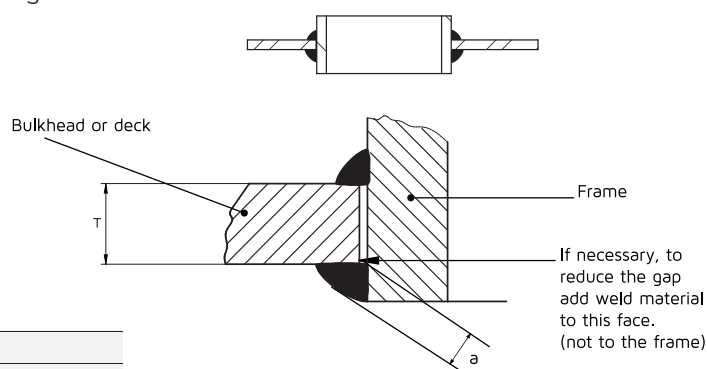
Follow same welding sequence for correct procedure. The interpass temperature should not exceed 200°C for mild steel and aluminium and 150°C for stainless steel.

This welding throat should not excess following values:

$T > 7\text{mm}$        $a = 5\text{mm}$   
 $T \leq 7\text{mm}$        $a = 4\text{mm}$

■ Max Run Lenght

Mild Steel	200 mm
Stainless Steel	150 mm
Aluminium	200 mm



	Máx. Heat Input (KJ/mm)		
	Mild Steel	Stainless Steel	Aluminium
a = 4 mm	1,2	1,1	2
a = 5 mm	1,4	1,1	2