Welding instructions

Welding sequence of a two-pass fillet shall be performed in the following steps with minimize heat input.

1 – Fix with tack weld points, maximum 150 mm (5.90”) between.
2 – Root weld 1.1 and 2.1
3 – Fillet weld 1.2 and 2.2
4 – Seal weld 3 and 4

Weld pass 4 is not to be started until weld 2 and 3 are completed!

Three different welding sequences
Fillet weld size for a centre-placed frame

Fillet weld size (throat thickness) is to be $0.5 \times$ plate thickness of the bulkhead or deck plate (THD). However fillet weld size is not to be greater than $0.7 \times$ frame plate thickness (THF).

$$a = \text{Fillet size (throat thickness)}$$

Note!

$THD = \text{Thicknes deck plate}$

$THF = \text{Thickness frame plate}$

Multi-pass welding is required if $a \geq 5 \text{ mm} (0.20")$

Maximum allowable root gap for fillet joint

If root gap is too wide the deck plate or bulkhead may be built up with weld to achieve a proper gap (see Figure 2).

Build-up of fillet joint

Note! Weld build up on the frame is not recommended as it may cause deformation of the frame.