



Caution:
 Keep both door and frame straight. Do not force it towards the bulkhead. Do not force the doorframe, for example with clamp tools.

- Close and latch the door on the frame. Keep the door closed during the entire welding procedure.
- Welding must be done carefully to prevent thermal stresses in the door.
- Make sure that the heat-dissipation into the door is as little as possible.
- Refer also to the instruction on the door.
- Weld also the backside of the doorframe by interrupted welding.
- Refer to the illustration, start at position 1, interrupted welding (length $\pm 3/4$ 100mm). Follow to position 2 – 3 – 4 etc.
- Complete the welding: Fill the open spaces between doorframe and wall.

Caution:
 Max frame deflection after welding to ship construction: 1mm / mtr

**Where door is mentioned also hatch can be read*

Revision Description		RM	6-6-2023	-
		Name	Date	Rev
Weight: 0,000 kg		Status:	WorkInProgress	
		Engineer:	RM	6-6-2023
American projection:	Description: Proposed options			
Reference:				
Drawing number: 9580.WELD Instruction			Rev.	Sheet
			-	1 / 1
			Size	A2
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This appendix is to be read in conjunction with drawing: 9580.WELD Instruction.pdf

In this document we give some explanation about the possible connection type possible for welding door/hatch to the ships structure, final details and class approval if necessary are yard responsibility!

Different frame type have different options for welded connections, we have tried to clarify them as good as possible.

We have numbered the option and below we will explain for which types it can be used.

- 01.** This is the standard angle bar frame(75x50x7) used for Winel's Splash-,Weathertight- and Watertight doors. Can also be an option for Weathertight and Watertight hatches. For Watertight applications we recommend a keel height in the weld of 4 mm, other applications we recommend a keel height of 3 mm.
- 02.** The U-frame is used for Splash and weathertight doors, not applicable for GRP doors. For welding these frames into superstructure or bulkhead we recommend a keel height of 3 mm.

The following connection(03 -06) options are applicable for several type of hatches. Types that are executed with this type of coaming are: square and round hatches with sheet metal coaming, different methods of operation.

- 03.** Hatch placed on top of deck. A fillet weld is placed on both in and outside. For Watertight applications we recommend a keel height in the weld of 4 mm, other applications we recommend a keel height of 3 mm for a coaming thickness of 8mm. Increased coaming thickness requires larger keel heights.
- 04.** Hatch placed half through deck, dimension to be determined by yard!. A fillet weld is placed on both in and outside. For Watertight applications we recommend a keel height in the weld of 4 mm, other applications we recommend a keel height of 3 mm for a coaming thickness of 8mm. Increased coaming thickness requires larger keel heights.
- 05.** Hatch placed on top of deck, with deck inside of CO coaming. A fillet weld is placed on both in and outside. For Watertight applications we recommend a keel height in the weld of 4 mm, other applications we recommend a keel height of 3 mm for a coaming thickness of 8mm. Increased coaming thickness requires larger keel heights
- 06.** Hatch placed through deck, dimension to be determined by yard!. A fillet weld is placed on both in and outside. For Watertight applications we recommend a keel height in the weld of 4 mm, other applications we recommend a keel height of 3 mm for a coaming thickness of 8mm. Increased coaming thickness requires larger keel heights.
- 07.** The U-frame is used for weather- and watertight hatches. For welding these frames into the deck we recommend a keel height of 3 mm for fillet weld and a full penetration weld