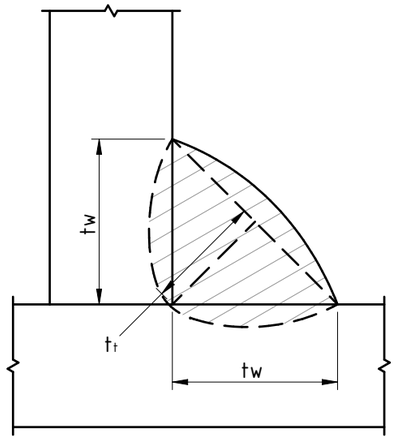

t_w = Fillet Weld Size (Leg Size)

t_t = Design Throat Thickness

Design Capacities of Equal-Leg Fillet Welds in accordance with AS4100 (2020) Steel Structures

Leg Size t_w (mm)	E41XX Consumable (f_{uw} = 410MPa)		E48XX Consumable (f_{uw} = 480MPa)	
	SP Weld ϕv_w (kN/mm length)	GP Weld ϕv_w (kN/mm length)	SP Weld ϕv_w (kN/mm length)	GP Weld ϕv_w (kN/mm length)
3	0.417	0.313	0.489	0.367
4	0.557	0.417	0.652	0.489
5	0.696	0.522	0.815	0.611
6	0.835	0.626	0.978	0.733
8	1.113	0.835	1.303	0.978
10	1.392	1.044	1.629	1.222
12	1.670	1.252	1.955	1.466

NOTES

1. DESIGN CAPACITIES SHOWN ARE FOR EQUAL-LEG FILLET WELDS IN ACCORDANCE WITH AS4100 (2020) STEEL STRUCTURES.
2. ALL WELDING SHALL BE IN ACCORDANCE WITH AS/NZS 1554.1, AS/NZS 1554.2, AS/NZS 1554.4 OR AS/NZS 1554.5
3. FOR SP FILLET WELDS TO RHS WITH WALL THICKNESS <3mm, MULTIPLY THE GIVEN SP VALUES BY 0.875.
4. "SP" DENOTES A STRUCTURAL PURPOSE CATEGORY WELD AS SPECIFIED IN AS/NZS 1554.1 OR AS/NZS 1554.4
5. "GP" DENOTES A GENERAL PURPOSE CATEGORY WELD AS SPECIFIED IN AS/NZS 1554.1 OR AS/NZS 1554.4
6. NOMINAL TENSILE STRENGTH (f_{uw}) OF E41XX WELD CONSUMABLE = 410MPa
7. NOMINAL TENSILE STRENGTH (f_{uw}) OF E48XX WELD CONSUMABLE = 480MPa
8. CALCULATION OF WELD LOADS MUST CONSIDER THE GEOMETRICAL PROPERTIES OF THE WELD GROUP.
9. CORRECT INTERPRETATION AND USE OF THIS INFORMATION IS THE RESPONSIBILITY OF THE USER. TRANG TAKES NO RESPONSIBILITY FOR THE OUTCOMES OF THE USE OF THIS INFORMATION.
10. FOR DESIGN OF YOUR WELDED CONNECTIONS CONTACT TRANG IMAGINEERING ON 13 000 87264 OR EMAIL info@trang.com.au

REV	DATE	DETAIL	BY	CHK	DES
A	04/09/23	INITIAL RELEASE	SB	GH	SB

DESIGNED AND ENGINEERED FOR:

DESIGNED AND ENGINEERED BY:

TRANG Imagineering

TRANG IMAGINEERING
74 ASTILL DRIVE
ORANGE NSW 2800
PHONE: 13 000 TRANG
info@trang.com.au

TRANG TECHNICAL REFERENCE DATA
CONTINUOUS FILLET WELD CAPACITY

DRAWING No. TRANG-TRD-002

ALL DIMENSIONS IN MM | DO NOT SCALE | THIRD ANGLE PROJECTION | SHEET: 1 OF 1

A3