KCL Engineering Services

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Client:

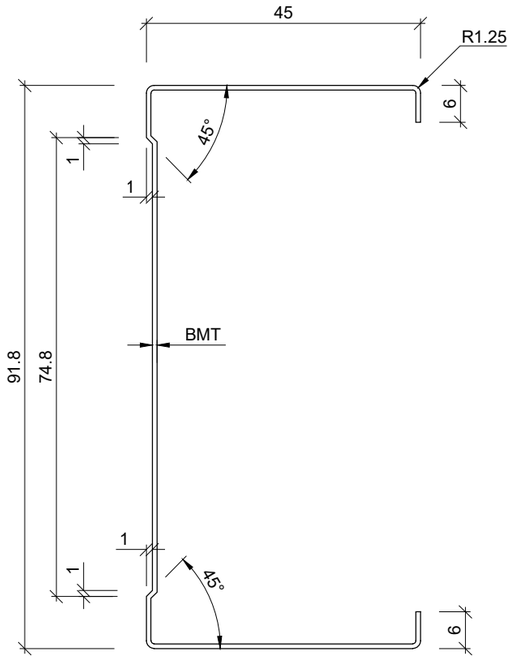
ECOPLUS SYSTEMS Ltd

Project:

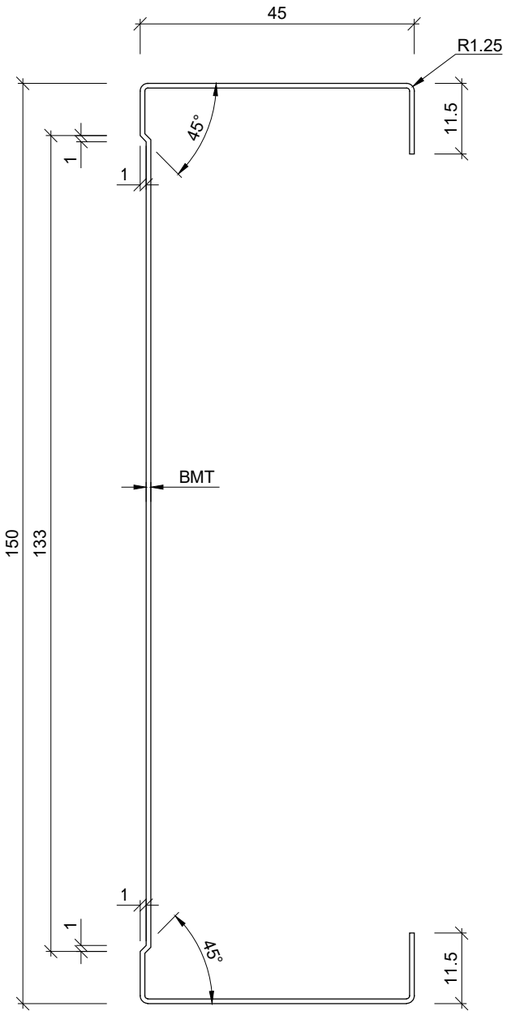
WIDE FACE STUD

Project No.

40385



92 x 45 WFS



150 x 45 WFS

Notes:

1. Material yield and ultimate tensile strength based on SGS testing data. $F_{y(min.)}$ = 270MPa, $F_{u(min.)}$ = 360MPa

2. Maximum unrestrained length for full section capacity ΦM_{sx} Lmax. = 1200mm.

   Maximum unstrained length for member bending capacity ΦM_{bx} Lmax. = 1500mm.

3. Member section capacities and member bending capacities have been calculated using FE analysis in accordance with AS/NZS4600:2018 section 3,7 and Appendix D.

4. The values provided are strictly limited to " Non-load bearing " partition walls, subject to bending out of plane, or about major stud axis.

TABLE 1 - EcoPlus Wide Face Stud Flexural Section Properties

Description	92 WFS			150 WFS	
	0.55 BMT	0.75 BMT	1.15 BMT	0.75 BMT	1.15 BMT
I_{gx} (mm⁴)	1.46E+05	1.96E+05	2.95E+05	6.48E+05	9.78E+05
I_{gy} (mm⁴)	2.51E+04	3.36E+04	4.96E+04	4.76E+04	7.06E+04
ΦM_{sx} kNm	0.41	0.65	1.54	1.46	2.65
ΦM_{bx} kNm	0.41	0.65	1.29	1.35	2.64

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Client: ECOPLUS SYSTEMS Ltd

Project: WIDE FACE STUD FLEXURAL SECTION PROPERTIES

Drawing Title: 92 & 150 WIDE FACE STUD FLEXURAL SECTION PROPERTIES

Scale (A1): -

Scale (A3): 1 : 1

Dwn By: LM

Engineer: LC

No.	Revision	By	Date
A	FOR CONSENT / CONSTRUCTION	LM	21.04.26

Job No. 40385

Drawing No. S1-01

Revision A

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