



SUBSTATION ENGINEERING STEELWORK PROFORMA

Template Identifier	240-67841615
Template Revision	4
Document Identifier	CESS11P03-SE-E76
Effective Date	01 August 2021

Scheme	Esselen Emergency Bypass
Project	Esselen Emergency Bypass
Substation	Esselen
Grid	Central
Date	19 June 2024
Revision Number	1
Issued For	

Total Quantity		
Structural Steel	1.86811	[t]
Tubular Structural Steel	0	[t]
Bolts	112.38	[kg]

Revision Control			
Rev	Date	Description	Compiled
1	19-Jun-24	Re-ordering of steelwork as requested by the current responsible project manager. Since the order for the 132kV and 275kV isolators were not placed previously, ordering of these items from the latest ENC's now requires that the support steel for the isolators be procured by Eskom.	Stanley Beukes

Reference Drawings		
Description	Dwg #	Rev

	Name	Designation	Signature	Date
Compiled	Stanley Beukes	Engineer		19-Jun-24
Reviewed	Fredda Laka	Senior Tech		19-Jun-24
Authorized	Derrick Delly	Chief Engineer		19/06/2024



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#	Quantity	Description	Steelwork 0.54/ Dwg #	Rev.	Individual Quantity		Total Quantity		Foundation 0.54/ Dwg # (Ref Only)
					Structural Steel [t]	Grade 8.8 Bolts / U-Bolts [kg]	Structural Steel [t]	Grade 8.8 Bolts / U-Bolts [kg]	
		275kV COLUMNS & BEAMS:							
137	90	M16 Grade 8,8 "U" Bolt	6441 sht 1	1		0.8	0	72	N/A
		MEDIUM EQUIPMENT SUPPORTS & TOP CAPS :							
384	8	Med. Equip. Support 2.5 m high	302	3	0.111	2.6	0.888	20.8	4358
397	6	Med. Equip. Top Cap M1. 100-706 Adjustable M16 Fixing *NOTE* NOT TO BE USED FOR 275kV CT's.	306	7	0.055	2	0.33	12	N/A
441	1	132kV Isolator Cap 0ES 3m Phase Spacing Manual and Motorised	10102	0	0.35251	4.62	0.35251	4.62	N/A
448	4	220kV & 275kV Isolator & Earth Switch Crossbeam 4.3m Phase Spacing	10110	0	0.0744	0.74	0.2976	2.96	N/A