

Project Name				Frame						
	Qty	Unit	Rate	£	p					
<p><u>GENERAL MEASUREMENT NOTES</u></p> <p><u>The general notes below are to be read in conjunction with the drawings, specification, room data sheets and Bills of Quantities</u></p> <p>The descriptions contained within this Bill of Quantities are generally in accordance with the Standard Method of Measurement 7</p> <p>Where there may be discrepancies between the pricing schedule and the drawings and specification, as detailed within the tender documents the drawings will always take precedence</p> <p>The items and quantities contained within this Bill of Quantities are as indicated on tender drawings and should not be regarded as the definitive scope of works. It is the responsibility of the Contractor or Sub-Contractor to check and confirm the full scope of the works and to include in his pricing for all other works required to complete the works</p> <p>All sections include the facility for the Contractor to include monies in respect of works not specifically included within the pricing schedule and measurement</p> <p><u>DOCUMENT LIST</u></p> <p><u>The following list of information represents the drawings used in the measurement of the Bills of Quantities</u></p> <p>Structural Engineers</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXX</p>										
				To Collection £						
				0.00						

Project Name					Frame	
		Qty	Unit	Rate	£	p
DOCUMENT LIST continued ...						
<u>The following list of information represents the drawings used in the measurement of the Bills of continued ...</u>						
Structural Engineers continued ...						
xxxxxxx						
xxxxxxx						
xxxxxxx						
Other						
Structural NBS Specification						
<u>ELEMENT ASSUMPTIONS</u>						
<u>The following project assumptions are to be read in conjunction with the project drawings, specification, room data sheets and Bills of Quantities</u>						
a	Provisional allowance of 10% of total steel work tonnage has been allowed as fittings		Item		0.00	
b	Detail R2/221; shows plate and stiffener plate welded to toe of flange to support end of purlin; the note on the detail suggests this detail applies to Gridlines F and J for the appliance bay and gridlines 4a and 7a for the appliance store bay; the purlins however run parallel to these grid lines; we have therefore assumed and measured detail R2 to gridlines 5 and 9 on grids F and J for the appliance bay and J and K for appliance bay store. No allowance for this detail has been made to canopies; assumed not required		Item		0.00	
c	Note; no adjustment made on weight for tapering steel work; assumed full kg/m allowance as other beams; however they have been measured separately for ease of identification		Item		0.00	
d	We have assumed all externally exposed steel work to be galvanized and painted; we have also made this allowance for base plates in accordance with specification G10/510		Item		0.00	
e	No allowance made for surface treatment and finish to connection details - end plates, stiffener plates and the like; contractor to make suitable allowance once actual sizes are known		Item		0.00	
f	No allowance made for decorative paint system as G10/638; specific requirement not stated in specification; we have only allowed for protective painting to exposed internal steelwork in accordance with clause G10/644		Item		0.00	
					To Collection £	0.00

Project Name Withheld					Frame
		Qty	Unit	Rate	£ p
	<u>ELEMENT ASSUMPTIONS continued ...</u>				
	<u>The following project assumptions are to be read in conjunction with the project drawings, specification, room data sheets and continued ...</u>				
a	No allowance made for intumescent coating as not required as per tender clarification 24/03/2016		Item		0.00
	<u>G10 STRUCTURAL STEEL FRAMING</u>				
	<u>Framing fabrication</u>				
	All steelwork is to be designed, manufactured, supplied and erected by specialist Sub Contractor; including, but not limited to, all surface treatments; factory applied finishes; localised repairs and the like as required following installation; making good following installation; all works to be carried out in strict accordance with the Employers requirements and the Engineers specifications				
b	supply and erect all structural steelwork as per subcontractors lump sum price		Item		0.00
	<u>Framing fabrication; Grade S355</u>				
	The following is presented for the purpose of check quantities; and is measured from the drawings provided, makes no allowance for design development; resizing for optimum efficiency and the like				
	Columns and bracing				
c	weight not exceeding 40kg/m	0.09	T		Rate Only
d	weight not exceeding 40kg/m; flat sections	1.79	T		Rate Only
e	weight not exceeding 40kg/m; PFC	1.31	T		Rate Only
f	weight 40kg/m - 100kg/m	21.09	T		Rate Only
g	weight 40kg/m - 100kg/m; SHS	0.77	T		Rate Only
h	weight 40kg/m - 100kg/m; RHS	0.86	T		Rate Only
i	weight exceeding 100kg/m; CHS	2.31	T		Rate Only
	Beams				
j	weight not exceeding 40kg/m	1.48	T		Rate Only
k	weight not exceeding 40kg/m; T section	2.86	T		Rate Only
l	weight 40kg/m - 100kg/m	6.07	T		Rate Only
m	weight 40kg/m - 100kg/m; SHS	1.89	T		Rate Only
n	weight 40kg/m - 100kg/m; RHS	2.04	T		Rate Only
o	weight exceeding 100kg/m	7.93	T		Rate Only
p	weight exceeding 100kg/m; SHS	1.46	T		Rate Only
q	weight exceeding 100kg/m; RHS	1.57	T		Rate Only
To Collection £					0.00

Project Name					Frame	
		Qty	Unit	Rate	£	p
G10 STRUCTURAL STEEL FRAMING continued ...						
Framing fabrication; Grade S355 continued ...						
Roof Beams						
<i>a</i>	weight not exceeding 40kg/m	15.53	T		Rate Only	
<i>b</i>	weight not exceeding 40kg/m; CHS	6.67	T		Rate Only	
<i>c</i>	weight not exceeding 40kg/m; PFC	4.12	T		Rate Only	
<i>d</i>	weight not exceeding 40kg/m; SHS	0.53	T		Rate Only	
<i>e</i>	weight 40kg/m - 100kg/m	14.52	T		Rate Only	
<i>f</i>	weight 40kg/m - 100kg/m; Tapered; 1nr 'T' cut UB406 x 178 x 54 and 1nr UB406 x 178 x 54 as detail drawing xxxxxxxx	1.41	T		Rate Only	
<i>g</i>	weight 40kg/m - 100kg/m; SHS	2.37	T		Rate Only	
<i>h</i>	weight 40kg/m - 100kg/m; RHS	1.12	T		Rate Only	
<i>i</i>	weight 40kg/m - 100kg/m; unequal angle	0.35	T		Rate Only	
<i>j</i>	weight exceeding 100kg/m	7.25	T		Rate Only	
<i>k</i>	weight exceeding 100kg/m; tapered	2.56	T		Rate Only	
Cold formed galvanized steel purlins; Kingspan or similar approved						
<i>l</i>	multibeam M205065200	419	m		Rate Only	
<i>m</i>	multibeam M175065180	236	m		Rate Only	
<i>n</i>	multibeam M175065150	67	m		Rate Only	
<i>o</i>	multibeam M235065130	144	m		Rate Only	
Fittings, connection details, plates						
<i>p</i>	thermal break connection; Farrat Isolevel Limited; Farrat TBK; 25 thick; plate size, hole size and positions to be determined by connection designer	18	nr		Rate Only	
<i>q</i>	moment connection; to steelwork fabricators details	29	nr		Rate Only	
<i>r</i>	base plate details for 203UC non braced; 400 x 400 x 20 base plate; 4nr bolts, 4nr bolt tubes, 4nr washer plates; detail xxxx & detail xxxxx	38	nr		Rate Only	
<i>s</i>	base plate details for 203UC braced; 400 x 400 x 20 base plate; 4nr bolts, 4nr tubes, 4nr washer plates; detail xxxx & detail xxxxx	19	nr		Rate Only	
<i>t</i>	base plate details for 406 CHS; 400 x 400 x 20 base plate; 4nr bolts, 4nr bolt tubes, 4nr washer plates; detail xxxx & detail xxxxx	2	nr		Rate Only	
<i>u</i>	base plate details for 150 x 90 PFC; 200 x 150 x 20 base plate; 2nr bolts, 4nr bolt tubes, 4nr washer plates; detail xxxxx & detail xxxxx	4	nr		Rate Only	
<i>v</i>	base plate details for 200SHS; 400 x 400 x 20 base plate; 4nr bolts, 4nr bolt tubes, 4nr washer plates; detail xxxxx & detail xxxxx	1	nr		Rate Only	
					To Collection £	0.00

Project Name Withheld					Frame
		Qty	Unit	Rate	£ p
G10 STRUCTURAL STEEL FRAMING continued ...					
Framing fabrication; Grade S355 continued ...					
Fittings, connection details, plates continued ...					
a	base plate details for 152UC; 350 x 350 x 20 base plate, 4nr bolts, 4nr bolt tubes, 4nr washer plates; detail xxxxx and detail xxxxx	1	nr		Rate Only
b	base plate details for combined UC152 and 150 x 90 PFC; 560 x 400 x 20 base plate; 6nr bolts, 4nr bolt tubes, 4nr washer plates; detail xxxxx and detail xxxxxx	4	nr		Rate Only
c	base plate details for 2 x 250 x 150 RHS; 350 x 600 x 20 base plate; 8nr bolts, 8nr bolt tubes, 8nr washer plates; detail xxxxx and detail xxxxx	1	nr		Rate Only
d	appliance bay canopy connections as shown on detail xxxxxx; connection complete including end/stiffener plates and the like	4	nr		Rate Only
e	detail R3/00221; connection complete including 6 thick connecting plate and fillet weld, slotted head restraints and the like; all to steel fabricators details	4	nr		Rate Only
f	capping plate; to steel fabricators detail; plate approx 762 wide; appliance bay canopy	15	m		Rate Only
g	12 thick plate; length to suit purlin offset from roof beam; welded to roof beam flange using 8 thick CFW	866	m		Rate Only
h	flange extension; 15 thick x 100 wide plate welded to toe of flange with full penetration butt weld	28	m		Rate Only
i	flange extension; 20 thick x 100 wide plate welded to toe of flange with full penetration butt weld	56	m		Rate Only
j	flange extension; 30 thick x 100 wide plate welded to toe of flange with full penetration butt weld	9	m		Rate Only
k	detail xxxxxx; bedding mortar; thickness not stated; to both flanges of T section	78	m		Rate Only
l	detail xxxxxx; bedding mortar; with and including 10 thick x approx 450 wide bottom plate welded to beam with 6 thick fillet weld	13	m		Rate Only
m	detail xxxxxx; 15 thick x approx 354 wide bottom shelf plate; welded to beam with 8 thick fillet weld	5	m		Rate Only
n	detail xxxxxxx; 20 thick x approx 400 wide bottom shelf plate welded to beam with 8 thick fillet weld	13	m		Rate Only
o	detail xxxxxxxx; 10 thick x approx 405 wide bottom plate welded to beam with 6 thick fillet weld; extended flange bedded in mortar	2	m		Rate Only
To Collection £					0.00

Project Name					Frame	
		Qty	Unit	Rate	£	p
G10 STRUCTURAL STEEL FRAMING continued ...						
<u>Framing fabrication; Grade S355 continued ...</u>						
Fittings, connection details, plates continued ...						
a	detail xxxxxxxx; bedding mortar to pack out pre-camber; width to suit width of beam	40	m		Rate Only	
b	detail xxxxx; 10 thick x approx 378 wide bottom shelf plate welded to beam with 6 thick fillet weld	8	m		Rate Only	
c	detail xxxxxx; 10 thick x approx 400 wide plate welded to SHS using 8 thick CFW to support end of purlin	6	m		Rate Only	
d	detail xxxxxxx; 10 thick x approx 150 wide plate welded to toe of flange to support end of purlins	79	m		Rate Only	
e	detail xxxxxxx; 8 thick stiffener plate welded to UB using 8 thick CFW at purlin locations	79	m		Rate Only	
f	other fittings to complete installation; provisional allowance of 10% of steel member weights	10.99	T		Rate Only	
<u>Framing erection</u>						
Trial erection; including temporary propping of steelwork						
g	generally	120.95	T		Rate Only	
Permanent erection on site						
h	generally	120.95	T		Rate Only	
<u>Surface Preparation</u>						
Blast cleaning to BS EN ISO 8501-1, preparation grade SA2.5, using chilled angular iron grit grade G24 to give a coarse surface profile, followed by chemical cleaning; galvanizing to BS EN ISO 1461, minimum mean coating thickness of 140 micrometers as NBS G10/620 and all subsequent clauses						
i	at works; external exposed steelwork	375	m2		0.00	
<u>Surface Treatment</u>						
Protective painting to external steelwork; submit proposals of paint as NBS G10/645 and all subsequent clauses						
j	at works	375	m2		0.00	
					To Collection £	
					0.00	

Project Name					Frame	
		Qty	Unit	Rate	£	p
G10 STRUCTURAL STEEL FRAMING continued ...						
<u>Surface Treatment continued ...</u>						
	Protective coating to exposed internal steelwork; Contractor to submit proposals for paint manufacturer and product; allow for blast cleaning to BS EN ISO 8501-1, preparation grade SA2.5; weld, edges, area with surface imperfections to BS EN ISO 8501-3, preparation grade P1; Corrosion protection To BS EN ISO 12944-1, corrosivity category C2, durability range H; protective coating with a zinc epoxy primer; apply primer in shop and subsequent coats on site after erection of the steelwork as NBS G10/644 and all subsequent clauses					
a	generally	88	m2			0.00
	Protective coating to concealed internal steelwork; Contractor to submit proposals for paint manufacturer and product; allow for blast cleaning to BS EN ISO 8501-1, preparation grade SA2.5; weld, edges, area with surface imperfections to BS EN ISO 8501-3, preparation grade P1; Corrosion protection To BS EN ISO 12944-1, corrosivity category C1, durability range H; protective coating with a zinc epoxy primer; apply primer in shop and subsequent coats on site after erection of the steelwork as NBS G10/643 and all subsequent clauses					
b	generally	1640	m2			0.00
	Site painting with high build bitumen; Amercoat 4186 or similar approved to steel work enclosed or partially enclosed in external masonry; site top coat of thickness of 150 micrometers; contractors choice of colour; allow for stripe intermediate coat to external angles as NBS G10/650 and all subsequent clauses					
c	on site	403	m2			0.00
<u>OTHER ITEMS</u>						
	<u>The contractor is to detail below any items not specifically identified above that he considers should be shown and included in his tender</u>					
d			Item			0.00
					To Collection £	0.00

Project Name				Frame	
	Qty	Unit	Rate	£	p
Collection					
Total from Page 2A / 1			£		0.00
Total from Page 2A / 2			£		0.00
Total from Page 2A / 3			£		0.00
Total from Page 2A / 4			£		0.00
Total from Page 2A / 5			£		0.00
Total from Page 2A / 6			£		0.00
Total from Page 2A / 7			£		0.00
				To Summary £	0.00

		Qty	Unit	Rate	£ p
	Summary Frame Page 2A / 8			£	0.00
	Total for Bill			£	0.00