									Refer to A4 Emission Factor Calcuation						(assuming 50km) 0.005 KgCO2e/kg	1.77kgCO2e/ kg for timber, 0.13kgCO2e/ kg for others						
	Number	Linear m	Area (m2)	Volume (m3)	Weight (kg)	A1-A3 ECF kgCO2e/unit	A1-A3 kgCO2e	A1-A3 kgCO2e/m2 or kgCO2e/m for linear material	A4 Transport ECF kgCO2e/kg	A4 Transport KgCO2e	A4 Transport KgCO2e/m2	A5a (2025) 20.66% of A1-A3	A5w (2025) 1.52% of A1-A3	Waste factor	C2 transport ECF kgCO2e	C3-C4, waste processing ECF kgCO2e	A5w factor	A5w kgCO2e	Total EC kgCO2e	Total EC tonCO2e		Reduction area from construction efficiency	New Total EC tonCO2e
Conc slab 100mm min 25Mpa up to 32Mpa			62.00	6.20	14,880.00	0.20	2,902	46.80	0.01	177				4%	0.005	0.13	0.01	203.49	3,281.86	3.28		31	
with 300 thicken edge			9.45	2.83	6,803.14	0.20	1,327	140.40	0.01	81				4%	0.005	0.13	0.01	93.03	1,500.47	1.50			
Reo SL72 (kg)			62.00		176.51	**3.65**	644	10.39	0.22	39				4%	0.005	0.13	0.16	28.30	711.89	0.71			
Concrete pad footing to column and infill under floorboxes				0.96	2,292.00	0.20	447		0.01	27				4%	0.005	0.13	0.01	31.34	505.51	0.51			
Hot roll Steel structure - galvanised,Plus steel misc (5%)					900.00	4.09	3,681		0.22	200				0%	0.005	0.01	0.00	3.89	3,885.36	3.89			
ROOF																							
Shadowline 305 roof sheet, Colorbond (EPD)			27		264.87	31.774	858	31.77	0.1608	43	1.58			15%									
Flashing 0.55 BMT flat, Colorbond (EPD)			105		470.4	15.1	1,586	15.10	0.1608	76	0.72			15%									
Danpalon 16mm system			57		358.302	35.444	2,020	35.44	0.535872	192	3.37			10%									
Bondor Solar Span 100mm EPS (EPD)			11		124.3	44.1	485	44.10	0.0648	8	0.73			15%									
GLAZING SYSTEM																							
Double glazed operable			18.7				9,441	504.89															
Double glazed glass only			18.7		461.89	2.38	1,099	58.79	0.222734	103													
Double glazed aluminium only			18.7		280.5	29.74	8,342	446.10	0.222734	62													
Double glazed fixed			8				4,084	510.48															
Double glazed glass only			8		226.4	2.38	539	67.35	0.222734	50				1%									
Double glazed aluminium only			8		119.2	29.74	3,545	443.13	0.222734	27				1%									
Single glazed system with alu frame			0.7				316	452.06		6	8.21												
Alumium frame only		4.9	0.7		9.8	29.74	291	416.36	0.222734	2				1%									
Glass only Soltech 6mm			0.7		10.5	2.38	25	35.70	0.3392	4				1%									
Single glazed system with jarrah frame			8							54	6.78												
Jarrah frame only		24		0.2088	171.216	591	123	5.14	0.0648	11				10%									
Glass only Vlam Hush 6.5mm thick			8		127.2	2.38	303		0.3392	43				1%									
Replacement glazing Vlam Hush 6.5mm			3		47.7	2.38	114	37.84	0.3392	16	5.39			1%									
WALL																							
Double brick cavity wall (to new opening)			1	0.22	314.6	0.449	141	141.26	0.0648	20	20.39			5%									
External 90 steel stud, FC cladding+lining			11				361	32.82		110	10.01												
92mm steel stud 0.55 BMT Rondo251		33			26.0	3.29	85	2.59	0.3392	9				15%		0.00639							
35mm batten Rondo M735		26.4			28.7	3.09	89	3.36	0.3392	10				15%		0.00639							
8mm external cladding			11		145.2	8.1	89	8.10	0.3392	49				15%		1.4							
6mm internal lining			11		95.7	6.05	67	6.05	0.3392	32				15%		1.19							
90mm R2.8 glass wool insulation			11		26.73	0.96	26	2.33	0.3392	9				10%									
External enamel paint			11		2.2	0.5	6	0.50	0.3392	1				1%									
External 90 timber stud, FC cladding+plaster			4.2				55	13.03		38	9.17												
90mm timber stud with noggings		14.28		0.044982	24.8	-764	-34	-2.41	0.3392	8				15%		0.00639							
35mm batten Rondo M735		10.08			11.0	3.09	34	3.36	0.3392	4				15%		0.00639							
8mm external cladding			4.2		55.44	8.1	34	8.10	0.3392	19				15%		1.4							
13mm plasterboard lining			4.2		54.6	1.83	8	1.83	0.0648	4				15%		1.19							
90mm R2.8 glass wool insulation			4.2		10.206	0.96	10	2.33	0.3392	3				10%									
External enamel paint			4.2		0.84	0.5	2	0.50	0.3392	0				1%									
Internal paint			4.2		0.84	0.392	2	0.39	0.3392	0				5%									
Internal 90 timber stud wall, plaster lining		21	56.7				86	4.12		89	4.26												
90mm timber stud with noggings		71.4		0.22491	123.9	-764	-172	-2.41	0.0648	8				10%									
13mm plasterboard lining (Knauf)			56.7		481.95	1.83	104	1.83	0.0648	31				15%		1.19							
90mm R2.8 glass wool insulation			56.7		137.781	0.96	132	2.33	0.3392	47				10%									
Internal paint x 2			56.7		9.9225	0.392	22	0.39	0.3392	3				5%									
Internal blockworks 90mm		17	49.3	4.437	10648.8	0.264	2,811	57.02	0.0648	690	14.00			5%									

Internal plaster lining (13mm)(Knauf)		132	356.4		3029.4	1.83	652	1.83	0.0648	196													
Internal plaster painting		202	545.4		95.445	0.392	214	0.39	0.3392	32													
Accoustic board lining		209	604.83		1814.49	8.69	5,256	8.69	0.3392	615													
FINISHES																							
Ceiling plaster			79		671.5	1.83	145	1.83	0.0648	44													
Ceiling steel system-Rondo		237			257.6	3.09	796	3.36	0.3392	87													
Ceiling painting			435		76.125	0.392	171	0.39	0.3392	26													
Water proofing			93		46.5	0.46	21	0.23															
Wall tilling 8mm			90		1620	0.984	1,594	17.71	0.222734	361													
Jarrah timber door frame		33		0.396	291.06	-731	-289	-8.77	0.0648	19													
Timber door new			16	0.64	352.6	111	1,776	111.00	0.3392	120													
Door paint new			32		5.6	0.392	13	0.39	0.3392	2													
Door hardware (not accounted for)									0.222734	0													
External spandrel painting			25		4.375	0.5	13	0.50	0.3392	1													
Carpet (GH Commercial)			355		276.9	5.3	1,882	5.30	0.222734	62													
New Hardwood timber skirting 100mm x 18mm		47		0.0846	62.181	591	50		0.0648	4													
Vinyl (Forbo Allura Flex)			19		52.82	16.6	315	16.60	0.222734	12													
Floor tiles (8mm)			19		342	0.984	337	17.71	0.222734	76													
Moisture treatment to concrete floor - Aquron2000			372		82.66666667	0.46	38	0.10	0.222734	18													
Building services MEP Office lowrise (half for refub)			460		9742.8	1.345	13,104	28.49	0.3392	3,305													
Furniture fitout									0.222734	0													
Benchtop - Corian			0.62			67.5	42																
Laminate Particle board			312			-6.22	-1,941																
Furniture fitout - Steel legs				0.48	3768	4	15,072		0.222734	839													
Furniture chairs	52				260	72	3,744		0.222734	58													
TOTAL CO2							**89,132**			**8,285**		**18,414.64**	**1,354.80**										**117,187**
CO2/m2							165.06			15.34		34.10	2.51										217.01
NEW BUILT COMPARE			**540**																				**289,980**
																							537.00