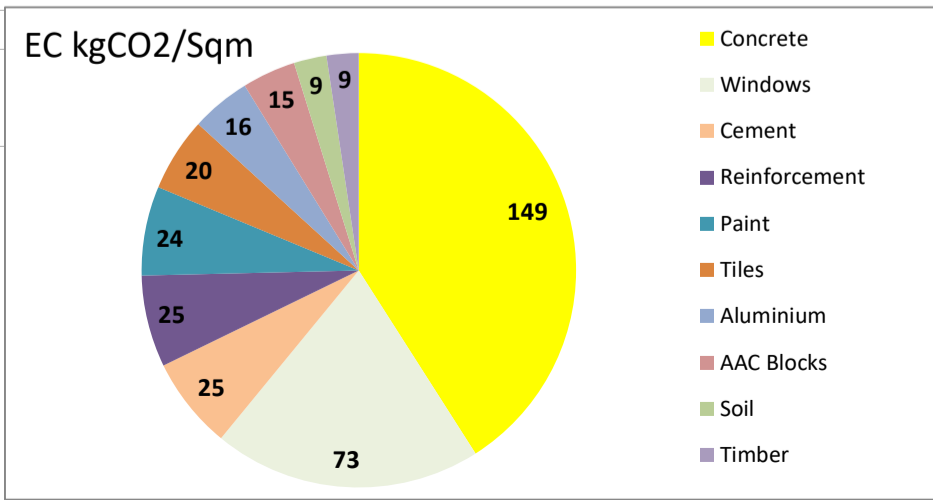


Builtup Area		10310 sqm		##### sft.		Transportation emission coefficients								
						Road	0.7375		Sea	0.012				
Ref No	Materials list	Category	Materials Type	Material Weight (Kgs)	EC Coefficients (kgCO2/kg)	EC Emission (kgCO2e)	Transport medium	Lead Distance (km)	Transportation Emissions (kgCO2e)	Total Emissions (kgCO2e)	EC kgCO2/Sqm	EC %	Emission Database Reference	
1	Aggregate										1.21	0.30%		
a	Coarse	Structure	General	101880	0.009	917	Road	40	30	946	0.09		IFC	
b	Fine	Structure	General	1254400	0.009	11290	Road	290	214	11503	1.12		IFC	
2	Aluminium										16.17	4.03%		
a	Electrical Wire	MEP(E)	Virgin	2404	31	74511	Road	200	148	74659	7.24		IFC	
b	Fire Extinguishers, F	MEP(E)	Virgin	276	35	9654	Road	1267	934	10588	1.03		IFC	
c	Form work	Structure	Virgin	8827	9.22	81387	Sea	9600	115	81502	7.91		SP	
d	Extruded	Structure	Virgin	0	33	0	Road	0	0	0	0.00		IFC	
e	Rolled	Structure	Virgin	0	32	0	Road	0	0	0	0.00		IFC	
3	Anti-Termite material	Civil	General	2870	11.2	32144	Road	161	119	32263	3.13	3.13	0.78%	SP
4	Asphalt	Civil	Recycled	0	0.24	0	Road	0	0	0	0.00	0.00	0.00%	IFC
5	Bitumen	Structure	Recycled	270	0.51	138	Road	320	236	374	0.04	0.04	0.01%	SP - Hot
6	AAC Blocks										14.57	3.63%		
a	100mm thick	Structure	Green	74863	0.5	37431	Road	260	192	37623	3.65		IFC	
b	150mm thick	Structure	Green	166288	0.5	83144	Road	260	192	83336	8.08		IFC	
c	200mm thick	Structure	Green	58080	0.5	29040	Road	260	192	29232	2.84		IFC	
7	Concrete Blocks										0.00	0.00%		
a	100mm thick	Civil	General	0	0.09	0	Road	0	0	0	0.00		SP	
b	150mm thick	Civil	General	0	0.09	0	Road	0	0	0	0.00		SP	
c	200mm thick	Civil	General	0	0.09	0	Road	0	0	0	0.00		SP	
8	Brass										0.73	0.18%		
a	Diverter	MEP(P)	Virgin	563	4.32	2431	Road	345	254	2685	0.26		SP	
b	Angle Valve	MEP(P)	Virgin	238	4.32	1026	Road	345	254	1281	0.12		SP	
c	PRV, Bob Cock	MEP(P)	Virgin	547	4.32	2364	Road	1643	1212	3575	0.35		SP	
9	Bronze	Arch	Virgin	0	4.92	0	Road	0	0	0	0.00	0.00	0.00%	SP
10	Carpet	Arch	Recycled	0	7	0	Road	0	0	0	0.00	0.00	0.00%	IFC
11	Cast Iron										0.76	0.19%		
a	Split AC	MEP(M)	Virgin	2806	1.77	4967	Road	568	419	5386	0.52		SP	
b	Butterfly Valves, M	MEP(P)	Virgin	863	1.77	1527	Road	1189	877	2404	0.23		SP	
12	Cement OPC	Civil	cement	117200	0.912	106886	Road	550	406	107292	10.41	10.41	2.59%	Lodha
	Cement PPC	Civil	cement	234400	0.638	149641	Road	551	406	150047	14.55	14.55	3.62%	Lodha
13	Cementitious WP Material	Civil	Cementitious	4178	0.546	2281	Road	40	30	2310	0.22	0.22	0.06%	SP
14	Ceramics - WC & Wash b	Arch	Sanitary war	8712	1.97	17163	Road	775	572	17734	1.72	1.72	0.43%	SP
15	Clay	Arch	General	0	0.0099	0	Road	0	0	0	0.00	0.00	0.00%	SP
16	Concrete (OPC+Fly ash)		Concrete								140.64	35.01%		
a	M10	Structure		183912	0.0825	15173	Road	2	1	15174	1.47		Lodha	
b	M20	Structure		59808	0.108	6435	Road	2	1	6437	0.62		Lodha	
c	M25	Structure		334200	0.110	36762	Road	2	1	36763	3.57		Lodha	
d	M30	Structure		5863872	0.118	689591	Road	2	1	689593	66.89		Lodha	
e	M35	Structure		2589888	0.133	344196	Road	2	1	344198	33.38		Lodha	
f	M40	Structure		2525282	0.142	357832	Road	2	1	357834	34.71		Lodha	
17	Concrete (OPC+GGBS+Fly ash)		Concrete								8.75	2.18%		
a	M30	Structure		0	0.082	0	Road	2	1	1	0.00		Lodha	
b	M35	Structure		0	0.088	0	Road	2	1	1	0.00		Lodha	
c	M40	Structure		959518	0.094	90195	Road	2	1	90196	8.75		Lodha	
18	Copper										4.42	1.10%		
a	Split AC	MEP(M)	Virgin	3246	7.4	24023	Road	568	419	24442	2.37		IFC	
b	Refrigerant Pipe	MEP(M)	Virgin	1240	7.4	9178	Road	188	139	9317	0.90		IFC	
c	Electrical Cables, Ge	MEP(E)	Virgin	1537	7.4	11375	Road	647	477	11853	1.15		IFC	
19	CRCA										0.44	0.11%		
a	Control Panel	MEP(E)	Virgin	309	2.63	813	Road	1020	752	1565	0.15		SP	
b	Switch Box	MEP(E)	Virgin	340	2.63	894	Road	1020	752	1646	0.16		SP	
c	ELV Distribution Bo	MEP(E)	Virgin	221	2.63	581	Road	1020	752	1333	0.13		SP	
20	Double Wall Corrugated I	MEP(E)	Virgin	2700	2.59	6993	Road	1130	833	7826	0.76	0.76	0.19%	SP
21	Galvanized Iron										4.85	1.21%		
a	Split AC	MEP(M)	Virgin	1399	3	4212	Road	568	419	4631	0.45		IFC	
b	Pipe	MEP(P)	Virgin	13261	3	39914	Road	118	87	40001	3.88		ICE	
c	Cable Tray	MEP(E)	Recycled	1115	0.72	803	Road	25	18	821	0.08		ICE	
d	Strips , Z Angles	MEP(E)	Recycled	5775	0.72	4158	Road	584	431	4589	0.45		ICE	
22	Glass	Façade	General	30000	1.2	36000	Road	411	303	36303	3.52	3.52	0.88%	IFC
23	Insulation	MEP(E)	Rockwool	0	1.14	0	Road	0	0	0	0.00	0.00	0.00%	SP
24	Iron	Arch	Recycled	0	1.77	0	Road	0	0	0	0.00	0.00	0.00%	SP
25	Lead	Arch	Virgin	0	1.22	0	Road	0	0	0	0.00	0.00	0.00%	SP
26	Lime	Arch	General	0	1.3	0	Road	0	0	0	0.00	0.00	0.00%	IFC
27	Linoleum	MEP(M)	Recycled	0	1.1	0	Road	0	0	0	0.00	0.00	0.00%	IFC
28	Mild Steel										0.43	0.11%		
a	WC Chair Bracket	MEP(P)	Recycled	1716	0.47	807	Road	345	254	1061	0.10		ICE	
b	ODU Stand	MEP(M)	Recycled	385	0.47	181	Road	10	7	188	0.02		ICE	
c	Hose Reel Drum, Sa	MEP(M)	Recycled	141	0.47	66	Road	859	634	700	0.07		ICE	
d	M.S.Railing	Façade	recycled	3000	0.83	2490	Road	50	37	2527	0.25		IFC	

Ref No	Materials list	Category	Materials Type	Material Weight (Kgs)	EC Coefficients (kgCO2/kg)	EC Emission (kgCO2e)	Transport medium	Lead Distance (km)	Transportation Emissions (kgCO2e)	Total Emissions (kgCO2e)	EC kgCO2/Sqm	EC %	Emission Database Reference	
29	Paint										24.19	6.02%		
a	External	Façade	Acrylic	28994	6.63	192227	Road	159	117	192344	18.66		SP	
b	Internal	Arch	Enamel	8577	6.63	56863	Road	200	148	57011	5.53		SP	
30	Paper	Arch	General	0	2.78	0	Road	0	0	0	0.00	0.00%	SP	
31	Pipes										4.43	1.10%		
a	CPVC	MEP(P)	Virgin	2470	3.39	8373	Road	430	317	8690	0.84		SP	
b	CPVC	MEP(P)	Virgin	76	3.39	258	Road	1704	1257	1515	0.15		SP	
c	UPVC	MEP(P)	Virgin	10003	3.39	33911	Road	430	317	34228	3.32		SP	
d	UPVC (Multi Floor T	MEP(P)	Virgin	223	3.39	758	Road	665	490	1248	0.12		SP	
32	Plaster	Arch	Gypsum	224208	0.099	22197	Road	1200	885	23082	2.24	2.24	0.56%	IFC
33	Plastics										0.62	0.15%		
a	Split AC body	MEP(M)	General	2123	2.17	4607	Road	568	419	5026	0.49		SP	
b	Exhaust Fan body	MEP(M)	General	253	2.17	549	Road	592	437	986	0.10		SP	
c	LED, Smoke Detectc	MEP(M)	General	152	2.17	331	Sea	3130	38	368	0.04		SP	
34	Polyurethane								0		1.77	0.44%		
a	PU Foam -Gap bet s	MEP(M)	Virgin	1027	12	12323	Sea	4883	59	12381	1.20		ICE	
b	Waterproofing mat	Civil	Polyurethan	1061	5.47	5801	Road	40	30	5830	0.57		IFC	
35	PV Modules	MEP(M)	Polycrystalli	0	242	0	Road	0	0	0	0.00	0.00%	ICE	
36	PVC										0.44	0.11%		
a	Electrical Cable	MEP(E)	Virgin	861	2.17	1868	Road	200	148	2015	0.20		SP	
b	Flush Tanks	MEP(P)	Virgin	356	2.17	773	Road	345	254	1028	0.10		SP	
c	Conduits	MEP(E)	Virgin	195	2.17	422	Road	180	133	555	0.05		SP	
d	Fire Hose Pipe, PVC	MEP(M)	Virgin	312	2.17	676	Road	403	297	973	0.09		SP	
37	Red Bricks	Civil	Recycled	0	0.32	0	Road	0	0	0	0.00	0.00%	IFC	
38	Rubber (Nitrile)	MEP(M)	General	0	4.69	0	Road	0	0	0	0.00	0.00%	SP	
39	Sand	Structure	General	0	0.009	0	Road	0	0	0	0.00	0.00%	IFC	
40	Sealants and adhesives	MEP(M)	General	0	1.13	0	Road	0	0	0	0.00	0.00%		
41	Soil	Structure	General	3807000	0.024	91368	Road	1	1	91369	8.86	8.86	2.21%	ICE
42	Solar Panels/ Solar Heatir	MEP(M)	Polycrystalli	0	208	0	Road	0	0	0	0.00	0.00%	ICE	
43	Stainless Steel										1.03	0.26%		
a	Split AC	MEP(M)	virgin	1870	2.8	5235	Road	568	419	5654	0.55		IFC	
b	Drain Board	MEP(P)	virgin	522	2.8	1462	Road	345	254	1716	0.17		IFC	
c	SS Grating, Double I	MEP(P)	virgin	1014	2.8	2840	Road	520	384	3224	0.31		IFC	
44	Reinforcement										24.89	6.20%		
a	Virgin	Structure	Virgin	0	2.6	0	Road	0	0	0	0.00		SP	
b	Recycled	Structure	Recycled	493300	0.52	256516	Road	180	133	256649	24.89		SP	
45	Stone										4.40	1.10%		
a	Granite	Arch	General	46918	0.7	32843	Road	1100	811	33654	3.26		ICE	
b	Marble	Arch	General	21298	0.13	2769	Road	720	531	3300	0.32		ICE	
c	Soling	Structure	General	106628	0.079	8424	Road	25	18	8442	0.82		ICE	
46	Tiles								0		20.05	4.99%		
a	Ceramic (Toilet & Ki	Arch	General	22429	0.67	15027	Road	720	531	15558	1.51		IFC	
b	Vetrified	Arch	General	280404	0.68	190675	Road	720	531	191206	18.55		IFC	
47	Timber										8.69	2.16%		
a	MDF	Arch	Recycled	0	4.47	0	Road	0	0	0	0.00		SP	
b	Door Frames	Arch	General	15808	2.56	40518	Road	800	590	41108	3.99		SP	
c	Doors	Arch	General	30304	1.58	47848	Road	800	590	48438	4.70		SP	
48	Tin	Arch	Virgin	0	20.6	0	Road	0	0	0	0.00	0.00%	SP	
49	Titanium	Arch	Virgin	0	29.2	0	Road	0	0	0	0.00	0.00%	SP	
50	Vinyl flooring	Arch	Virgin	0	2.1	0	Road	0	0	0	0.00	0.00%	IFC	
51	Windows										72.78	18.12%		
a	Aluminium framed	Façade	Virgin	30000	25.00	750000	Road	532	392	750392	72.78		SP	
b	Aluminium-clad Tim	Façade	Virgin	0	14.00	0	Road	0	0	0	0.00		SP	
c	Timber Framed	Façade	General	0	2.40	0	Road	0	0	0	0.00		IFC	
52	Zinc	Arch	Virgin	0	4.72	0	Road	0	0	0	0.00	0.00%	SP	
<b>Total</b>						<b>4118076</b>			<b>23658</b>	<b>4141734</b>	<b>402</b>	<b>402</b>		
						99.43%			0.57%					

Top 10 Contributors - Materials/Items		
Material/ Item	EC kgCO2/Sqm	EC %
Concrete	149	37.2%
Windows	73	18.1%
Cement	25	6.2%
Reinforcement	25	6.2%
Paint	24	6.0%
Tiles	20	5.0%
Aluminium	16	4.0%
AAC Blocks	15	3.6%
Soil	9	2.2%
Timber	9	2.2%



Category wise contributors			
Category	EC kgCO2/Sqm	EC %	
Arch	42	10%	
Civil	29	7%	
Façade	95	24%	
Structure	208	52%	
MEP(M)	7	2%	
MEP(E)	11	3%	
MEP(P)	10	2%	