

Conversion of GFA to \$ Million Work Done

Taking private residential average cost as a guide:

\$3,000 / m² GFA is equivalent 333 m² per \$million work done (1,000,000,000 / 3,000 = 333)

Building Category	Average cost per m ² GFA	m ² GFA per \$million work done
Commercial	\$4,000	250 m ²
HDB	\$1,300	769 m ²
Private Residential	\$3,000	333 m ²
Industrial	\$1,500	666 m ²
Institutional	\$1,700	588 m ²

Note:

Average waste disposal cost is \$65 /tonne

KPI for Concrete Wastage

Building Category	KPI	Points Awarded	Remarks
Commercial	< 1.5% wastage	1.50	
	< 2% of wastage	1.00	
	< 4% wastage	0.75	Based on commercial average of 3.3%
	< 6% wastage	0.50	Between 1.5 to 5.6%

Building Category	KPI	Points Awarded	Remarks
HDB	< 2% wastage	1.50	
	< 3% wastage	1.00	
	< 5% wastage	0.75	Based on HDB average of 4.4%
	< 7% wastage	0.50	Between 2.0 to 7.0%

Building Category	KPI	Points Awarded	Remarks
Private Residential	< 3% wastage	1.50	
	< 5% wastage	1.00	
	< 7% wastage	0.75	Based on private residential average of 6.5%
	< 9 % wastage	0.50	Between 3.2 to 8.7%

Building Category	KPI	Points Awarded	Remarks
Industrial	< 3% wastage	1.50	
	< 5% wastage	1.00	
	< 7% wastage	0.75	Based on industrial average of 7.5%
	< 9 % wastage	0.50	Between 3.3 to 8.8%

Building Category	KPI	Points Awarded	Remarks
Institutional	< 2% wastage	1.50	
	< 3% wastage	1.00	
	< 6% wastage	0.75	Based on institutional average of 5.4%
	< 8% wastage	0.50	Between 2.6 to 7.1%

KPI for Rebar Wastage

Building Category	KPI	Points Awarded	Remarks
Commercial	< 1% wastage	1.50	
	< 2% wastage	1.00	
	< 4% wastage	0.75	Based on commercial average of 3.3%
	< 6% wastage	0.50	Between 1.0 to 5.9%

Building Category	KPI	Points Awarded	Remarks
HDB	< 2% wastage	1.50	
	< 3% wastage	1.00	
	< 5% wastage	0.75	Based on HDB average of 4.6%
	< 9% wastage	0.50	Between 1.8 to 8.4%

Building Category	KPI	Points Awarded	Remarks
Private Residential	< 3% wastage	1.50	
	< 5% wastage	1.00	
	< 9% wastage	0.75	Based on private residential average of 9%
	< 16% wastage	0.50	Between 3.6 to 16.1%

Building Category	KPI	Points Awarded	Remarks
Industrial	< 2% wastage	1.50	
	< 4% wastage	1.00	
	< 6% wastage	0.75	Based on industrial average of 6.2%
	< 10% wastage	0.50	Between 2.1 to 9.5%

Building Category	KPI	Points Awarded	Remarks
Institutional	< 2% wastage	1.50	
	< 4% wastage	1.00	
	< 6% wastage	0.75	Based on institutional average of 6%
	< 10% wastage	0.50	Between 1.9 to 9.2%

KPI for Waste Disposal

Building Category	KPI (cost per m ² GFA)	KPI (cost per \$million work done)	Points Awarded	Remarks
Commercial	< \$2.50 / m ² GFA	< \$625 / \$million work done	1.00	
	< \$3.50 / m ² GFA	< \$875 / \$million work done	0.75	
	< \$5.00 / m ² GFA	< \$1,250 / \$million work done	0.50	Based on commercial average of \$4.97 per m ² GFA
	< \$6.50 / m ² GFA	< \$1,625 / \$million work done	0.25	Between \$2.27 to \$6.20

Building Category	KPI (cost per m ² GFA)	KPI (cost per \$million work done)	Points Awarded	Remarks
HDB	< \$0.40 / m ² GFA	< \$308 / \$million work done	1.00	
	< \$0.70 / m ² GFA	< \$538 / \$million work done	0.75	
	< \$1.00 / m ² GFA	< \$769 / \$million work done	0.50	Based on HDB average of \$0.93 per m ² GFA
	< \$3.00 / m ² GFA	< \$2,307 / \$million work done	0.25	Between \$0.33 to \$2.62

Building Category	KPI (cost per m ² GFA)	KPI (cost per \$million work done)	Points Awarded	Remarks
Private Residential	< \$2.50 / m ² GFA	< \$833 / \$million work done	1.00	
	< \$4.50 / m ² GFA	< \$1,500 / \$million work done	0.75	
	< \$6.50 / m ² GFA	< \$2,165 / \$million work done	0.50	Based on private residential average of \$6.28 per m ² GFA
	< \$10.50 / m ² GFA	< \$3,500 / \$million work done	0.25	Between \$2.41 to \$10.47

Building Category	KPI (cost per m ² GFA)	KPI (cost per \$million work done)	Points Awarded	Remarks
Industrial	< \$0.90 / m ² GFA	< \$599 / \$million work done	1.00	
	< \$1.60 / m ² GFA	< \$1,065 / \$million work done	0.75	
	< \$2.50 / m ² GFA	< \$1,665 / \$million work done	0.50	Based on industrial average of \$2.35 per m ² GFA
	< \$4.50 / m ² GFA	< \$2,997 / \$million work done	0.25	Between \$0.89 to \$4.43

Building Category	KPI (cost per m ² GFA)	KPI (cost per \$million work done)	Points Awarded	Remarks
Institutional	< \$2 / m ² GFA	< \$1,176 / \$million work done	1.00	
	< \$3 / m ² GFA	< \$1,764 / \$million work done	0.75	
	< \$4.50 / m ² GFA	< \$2,646 / \$million work done	0.50	Based on institutional average of \$4.05 per m ² GFA
	< \$6.00 / m ² GFA	< \$3,528 / \$million work done	0.25	Between \$2.04 to \$6.00

KPI for Electricity Consumption

Building Category	KPI (kWh per m ² GFA)	KPI (kWh per \$million work done)	Points Awarded	Remarks
Commercial	< 7 kWh / m ² GFA	< 1,750 kWh / \$million work done	2.00	
	< 8.5 kWh / m ² GFA	< 2,125 kWh / \$million work done	1.50	
	< 10 kWh / m ² GFA	< 2,500 kWh / \$million work done	1.00	Based on commercial average of 10 kWh per m ² GFA
	< 14 kWh / m ² GFA	< 3,500 kWh / \$million work done	0.50	Between 7 to 14 kWh

Building Category	KPI (kWh per m ² GFA)	KPI (kWh per \$million work done)	Points Awarded	Remarks
HDB	< 2 kWh / m ² GFA	< 1,538 kWh / \$million work done	2.00	
	< 3.5 kWh / m ² GFA	< 2,692 kWh / \$million work done	1.50	
	< 5 kWh / m ² GFA	< 3,845 kWh / \$million work done	1.00	Based on HDB average of 5 kWh per m ² GFA
	< 10 kWh / m ² GFA	< 7,690 kWh / \$million work done	0.50	Between 2 to 10 kWh

Building Category	KPI (kWh per m ² GFA)	KPI (kWh per \$million work done)	Points Awarded	Remarks
Private Residential	< 9 kWh / m ² GFA	< 2,997 kWh / \$million work done	2.00	
	< 11.5 kWh / m ² GFA	< 3,830 kWh / \$million work done	1.50	
	< 14 kWh / m ² GFA	< 4,662 kWh / \$million work done	1.00	Based on private residential average of 14 kWh per m ² GFA
	< 19 kWh / m ² GFA	< 6,327 kWh / \$million work done	0.50	Between 9 to 19 kWh

Building Category	KPI (kWh per m ² GFA)	KPI (kWh per \$million work done)	Points Awarded	Remarks
Industrial	< 8 kWh / m ² GFA	< 5,328 kWh / \$million work done	2.00	
	< 8.5 kWh / m ² GFA	< 5,661 kWh / \$million work done	1.50	
	< 9 kWh / m ² GFA	< 5,994 kWh / \$million work done	1.00	Based on industrial average of 9 kWh per m ² GFA
	< 13 kWh / m ² GFA	< 8,658 kWh / \$million work done	0.50	Between 8 to 13 kWh

Building Category	KPI (kWh per m ² GFA)	KPI (kWh per \$million work done)	Points Awarded	Remarks
Institutional	< 4 kWh / m ² GFA	< 2,352 kWh / \$million work done	2.00	
	< 4.5 kWh / m ² GFA	< 2,646 kWh / \$million work done	1.50	
	< 5 kWh / m ² GFA	< 2,940 kWh / \$million work done	1.00	Based on institutional average of 5 kWh per m ² GFA
	< 11 kWh / m ² GFA	< 6,468 kWh / \$million work done	0.50	Between 4 to 11 kWh

KPI for Diesel Consumption

Building Category	KPI (litre per m ² GFA)	KPI (litre per \$million work done)	Points Awarded	Remarks
Commercial	< 5 L / m ² GFA	< 1,250 L / \$million work done	1.00	
	< 6.5 / m ² GFA	< 1,625 L / \$million work done	0.75	
	< 8 L / m ² GFA	< 2,000 L / \$million work done	0.50	Based on commercial average of 8 litre per m ² GFA
	< 10 L / m ² GFA	< 2,500 L / \$million work done	0.25	Between 5 to 10 litre

Building Category	KPI (litre per m ² GFA)	KPI (litre per \$million work done)	Points Awarded	Remarks
HDB	< 1 L / m ² GFA	< 769 L / \$million work done	1.00	
	< 2.5 L / m ² GFA	< 1,923 L / \$million work done	0.75	
	< 4 L / m ² GFA	< 3,076 L / \$million work done	0.50	Based on HDB average of 4 litre per m ² GFA
	< 8 L / m ² GFA	< 6,152 L / \$million work done	0.25	Between 1 to 8 litre

Building Category	KPI (litre per m ² GFA)	KPI (litre per \$million work done)	Points Awarded	Remarks
Private Residential	< 7 L / m ² GFA	< 2,331 L / \$million work done	1.00	
	< 8.5 L / m ² GFA	< 2,831 L / \$million work done	0.75	
	< 10 L / m ² GFA	< 3,330 L / \$million work done	0.50	Based on private residential average of 10 litre per m ² GFA
	< 15 L / m ² GFA	< 4,995 L / \$million work done	0.25	Between 7 to 15 litre

Building Category	KPI (litre per m ² GFA)	KPI (litre per \$million work done)	Points Awarded	Remarks
Industrial	< 4 L / m ² GFA	< 2,664 L / \$million work done	1.00	
	< 5.5 L / m ² GFA	< 3,663 L / \$million work done	0.75	
	< 7 L / m ² GFA	< 4,662 L / \$million work done	0.50	Based on industrial average of 7 litre per m ² GFA
	< 9 L / m ² GFA	< 5,994 L / \$million work done	0.25	Between 4 to 9 litre

Building Category	KPI (litre per m ² GFA)	KPI (litre per \$million work done)	Points Awarded	Remarks
Institutional	< 3 L / m ² GFA	< 1,764 L / \$million work done	1.00	
	< 4.5 L / m ² GFA	< 2,646 L / \$million work done	0.75	
	< 6 L / m ² GFA	< 3,528 L / \$million work done	0.50	Based on institutional average of 6 litre per m ² GFA
	< 9 L / m ² GFA	< 5,292 L / \$million work done	0.25	Between 3 to 9 litre

KPI for Water Consumption

Building Category	KPI (litre per m ² GFA)	KPI (m ³ per \$million work done)	Points Awarded	Remarks
Commercial	< 650 L / m ² GFA	< 163 m ³ / \$million work done	2.00	
	< 760 L / m ² GFA	< 190 m ³ / \$million work done	1.50	
	< 900 L / m ² GFA	< 225 m ³ / \$million work done	1.00	Based on commercial average of 903 litre per m ² GFA
	< 1250 L / m ² GFA	< 312 m ³ / \$million work done	0.50	Between 620 to 1208 litre

Building Category	KPI (litre per m ² GFA)	KPI (m ³ per \$million work done)	Points Awarded	Remarks
HDB	< 500 L / m ² GFA	< 384 m ³ / \$million work done	2.00	
	< 650 L / m ² GFA	< 500 m ³ / \$million work done	1.50	
	< 800 L / m ² GFA	< 615 m ³ / \$million work done	1.00	Based on HDB average of 774 litre per m ² GFA
	< 1100 L / m ² GFA	< 845 m ³ / \$million work done	0.50	Between 500 to 1055 litre

Building Category	KPI (litre per m ² GFA)	KPI (m ³ per \$million work done)	Points Awarded	Remarks
Private Residential	< 980 L / m ² GFA	< 326 m ³ / \$million work done	2.00	
	< 1250 L / m ² GFA	< 416 m ³ / \$million work done	1.50	
	< 1550 L / m ² GFA	< 516 m ³ / \$million work done	1.00	Based on private residential average of 1514 litre per m ² GFA
	< 2000 L / m ² GFA	< 666 m ³ / \$million work done	0.50	Between 971 to 1972 litre

Building Category	KPI (litre per m ² GFA)	KPI (m ³ per \$million work done)	Points Awarded	Remarks
Industrial	< 800 L / m ² GFA	< 533 m ³ / \$million work done	2.00	
	< 950 L / m ² GFA	< 633 m ³ / \$million work done	1.50	
	< 1050 L / m ² GFA	< 700 m ³ / \$million work done	1.00	Based on industrial average of 1011 litre per m ² GFA
	< 1450 L / m ² GFA	< 965 m ³ / \$million work done	0.50	Between 820 to 1412 litre

Building Category	KPI (litre per m ² GFA)	KPI (m ³ per \$million work done)	Points Awarded	Remarks
Institutional	< 550 L / m ² GFA	< 323 m ³ / \$million work done	2.00	
	< 700 L / m ² GFA	< 412 m ³ / \$million work done	1.50	
	< 850 L / m ² GFA	< 500 m ³ / \$million work done	1.00	Based on institutional average of 832 litre per m ² GFA
	< 1100 L / m ² GFA	< 646 m ³ / \$million work done	0.50	Between 537 to 1105 litre