

Measuring Project Productivity

Project productivity is defined as the amount of floor area completed per man day.

The indicator is calculated as follows:

$$\text{Project Productivity} = \frac{\text{Total Constructed Floor Area (m}^2\text{)}}{\text{Total number of site workers (mandays)}}$$

A project is deemed to be more productive if more square meters of floor area can be constructed with the same mandays.

The following tables show the project productivity of our local construction industry:

Table 1a: Industry Overall Productivity Indicator (m2 per manday)

Year	Industry Overall Productivity Indicator
2010	0.381
2011	0.384
2012	0.389
2013	0.395
2014	0.403
2015	0.411
2016	0.419
2017	0.428
2018	0.438
2019	0.448
2020	0.455
2021	0.451

Table 1b: Project Productivity by Building Category (m2 per manday)

Year	Public Housing (HDB Projects)	Residential (landed)	Residential (non-landed)	Commercial	Industrial	Institutional
2010	0.439	0.190	0.319	0.328	0.495	0.319
2011	0.441	0.192	0.321	0.330	0.501	0.330
2012	0.449	0.194	0.326	0.335	0.508	0.338
2013	0.459	0.196	0.331	0.341	0.513	0.348
2014	0.470	0.199	0.337	0.348	0.523	0.355
2015	0.482	0.202	0.343	0.355	0.534	0.363
2016	0.493	0.204	0.349	0.363	0.542	0.373
2017	0.504	0.206	0.357	0.370	0.554	0.381
2018	0.517	0.210	0.366	0.378	0.566	0.391
2019	0.532	0.216	0.376	0.386	0.577	0.399
2020	0.553	0.218	0.386	0.392	0.581	0.406
2021	0.554	0.204	0.395	0.382	0.571	0.404

Please note that:

1. 1 manday is defined as 1 man working for 8 hours.
2. The productivity indicators shown in Table 1a and 1b apply to building projects only.
3. The industry overall productivity indicator is derived based on the percentage of progress payment for the various building categories.
4. The site management team is not included when calculating the total number of site workers.
5. Only on-site works are considered when calculating the project productivity.