

Annex B

Factsheet on Buildability

Legislation on Buildability

The legislation on Buildability was introduced by the Building and Construction Authority (BCA) in 2001 under the Building Control Act to promote buildable design through greater adoption of prefabricated, modular and standardised building components.

Under the legislation, building designs are required to comply with a minimum buildable design score. Good buildable designs require the adoption of labour-efficient technologies and methods to improve productivity at the construction stage.

Over the years, the Buildability framework has been strengthened to require designers to deliver more buildable designs upstream, and builders to adopt more labour-saving construction methods / technologies downstream.

Since July 2011, builders have to comply with a minimum constructability score which encourages the use of construction technologies, methods and processes to reduce the industry's reliance on foreign workers.

About Buildable Design Score

The buildable design score computes the extent of standardisation, simplicity and integrated elements applied to projects at the design stage. It measures the potential impact of a building's design on labour usage.

The maximum points for a building's design is 100 points, of which 45 points are allocated to structural systems, 45 points to wall systems and 10 points for use of other buildable features. The higher the buildable design score obtained by a project, the easier it is to construct.

About Constructability Score

The constructability score measures the level of adoption of labour-efficient construction methods and construction processes such as system formwork and climbable scaffolding. Higher constructability scores would translate to savings in manpower cost and shorter construction time.

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Raising the Minimum Buildable Design Scores and Constructability Scores

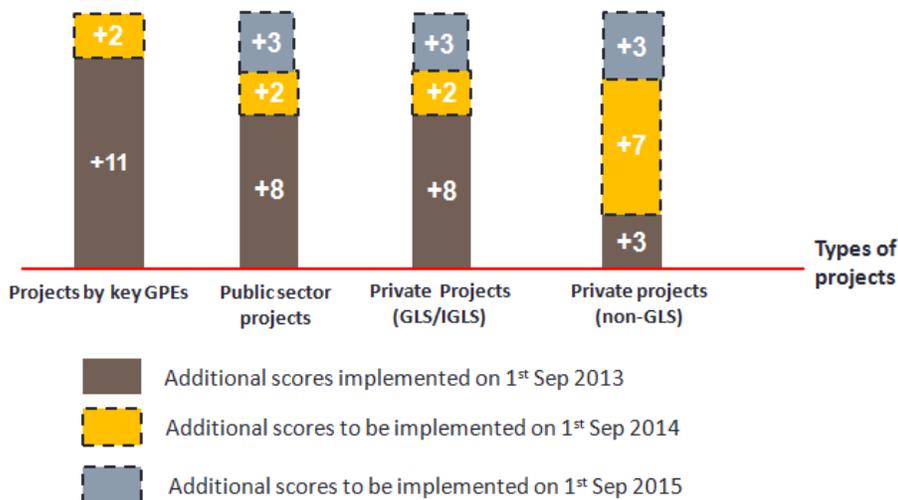
Currently, the minimum Buildable Design Score (B-score) and Constructability Score (C-score) for new private projects that are outside of the Government Land Sales (GLS) programme are lower than those projects under the GLS and industrial-GLS programme.

In September this year, besides raising the minimum B-scores and C-scores by another 2 points, BCA will also be raising the minimum scores for private projects that are outside of the GLS programme to match the same higher B-score and C-score standards as those under the land sales programme. Specifically, the minimum B-score for these projects will be raised by a total of 7 points. For the C-score, it will be raised by 4 points for private projects on non-GLS sites.

Beyond 2014, BCA will further raise the standards for all public and private sector projects to achieve the same minimum scores imposed for projects by the key Government Procurement Entities (GPEs) to drive greater productivity improvements for the entire industry. By doing so, all projects will have the same buildability standards from September 2015.

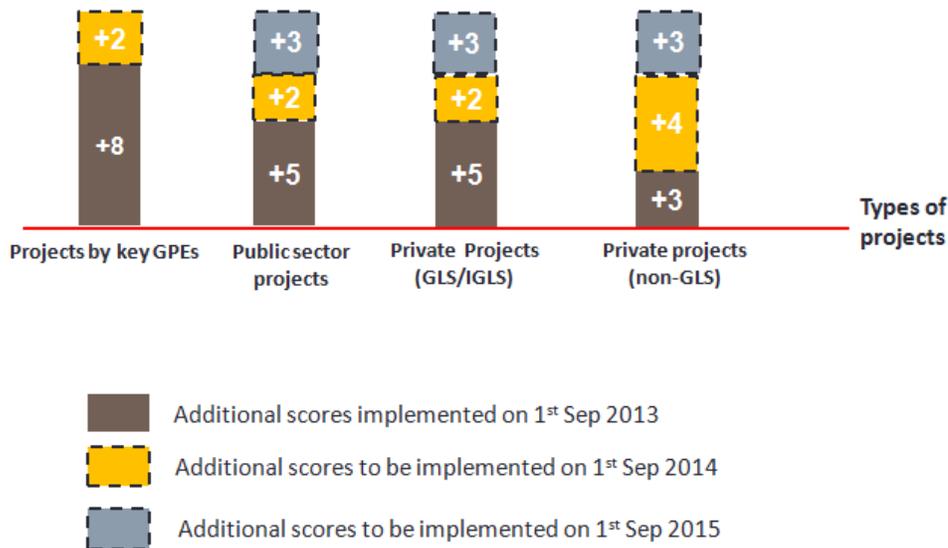
Also, by raising the B-score by 13 points by September 2015, projects could potentially achieve between 16-22% in manpower savings, depending on the scale and complexity of the project as well as other factors such as site conditions, project management etc.

Raising of Buildable Design Scores



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Raising of Constructability Scores



Stronger Buildability Enforcement

To ensure compliance to the buildability requirements, BCA currently checks the B-score submitted by designers and G-score by builders for new projects. BCA also conducts site inspections to ensure that all the productivity proposals identified and committed by the designers and the builders are implemented on site. Currently, it is an offence not to comply with the Buildability Regulations and this offence may attract a fine of up to \$10,000. However, BCA may also withhold the Temporary Occupation Permit (TOP) of the affected projects should there be any non-compliance to the Buildability Regulations.

To ensure that developers take greater ownership in implementing buildable design and use of labour-efficient construction methods, BCA will take stronger enforcement measures such as issuing stop work orders if the declared buildable systems or technologies are not implemented at site.