

3-D modelling shaves hours for architects

■ BY CHERYL LIM

DESIGNING a pair of double-storey semi-detached houses would normally take DCA Architects more than 1,600 man hours.

But the three-dimensional modelling technology called BIM has helped the firm shave 336 hours off that process. BIM, which stands for Building Information Modelling, allows architects and engineers to create 3-D models of buildings on computers.

The architectural firm is part of the estimated 30 per cent of Singapore's construction industry that has adopted the BIM technology.

The Building and Construction Authority (BCA) is closely monitoring that figure as it aims to have 80 per cent of the industry using BIM by 2015, as part of a productivity drive in construction.

Aside from savings in costs and labour, building modelling professor Stephen Lockley of Northumbria University's School of the Built and Natural Environment said there are intangible benefits too.

"It helps to reduce the errors that occur during building projects," he said. "Design teams spend less time redoing things. You can also get more engagement with your clients because they can better understand what they're going to get."

The introduction of a \$6 million BIM fund by BCA last year has encouraged firms to take the leap. To date, 70 per cent of the fund is committed.

But more can be done to encourage widespread BIM use. Speaking on the sidelines of an industry discussion, international experts made several recommendations, including setting up a national digital library of standard building components to make modelling easier, and using social media to promote BIM to younger construction professionals.