



LOCAL PRACTICE PROJECT: 6-STAR – DTS OR MODELLING?

Western Australia has deferred the implementation of the BCA 2010 Volume Two “6-Star” Energy Efficiency provisions until 1 May 2011. This delay provides industry with the opportunity to better understand the provisions and learn how to manage the transition process.

To assist the industry As-Built Learning Exchange is undertaking a local practice project to investigate and report on the issues builders and designer will need to consider when making the transition to 6-Star assessment. This project will identify:

- The options – Deemed-to-Satisfy (DTS) and Software Rating (Modelling) assessment.
- Issues to consider when deciding on the most appropriate assessment option.
- Likely construction cost differences between DTS or Modelling outcomes.
- The likely design and/or building process impact of each option., and
- Compliance and reporting issues that need to be addressed.

Building Commission supports this project and the work that As-Built Learning Exchange is undertaking.

If you would like to participate in this project or if you have any further queries please contact James Bertram at As-Built Learning Exchange on (08) 9317 3648 or at support@asbuiltlearningexchange.com.au.

Yours faithfully

Nabil Yazdani
Manager Standards and Regulation
BUILDING COMMISSION

14 July 2010

CURRENT PROJECT NOTES: 6-STAR – DTS or MODELLING?

ABLE Web ref: *Current Project Notes*

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As-Built Learning Exchange (ABLE) services building professionals working in the Western Australian housing industry who are willing to participate in the development of useful local practice information and resources.

ABLE does this by answering compliance and workmanship questions, developing local solutions as issues are discovered, and publishing local practice information and resources.

About ABLE, Open Exchange:

ABLE Web ref: About ABLE

The underpinning proposition is that it is more affordable to **compete for work and collaborate on solutions**. In an industry where technical issues have so much in common, Open Exchange provides a more effective way to learn about issues and a more efficient way to contribute to development of recognised solutions for common local practices.

This Local Practice Project will provide the information building professionals need to make informed 6-Star decisions.

PROJECT BACKGROUND

6-Star Local Practice Snapshot:

ABLE Web ref: Compliance & Workmanship Information / BCA Design Compliance

ABLE has been the leading provider of Energy Efficiency training and technical advice since the introduction of the provision in BCA 2003.

Glazing Calculator Common Practice Solution, Roof Light Common Practice Solution, and Ceiling Insulation Area Common Practice Interpretation:

ABLE Web ref: Recognised Common Practice

In 2004 ABLE published the Energy Notebook, in 2006 ABLE reported on the local impact of the transition to 5-Star, in 2006 ABLE developed the Glazing Calculator Add-Ons used for DTS assessment in WA, in 2007 ABLE reported on options for the 5-Star Plus WA Variation, and in 2009 ABLE undertook a 6-Star Local Practice Snapshot to assess the likely impact of the public comment version BCA 2010 provisions.

ABLE has also published a BCA2009 Glazing Calculator Add-Ons Common Practice Solution update, the Roof Light Common Practice Solution and the Ceiling Insulation Area Common Practice Interpretation.

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Outcomes from the Local Practice Snapshot suggested that the shift from 5 to 6-Star will significantly more difficult than the previous shift from 4 to 5-Star and that the commonly used DTS assessment method may not deliver the better process and cost outcomes.

This project will investigate whether DTS or Modelling delivers the better process and construction cost outcome for:

- Project display homes that are required to comply in multiple site orientations.
- Design and construction homes that are designed for known orientation.

At the end of the project ABLE will document the outcomes and invite the project Exchange Partners and Project Contributors to participate in an open-house briefing session so that other building professionals can learn how to make an informed assessment choice.

ABLE will then publish the project findings, develop a 6-Star training program, begin developing 6-Star Local Practice Information & Resources, and continue to provide telephone support to building professionals seeking compliance and workmanship information.

PROJECT SUPPORTERS

Common Practice Supporters, Exchange Partners, and Project Contributors:

ABLE Web ref: About ABLE

Building Commission supports this project.

ABLE is now inviting builders and other parties to support and resource this project.

A detailed project outline follows.

Regards



James Bertram BArch Hons

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As-Built Learning Exchange: W: www.asbuillearningexchange.com.au T: (08) 9317 3648 M: 0412 010 93

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PROJECT FRAMEWORK

Design	Selling	Contracting	Building Licence	Pre-Start	Construction
ORIENTATION	SALES CHANGES & SUB-DIVISION STAR RATINGS	ASSESSMENT OPTIONS	COMPLIANCE	AMENDMENTS	BUILDING PRACTICES
<p>Flexibility- will display homes comply in all orientations? If not, what changes are required to achieve multi-orientation compliance?</p> <p>Construction cost – what is the cost of multi-orientation compliance?</p> <p>Sales cost – how will the sales process manage the “as seen” expectation?</p>	<p>Processing cost – which option is most likely to deliver sales change compliance?</p> <p>Design compliance – how many times will sales changes need to be assessed?</p> <p>Higher ratings – if sub-divisions impose higher ratings (7-Star), which option has the capacity to verify compliance?</p> <p>Smart design – what are the sales change “dos & don’ts” that will reduce cost and increase compliance certainty?</p>	<p>Office resource – what are the benefits of out-sourcing?</p> <p>Direct cost - what is the total assessment cost difference?</p> <p>Processing - what are the time and control impacts?</p> <p>Assessor capacity – does the local assessor industry have the capacity to process large volumes?</p> <p>Local practice – what are the Common Practice Solutions & Interpretations needed to clarify and make compliance easy?</p> <p>Compliance tips – what materials and/or products are most likely to lower local practice compliance costs?</p>	<p>Electronic reporting – what authorisation is appropriate for builder reporting?</p> <p>DTS compliance – what is reported and can the report be simplified?</p> <p>Modelling + DTS construction – what are the DTS construction issues that change Modelling outcomes and reporting?</p> <p>Modelling reporting – does the report include the DTS construction assessment items?</p>	<p>Post-approval – how are changes processed and will this require a Building Licence amendment?</p> <p>Part assessment – can a “changes-only” assessment process be used?</p> <p>Unknown-unknowns – what process is required for modelling assessment to work for the sales to pre-start process?</p>	<p>Compliance – does product certification include product and building compliance?</p> <p>Building practices – what changes would make compliance easier?</p> <p>New materials and practices – how can sharing experiences shorten the learning curve and reduce defects and compliance issues?</p>
EXCHANGE PARTNERS					
<p>Exchange Partners who: Contribute \$1,000 (+GST) project funding. Nominate three current homes (and for display homes, the sales changes and/or pre-start variations likely to be made to the standard model). Review the building process impact of DTS and Modelling outcomes. Cost the differences between DTS and Modelling assessment outcomes.</p>			<p>As part of their learning exchange ABLE will: Undertake a DTS assessment for each home in each orientation. Provide 5 hours support to review and analyse DTS and Modelling outcomes with each builder to determine the impact on their building process. Facilitate a management round-table with each builder to plan their shift to 6-Star. Recognise each Builder as an Exchange Partner on the ABLE website and at industry forums.</p>		
<p>Exchange Partners who: Undertake an AccuRate or BERS assessment on three homes. Determine the changes required for compliance in the eight DTS orientations. Determine what changes are likely to deliver all-orientation compliance.</p>			<p>As part of their learning exchange ABLE will: Provide 3 hours of support to each assessor to explain the outcomes of the project, DTS issues to be aware of, and how assessment affects the building process. Recognise each assessor as an Exchange Partner on the ABLE website and at industry forums.</p>		
PROJECT CONTRIBUTORS					
<p>Project Contributors who: Support and resource the project with \$2,500 (+GST) project funding. Think Brick Australia is a Project Contributor.</p>			<p>ABLE will: Provide a team briefing for each party to explain the 6-Star provisions, identify the 6-Star transition issues builders will need to manage, and the 6-Star issues likely to affect their products or services. Recognise each party as a Project Contributor on the ABLE website and at industry forums.</p>		

Modelling Assessment & DTS Construction
OR
DTS Assessment & Construction

ABLE invites three builders to participate as:

ABLE invites ABSA assessors to participate as:

ABLE invites two other parties to become:

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PROJECT FLOWCHART

