BCA ID 88.2.6

1 November 2008

Technology Development Division

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Dear Sir / Madam

## WEIGHTAGES FOR DEFECTS UNDER CONQUAS & QM ARCHITECTURAL INTERNAL FINISHES ASSESSMENTS

Under BCA's Construction Quality Assessment System (CONQUAS), each architectural internal finish element e.g. floor, internal wall, etc is assessed based on defined standards/defects e.g. finishing, alignment & evenness, crack & damages, hollowness/delamination, jointing, etc. Each building element has different weightages assigned to reflect its importance or contribution to the overall CONQUAS score. However no such weightages exist for the standards/defects within each element. Hence equal points are allocated for each defect discovered during assessment.

- There has been feedback from contractors, private developers and HDB that this system does not accurately reflect homeowners' priorities on workmanship quality especially in internal finishing works which are highly visible. Some homeowners regard certain defects such as functionality and damages more important than others like joints and evenness.
- To ensure that CONQUAS requirements are aligned with homeowners' priorities, BCA will be implementing defect level weightages for all architectural internal finishes assessments. The new weightages compared with the existing structure are in Appendix A. The defect level weightages will also apply to Quality Mark (QM) assessments, which are based on CONQUAS standards.
- The new defect level weightages has an impact on CONQUAS scores. A simulation study on 70 completed CONQUAS projects across all building categories showed an average increment of 1.03 points using the new defect level weightages. Of these, CONQUAS scores were increased for 69 projects and reduced for 1

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project. The impact is greater for projects with low CONQUAS scores and lesser for higher scoring projects.

- The defect level weightages will apply to all CONQUAS and QM assessments for projects called on or after 1 December 2008. These weightages (together with other minor changes) will be reflected in the 7th Edition of CONQUAS, a copy of which can be accessed at <a href="http://www.bca.gov.sg/Professionals/IQUAS/others/CON21.pdf">http://www.bca.gov.sg/Professionals/IQUAS/others/CON21.pdf</a> (viewable from 1 December 2008).
- I would be grateful if you could disseminate the contents of this circular to your staff/members. Please contact Senior Executive Development Officer, Mr Ngeow Kao Peng, at Tel: 6730 4494 or email: ngeow\_kao\_peng@bca.gov.sg if you need further clarifications.

7 Thank you.

Yours faithfully

The man

Ding Hock Hui Deputy Director Quality & Certification Department for Chief Executive Officer Building & Construction Authority

## APPENDIX A

## DEFECT LEVEL WEIGHTAGES FOR CONQUAS & QUALITY MARK ARCHITECTURAL INTERNAL FINISHES ASSESSMENTS

(A)	(E	(C)	(D)		(E)		
Element	Element Weightage		Defeat O. I	Current Weightage		New Weightage	
	CONQUAS	QM	Defect Category	CONQUAS	QM	CONQUAS	QM
Floor			Finishing	3.2	4.4	4.8	6.6
			Alignment & Evenness	3.2	4.4	2.4	3.3
	16 points	22 points	Crack & Damages	3.2	4.4	4.8	6.6
			Hollowness	3.2	4.4	1.6	2.2
			Jointing	3.2	4.4	2.4	3.3
Wall			Finishing	3.2	2.0	4	2.5
			Alignment & Evenness	3.2	2.0	2.4	1.5
	16 points	10 points	Crack & Damages	3.2	2.0	4.8	3.0
			Hollowness	3.2	2.0	2.4	1.5
			Jointing	3.2	2.0	2.4	1.5
Ceiling			Finishing	1.2	1.2	0.9	0.9
			Alignment & Evenness	1.2	1.2	0.9	0.9
	6 points	6 points	Crack & Damages	1.2	1.2	1.8	1.8
			Roughness	1.2	1.2	1.5	1.5
			Jointing	1.2	1.2	0.9	0.9
Door			Joint & Gap	1.2	4.0	0.6	2.0
			Alignment & Evenness	1.2	4.0	0.6	2.0
	6 points	20 points	Material & Damages	1.2	4.0	1.8	6.0
			Functionality	1.2	4.0	1.8	6.0
			Accessories Defects	1.2	4.0	1.2	4.0
Window			Joint & Gap	1.2	2.0	0.6	1.0
			Alignment & Evenness	1.2	2.0	0.6	1.0
	6 points	10 points	Material & Damages	1.2	2.0	1.2	2.0
			Functionality	1.2	2.0	1.8	3.0
			Accessories Defects	1.2	2.0	1.8	3.0
Component			Joint & Gap	1.2	4.4	0.6	2.2
			Alignment & Evenness	1.2	4.4	0.6	2.2
	6 points	22 points	Material & Damages	1.2	4.4	1.8	6.6
			Functionality	1.2	4.4	1.8	6.6
			Accessories Defects	1.2	4.4	1.2	4.4
M&E Fitting			Joint & Gap	3.0	2.0	*1.5	1.0
			Alignment & Evenness	3.0	2.0	*3.0	2.0
	*15 points	10 points	Material & Damages	3.0	2.0	*4.5	3.0
			Functionality	3.0	2.0	*4.5	3.0
			Accessories Defects	3.0	2.0	*1.5	1.0

<sup>\*</sup> Illustration refers to CONQUAS Category B projects only. For projects in other categories, weightages at defect level will be distributed in similar proportions.

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