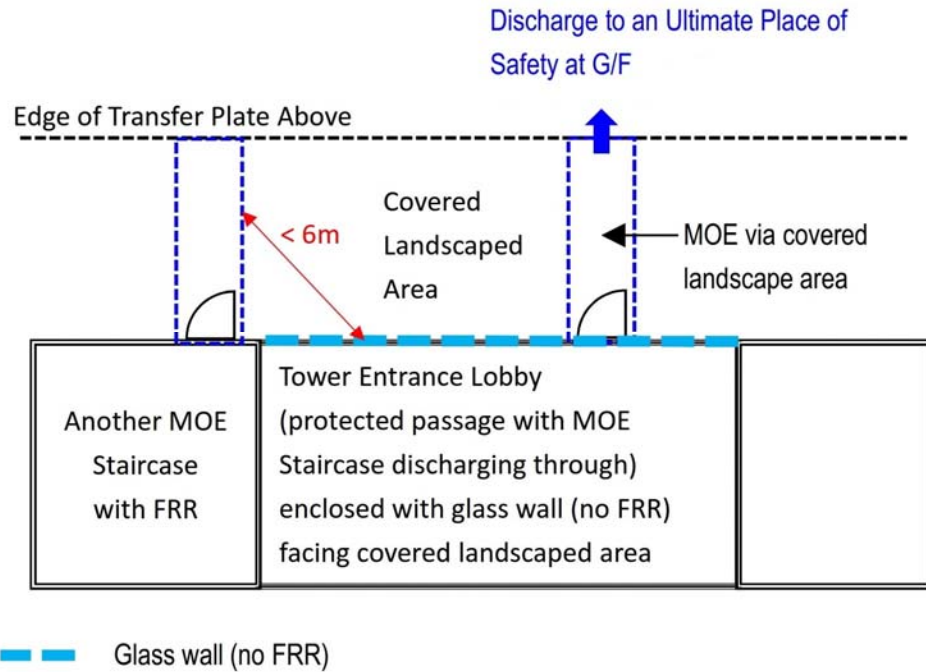


Summary of Items Discussed in 3/2018 APSEC Discussion Forum on 25 May 2018

	Items proposed by Convenors for Discussion	Summary of Discussion and BD's Responses
	Items raised by HKIA	
1.	<p><u>Flexibility for Solar Shading of Windows</u></p> <p>According to item 7 of ADF 2/2015 held on 20 March 2015, BD was receptive with the proposed sliding louvres in front of prescribed windows to enhance solar protection on a case-by-case basis subject to submission of detailed information of such system as well as the circumstances of individual cases. Further to the above, we would like to enquire if these external operable shading devices could also be taken into account in the RTTV assessment for residential buildings.</p>	<p>BD advised that whether such external operable shading devices could be taken into account in RTTV assessment would be considered on a case basis with due regard to the merits and circumstances of individual cases, as well as the following:</p> <ul style="list-style-type: none"> (i) External Shading Coefficient of the proposed device should be calculated with due reference to the methodology as stated in Section 2.5.3 of the “Guidelines on Design and Construction Requirements for Energy Efficiency of Residential Buildings 2014” (the Guidelines); (ii) Any possible adverse impact on natural lighting/ventilation to the habitable spaces concerned arising from such device should be carefully examined; (iii) Pursuant to Paragraph 11 of PNAP APP-156, quantitative assessment should be submitted for consideration if such device projected more than 750mm from the external walls; and <p>In general, if the proposed external shading devices were operated</p>

		<p>manually, they should be excluded from the RTTV assessment as per principle laid under first bullet of Section 2.1.7 of the Guidelines. To facilitate the processing, BD strongly advised that pre-submission enquiry with detailed justifications should be made prior to formal submission.</p> <p>Whilst HKIA expressed that external operable shading devices had been widely adopted in overseas countries, HKIA requested BD to further review the Guidelines at the Technical Committee so as to streamline the acceptance of such devices, including those external manual-operable shading devices.</p>
2.	<p><u>Maintenance & Repair of External Cladding & Typhoon Proof Ceiling</u></p> <p>It is not uncommon that maintenance & repair (M&R) for external cladding or typhoon-proof ceiling are required during the life-time of a building. However, only erection, repair or removal of any cladding fixed to the external wall with the distance between any part of it and the adjoining ground/floor $\leq 6\text{m}$ would be considered as Minor Works (i.e. MW Item 3.31). We would therefore like to enquire on the following with respect to M&R works:</p> <p>(i) whether the requirements for structural A&A submission could be waived for dismantling, inspection, repairs and reinstatement works involving small quantities of existing cladding works (say 20 nos. defective cladding panels out of 300 nos.) or typhoon proof ceiling;</p>	<p>BD advised the following:</p> <p>(i) As the works concerned were neither considered as Minor Works or Designated Exempted Works under the Building (Minor Works) Regulations nor building works exempted under Section 41(3) of the Buildings Ordinance, structural A&A submission would be required for such works regardless of the quantities of the cladding panels involved.</p> <p>BD supplemented that in order to facilitate M&R of cladding panels, legislative amendments to introduce new MW item for repair and removal of cladding panels located at a level $> 6\text{m}$ from</p>

	<p>(ii) whether structural A&A submission would be required if the existing cladding panels are replaced with new panels of same size and material specifications; and</p> <p>(iii) In case structural A&A submission cannot be waived for item (i) and/or (ii) above, we understand that separate demolition proposal for the dismantling of the existing cladding/typhoon proof ceiling panels is NOT necessary since such works ought to be covered under the structural A&A submission. Please advise if our understanding is correct.</p>	<p>adjoining ground had already been proposed and would be put forward to LegCo for vetting in due course.</p> <p>(ii) Reply as per item (i) above was applicable.</p> <p>(iii) BD shared HKIA's understanding that separate demolition plan for dismantling of the existing cladding/typhoon proof ceiling panels would normally not be required.</p>
3.	<p><u>Clause C9.7 of the FS Code 2011</u></p> <p>With reference to Item 9 of ADF dated 16 March 2012, a required staircase discharging through the main entrance lobby of a tower which is recessed from the edge of open air outside a building with the arrangement as indicated in the diagram below is normally considered acceptable, providing that the covered recessed area is a common area, open in design and not encumbered with features carrying fire risks.</p>	<p>BD advised that the concerned MOE route discharged from another required staircase across the same covered recessed area should be located at least 6m away from the said main entrance lobby with non-FRR glass wall enclosure pursuant to Clause C9.7 of the FS Code 2011.</p> <p>Similarly, any unprotected opening on the external wall of a required staircase should be located at least 6m away from the unprotected opening on the external wall of another required staircase. This could prevent any smoke logging or other life-threatening incident occurring in a required staircase from affecting any other required staircases to ensure safe discharge of the evacuees.</p>




BD's reply to item 2 of ADF 2/2016 dated 18 March 2016 was also relevant.

By the same token, MOE route discharged from another required staircase across the same covered recessed area can be located within 6m from the said main entrance lobby with non-FRR glass wall enclosure, as the said tower lobby (with a required staircase discharges through) should be considered as a discharge route of no fire risk, and hence the requirement for fire protection under Clause C9.7 of the FS Code 2011 should not be applicable.

Please advise if our interpretation is correct.

	Items raised by HKIE	
4.	<p data-bbox="181 193 1153 272"><u>Adopting Performance-based Approach in FS Code 2011 for Innovative Building Design</u></p> <p data-bbox="181 339 1153 515">For building projects that cannot meet the Deemed-to-Comply provisions of the FS Code 2011 due to genuine difficulties, a performance-based approach using fire engineering can be adopted to formulate an Alternative Solution. Clause G3.3 of FS Code 2011 refers.</p> <p data-bbox="181 582 1153 662">However, BD will normally not accept any reasons on better architectural design, more user-friendly and easier maintenance for future users/owners.</p> <p data-bbox="181 729 1153 1048">This deters the building professionals from innovative building designs and poses much limitations and constraints in the development of fire engineering design for complicated composite buildings. While fire engineering design is project specific and tailored made to suit the building design, performance and operational requirements, such fire engineering design should be a more suitable design approach to safeguard human lives and properties in case of fire.</p> <p data-bbox="181 1115 1153 1243">Hence, we would like to request BD to support innovative building design by considering Fire Engineering Approach as Alternative Solution irrespective of whether the Deemed-to-Comply provisions are applicable.</p>	<p data-bbox="1180 339 2119 467">BD advised that they would favourably consider accepting performance-based approach by fire engineering as an Alternative Solution to prescriptive approach on case merits.</p> <p data-bbox="1180 534 2119 662">To streamline the approval process, pre-submission enquiry could be made to ascertain critical issues/comments from relevant government departments.</p>

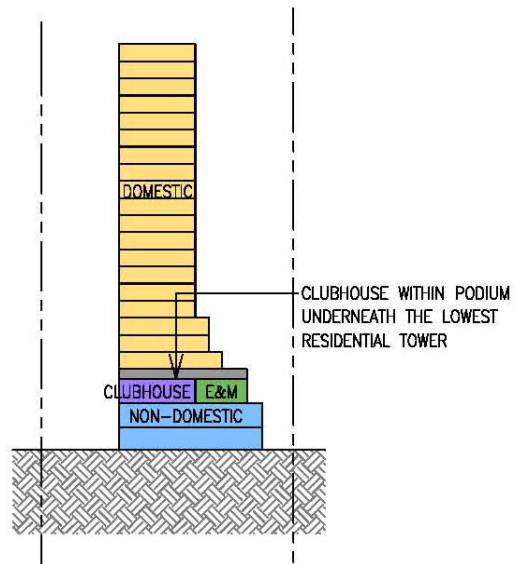
<p>5.</p>	<p><u>Clause 5.4.11 of CoP for Foundations 2017</u></p> <p>Clause 5.4.11 (5)(c) & (d) of CoP for Foundations 2017 specifies the dynamic load test requirements for steel H-piles driven to bedrock.</p> <p>(i) Would BD please clarify whether, unless specifically imposed in the approval letter for particular case, dynamic load tests on 10% of working piles for pile capacity and another 20% of working piles for integrity are sufficient.</p> <p>(ii) If hydraulic hammers are proposed for conducting the Stress Wave Dynamic Tests (SWDTs), do we need to submit Final Set Tables with hydraulic hammers for approval and construction?</p> <p>(iii) If only SWDTs on 10% of working piles is imposed during approval (e.g. Para. 1 (e) of App. II of the attached sample approval letter refers), do we need to conduct SWDTs on all working piles?</p> <p> Sample Approval Letter.pdf</p> <p>(iv) Do we need the pile integrity tests as per Clause 5.4.11 (5)(d) of CoP for Foundations 2017 if it is not imposed during approval?</p>	<p>BD confirmed that:</p> <p>(i) Dynamic load tests on 10% for pile capacity and another 20% for integrity as per CoP for Foundations 2017 would suffice. For the 10% verification test on pile capacity, selection of piles would accord priority to those which were driven to sloping rockhead. With regard to the difficulty in achieving 75% of yield stress when pile length is relatively long, this issue would be further discussed in the coming TC meeting.</p> <p>(ii) Submission of Final Set Tables by hydraulic hammer for conducting the SWDTs would not be required for BD's approval.</p> <p>(iii) The % of SWDTs to be conducted should be strictly in accordance with the conditions imposed in approval letter.</p> <p>(iv) BD confirmed that the % of integrity test should be carried out in accordance with the imposed condition. Meanwhile, BD would amend the standard appendix to approval letter for Steel H-piles driven to bed rock to tally with the relevant clauses of CoP for Foundations 2017.</p>
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	Item raised by AAP	
6.	<p><u>Site Coverage of Resident’s Clubhouse under the application of PNAP APP-132</u></p> <p>We understand that the site coverage (SC) of resident’s clubhouse has always been considered as non-domestic.</p> <p>We wish to know whether the determination will be different if clubhouse is located in a building which applied PNAP APP-132 for SC concession with building set back.</p> <p>It is our view that the determination should depend on the function of the premises and be unrelated to other circumstances. All uses within resident’s clubhouse are non-domestic, and therefore non-domestic SC and GFA should always apply. We wish to know if our view is agreed.</p> <p>If the SC of resident’s clubhouse is determined by circumstances other than its use, we wish to know whether the SC of the clubhouse in the following circumstances (all under PNAP APP-132) will be domestic SC or non-domestic SC.</p>	<p>BD confirmed that if the clubhouse was placed below the lowest domestic floor, its SC could be counted as non-domestic. However, if the clubhouse was placed within the domestic tower, its SC should be counted as domestic. The same principle should be applied in the context of PNAP APP-132.</p>

Scenario 1

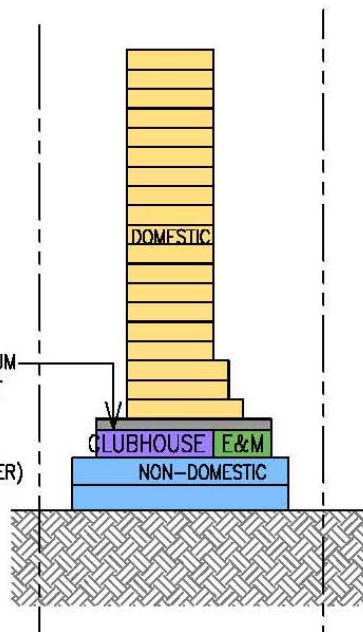
DOMESTIC PART
PERMITTED SITE COVERAGE
= 63% - 40%

NON-DOMESTIC PART
PERMITTED SITE COVERAGE
= 92% - 65%



Scenario 2

CLUBHOUSE WITHIN PODIUM
UNDERNEATH THE LOWEST
RESIDENTIAL TOWER
(PART OF CLUBHOUSE
AT THE OUTSIDE OF TOWER)



7.	<p><u>PNAP APP-159</u></p> <p>PNAP APP-159 and Circular Letter dated 6 February 2018 provided clear directions for AP to follow concerning subdivision of industrial premises.</p> <p>Members have noticed through their submissions of proposals that BD is also concerned about the misuse of office buildings for residential use. Subdivision into small office units provided with toilets would not be approved, even though the toilets do not require modification for natural lighting and ventilation and the office's size is larger than 80m², which seems to be even more stringent than the requirements for industrial premises.</p> <p>We understand the need to avoid misuse of office buildings for domestic use. We hope that clear guidelines can be available such that APs can follow.</p>	<p>BD advised that according to the previous reply to item 9 of ADF 3/2018 dated 19 May 2017, BD would make reference to the relevant criteria in PNAP APP-159 in bench marking whether the office layout resembled those for domestic use or not.</p> <p>[Post Meeting Notes: BD clarified that such practice was being reviewed in light of members' concerns as well as the latest situation of office developments/uses and would be further discussed in the next ADF.]</p>
Item raised by BD		
8.	<p><u>Compliance Standard for Heat Soak Process of Tempered Glass Panes</u></p> <p>The compliance standard for heat soak process of tempered glass panes specified in PNAP APP-37 and PNAP APP-53 is BS EN 14179-1:2005, whereas the updated version BS EN 14179-1:2016 is specified in Annex A1 of the CoP for Structural Use of Glass 2018 (the 2018 Code). The main difference between the two versions is that the temperature of glass pane during the holding phase of the heat soak process, in which the glass pane</p>	<p>BD briefed members on the arrangement of accepting different versions of heat soak test standard under the 2018 Code during the grace period.</p>

	<p>shall be maintained within the range 290°C±10°C for BS EN 14179-1:2005 and 260°C±10°C for BS EN 14179-1:2016.</p> <p>In order to facilitate the industry during the transition period when the oven for heat soak process are re-calibrated to conform to BS EN 14179-1:2016, heat soak test in accordance with BS EN 14179-1:2016 and the corresponding assessment report would be considered acceptable even though BS EN 14179-1:2005 has been specified on the structural plans approved before the promulgation of the 2018 Code.</p> <p>On the other hand, for tempered glass design to 2018 Code and BS EN 14179-1:2016 is specified on the approved plans, heat soak test conforming to BS EN 14179-1:2005 and the corresponding assessment report would not be accepted.</p>	
AOB Items		
9.	<p><u>Minor Amendments for Phased Development</u> (Item raised by HKIE)</p> <p>Phased development nowadays is very common, especially for large scale developments where foundation works cannot be completed within a short period.</p> <p>Would BD please advise whether application for modification of regulation 33(1) of the B(A)R is applicable for minor amendments of building, superstructure and drainage works in phased developments provided that</p>	<p>BD advised that application for modification of regulation 33(1) of the B(A)R would be considered in accordance with PNAP ADM-19 provided that the extent of application had been clearly demarcated on plan.</p>

	first consents have been granted.	
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