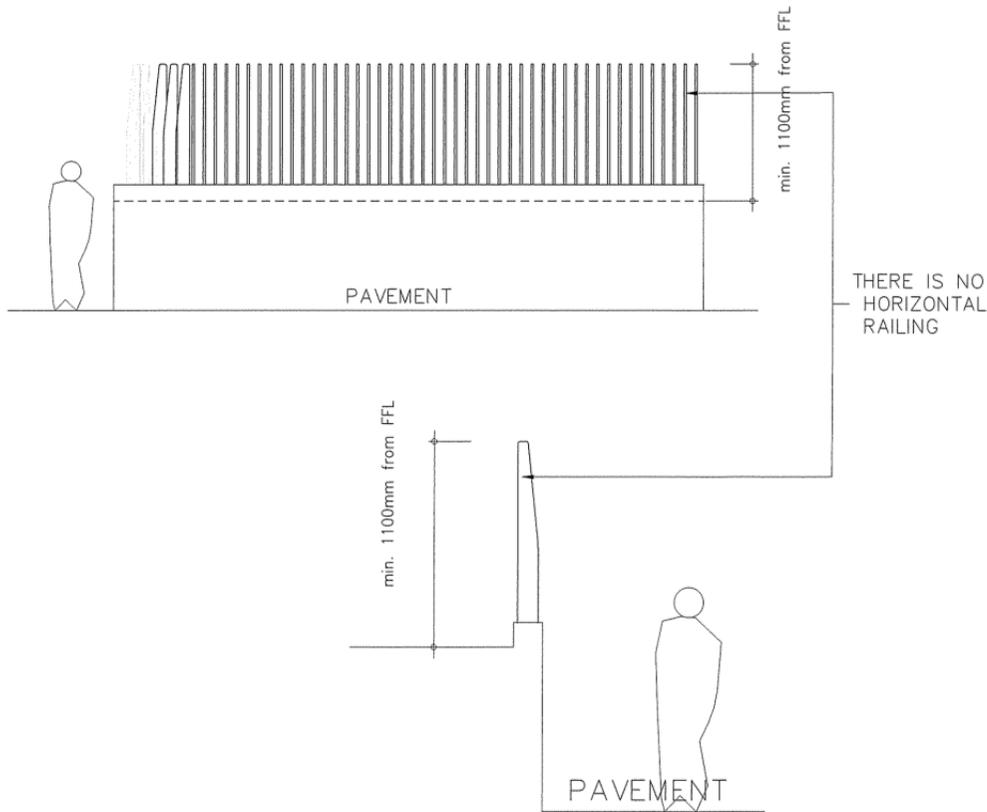


Summary of Items Discussed in 1/2016 APSEC Discussion Forum on 15 January 2016

	Items proposed by Convenors for Discussion	Summary of Discussion and BD's Responses
	Items raised by HKIA	
1.	<p><u>Protective Barrier and Horizontal Elements</u> B(C)R 8 stated that protective barrier is required for “Changes in Level” and compliance to B(C)R 17 Table 3 for imposed load. We would like to seek clarification from BD whether horizontal elements/ top rails are mandatorily required (see attached diagrams).</p>	<p>BD confirmed that horizontal element/top rail is not required for the purpose of compliance with B(C)R 17 Table 3 for imposed load as long as the vertical members are demonstrated to be in compliance with the said regulation.</p>



2.

Canopies SC / PR

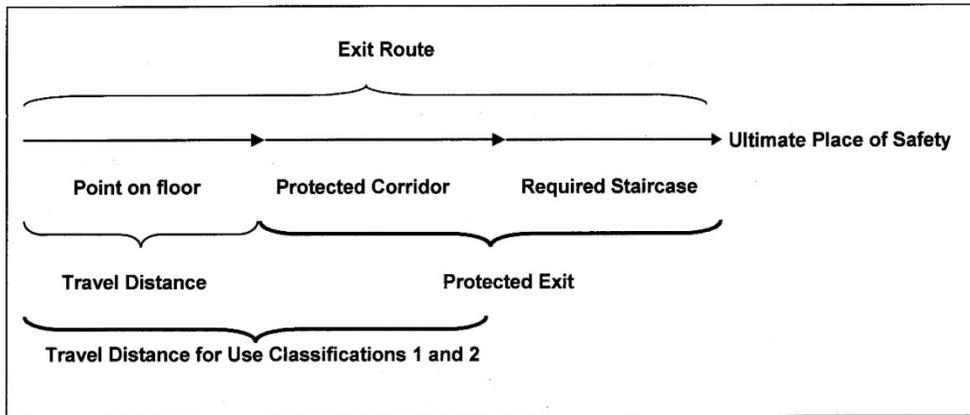
According to PNAP APP-19 para. 3(j), canopies projecting not more than 2m over an entrance to a building need not be counted for SC/PR calculation. Further to the discussion at APSEC forum on 9 Jan 2015, *“For architectural features with projections exceeding 500mm, only the exceeding portion should be included in the GFA calculations.”* Under the same token, can canopies projecting more than 2m over an entrance be accountable in SC/PR ONLY for

Provided that the size of the canopy was commensurate with the use and scale of the building/premises, only the portion exceeding 2m would be accountable for SC/PR calculations.

In general, the clarification in para.3(j) is applicable to single family houses but the design should be reasonable and will not tempt owners

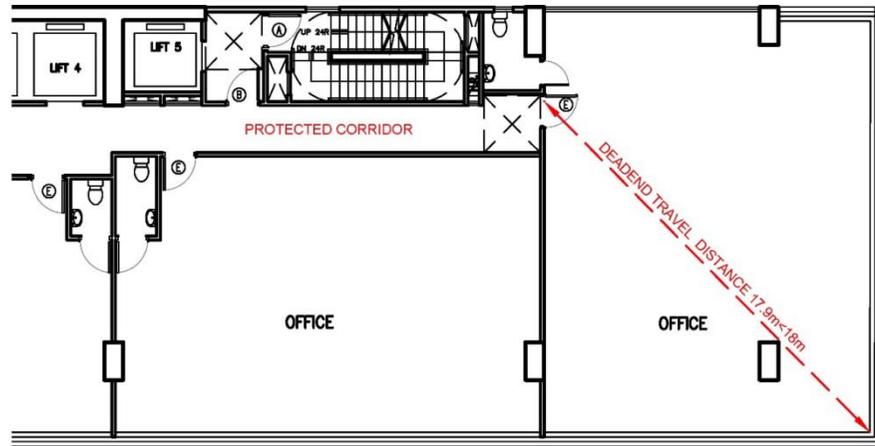
	<p>the exceeding portion too?</p> <p>We understand that the term “building” in the said para. 3(j) is meant to include single family house as well. Please confirm our understanding is correct.</p>	<p>to abuse.</p>
<p>3.</p>	<p><u>Sunshades SC / PR</u></p> <p>According to paragraph no. 11 of PNAP APP-156, “in case the sunshades project more than 750mm from the external walls, quantitative assessment should be submitted to the BA for consideration.” In paragraph no. 10 of PNAP APP-67, however, “quantitative assessment should be submitted to the BA for consideration, if the sunshades project over 0.5m from the external walls.” Would BD please clarify which dimension (500mm or 750mm) is the one over which quantitative assessment would be necessary?</p>	<p>The requirement on submitting quantitative assessment (QA) to justify sunshades > 750mm in residential buildings as promulgated in PNAP APP-156 had taken into account factors such as façade heat gain, natural lighting, etc. as analysed by the consultant for the study in drafting the guidelines under the PNAP. BD would consider revising the corresponding guidelines in the extant PNAP APP-67 requiring QA for sunshades >500mm for commercial/hotel buildings for consistency.</p>
<p>4.</p>	<p><u>Non-combustibility Requirement for General Accommodation</u></p> <p>BD proposed in the TC meeting on FS Code dated 31 July 2014 that the non-combustibility requirement within protected area to be relaxed to European Classification ‘C’ (or Class ‘1’ of BS equivalent) and the amendment had been issued under Corrigenda (item 18 & 19) dated 22 October 2015. However, this relaxation is not applicable to other areas, such as those under "Clause E14.1(b) Use Classification 3 - general accommodation (including corridors, circulation spaces and rooms) that are not forming the protected exit" which requires those areas to comply with Classification B or above, and hence is even more stringent than the protected areas. We suggest BD to review the non-combustibility requirement for</p>	<p>BD explained that in institutional buildings under Use Classification 3 such as hospitals, day care centres and etc., occupants may not be able to evacuate without assistance thus slowing down the process. Therefore, in the general accommodations of such use, the combustibility of the linings of internal wall and ceiling and decorative finishes is required to be in Classification B or above for better fire protection facilitating escape.</p> <p>BD further explained that in 2011 before the subject requirement in the present code was finalised, BD had already lowered this requirement</p>

	those areas as well.	from classification from A to B as per ArchSD's request. The revised requirement as stated in the present code had been found acceptable so far. HKIA should review or exhaust the availability of suitable materials for meeting such requirements.
	Item raised by AAP	
5.	<p><u>Code of Practice for Fire Safety in Buildings (FS Code) – Clause B11.2</u></p> <p>In respect of the following statement of Clause B11.2(c)(i) as stipulated in the Code of Practice for Fire Safety in Buildings 2011,</p> <p>“The deadend travel distance is limited to :-</p> <p>.....</p> <p>.....</p> <p>(c) for all other use classifications:-</p> <p>(i) 18m to the protected exit or to a point, from which travel in different directions to 2 or more exits is available;”</p> <p>(d)</p> <p>and according to Section 3 - Definitions, Diagram A2: Illustration of Exit Route as stipulated in the same Code,</p>	BD confirmed that the dead end distance shown on the diagrammatic floor plan for office accommodation was a correct interpretation of Clause B11.2(c)(i) of the FS Code, provided that the corridor outside the office unit was fully protected.



“Protected Exit” include the “Protected Corridor” for Use Classifications other than Use Classifications 1 and 2.

In this regard, please confirm that the deadend travel distance for the office as shown on the floor plan below is acceptable if the corridor outside the office unit is fully protected.



6. **Void Covered by the Transfer Plate or Footprint of a Domestic Tower**

In accordance with Para. 2(c) of APP 2, it mentioned that:-

Voids in Buildings

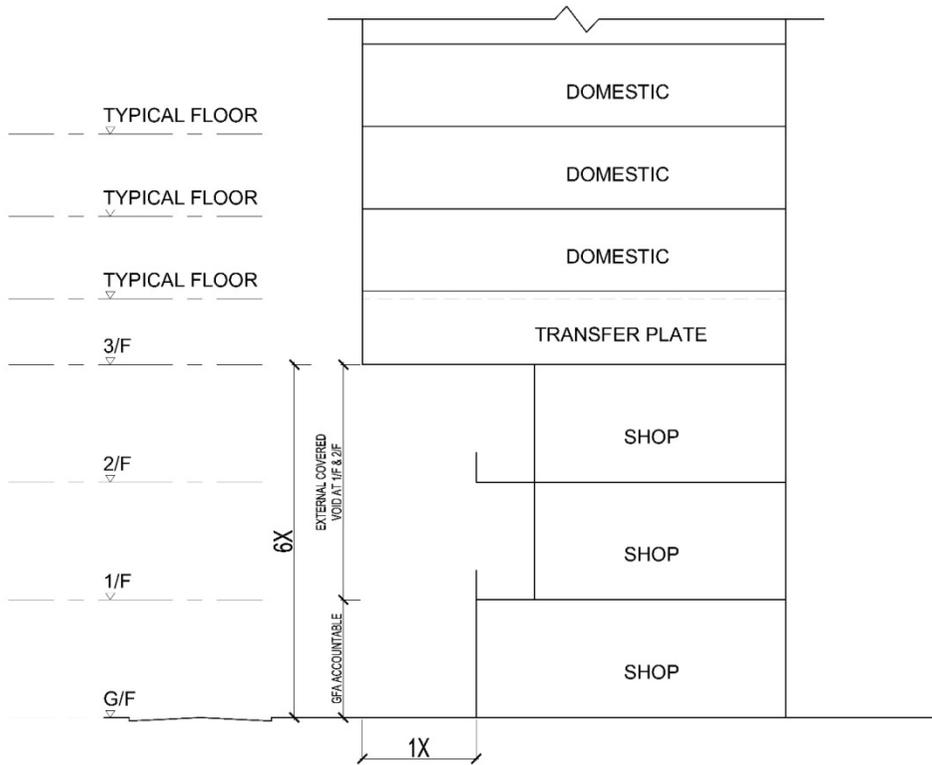
2. However where large voids occur, a modification of regulation 23(3)(a) of the B(P)R may be granted on application for voids in the following circumstances and subject to compliance with the pre-requisites (for items (a) to (g)) and the overall cap on GFA concessions (for items (f) and (g) only) stipulated in PNAP APP-151 on Building Design to Foster a Quality and Sustainable Built Environment:-

- (a)
- (b)
- (c) in shopping arcades provided that the total area of voids in the shopping arcade does not exceed 10% of the total GFA of the shopping arcade.
- (d)

BD noted that if the building was a genuine shopping arcade and the void was not excessive (i.e. subject to 10% of the total GFA of the arcade under APP-2 but not to the 10% cap under PNAP 151), such space above ground could be exempted from GFA in principle. In other words, GFA exemption under PNAP APP-2 for voids over shopping arcade could apply to voids not just at the center but also applicable in principle to the periphery of buildings with or without an external wall. BD reminded that the G/F of such voids would not be exempted.

The discussion carried further that if the ratio of space at the periphery is bigger than 1(W):8(H), only the G/F would be included in accountable GFA. If less, configuration of the recession would be considered “open” enough and the G/F could be excluded from GFA.

Please confirm if void areas in the podium floors covered by the transfer plate or footprint of a domestic tower can be exempted from GFA calculation by considering as voids in a shopping arcade subject to a 10% cap.



In any case, the intermediate floors would not be included.

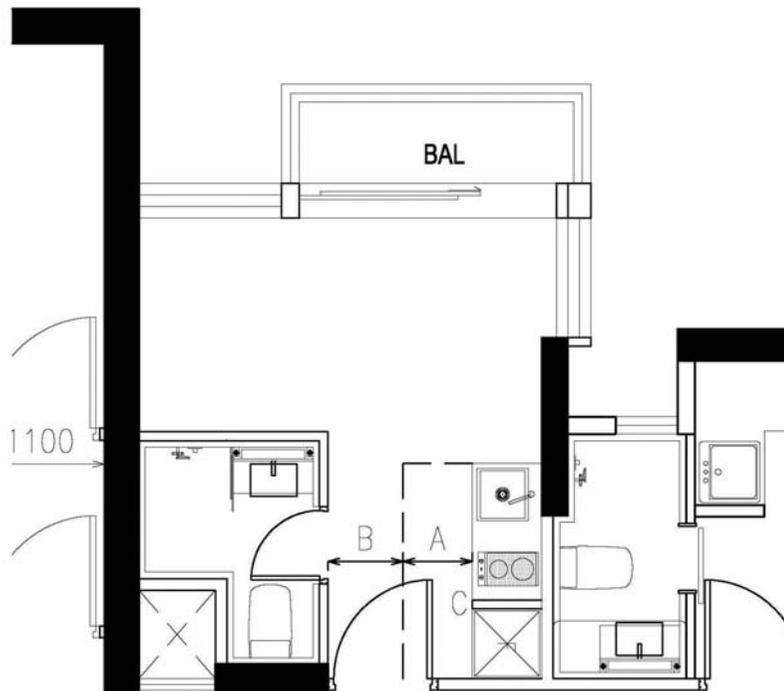
Members recapped that during the working meeting on the Revision of the Building Planning Regulation, there had been discussions regarding the definition of 'external walls' for determining GFA under B(P)R23(3)(a), and there were strong suggestions that the 'external walls' should be the physical external wall of that floor, rather than the imaginary wall on the outer edge of the projecting floor slab above. This interpretation of 'external walls' could avoid arguments and the complication of applying exemptions. BD indicated that the suggestion was included in the review of the B(P)R and would be considered in that context.

7. **Open Kitchen**

We observed that BD has recently considered the arrangement where open kitchen countertop is parallel to the route towards unit's entrance door is not acceptable when the space between the countertop and the wall is like a

1. BD explained that the current requirements in the FS Code for open kitchens, namely wall by the stove, sprinkler, smoke detector alarms, management undertaking, etc. were all derived from the experience gained in the many FS assessment (Fire Engineering) reports for open kitchen designs.

<p>corridor.</p> <p>We also understand that the idea of 'notional kitchen area' was brought up in discussions with BS.</p> <p>We hope the following guidelines to facilitate the design and submission can be provided:</p> <p><i>Notional Kitchen Area</i></p> <p>Notional kitchen area – what is the acceptable minimum dimension for such notional kitchen area? (A)</p> <p><i>Minimum remaining width from A to wall?</i> (B)</p> <p>When sufficient space is provided, will the 600mm wall be still required? (C)</p>	<ol style="list-style-type: none"> 2. The purpose of the “wall” mentioned in Clause C13.4(d) of the current FS Code was to shield the evacuees from radiant heat of stove fires, allowing the necessary pause of evacuees to open the door (and gate) without being seriously charred. This wall would be essential unless the stove was placed sufficiently far from the exit. From the advice of the Technical Committee on the various open kitchen layouts presented and an expert’s advice on the effect of radiant heat flux to the evacuees at the exit door, the minimum distance for a sprinkler controlled household stove fire without shielding by walls should be 2m measured from the nearest corner of the stove to the door knob when the exit door was in closed position. 3. The following two phenomena recently found in some open kitchen designs had posed threat to fire safety and undermined the relevant standards as stipulated in the Code: <ol style="list-style-type: none"> a) The “wall” though provided but at locations not performing the intended shielding function for the exit and the stove was less than 2m from the exit door (considered not meeting code-compliant equivalent standard), and b) The design of open kitchens in small studio flats which a very congested environment would be expected (considered in such case the stove could be very near to main circulation routes or storage of combustibles, irrespective of (i) whether the wall was performing the intended shielding effect for the exit and (ii) location of the stove was more or less than 2m from the exit or not, therefore a highly undesirable scenario not specifically addressed by the Code). 4. The demarcation of notional kitchen area as proposed in the meeting might help but would not significantly reduce the risks mentioned in para. 3. 5. Scenario 3(a) would be regarded as a contravention. New proposals would not be accepted. If such design was insisted,
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A = NOTIONAL KITCHEN (SPACE IN FRONT OF COUNTER TOP)
 C: WILL THE 600MM WALL STILL BE REQUIRED?

additional compensatory measures on top of the current code requirements might be necessary for consideration on case basis, and by the Fire Safety Committee (FSC) if necessary.

- 6. Scenario 3(b) with the provision of effective shield wall or sufficient distance between door and stove could be regarded as code-compliant but undesirable. APs were advised to consider on a voluntary basis a choice of safer stove or other compensatory measures for such flats.
- 7. BD invited members to view from the internet how the intervention of water could aggravate a fire involving cooking oil to appreciate the fire risk involved under sprinkler control.

8. **Arrangement for Previously Approved GBP with Open Kitchen Parallel to Exit Path**

BD recently stated in approval letter that open kitchen facing exit route within the unit, which was approved in previous GBP submission / amendments, to be not acceptable.

For projects with foundation construction already underway, it will be extremely difficult to change the typical floor layout. The matter is even more complicated when sales campaign has already started.

BD would pragmatically accept such situations subject to AP's proposed additional enhancement or compensatory measures such as the choice of safer stoves. Controversial cases might be referred to the FSC for consideration.

9. **Tactile Guide Path in Domestic Use**
 According to the DM:BFA, tactile guide path is not required for domestic use. However, in many cases BD officer requested to add in OP inspection.

It has been our understanding that Item 14 "Club house" in Table 2 of Section 2.1 of the BFA is not referring to the Resident's Recreational Facilities. Kindly advise whether this understanding is correct.

2.1 EXTENT OF APPLICATION (Cont'd)

TABLE 2

"Y" denotes "Applicable"
 "-" denotes "Not Applicable"

EXTENT OF APPLICATION OF ADDITIONAL ASSISTIVE PROVISIONS TO VARIOUS USES OF BUILDINGS						
Uses of buildings	Required Additional Assistive Provisions listed below: -					
	Braille & tactile floor plan [para. 69(2) in Division 14]	Tactile guide path [para. 13 in Division 4 and para. 69(3) in Division 14]	Visual Display Board [para. 69(4) in Division 14]	Accessible Public Information / Service Counter [para. 70 in Division 15]	Visual Fire Alarm System [para. 5.2 in Chapter 5]	Assistive Listening System [para. 77 in Division 18]
1. Domestic use	-	-	-	-	-	-
2. Common areas of Office	-	-	-	-	Y	-
3. Department	Y	Y	-	Y	Y	-

The term "club house" in the DM:BFA 2008 should include the Resident's Recreational Facilities. According to the Table 2 of Section 2.1 of the DM:BFA 2008, the requirement for providing tactile guide path would not be applicable to "club house".

As a related issue BD would prefer APs to include a diagrammatic indication on plan (with clear legends) showing the extent of relevant BFA provisions such as tactile guide paths in order to avoid misunderstandings with BD and possible dispute at the OP stage.

10. **GFA issue - Curtain Wall of Existing Buildings**
 We wish to confirm that similar principle on GFA exemption for architectural features exceeding 500mm deep or claddings exceeding 90mm thick can apply for existing curtain wall which used to be totally GFA counted. That is, maximum 250mm thick of existing curtain wall can be disregarded

BD confirmed that similar principle could apply. The area of 250mm thick curtain wall could be excluded from GFA, provided that requirements under PNAP APP-2 on curtain wall were met. The area of the curtain wall exceeding 250mm thick should be accountable for GFA.

	from GFA calculation upon a submission of an A&A, even when the existing curtain wall thickness exceeds 250mm.	
11.	<p><u>Horizontal Screen Width</u></p> <p>We wish to confirm that for GFA calculation, only the covered area exceeding 2.0m wide under horizontal screen (PNAP APP-42) will be accountable for GFA.</p>	BD confirmed that only the covered area exceeding 2.0m wide under a horizontal screen would be GFA accountable.
12.	<p><u>Store Room - Follow up on item 12 of Forum 2014-5 on Store / Utility Room</u></p> <p>Recently members heard that there were cases in which BD rejected the store room without prescribed window when the dimension of the room exceeds 1.7m.</p> <p>We wish to clarify whether the conclusion of the previous forum 2014-5 still applies, or there are new policies for this issue.</p>	<p>BD confirmed that there had been no change in the policy towards store rooms / utility rooms in domestic unit since the discussion forum 2014-5. Also, there was no internal guideline for 1.7m maximum store room size.</p> <p>BD emphasized that store/ utility rooms of sizes commensurate with that of the unit, e.g. relatively large stores in large-size flats or single-family houses would be more justifiable. Rooms with sizes and in contexts likely to be used for habitation must comply with the lighting and ventilation requirement regardless of how the room was named.</p>
13.	<p><u>Duplex in Residential Tower</u></p> <p>Further to the discussion in Forum 4/2015 and BD's explanation that B(P)R 39 should be complied for single family house even though MOE need not be followed, we would like to seek BD's clarification that for Duplex Units within a residential tower where MOE staircases are already provided, there is no restriction on the design of the internal staircase connecting the 2 floors within the duplex unit. That means the internal staircase of such duplex units need NOT comply with B(P)R 39. And MOE B11.2(a) should be</p>	<p>BD confirmed that the internal staircase of duplex units should comply with B(P)R39 if there was no other access to the upper floor of the duplex.</p> <p>The design of the internal staircase would not be required to follow B(P)R 39 if the upper level of the duplex was provided with access to the tower staircase.</p>

	<p>complied for the travel distance from the farthest point at the upper level of the duplex, along the internal staircase, to the unit's entrance door at the lower level.</p>	
	<p>Items raised by BD</p>	
<p>14.</p>	<p><u>Supporting Documents to be Submitted</u></p> <p><u>Fire rated glass*</u></p> <ul style="list-style-type: none"> ● Fire test report (<i>Some fire test reports submitted were irrelevant to the proposed fire rated glass wall, such as thickness/type of fire rated glass panels, maximum sizes of glazing system, restraint conditions, etc. were different from the proposed system</i>) ● If assessment is to be carried out, the fire assessment report together with those referenced test report(s) should also be submitted. (<i>Some assessment reports submitted were for other systems and irrelevant to the proposed fire rated glass</i>) <p><u>Glass reinforced concrete (GRC)*</u></p> <ul style="list-style-type: none"> ● Catalogue showing the composition ● <i>Report showing the adoption of FOS</i> ● <i>Justification for the assumed thermal stress. Normally 2.5MPa was adopted by making reference to the Practical Design Guide for GRC. Some RSEs might propose to carry out tests to justify other values of thermal stress</i> ● <i>Test reports for strength retention of the fibre >350MPa for Category B under BS EN 14649 and minimum content of Zirconia (ZrO₂) in glass fibre > 16%.</i> 	<p>It was noted that the required supporting documents associated with the structural plans submitted by RSE might sometimes be incomplete or contained information irrelevant to the proposed structural materials/systems. In order to facilitate efficient processing of the submissions, members were reminded of the common irregularities found in the supporting documents (highlighted in italic blue in the left column) in relation to fire rated glass and glass reinforced concrete.</p>

	<ul style="list-style-type: none"> ● <i>Test reports to substantiate the design mechanical strength including flexural strength, anchorage strength, interlaminar shear, in-plane shear, compression, etc.</i> ● <i>QA/QC document</i> <p>* Documents which are found outstanding or not submitted in full are highlighted in <i>blue italic</i></p>	
15.	<p><u>Uploading of Structural Material Information to Central Data Bank (CDB)</u></p> <p>A standard paragraph is inserted in the approval letter for structural submissions requesting the RSE to submit all necessary relevant information (i.e. product name, name of manufacturer & place of manufacturing (city and country), material category, application, compliance testing standard, name of the laboratory accreditation body, name of laboratory or assessing organization, test report number, date of test or assessment report, validity data, any special remark on approval, etc.) for structural materials used in the particular projects upon submission of the Form BA13/BA14 to facilitate uploading of such material information to the CDB on BD’s website.</p> <p><i>It is noted that the required information is either found outstanding or submitted under separate covering letters at different times. In order to facilitate easy identification/verification of the information and subsequent uploading to the CDB, RSE is reminded to submit the required documents in a timely manner and provide copies of the covering letters for the submission of such documents to BD upon submission of the Form BA13/BA14.</i></p>	<p>BD reminded members that the CDB aimed to provide a web-based point of reference to authorized person (AP), registered structural engineer (RSE) and other parties concerned in the building industry. It was intended to help sharing of information amongst government departments and to enhance public access to information. To facilitate BD to update the CDB, a standard paragraph would be inserted in the approval letter for structural submissions requesting the RSE to submit all the necessary relevant information. In this connection, RSEs were requested to liaise with the supplier/manufacturer of the structural materials/systems used in the project and provide a full set of required documents to facilitate uploading to the CDB by BD.</p>

	AOB items	
16.	<p><u>Preliminary Final Assessment for the Site Developed under Phased OPs</u> (Item raised by HKIA)</p> <p>HKIA informed BD that BEAM Society Limited had changed the practice that it was allowable to conduct multiple final assessments for the large site developed under phased OPs. All the intermediate final assessments would be treated as preliminary final assessments and only assessment results would be released. The certificate for project with multiple final assessments which would be available upon the completion of the last final assessment.</p>	<p>BD noted and confirmed that <i>preliminary</i> final assessment results conferred/ issued by the Hong Kong Green Building Council (instead of BEAM Society Limited) under the multiple final assessments procedure would be accepted for phase OP situations for the purpose of meeting the pre-requisite of PNAP 151.</p> <p>Post meeting note: HKIA emailed the information issued by BEAM SOCIETY to BEAM PRO regarding the preliminary final assessment of multiple phased development for BD information.</p>
17.	<p><u>Discharge of Floor Drain of Utility Platform</u> (Item raised by HKIA)</p> <p>It appeared that BD had been accepting the discharge of the floor drains of the utility platforms to either storm water system or waste water system. To avoid the confusion, BD was requested to unify the practice.</p>	<p>BD confirmed after the meeting that drains for collecting rain water from balconies or utility platforms should be connected to the surface water system. However, where a water supply point was installed for washing machines or other purposes, a waste water system should be provided separately.</p>
18.	<p><u>Fireman's Lift</u> (Item raised by HKIE)</p> <p>At the recent FSD/AP Liaison Meeting, representatives of various Institutions were informed that there is new requirement for Fireman Lift to avoid holding up of Fireman lift doors from proper operation, which in turn will affect proper functioning of the Fireman Lift in case of fire. As there is no formal</p>	<p>BD advised that this new requirement had been implemented with effect from 1 Jan 2016. GBPs approved before 1 Jan. 2016 would not be affected.</p>

	<p>circular letter issued by BD on this issue for the additional corresponding requirement, we would like to clarify on the new requirement and compliance standards for this issue. Decisions are sought:-</p> <p>1) please clarify if there is any new requirements for fireman lift in new projects;</p> <p>2) if positive, please advise any interim measures for ongoing projects; and</p> <p>3) a clear cut-off stage for the adoption of new Fireman lift requirement, if any.</p>	
19.	<p><u>Signature on ELS plans by RGE</u> (Item raised by HKIE)</p> <p>We would like to clarify whether RGE is required to sign on ELS plans for BA's approval. We notice that under APP-141 "Division of Responsibilities between AP, RSE/RGE", RGE shall take an "Advisory Role" for Excavation and Lateral Support (ELS) Works in geotechnical related matters. The signature of RGE is only required on the report and documents, which deems to indicate his acceptance of responsibilities on geotechnical matters. And RSE shall sign all ELS plans to assume his/her responsibilities under the BO.</p>	<p>BD advised that RGE was not required to sign on ELS plans in accordance with the division of responsibilities between AP, RSE and RGE specified in Task 6 under Appendix B of PNAP APP-141 in dealing with "Excavation and Lateral Support" works.</p>