

Summary of Items Discussed in 3/2017 APSEC Discussion Forum on 19 May 2017

	Items proposed by Convenors for Discussion	Summary of Discussion and BD's Responses
	Items raised by HKIA	
1.	<p><u>Pipe Ducts and Pipe Wells</u></p> <p>In order to obviate access difficulties and facilitate future maintenance of common drains, PNAP APP-93 stipulates the criteria that pipe ducts and pipe wells need to fulfill. For instance, size of pipe well shall not be less than 1200mm x 1500mm, and an unobstructed working space of not less than 700mm shall be provided in front of pipes in pipe duct, etc.</p> <p>However, at times, these minimum criteria are regarded as the maximum allowable by some case officers for GFA exemption, and this unnecessarily restricts the design flexibility in architectural layout. We believe such onerous approach is certainly not the genuine intent of the PNAP, and that pipe wells with sizes exceeding the minimum requirement could also be considered acceptable for GFA exemption providing that reasonable justifications, e.g. pipe layouts to demonstrate the necessity, are provided. Would the BD please confirm that our understanding is correct.</p>	<p>BD had the same understanding.</p> <p>Favourable consideration would be given to designs indicating sizes of services and minimum provisions necessary for housing and repairing such in the pipe ducts and wells. Furthermore, designs should not attract convenient conversion of such spaces, whether in front of or inside the ducts and wells, into other uses.</p>
2.	<p><u>Assessment of Occupancy for Swimming Pool</u></p> <p>Item 5 of the Notes to Table B1 of the Fire Code states that the UFA for assessing the occupant capacity in the swimming pool in Use Classification 5d refers to the water surface area of the swimming pool.</p> <p>In some cases, APs are asked to include the deck area in the occupancy</p>	<p>BD found the suggested 1:1 ratio agreeable subject to no unconventional designs which would accommodate non-swimmers e.g. pool side bar or café, which should then be assessed under separate consideration on case merits.</p>

	<p>assessment for swimming pool as well for the reason that the deck is also occupied with persons. This appears to be not necessary in light of item 5 of the Notes to Table B1 as abovementioned. However, should BD consider this is necessary where the deck area is substantial as compared with the pool area, we would suggest that only the portion of deck area which exceeds the pool surface area (i.e. beyond the ratio 1:1) be included in the occupancy assessment. Would BD please advise / consider our suggestion.</p>	
<p>3.</p>	<p><u>Building (SSF,P,DW & L) Regulation 56(7)</u> The regulation states that <i>“Every manhole shall be fitted, on a level with the ground surface, with a cast iron airtight cover of adequate strength and approved design, provided that every manhole inside or under a building shall be fitted with a double-sealed cast iron airtight cover”</i>. The latter clause of this regulation implies that double-seal is not a must for manhole cover to be air-tight, and hence manhole covers to both rainwater and foul water manholes outside a building need not be provided with double-sealing. Please advise if our interpretation of the regulation is correct.</p>	<p>BD shared the same understanding with HKIA. BD staff would look for putty type of sealing materials or equivalent construction between the contacts of the covers and the manholes, for assuring the air-tightness. HKIA agreed.</p>
<p>4.</p>	<p><u>Clause B13.2 of FS Code</u> We would like to enquire on the latest status regarding the discussion between BD/FSD on the subject matter. Item 17 of the last ADF 2/2017 refers.</p>	<p>BD advised that they were liaising with FSD on the subject matter.</p>

	Items raised by HKIE	
5.	<p><u>Conditions imposed under Section 17(1) of the BO and B(A) R 10</u></p> <p>BD imposes conditions requesting for submission of test/performance review reports, documents, record plans and statutory forms under item 6 of s17(1) of the BO and B(A)R 10 during its approval / granting of plans / consent to building works. The acknowledgement of these documents / plans may have a knock-on effect on the site progress and the overall development program. May we know BD’s target performance pledges on acknowledgement of the said documents / plans.”</p>	<p>BD responded that acknowledgement of test reports, documents and record plans that were submitted in satisfying the conditions imposed during approval/consent stages would normally be incorporated in the letters for granting consent or acknowledgement of Form BA13/14. Such practice should not impede the site progress of the building project. Nevertheless, BD would remind their colleagues to process and acknowledge timely the reports/documents/record plans submitted by AP/RSE/RGE regularly at various construction stages of the building project.</p>
	Item raised by AAP	
6.	<p><u>Amendments to Code of Practice for Site Supervision 2009 (SS Code)</u></p> <p>The last 2 amendments to the SS Code regarding Basic Value were issued in May 2015 and June 2016 respectively. We would like to know whether further amendments will be issued shortly to reflect the updated construction costs.</p>	<p>BD advised that the Basic Values in SS Code would be reviewed regularly by the Technical Committee on the Code of Practice for Site Supervision (TC). For year 2017, no further adjustment on the Basic Values was found necessary after a review conducted by the TC.</p>
	Item raised by BD	
7.	<p><u>New Working Group on Guidelines on Structural Submission on Vertical Green (WG)</u></p> <p>As agreed in item 4 of ADF 1/2017, BD would conduct a study in collaboration with AP/RSE’s representatives aiming to formulate a set of technical requirements/guidelines for reference by the industry. To that end, a WG would be formed and nominations of members from various</p>	<p>BD advised that nomination exercise would soon be commenced.</p> <p>(Post-meeting note : BD issued an email on 23 June 2017 informing members that formation of the WG was withheld. Instead, members’ assistance was solicited for providing information on proprietary</p>

	<p>Institutes/Associations invited.</p>	<p>products of the vertical greening systems (e.g. types, dimensions, material, fixing details, etc.) for BD's study and consideration in formulating relevant technical guidelines. The findings and recommendations of BD's study would be submitted to the Joint BSC & APSEC for further discussion in due course.)</p>
<p>8.</p>	<p><u>Vent pipes not functioning as intended</u></p> <p>Under B(SSFDW&L)R 30(2)(b), every anti-siphonage pipe (ASP) shall be connected with the branch soil pipe (i) on the side of the water seal nearest the main soil pipe; and (ii) at a point not more than 300 mm from the trap outlet.</p> <p>In case the connection is made in the trough of a sunken slab design, the AP and RGBC should ensure that the connection point of the ASP to the soil pipe will not result in foul water entering the ASP undermining the intended performance standard as stipulated by the aforesaid regulation. To avoid abortive works, relevant parties should take note that BD may not accept alternative designs in rectifying as-built ASP which undermine the aforesaid performance standard.</p>	<p>BD supplemented that ASP should be designed in such a way not prone to entry of foul/waste water and with an effective fall back by gravity to those which inadvertently entered. This performance target had been well demonstrated by the typical standard details of ASP being either at location on well above vertical bends, or on the top side of horizontal pipes away from flows or the splash of such. BD quoted some unsatisfactory cases where ASPs were almost at the bottom of vertical bends falling away from connection prone to diverting flow.</p> <p>Members proposed alternative designs to circumvent the congested situation of troughs in sunken slabs. BD would consider.</p> <p>[Post-meeting note: BD had accepted an alternative design[@] for projects with construction works on-going but requested HKIA to follow the performance standards of the conventional designs for projects with works not yet commenced. Other proposals should be justified by making reference to established standards, expert opinions or test reports.</p>

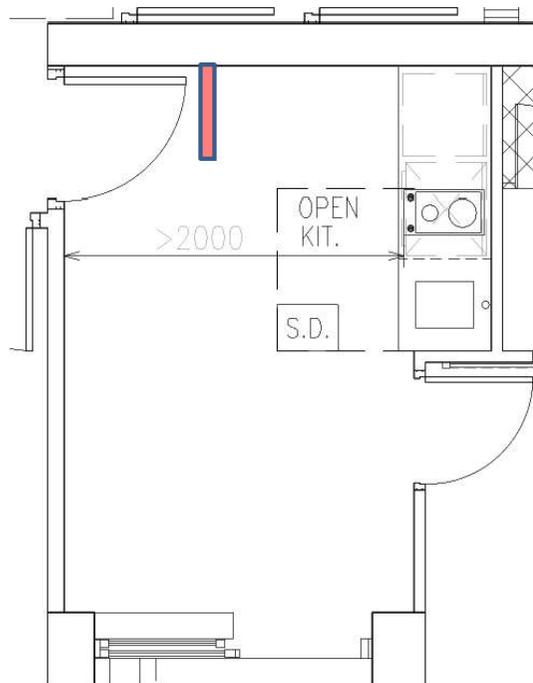
		<p>@Alternative design was with a rodding pipe connected to the vertical bend preferably with a fall back to the bend. The ASP would be connected to the rodding pipe with a distance from the connection between the rodding pipe and bend.]</p>
9.	<p><u>Office designed as hotels</u> There have been more and more cases with office buildings designed with majority of units resembling hotel layouts.</p>	<p>BD advised that after the issue of PNAP APP-159 inhibiting industrial buildings with hotel layouts, there was a rising trend of offices designed with hotel layouts. BD would make reference to the relevant criteria in PNAP APP-159 in bench marking whether the office layout resembled those for domestic or not. However, BD would consider the reasonable provision of en-suite sub-offices for top executives of large setups.</p>
10.	<p><u>Use of Pre-fabricated external walls</u> BD noted that curtain wall designs were found much more popular than those pre-fabricated units. As glass would inevitably post difficulties in meeting lower OTTV and RTTV, BD would like to obtain views from the industry in not using pre-fabricated units.</p>	<p>Members expressed that the maximum permissible thickness of pre-fabricated external walls that could be exempted from GFA being 150mm might not be enough, particularly for cases with large walls or walls with large built-in window, which in turn entailed additional structures for reinforcement undermining the design flexibilities. Furthermore, unlike pre-fabricated units, curtain walls needed not be capped within in the 10% GFA concession.</p> <p>BD advised that they would take note of the members' views and would contemplate measures to encourage more use of pre-fabricated external walls.</p>

	AOB Items	
11.	<p><u>Mechanical Ventilation of Room containing Waste Fitment</u> (Item raised by HKIA)</p> <p>Pursuant to our discussion of item 3 of the last ADF 2/2017 regarding the subject, we would further enquire on the following:</p> <p>In the case where a waste fitment was located right next to the openable window in a large open plan area due to functional reason, would BD consider accepting the application of the same notional area of 1.5 x 1.5m per sink/basin in the calculation of window requirement on a case by case basis.</p>	<p>BD advised that they would favourably consider the application of a notional area of 1.5m x 1.5m per sink/basin in the calculation of window requirements for large rooms on a case basis; and submission of Form BA16 with respect to B(P)R 36(2) would not be necessary.</p>
12.	<p><u>Clause C10.3 of FS Code – Atrium in a Sprinkler Protected Building</u> (Item raised by HKIA)</p> <p>In item 2(b) of ADF 3/2014, BD confirmed that the requirement of atrium generally applied to commercial premises and might not be applicable to multi-levels void spaces commonly adopted in school which was naturally ventilated.</p> <p>We would further enquire if those areas with high ceiling functional spaces, such as school hall or indoor swimming pool with balcony seating, would not be considered as atrium, and hence the requirements under clause C10.3 of the FS Code are not applicable.</p>	<p>BD re-confirmed that clause C10.3 of the FS Code generally applied to commercial premises only, and not to the high ceiling spaces in halls or indoor swimming pools of institutional buildings despite with balcony seating.</p> <p>However, clause C10.1 of the FS Code would still be applicable to such high ceiling spaces with required sprinkler provision, for assuring the effective function of sprinklers.</p>

13. **Clause C13.3 of FS Code – Kitchen in Use Classification 1**

(Item raised by AAP)

As pointed out in item 7 of 1/2016 ADF, 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. In this connection, we have the following 2 queries regarding the diagram attached below



(1) Is the fire rated wall (highlighted in red) required if the cooking appliance is more than 2m away from the flat entrance. (Note: this is a

According to the FS Code 2011, if a fire barrier was not provided in accordance with Clause C13.3, for kitchens **adjacent** to the sole exit of a unit, a full height wall having an FRR not less than -/30/30 and not less than 600mm wide should be provided adjacent to the flat exit door together with the FSIs according to Clause C13.4.

As discussed in item 7 of 1/2016 ADF, where stoves were already provided at location near to exits where screen walls could not be effective to protect the occupants at the entrance or the risk of open flame being likely to injure users of narrow passages, improvements measures should be considered such as the use of stove with extra safety provisions.

From the sketch, the studio flat itself resembled a kitchen of a medium size flat. The “adjacent” meaning is obviously applicable thus requiring the screen wall. Furthermore, the screen wall as shown could obviously serve to a certain extent the screening effect, though not entirely satisfactory. After occupation, the room would likely be very congested with furniture items cornering users close to the stove before reaching exits. The screen wall should be indispensable in this scenario.

Generally speaking, in considering whether screen walls would be required for open kitchens in such small studio flats, BD would pragmatically consider the layout of the flat, e.g. in L-shaped flats where

	<p>one-bed room flat.)</p> <p>(2) Is gas stove allowed if it is more than 2m away from the entrance without the fire rated wall.</p>	<p>the stove was located on the screened side from the entrance a layout already serving the screening function for the stove, such walls might not be necessary. On the other hand, in some apparently code-compliant layouts such as the proposed one, since the room was very small and the screen wall could only shadow a part of the exit door, the AP should consider enhancement measures such as safer stoves, on top of the screen wall.</p>
<p>14.</p>	<p><u>Basement Carpark to Estate type Houses Development</u> (Item raised by BD) BD would further elaborate the discussion in Item 6 of 2/2017 ADF for house-type development with basement private carpark spaces.</p>	<p>BD expressed that the industry had all along been reflecting that basement carparks would entail significant construction cost and time as well as being environmentally unfriendly. In the context of aboveground carparks for low rise buildings could be disregarded from accountable GFA, BD reiterated that house type developments providing underground carparks with excessive undesignated space and significant enclosure walls prone to attract misuse or even conversion creating additional fire risks, could hardly be justified. To minimize the extent of excavation for less disturbance to the natural terrain and for assuring fire safety, in basement carparks with open designs, undesignated space around carparks should be kept to minimum necessary. For those enclosed designs which had been justified as necessary, undesignated space around such carparks should not be provided. Creating “inaccessible voids even with bracing” prone to abuse would be undesirable and critically examined.</p>

15.	<p><u>Submission of Drainage plans prior to General Building Plans (GBP)</u></p> <p>(Item raised by BD)</p> <p>Recently BD encounters the situations that drainage plans submissions are made prior to GBP submission, which renders the processing the former rather difficult.</p>	<p>Members responded that such situations were usually encountered involving external drains in large sites, which might need to be carried out prior to superstructure works. After discussion, it was agreed that apart from such scenarios that might be processed under the title of "site drainage", the first drainage submission should be after that for GBP and preferably after the approval of such so that drainage layouts could have a relatively certain design to refer to.</p>
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