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**Kampong Java Neighbourhood Police Centre**  
Tanglin Division Headquarters  
Singapore Police Force  
21 Kampong Java Road  
Singapore 228892

**DAMAGE CONSISTENCY REPORT OF PERIMETER WALLS OF 2  
RESIDENTIAL UNITS ALONG JALAN BAHAGIA**

1. I refer to your request dated 27 November 2017 to comment on the damage sustained to the perimeter walls of 2 residential units along Jalan Bahagia that were caused by a police patrol car on 09 November 2017.
2. The 2 residential units were Block 45 #01-192 Jalan Bahagia and Block 46 #01-190 Jalan Bahagia, Singapore 320045 and 320046 respectively.
3. Following the request, I had visited the 2 residential units on 05 December 2017 at about 1900hrs. The purpose of the visit was to carry out a visual inspection of the perimeter walls.

**Block 45 #01-192 Jalan Bahagia**

4. The perimeter wall towards the left side of the unit (from the perspective when standing inside the unit) was found to be with multiple crack lines. The crack lines could be found on both the interior side and exterior side of the wall. The base of this wall was observed to be shifted inwards. A section of the wall at the upper part was also separated into 2.
5. The crack lines of the wall, at both the interior side and exterior side, had extended towards the pillars at the end of the left side and right side of the wall. The cement at the base, on the exterior side of the pillar towards the left of the wall, was also observed to be broken, exposing the bricks used to construct the pillar.
6. The access gate of the unit was unable to be locked as the horizontal holding arm of the gate, which was mounted on the pillar towards the right of the wall, was slightly shifted. The horizontal bolt of the gate could not slide into its lock chamber due to slight misalignment. See photo 1 – 15 below.



**Photo 1** shows a general view of Block 45 #01-192 Jalan Bahagia. The perimeter wall (arrowed) towards the left of the unit (from the perspective when standing inside the unit) was observed to have been damaged. The 2 pillars at the right side and left side of the wall, together with the access gate of the unit were also affected.



**Photo 2** shows a general view of the damaged perimeter wall of Block 45 #01-192 Jalan Bahagia.





**Photo 3** shows a general view of the damaged perimeter wall of Block 45 #01-192 Jalan Bahagia. The wall was found to be with multiple crack lines. The crack lines could be found on both the interior side and exterior side of the wall. The base of the wall (circled) was also observed to be shifted inwards.



**Photo 4** shows a closer view of the damage to the exterior side of the perimeter wall. Multiple crack marks (arrowed) were seen on the wall. The base of the wall (circled) was also observed to have been shifted inwards.



**Photo 5** shows the crack lines (arrowed) of the wall extending towards the pillar at the left side of the wall. The cement at the base (circled), on the exterior side of the pillar, was also observed to be broken, exposing the bricks used to construct the pillar.



**Photo 6** shows a section of the wall at the upper part separated into 2. This was on the exterior side of the wall.



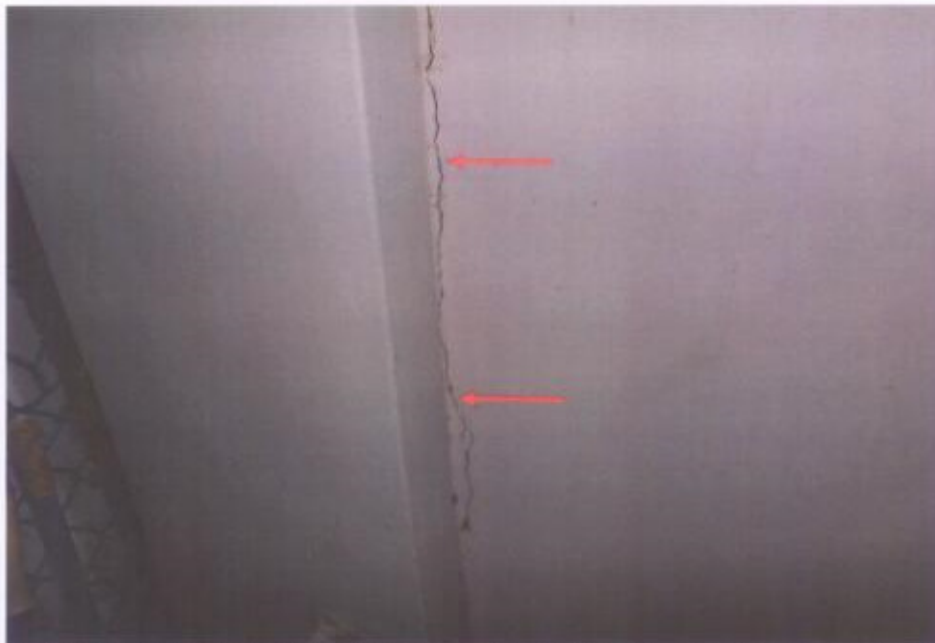
**Photo 7** shows a section of the wall at the upper part separated into 2. This was on the interior side of the wall.



**Photo 8** shows a section of the wall at the upper part separated into 2. This was at the top surface of the wall.



**Photo 9** shows a single crack line (arrowed) formed between the perimeter wall and the pillar that was on the left side of the wall.



**Photo 10** shows the single crack line (arrowed) formed between the perimeter wall and the pillar at the left side of the wall. The crack line was from the top surface extending downwards on the interior side of the wall.





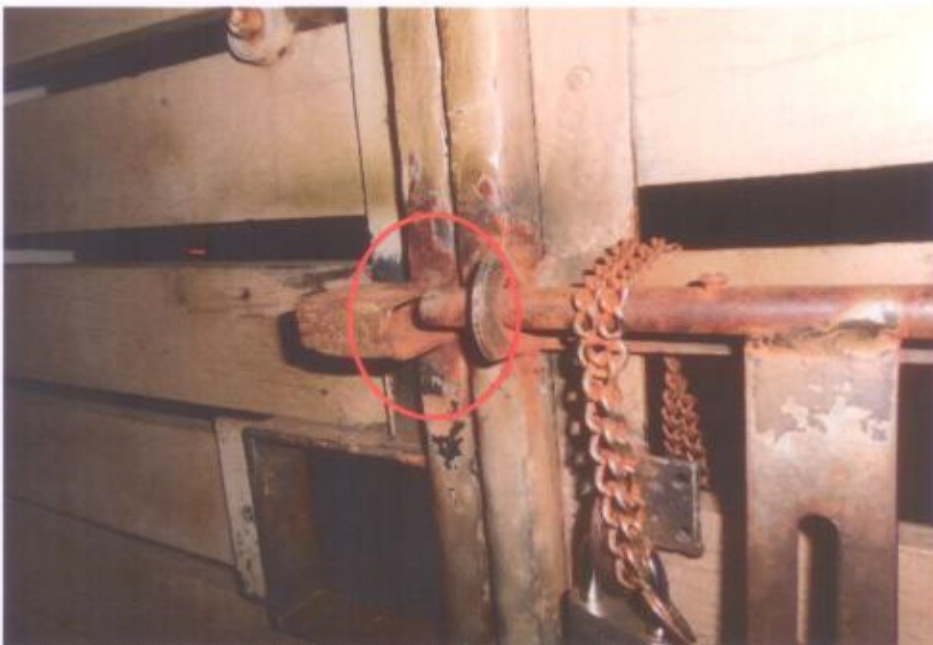
**Photo 11** shows the crack lines (arrowed) formed on the interior side of the perimeter wall. The crack lines were largely traced from the exterior side of the wall extending into the interior side.



**Photo 12** shows a closer view of the crack line on the interior side of the wall, leading towards the pillar on the right side of the wall.



**Photo 13** shows a single crack line (arrowed) on the interior side of the wall, leading towards the pillar on the right side of the wall.



**Photo 14** shows the horizontal bolt of the access gate could not slide into its lock chamber (circled) due to slight misalignment. This was a result of the horizontal holding arm of the gate, which was mounted on the pillar towards the right of the wall, being slightly shifted.





**Photo 15** shows the horizontal holding arm (arrowed) of the gate, which was mounted on the pillar towards the right of the wall. Due to slight shifting of this arm, the horizontal bolt of the access gate could not slide into its lock chamber.

#### **Block 46 #01-190 Jalan Bahagia**

7. The damaged perimeter wall and pillar of this unit was adjacent to the damaged perimeter wall and pillar of Block 45 #01-192. The extent of damage to this wall was however less severe as compared to the wall of Block 45 #01-192.
8. The perimeter wall towards the right side of this unit (from the perspective when standing inside the unit) was found to be with a single crack line on the exterior side, extending over the top surface towards the interior side of the wall. A section of the wall at the upper part towards the top surface was also separated into 2. The glass partition erected at the centre section of this wall was however unaffected.
9. The cement at the base of the pillar towards the right side of the wall was also found to have been broken, exposing the bricks used to construct the pillar. See photo 16 – 23 below.



**Photo 16** shows a general view of Block 46 #01-190 Jalan Bahagia. The perimeter wall (arrowed) towards the right of the unit (from the perspective when standing inside the unit) was observed to have been damaged on its exterior side and interior side. The pillar at the right side of the wall was also affected. The glass partition erected at the centre section of this wall was however unaffected.



**Photo 17** shows the cement at the base (circled) on the exterior side of the pillar broken, exposing the bricks used to construct the pillar. A single crack line (arrowed) was formed from the pillar extending towards the upper section of the wall.



**Photo 18** shows the single crack line (arrowed) on the exterior side of the wall, from the pillar extending towards the upper section of the wall.

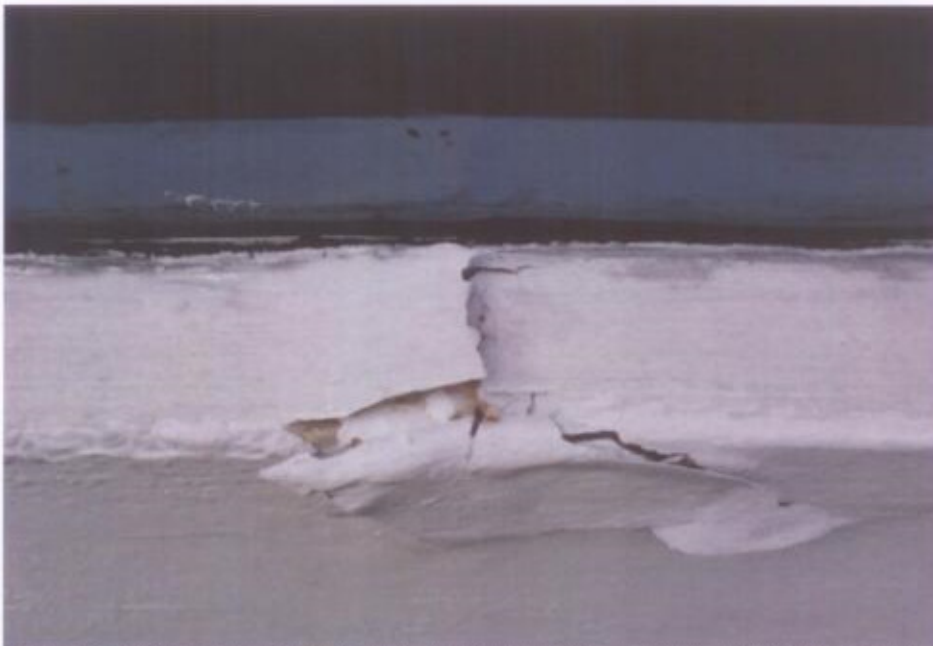


**Photo 19** shows a section of the wall at the upper part and at the top surface, was separated into 2. The glass partition erected at the top surface of this wall was however unaffected.





**Photo 20** shows a general view of the interior side of the damaged perimeter wall of Block 46 #01-190 Jalan Bahagia. A single crack line (arrowed) was observed on the interior side from the top surface stretching towards the bottom of the pillar at the right side of the wall.



**Photo 21** shows a close up view of the single crack line on the top surface, at the interior side of the wall, stretching towards the bottom of the wall.




**Photo 22** shows the single crack line on the interior side from the top surface stretching towards the bottom of the pillar at the right side of the wall.



**Photo 23** shows the single crack line on the interior side from the top surface stretching towards the bottom of the pillar (arrowed) at the right side of the wall.

## Conclusion

10. Having inspected the 2 damaged perimeter walls, I am of the opinion that the damage pattern of the 2 walls are consistent to the 2 walls sustaining a single impact force. This follows the observations of several crack lines stretching continuously from the exterior side to the interior side of both the walls. The impact force was relatively significant, causing damage to both the exterior side and interior side of the perimeter walls.
11. The access gate and the 2 pillars at the right side and left side of the perimeter wall of Block 45 #01-192 was also affected. The pillar at the right side of the perimeter wall of Block 46 #01-190 was similarly affected.



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