

1 Feb 2016

See **Distribution**

Dear Sir/Madam

**PERMIT TO CARRY OUT STRUCTURAL WORKS – NEW CONDITION TO ENSURE THE STRUCTURAL STABILITY OF EXISTING PARTY WALL AND BOUNDARY WALL**

**Objective**

This circular is to inform the industry of the inclusion of a new condition to the permit to carry out structural works. The new condition aims to ensure the structural stability of existing party wall and boundary wall when carrying out reconstruction or additions & alterations works.

**Background**

2 In the past few years, we had observed recurrent incidents involving the collapse of existing party wall and boundary wall during reconstruction or additions & alterations works, especially at landed houses. Over the last 3 years, there were a total of 6 such cases (see Annex A for examples of such incidents). There were also incidences where existing party walls were indiscriminately hacked to embed structural elements. Such activities undermine the stability of the existing wall. All these incidents warrant urgent action from Qualified Persons and Builders to ensure the structural stability of existing party wall and boundary wall.

**Measures to be taken**

3 All Qualified Persons and Builders are advised to pay particular attention to ensure that the structural stability of any existing wall (either party wall or boundary wall) is not undermined during reconstruction or additions & alterations works. In particular, the following measures should be taken into consideration when designing and carrying out construction works:

- a) QPs should investigate the location and condition of the existing party wall and boundary wall and adopt suitable design solution to ensure that the stability of the existing walls will not be undermined during construction;

- b) QPs should not embed any structural elements within the existing party wall or boundary wall;
- c) QP should also avoid placing large and continuous structural elements abutting the existing party wall and boundary wall. If this cannot be avoided, the design should ensure that there will not be any forces (lateral and vertical) being transmitted to the existing walls;
- d) During construction, the Builder should not impose any lateral force on the existing party wall and boundary wall;
- e) If concreting works are to be carried out abutting existing party wall and boundary wall, the Builder should provide suitable formwork system to ensure that lateral load from the formwork (due to the wet concrete) is not transmitted onto the existing party wall and boundary wall.

### **New Condition to the Permit**

4 Arising from the above, we have included a new condition of permit, as provided below. This condition will be included in permits granted in respect of applications **made on or after 1 July 2016**.

#### *Maintaining the Stability of Existing Party Wall and Boundary Wall*

4. *To ensure the safety of existing party wall and boundary wall when carrying out building works, the builder shall ensure that –*
- a) *the building works do not impose any lateral forces to any part of the existing party wall and boundary wall that may undermine the stability of any part of the existing party wall and boundary wall; and*
  - b) *no part of the existing party wall shall be hacked to embed any structural elements.*

### **Building Offences**

5 We would also like to bring to your attention to Section 20(2)(b) of the Building Control Act, which states that –

*20(2)(b) Any person who contravenes any term or condition of a permit to carry out any building works under section 6 shall be guilty of an offence and shall be liable on conviction –*

- (i) to a fine not exceeding \$20,000 or to imprisonment for a term not exceeding 12 months or to both; and*
- (ii) in respect of a continuing contravention, to an additional fine not exceeding \$1,000 for each day or part thereof the contravention continues.*

6 We would appreciate it if you could disseminate the contents of this letter to your members.

**For Clarification**

7 Please contact Ms Yau Yen Nee at Tel 6804 4615 or email [bca\\_enquirv@bca.gov.sg](mailto:bca_enquirv@bca.gov.sg), if you need any clarification. Thank you.

Yours faithfully



LUNG HIAN HAO  
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# **ANNEX A: INCIDENTS OF BRICKWALL COLLAPSE**

## **Case 1 - September 2015, terrace house**

Concreting works for a segment of reinforced concrete wall, abutting the brick party wall of the two-storey house, were being carried out when a localised portion of that brick wall gave way. As a result, some wet concrete and brick pieces fell through the second storey plasterboard ceiling into the bedrooms of the house. One occupant suffered minor injury.



## **Case 2 - April 2015, detached house**

The existing boundary brickwall had been used as formworks for concreting the RC retaining wall of the construction site. A portion of the brickwall collapsed due to the pressure of wet concrete exerting onto it.



## **Case 3 - September 2013, shop house**

A free standing existing brick boundary wall was being sheared off during the casting of a 300mm thick reinforced concrete wall at the second storey. Half way through the concreting process, a big area of the existing brick boundary wall gave way and fell into the adjoining neighbour's backyard. Fortunately, no one was injured.



## **Case 4 - September 2013, detached house**

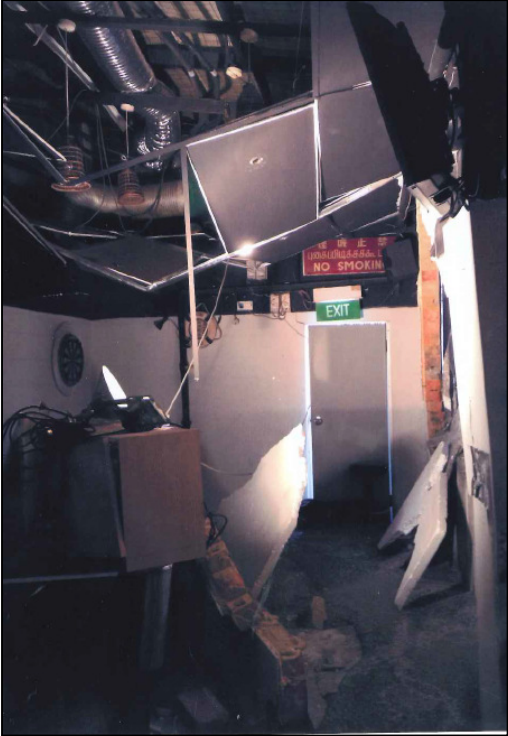
During the casting of a reinforced concrete semi-basement wall, the existing free standing brick boundary wall was damaged.





**Case 5 – August 2013, shop house**

At a conservation building site, during casting of a reinforced concrete wall at the 1<sup>st</sup> storey, the existing party brick wall was damaged.



**Case 6 - May 2013, corner terrace house**

An external existing brick wall was damaged during casting of the household shelter wall.

