

Comments are provided in relation to Clause 167 (1)(c)(iii).

Recommendation:

Reconsider item (iii), and may consider changing it to one of the followings:

(iii) a class 5, 6, 7 or 8 building of 2 storeys or less, which has a total floor area of not greater than 2000 m² and a total volume of not greater than 3000 m³, or

(iii) a class 5, 6, 7 or 8 building of 2 storeys or less, which is constructed in accordance with the requirements of the BCA for a building of Type C construction

It is understood that this amendment is to empower the relevant authorities to proactively collect the information of the existing buildings having combustible external cladding, so that the fire risk can be determined and actions (such as issuing fire orders) can be undertaken to improve fire and life safety.

For this purpose, it is critical for this application clause to cover all the existing buildings that are required by the BCA DtS provisions to have non-combustible external walls. Otherwise, certain fire risks associated with combustible external cladding could be ignored because the coming regulation “deliberately” omit some existing buildings that do not comply with the BCA.

It appears that the application of the draft amendment may intend to be in line with the BCA requirements of Type A or B of construction, as detailed in Table C1.1 of BCA 2016.

Table C1.1 TYPE OF CONSTRUCTION REQUIRED

Rise in storeys	Class of building	
	2, 3, 9	5, 6, 7, 8
4 OR MORE	A	A
3	A	B
2	B	C
1	C	C

However, type of construction also relates to the maximum floor area or the maximum volume of the building, as stipulated in Table C2.2 of BCA 2016.

Table C2.2 MAXIMUM SIZE OF FIRE COMPARTMENTS OR ATRIA

Classification		Type of construction of building		
		Type A	Type B	Type C
5, 9b or 9c <i>aged care building</i>	max <i>floor area</i> —	8 000 m ²	5 500 m ²	3 000 m ²
	max volume—	48 000 m ³	33 000 m ³	18 000 m ³
6, 7, 8 or 9a (except for <i>patient care areas</i>)	max <i>floor area</i> —	5 000 m ²	3 500 m ²	2 000 m ²
	max volume—	30 000 m ³	21 000 m ³	12 000 m ³
Note: See C2.5 for maximum size of compartments in <i>patient care areas</i> in Class 9a <i>health care buildings</i> .				

A number of existing class 5, 6, 7 or 8 buildings of 2 storeys or less have been provided with Type A or B construction, instead of Type C construction, whilst the max floor area or the max volume of such buildings exceed the limits of a building of Type C construction, as stipulated in Table C2.2.

For the abovementioned buildings of Type A or B construction, the BCA Deemed-to-Satisfied provisions require that the external walls, common walls, and the flooring and floor framing in any lift pit must be non-combustible.

The current draft amendment does not apply to the abovementioned buildings, and therefore, is not consistent with the current BCA Deemed-to-Satisfied provisions in relation to buildings with combustible external cladding.

It is unclear whether there are special reasons to exclude the abovementioned buildings that contain combustible external cladding and do not comply with the BCA, or the current statement in item (iii) is based on Table C1.1 of the BCA only, and overlooking the existing buildings constructed based on Table C2.2 of the BCA.

There could be a range of fire risks within the abovementioned buildings that contain combustible external cladding. For instance, combustible external cladding could have been provided to the external walls of a two-storey class 5, 6, 7, or 8 building of Type A or B construction, vertically or horizontally across two fire compartments. Such external walls could have no fire resistance level in accordance with the Specification C1.1 of the BCA. One of the two fire compartments could be a battery room, an electrical transformer room, a large storage, or a room containing dangerous goods. The other fire compartment would be a supermarket, a childcare centre (having less than 10% of the floor area of the storey), or a carpark full of vehicles. A façade fire could easily overcome the fire compartmentation and spread within the building.

As another instance, it does not seem reasonable that the draft amendment applies to a small class 9b Gymnasium Centre on the second storey; whilst the draft amendment does not apply to a two-storey large shopping centre or a large storage building, which is not considered as a large isolated building, is not sprinkler protected, contains combustible external cladding, and does not comply with the BCA.

Therefore, it would be necessary to reconsider clause 167, Application of Part.