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#### ALTERATIONS TO EXISTING BUILDINGS IN QUEENSLAND

Fire and Security Consulting Services (FSCS) is frequently consulted on alterations to existing buildings. See page 5 for the definition of "alterations" to include "additions".

Alterations to existing buildings may encompass minor works as described in Section 1 below or major work such as complete refurbishment as described in Section 2 below.

1. Repairs or replacement of minor portions of a building's structure, fabric or services. In this case, the Building Regulation 2006 may apply as below.

For minor alterations, Part 2, Section 4 of the Building Regulation 2006 may apply. This Regulation allows certain works to be "self assessable' and not require a Building Approval. However the works still need to meet the same standards and records as if an approval was required.

Schedule 1, Sections 7, 8 and 9 address the minor repairs, maintenance or alterations to the structure or Fire Safety Systems of and in the building that are prescribed as self assessable as follows.

Generally, the Regulation requires assessment and approval (i.e. require a Building Approval), if they comprise more that the specified percentage of equipment, floor area or volume as below.

7. Particular repairs, maintenance or alterations not affecting structural component or fire safety system

Building work that consists of repairs, maintenance or alterations to an existing building or structure is prescribed if they do not—

- (a) change the building or structure's floor area or height; and
- **(b)** affect a structural component or the fire safety system of the building or structure.
- 8. Particular repairs, maintenance or alterations only affecting minor structural component
  - (1) This section applies to building work that consists of repairs, maintenance or alterations to an existing building if they—
    - (a) do not change the building or structure's floor area or height; and
    - (b) are for, or only affect, a minor structural component of the building.
  - (2) The building work is prescribed if—
    - (a) the work does not affect more than 20% of the building's structural components of the same type; or
    - (b) if the work is carried out on a sole-occupancy unit in the building the work and other building work of the same type carried out on the unit in the previous 3 years does not affect more than the lesser of the following—
      - (i) 20% of the unit's gross floor area;
      - (ii) 40m<sup>2</sup> of the unit's floor area; or

Page 2
May 15, 2013

- (c) if the building consists of stories and the work is not carried out on a sole-occupancy unit—the work and other building work of the same type carried out on the same storey in the previous 3 years does not affect more than the lesser of the following—
  - (i) 20% of the storey's gross floor area;
  - (ii)  $40m^2$  of the storey's floor area.
- (3) For subsection (1) (b), a structural component is minor only if—
  - (a) the component is—
    - (i) a roof beam or lintel supporting no more than 5m<sup>2</sup> of roof area; or
    - (ii) a sun hood or sun blind projecting no more than 1m from the building; or
  - **(b)** if the work is repairing or maintaining the component—were it not present in the building, the building's general safety and structural integrity would not be at risk;

### Examples—

- replacing a verandah post
- replacing a metal connector or bracing member
- (c) if the work is adding the component to the building the addition does not pose a risk to the building's general safety and structural integrity.
- (4) In this section—

building includes structure.

gross floor area, of a sole-occupancy unit or storey, means the total area of-

- (a) all parts of the unit or storey within its external walls; and
- (b) any other roofed part of the unit or storey.

Example for paragraph (b)—a roofed balcony

# 9 Particular repairs, maintenance or alterations only affecting minor component of fire safety system

- (1) This section applies to building work that consists of repairs, maintenance or alterations to an existing building if they—
  - (a) do not change the building's floor area or height; and
  - (b) only affect a minor component of the building's fire safety system.
- (2) The building work is prescribed if the work—
  - (a) only affects a minor component of the system; and
  - **(b)** does not affect more than 20% of the system's components of the same type.
- (3) For subsection (2) (a), a component is minor only if, were it not present in the fire safety system, the safety of occupants of the building would not be compromised.

● Page 3 May 15, 2013

Examples of a minor component of a fire safety system—

- a sprinkler head
- a smoke alarm
- (4) In this section building includes structure.

### 2. Major Alterations such as refurbishment etc. in excess of Section 1 above

Since 1975 the Building Act has always permitted alterations to be carried out to existing buildings and those alterations to be assessed under the Regulations applicable at the time of the original construction of the building. These are the "Transitional Provisions" or discretional provisions referred to in the Act.

However the extent of alterations needs to be carefully assessed and a Building Certifier should be engaged for advice.

Note that if it is determined that the "Transitional Provisions" can be applied; the various technical requirements required under the original Regulations apply.

An example of this is Australian Standard AS2419.1, the Standard for Fire Hydrants. There are various editions of this Standard published in 1980, 1988, 1991, 1994 and 2005. The evolution of AS2419.1 imposed more stringent requirements as it developed. Unless the Building Certifier deems otherwise under Section 81 (3), the applicable Standard adopted by the Building Regulations at the time of construction applies and not the most recent Standard which may have more stringent requirements.

Alterations to an existing building are permitted under Sections 61, 68 and 81of the Building Act 1975 as follows:-

Section 61 of the current Building Act 1975 states:-

Alteratons to safe existing work may be approved on basis of earlier building assessment provisions

- (1) this Section applies for a building development application if:-
  - (a) the building work is alterations to an existing building or structure; and
  - (b) the building certifier is satisfied the general safety and structural standards of the building or structure would not be at risk if the alterations were to be carried out under earlier building assessment provisions.
- (2) The building certifier may carry out building assessment work for the application on the basis that the building workis to be carried out under the earlier building assessment provisions.

Section 68 of the current Building Act 1975 states:-

Particular alterations not permissible

- 1. This section applies to a building development application for alterations to an existing building or structure.
- 2. However, this section does not apply if-
  - (a) the alterations are for a budget accommodation building, to which chapter 7, part 3, applies; and
  - (b) the purpose of the alterations is to ensure the building or structure complies with the fire safety standard.

Page 4
May 15, 2013

3. The assessment manager must not approve the application unless the building certifier has decided the alterations do not unduly reduce the following-

- (a) the existing level of fire protection for persons accommodated in, or using, the building or structure;
- (b) the existing level of resistance to fire of the building or structure;
- (c) the existing safeguards against spread of fire to adjoining buildings or structures:
- (d) the existing level of emergency egress from the building or structure.

## Section 81 of the current Building Act 1975 states:-

Building development approval for particular alterations may require existing building or structure to comply with building assessment provisions

- (1) This section applies to a building development approval for alterations to an existing building or structure if—
  - (a) the total of the following represents more than half the total volume of the existing building or structure, measured over its roof and external walls—
    - (i) the alterations;
    - (ii) any previous structural alterations to it approved or completed in the previous 3 years; or
  - (b) the building certifier has decided the alterations pose a risk-
    - (i) to the safety of persons in or using the building or structure; or
    - (ii) of spreading fire to adjoining buildings or structures.
- (2) However, this section does not apply if—
  - (a) the alterations are for a budget accommodation building, to which chapter 7, part 3, applies; and
  - (b) the purpose of the alterations is to ensure the building or structure complies with the fire safety standard.
- (3) The building development approval may include a condition that all, or a stated part, of the existing building or structure must comply with all or a stated part of the building assessment provisions as if it were a new building or structure.
- (4) This section does not limit chapter 5, part 3 applying.

## **Summary**

In summary, for minor alterations, Part 2, Section 4 of the Building Regulation 2006 can be demonstrated and documented as applicable.

For all other alterations, existing buildings may be altered, including the addition of extensions, subject to the building being "safe existing work":-

- (1) That building having been proven to have complied with earlier building regulations; and
- (2) The alterations being assessed and shown not to reduce the fire safety features as discussed earlier.

Page 5
May 15, 2013

These two issues are important to be properly assessed:-

(1) The earlier building approvals need to be thoroughly investigated and the building needs to be checked so that any requirements therein are confirmed as being present, not altered and properly maintained; and

(2) The Certifier may require a Fire and / or Structural engineer to confirm that alterations being assessed and shown not to reduce the fire safaety features as discussed earlier.

#### References:

- Building Act 1975 Reprint 6F, dated 01-01-2010
- Building Regulation 2006, Reprint 4C, dated 01-01-2010

#### **Definitions:**

- Definitions of "assessable" and "self-assessable" are provided in Section 232 (1) of the Sustainable Planning Act (Act No 36 of 2009). Because of the complexity of Planning Legislation, it is beyond the scope of this paper to advise on what is assessable or selfassessable, your Building Certifier should be consulted on this matter.
- 2. The Building Act 1975, in Schedule 2, Section 5 (Dictionary) advises that "alterations, to an existing building or structure, includes additions to the building or structure"

## Acknowledgement;

FSCS acknowledges the valuable assistance of Zane Russell of Suncoast Building Approvals for his advice and review of this paper.

FSCS can advse in more detail dependant on the extent of alterations.

I trust that this paper provides information that you will find helpful.

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