

SECTION 306 COMPONENT SERVICEABILITY

306.1 General. The components of a structure and equipment therein shall be maintained in good repair, structurally sound and in a sanitary condition.

306.1.1 Unsafe conditions. Where any of the following conditions cause the component or system to be beyond its limit state, the component or system shall be determined as unsafe and shall be repaired or replaced to comply with the *International Building Code* as required for existing buildings:

1. Soils that have been subjected to any of the following conditions:

- 1.1. Collapse of footing or foundation system;
- 1.2. Damage to footing, foundation, concrete or other structural element due to soil expansion;
- 1.3. Adverse effects to the design strength of footing, foundation, concrete or other structural element due to a chemical reaction from the soil;
- 1.4. Inadequate soil as determined by a geotechnical investigation;
- 1.5. Where the allowable bearing capacity of the soil is in doubt; or
- 1.6. Adverse effects to the footing, foundation, concrete or other structural element due to the ground water table.

2. Concrete that has been subjected to any of the following conditions:

- 2.1. *Deterioration*;
- 2.2. *Ultimate deformation*;
- 2.3. Fractures;
- 2.4. Fissures;
- 2.5. Spalling;
- 2.6. Exposed reinforcement; or
- 2.7. *Detached*, dislodged or failing connections.

3. Aluminum that has been subjected to any of the following conditions:

- 3.1. *Deterioration*;
- 3.2. Corrosion;
- 3.3. Elastic deformation;
- 3.4. *Ultimate deformation*;
- 3.5. Stress or strain cracks;
- 3.6. Joint fatigue; or
- 3.7. *Detached*, dislodged or failing connections

4. Masonry that has been subjected to any of the following conditions:

- 4.1. *Deterioration*;
- 4.2. *Ultimate deformation*;
- 4.3. Fractures in masonry or mortar joints;
- 4.4. Fissures in masonry or mortar joints;
- 4.5. Spalling;
- 4.6. Exposed reinforcement; or
- 4.7. *Detached*, dislodged or failing connections.

5. Steel that has been subjected to any of the following conditions:

- 5.1. *Deterioration*;
- 5.2. Elastic deformation;
- 5.3. *Ultimate deformation*;
- 5.4. Metal fatigue; or
- 5.5. *Detached*, dislodged or failing connections.

6. Wood that has been subjected to any of the following conditions:

- 6.1. *Ultimate deformation*;
- 6.2. *Deterioration*;

- 6.3. Damage from insects, rodents and other vermin;
- 6.4. Fire damage beyond charring;
- 6.5. Significant splits and checks;
- 6.6. Horizontal shear cracks;
- 6.7. Vertical shear cracks;
- 6.8. Inadequate support;
- 6.9. *Detached*, dislodged or failing connections; or
- 6.10. Excessive cutting and notching.

Exceptions:

- 1. When substantiated otherwise by an *approved* method.
- 2. Demolition of unsafe conditions shall be permitted when *approved* by the *code official*.