

Transition Key

ACI 318-11 to ACI 318-14 and ACI 318.2-14
Building Code
Requirements for
Structural Concrete



American Concrete Institute
Always advancing

The following chart is a mapping of provisions from ACI 318-11 to ACI 318-14 and ACI 318.2-14. It is common that a provision may have been divided or repeated. The code was mostly rewritten in the process of the reorganization; thus, the exact wording and context will not be the same at the new location.

Also, the reorganization changed headings, introductions, scopes and pointers used in ACI 318-11 that no longer work in ACI 318-14. Technical changes occurred that have altered or deleted requirements. The following symbols are used in the Note column to more easily identify the type of change, if any:

‡ = Heading, scope statement, introduction, or pointer to another section

~ = Technical change

BLANK = Editorial or no change

Chapter 1 - GENERAL REQUIREMENTS

| 318-11 | 318-14 | Note | Description |
|----------|-------------|------|---|
| 1.1 | --- | ‡ | Heading: Scope |
| | 1.2.2 | | |
| 1.1.1 | 1.2.5 | | |
| | 1.2.7 | | |
| | 19.2.1.1 | | |
| 1.1.2 | 1.2.6 | | |
| 1.1.3 | 1.5.8 | | |
| 1.1.4 | 1.4.5 | | |
| 1.1.5 | 1.4.2 | | |
| 1.1.6 | 1.4.6 | | |
| | 13.2.3.2 | | |
| 1.1.7 | 1.4.7 | | |
| | 13.2.4.1 | | |
| 1.1.8 | --- | ‡ | Heading: Concrete on steel deck |
| 1.1.8.1 | 1.4.4 | | |
| 1.1.8.2 | 1.4.9 | | |
| 1.1.9 | --- | ‡ | Heading: Provisions for earthquake resistance |
| 1.1.9.1 | 4.4.6.1 | | |
| | 5.2.2 | | |
| 1.1.9.2 | 4.4.6.3 | | |
| | 4.4.6.4 | | |
| 1.1.10 | 1.4.8 | | |
| 1.2 | --- | ‡ | Heading: Contract documents |
| 1.2.1 | 1.8.1 | | |
| 1.2.1(a) | 26.2.1(a) | | |
| 1.2.1(b) | 26.2.1(b) | | |
| 1.2.1(c) | 26.4.2.1(c) | | |
| | 26.4.2.2(a) | | |
| 1.2.1(d) | 26.6.1.1(a) | | |
| | 26.3.1(a) | | |
| 1.2.1(e) | 26.6.1.1(b) | | |
| | 26.6.1.1(c) | | |
| | 26.10.1(c) | | |

Chapter 1 - GENERAL REQUIREMENTS

| 318-11 | 318-14 | Note | Description |
|------------|--------------|------|---|
| | 26.7.1(b) | | |
| 1.2.1(f) | 26.7.1(e) | | |
| | 26.7.1(g) | | |
| 1.2.1(g) | 26.5.7.1(a) | | |
| 1.2.1(h) | 26.10.1(a) | | |
| 1.2.1(i) | 26.6.1.1(b) | | |
| | 26.6.1.1(d) | | |
| 1.2.1(j) | 26.6.1.1(e) | | |
| 1.2.1(j) | 26.6.1.1(g) | | |
| 1.2.1(k) | 26.5.6.1(a) | | |
| 1.2.1(l) | 26.4.2.2(a) | | |
| 1.2.1(m) | 26.10.1(b) | | |
| 1.2.1(n) | 26.5.7.1(b) | | |
| 1.2.2 | 1.8.2 | | |
| 1.3 | --- | ‡ | Heading: Inspection |
| 1.3.1 | 26.13.1.1 | | |
| | 26.13.1.2 | | |
| 1.3.2 | 26.13.1.3 | | |
| 1.3.2(a) | 26.13.2.2(c) | | |
| | 26.13.3.2(a) | | |
| 1.3.2(b) | 26.13.3.3(c) | | |
| 1.3.2(c) | 26.13.3.3(a) | | |
| 1.3.2(d) | 26.13.2.2(c) | | |
| | 26.13.3.3(b) | | |
| 1.3.2(e) | 26.13.3.3(d) | | |
| 1.3.2(f) | 26.13.3.2(b) | | |
| 1.3.2(g) | 26.13.2.2(b) | | |
| 1.3.2(h) | 26.13.2.2(a) | | |
| 1.3.3 | 26.13.2.2(d) | | |
| 1.3.4 | 26.13.2.1 | | |
| 1.3.5 | 26.13.1.4 | | |
| 1.4 | --- | ‡ | Heading: Approval of special systems of design or construction |
| 1.4 | 1.10.1 | | |

Chapter 2 - NOTATION and TERMINOLOGY (Only the deleted or revised articles are shown)

| 318-11 | 318-14 | Note | Description |
|-------------------------------------|---------------------------------|------|--|
| 2.1 | 2.2 | ‡ | Heading: Code notation |
| A_2 | A_2 | ~ | Revised notation |
| f'_{cr} | --- | ~ | Reference to ACI 301 replaced this notation |
| f_t | f_t | ~ | Revised notation |
| M_{slab} | M_{sc} | ~ | Revised notation |
| M_1 | M_1 | ~ | Changed sign convention |
| P_n | P_n | ~ | Added tensile strength requirements for concrete |
| $P_{n, max}$ | $P_{n, max}$ | ~ | Added tensile strength requirements for concrete |
| S_i | S_i | ~ | Revised notation for clarity |
| S_n | S_n | ~ | Revised notation |
| v_n | v_n | ~ | Revised notation for clarity |
| γ_f | γ_f | ~ | Revised notation |
| γ_v | γ_v | ~ | Revised notation |
| ψ_t | ψ_t | ~ | Revised notation |
| 2.2 | 2.3 | ‡ | Heading: Definitions |
| Anchorage device | Anchorage device | ~ | Revised reinforcement definitions |
| Bonded tendon | Bonded tendon | ~ | Revised reinforcement definitions |
| Column | Column | ~ | Revised definition for word used in code |
| Compression-controlled section | Compression-controlled section | ~ | Revised definition for clarity |
| Compression-controlled strain limit | --- | ~ | Deleted definition |
| Crosstie | Crosstie 25.3.5 | | |
| Deformed reinforcement | Deformed reinforcement | ~ | Revised reinforcement definitions |
| Headed deformed bars | Headed deformed bars | ~ | Revised reinforcement definitions |
| Headed shear stud reinforcement | Headed shear stud reinforcement | ~ | Revised reinforcement definitions |
| Hoop | Hoop 25.7.4.1 | ~ | Regulate the use of headed bars in hoops |
| Intermediate moment frame | Intermediate moment frame | ~ | Revised definitions to identify members |
| Moment frame | Moment frame | ~ | Revised definitions to identify members |
| Ordinary moment frame | Ordinary moment frame | ~ | Revised definitions to identify members |

Chapter 2 - NOTATION and TERMINOLOGY (Only the deleted or revised articles are shown)

| 318-11 | 318-14 | Note | Description |
|----------------------------|----------------------------|-------------|---|
| Plain reinforcement | Plain reinforcement | ~ | Revised reinforcement definitions |
| Post-tensioning | Post-tensioning | ~ | Revised reinforcement definitions |
| Prestressing reinforcement | Prestressing reinforcement | ~ | Revised reinforcement definitions |
| Pretensioning | Pretensioning | ~ | Revised reinforcement definitions |
| Reinforcement | Reinforcement | ~ | Revised reinforcement definitions |
| Seismic hook | Seismic hook 25.3.4 | | |
| Special moment frame | Special moment frame | ~ | Revised definitions to identify members |
| Tendon | Tendon | ~ | Revised reinforcement definitions |
| Unbonded tendon | Unbonded tendon | ~ | Revised reinforcement definitions |
| Welded wire reinforcement | Welded wire reinforcement | ~ | Revised reinforcement definitions |

Chapter 3 - MATERIALS

| 318-11 | 318-14 | Note | Description |
|---------------|----------------|-------------|---|
| 3.1 | --- | ‡ | Heading: Tests of materials |
| 3.1.1 | 1.6.3 | | |
| 3.1.2 | 1.9.1 | | |
| 3.1.3 | 26.13.2.1 | | |
| 3.2 | --- | ‡ | Heading: Cementitious materials |
| 3.2.1 | 26.4.1.1.1(a) | | |
| 3.2.2 | 26.4.3.1(c) | | |
| 3.3 | --- | ‡ | Heading: Aggregates |
| 3.3.1 | 26.4.1.2.1(a) | | |
| | 26.4.1.2.1(b) | | |
| 3.3.2 | 25.2.1 | | |
| | 25.2.3 | | |
| | 25.2.4 | | |
| | 25.2.5 | | |
| | 25.7.2.1 | | |
| | 25.7.3.1 | | |
| | 26.4.2.1(a)(4) | | |
| 3.4 | --- | ‡ | Heading: Water |
| 3.4.1 | 26.4.1.3.1(a) | | |
| 3.4.2 | 26.4.1.3.1(b) | | |
| 3.5 | --- | ‡ | Heading: Steel reinforcement |
| 3.5.1 | 20.2.1.1 | | |
| | 20.2.2.4 | | |
| | 26.4.1.5.1(a) | | |
| | 26.5.7.1(e) | | |
| 3.5.2 | 26.6.1.1(g) | | |
| | 26.6.4.1(a) | | |
| 3.5.3 | --- | ‡ | Heading: Deformed reinforcement |
| 3.5.3.1 | 20.2.1.3 | | |
| 3.5.3.2 | 20.2.1.2 | ~ | Revise to 0.2 percent offset method to define yield |
| | 26.6.1.2(a) | | |
| 3.5.3.3 | 20.2.1.3 | | |
| | 20.2.2.4 | | |
| 3.5.3.4 | 20.2.1.5 | | |
| 3.5.3.5 | 20.2.1.2 | ~ | Revise to 0.2 percent offset method to define yield |
| | 20.2.1.7 | | |
| | 20.2.1.7.1 | | |
| | 26.6.1.2(a) | | |
| 3.5.3.6 | 20.2.1.2 | ~ | Revise to 0.2 percent offset method to define yield |
| | 20.2.1.7 | | |
| | 20.2.1.7.3 | | |
| | 26.6.1.2(a) | | |

Chapter 3 - MATERIALS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|---|
| | 20.2.1.2 | ~ | Revise to 0.2 percent offset method to define yield |
| | 20.2.1.7 | | |
| 3.5.3.7 | 20.2.1.7.2 | | |
| | 20.2.1.7.3 | | |
| | 26.6.1.2(a) | | |
| 3.5.3.8 | 20.6.2.1 | | |
| | 20.6.2.2 | | |
| 3.5.3.9 | 20.6.2.1 | | |
| | 20.6.2.3 | | |
| | 26.6.1.1(g) | | |
| | 20.2.1.2 | ~ | Revise to 0.2 percent offset method to define yield |
| | 20.2.1.7 | | |
| 3.5.3.10 | 20.6.2.1 | | |
| | 25.4.6.6 | | |
| | 25.5.3.1.3 | | |
| | 26.6.1.2(a) | | |
| | 20.2.1.2 | ~ | Revise to 0.2 percent offset method to define yield |
| | 20.2.1.7 | | |
| 3.5.3.11 | 20.2.1.7.1 | | |
| | 20.2.1.7.2 | | |
| | 20.2.1.7.3 | | |
| | 26.6.1.2(a) | | |
| 3.5.4 | --- | ‡ | Heading: Plain reinforcement |
| 3.5.4.1 | 20.2.1.4 | | |
| | 20.2.2.4 | | |
| | 20.2.1.2 | ~ | Revise to 0.2 percent offset method to define yield |
| 3.5.4.2 | 20.2.1.7 | | |
| | 20.2.2.4 | | |
| | 26.6.1.2(a) | | |
| 3.5.5 | --- | ‡ | Heading: Headed shear stud reinforcement |
| 3.5.5.1 | 20.5.1 | | |
| 3.5.6 | --- | ‡ | Heading: Prestressing steel |
| 3.5.6.1 | 20.3.1.1 | | |
| 3.5.6.2 | 20.3.1.2 | | |
| 3.5.7 | --- | ‡ | Heading: Structural steel, steel pipe, or tubing |
| 3.5.7.1 | 20.4.1.1 | | |
| 3.5.7.2 | 20.4.1.2 | | |
| 3.5.8 | 26.4.1.5.1(a) | | |
| 3.5.9 | 20.2.1.6 | | |
| 3.6 | --- | ‡ | Heading: Admixtures |
| 3.6.1 | 26.4.1.4.1(a) | | |
| 3.6.2 | 26.4.1.4.1(a) | | |
| 3.6.3 | 26.4.1.4.1(b) | | |
| 3.6.4 | 26.4.1.4.1(c) | | |

Chapter 3 - MATERIALS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--------------------------------------|
| 3.6.5 | 26.4.1.4.1(d) | | |
| 3.7 | --- | ‡ | Heading: Storage of materials |
| 3.7.1 | 26.5.1.1(a) | | |
| 3.7.2 | 26.5.1.1(b) | | |
| 3.8 | --- | ‡ | Heading: Referenced standards |
| 3.8.1 | 3.1.1 | | |
| 3.8.1 | 3.2.4 | ~ | Update ASTMs |
| 3.8.2 | 3.1.1 | | |
| 3.8.2 | 3.2.5 | | |
| 3.8.3 | 3.1.1 | | |
| 3.8.3 | 3.2.3 | | |
| 3.8.4 | 3.1.1 | | |
| 3.8.4 | 3.2.2 | | |
| 3.8.5 | 3.1.1 | | |
| 3.8.5 | 3.2.1 | ~ | Update references in AASHTO |
| 3.8.6 | 3.1.1 | | |
| 3.8.6 | 3.2.2 | | |
| 3.8.7 | 3.1.1 | | |
| 3.8.7 | 3.2.2 | | |
| 3.8.8 | 3.1.1 | | |
| 3.8.8 | 3.2.5 | | |
| 3.8.9 | 3.1.1 | | |
| 3.8.9 | 3.2.2 | | |
| 3.8.10 | 3.1.1 | | |
| 3.8.10 | 3.2.2 | | |

Chapter 4 - DURABILITY REQUIREMENTS

| 318-11 | 318-14 | Note | Description |
|-------------|-----------------|------|---|
| 4.1 | --- | ‡ | Heading: General |
| | 19.2.1.1 | | |
| 4.1.1 | 26.4.1.1.1(b) | | |
| | 26.4.2.1(a)(3) | | |
| 4.1.2 | 19.3.2.1 | | |
| 4.2 | --- | ‡ | Heading: Exposure categories and classes |
| 4.2.1 | 19.3.1.1 | ~ | Changing description of "F Conditions" |
| | 26.4.2.1(b) | | Changing "P" to "W" |
| Table 4.2.1 | Table 19.3.1.1 | ~ | Changing description of "F Conditions" |
| | | | Changing "P" to "W" |
| 4.3 | --- | ‡ | Heading: Requirements for concrete mixtures |
| | 19.3.2.1 | ~ | Changing "P" to "W" and changing values of "F" |
| | 26.4.2.1(a)(3) | | Update of cement types |
| 4.3.1 | 26.4.2.1(a)(6) | | |
| | 26.4.2.1(a)(7) | | |
| | 26.4.2.1(a)(8) | | |
| Table 4.3.1 | Table 19.3.2.1 | ~ | Changing "P" to "W" and changing values of "F" |
| | | | Update of cement types |
| 4.4 | --- | ‡ | Heading: Additional requirements for freezing-and-thawing exposure |
| 4.4.1 | 19.3.3.1 | | |
| 4.4.1 | 19.3.3.2 | ~ | Clarify required air volume for air-entrained concrete |
| 4.4.1 | 19.3.3.3 | | |
| 4.4.1 | 26.4.2.1(a)(5) | | |
| Table 4.4.1 | Table 19.3.3.1 | | |
| 4.4.2 | 19.3.3.4 | | |
| 4.4.2 | 26.4.2.2(b) | | |
| Table 4.4.2 | Table 26.4.2.2b | | |
| 4.5 | --- | ‡ | Heading: Alternative cementitious materials for sulfate exposure |
| 4.5.1 | 26.4.2.2(c) | | |
| Table 4.5.1 | Table 26.4.2.2c | | |

Chapter 5 - CONCRETE QUALITY, MIXING, AND PLACING

| 318-11 | 318-14 | Note | Description |
|---------------|--|------|---|
| 5.1 | --- | ‡ | Heading: General |
| 5.1.1 | 19.2.1.1 19.2.1.2 | | |
| 5.1.2 | --- | ‡ | Pointer to 5.6.3 |
| 5.1.3 | 19.2.1.3 26.4.2.1(a)(1) 26.4.2.1(a)(2) | | |
| 5.1.4 | 19.2.4.3 | | |
| 5.1.5 | --- | ~ | Requirement no longer necessary |
| 5.1.6 | 19.2.1.1 26.4.2.2(d) 26.4.2.2(d)(1) | | |
| 5.2 | --- | ‡ | Heading: Selection of concrete proportions |
| 5.2.1 | 26.4.3.1(a) | | |
| 5.2.2 | 26.4.3.1(d) | | |
| 5.2.3 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.3 | --- | ‡ | Heading: Proportioning on the basis of field experience or trial mixtures, or both |
| 5.3 | 26.4.3.1(b) | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.3.1 | --- | ‡ | Heading: Sample standard deviation |
| 5.3.1.1 | --- | ~ | Remove statistical mix proportioning and ref. ACI 301 Clarify the length of time to keep records |
| 5.3.1.2 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| Table 5.3.1.2 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.3.2 | --- | ‡ | Heading: Required average strength |
| 5.3.2.1 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| Table 5.3.2.1 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.3.2.2 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| Table 5.3.2.2 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.3.3 | --- | ‡ | Heading: Documentation of average compressive strength |
| 5.3.3 | 26.4.4.1(a) | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.3.3.1 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.3.3.2 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.4 | --- | ‡ | Heading: Proportioning without field experience or trial mixtures |
| 5.4.1 | 26.4.4.1(b) | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.4.2 | --- | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.5 | --- | ‡ | Heading: Average compressive strength reduction |
| 5.5 | 26.4.4.1(c) | ~ | Remove statistical mix proportioning and reference ACI 301 |
| 5.6 | --- | ‡ | Heading: Evaluation and acceptance of concrete |
| 5.6.1 | 26.12.1.1(b) 26.12.1.1(c) 26.12.1.1(d) 26.12.1.1(e) | | |

Chapter 5 - CONCRETE QUALITY, MIXING, AND PLACING

| 318-11 | 318-14 | Note | Description |
|---------------|-----------------|-------------|--|
| 5.6.2 | --- | ‡ | Heading: Frequency of testing |
| 5.6.2.1 | 26.12.2.1(a) | | |
| 5.6.2.2 | 26.12.2.1(b) | | |
| 5.6.2.3 | 26.12.2.1(c) | | |
| 5.6.2.4 | 26.12.1.1(a) | | |
| 5.6.3 | --- | ‡ | Heading: Standard-cured specimens |
| 5.6.3.1 | 26.12.3.1(a) | | |
| 5.6.3.2 | 26.12.3.1(a) | | |
| 5.6.3.3 | 26.12.3.1(b) | | |
| 5.6.3.4 | 26.12.3.1(c) | | |
| | 26.12.3.1(d) | | |
| 5.6.4 | --- | ‡ | Heading: Field-cured specimens |
| 5.6.4.1 | 26.5.3.2(d) | | |
| 5.6.4.2 | 26.5.3.2(d)(2) | | |
| 5.6.4.3 | 26.5.3.2(d)(1) | | |
| 5.6.4.4 | 26.5.3.2(e) | | |
| | 26.5.3.2(e)(1) | | |
| | 26.5.3.2(e)(2) | | |
| 5.6.5 | --- | ‡ | Heading: Investigation of low-strength test results |
| 5.6.5.1 | 26.12.4.1(a) | | |
| 5.6.5.2 | 26.12.4.1(b) | | |
| 5.6.5.3 | 26.12.4.1(c) | | |
| 5.6.5.4 | 26.12.4.1(d) | | |
| | 26.12.4.1(e) | | |
| 5.6.5.5 | 26.12.4.1(f) | | |
| 5.6.6 | --- | ‡ | Heading: Steel fiber-reinforced concrete |
| 5.6.6.1 | 26.12.5.1(a)(1) | | |
| 5.6.6.2 | 26.4.2.1(a)(11) | | |
| | 26.12.5.1(a) | | |
| 5.6.6.2(a) | 26.4.2.2(d)(2) | | |
| 5.6.6.2(b) | 26.12.5.1(a)(2) | | |
| 5.6.6.2(c) | 26.12.5.1(a)(3) | | |
| 5.7 | --- | ‡ | Heading: Preparation of equipment and place of deposit |
| 5.7.1 | --- | ‡ | Introduction to a list |
| 5.7.1(a) | 26.5.1.1(c) | ~ | Clarified that equipment shall be maintained by ASTM C94 or C685 |
| 5.7.1(b) | 26.5.2.1(a) | | |
| 5.7.1(c) | 26.11.1.1(a) | | |
| 5.7.1(d) | 26.5.2.1(c) | | |
| 5.7.1(e) | 26.6.1.2(d) | | |
| 5.7.1(f) | 26.5.2.1(b) | | |
| 5.7.1(g) | 26.5.6.2(d) | | |
| 5.8 | --- | ‡ | Heading: Mixing |
| 5.8.1 | --- | ~ | Information repeated ASTM C94 |

Chapter 5 - CONCRETE QUALITY, MIXING, AND PLACING

| 318-11 | 318-14 | Note | Description |
|---------------|----------------|-------------|---|
| 5.8.2 | 26.5.1.1(d) | | |
| 5.8.3 | --- | ~ | Information repeated ASTM C94 |
| 5.9 | --- | ‡ | Heading: Conveying |
| 5.9.1 | 26.5.2.1(f)(3) | | |
| 5.9.2 | 26.5.2.1(f)(1) | | |
| 5.9.2 | 26.5.2.1(f)(4) | | |
| 5.9.2 | 26.5.2.1(d) | | |
| 5.10 | --- | ‡ | Heading: Depositing |
| 5.10.1 | 26.5.2.1(f)(5) | | |
| 5.10.2 | 26.5.2.1(f)(2) | | |
| 5.10.3 | 26.5.2.1(g) | | |
| 5.10.4 | 26.5.2.1(h) | ~ | Added reference to ASTM C94 for retempering |
| 5.10.5 | 26.5.2.1(i) | | |
| 5.10.6 | 26.5.2.1(k) | | |
| 5.10.7 | --- | ‡ | Pointer to 6.4 |
| 5.10.8 | 26.5.2.1(j) | | |
| 5.11 | --- | ‡ | Heading: Curing |
| 5.11.1 | 26.5.3.2(a) | | |
| 5.11.2 | 26.5.3.2(b) | | |
| 5.11.3 | --- | ‡ | Heading: Accelerated curing |
| 5.11.3.1 | 26.5.3.2(c) | | |
| 5.11.3.2 | 26.5.3.2(c)(1) | | |
| 5.11.3.3 | 26.5.3.2(c)(2) | | |
| 5.11.4 | 26.5.3.1(a) | | |
| | 26.5.3.2(d) | | |
| 5.12 | --- | ‡ | Heading: Cold weather requirements |
| 5.12.1 | 26.5.4.2(a) | | |
| 5.12.2 | 26.5.4.2(b) | | |
| 5.12.3 | 26.5.4.2(c) | | |
| 5.13 | --- | ‡ | Heading: Hot weather requirements |
| | 26.5.5.1(a) | | |
| 5.13 | 26.5.5.2(a) | | |
| | 26.5.5.2(b) | | |

Chapter 6 - FORMWORK, EMBEDMENTS, AND CONSTRUCTION JOINTS

| 318-11 | 318-14 | Note | Description |
|---------------|-----------------|-------------|---|
| 6.1 | --- | ‡ | Heading: Design of formwork |
| 6.1 | 26.11.1.1(a) | | |
| 6.1.1 | 26.11.1.2(b) | | |
| 6.1.2 | 26.11.1.2(c) | | |
| 6.1.3 | 26.11.1.2(d) | | |
| 6.1.4 | 26.11.1.2(a)(4) | | |
| | 26.11.1.2(a) | | |
| 6.1.5 | 26.11.1.2(a)(1) | | |
| | 26.11.1.2(a)(2) | | |
| | 26.11.1.2(a)(3) | | |
| 6.1.6 | 26.11.1.2(a)(5) | | |
| 6.2 | --- | ‡ | Heading: Removal of forms, shores, and reshoring |
| 6.2.1 | --- | ‡ | Heading: Removal of forms |
| 6.2.1 | 26.11.2.1(f) | | |
| | 26.11.2.1(g) | | |
| 6.2.2 | --- | ‡ | Heading: Removal of shores and reshores |
| 6.2.2.1 | 26.11.2.1(a) | | |
| 6.2.2.1(a) | 26.11.2.1(b) | | |
| 6.2.2.1(b) | 26.11.2.1(c) | | |
| 6.2.2.1(c) | 26.11.2.1(d) | | |
| | 26.11.2.1(e) | | |
| 6.2.2.2 | 26.11.2.1(i) | | |
| 6.2.2.3 | 26.11.2.1(h) | | |
| 6.3 | --- | ‡ | Heading: Embedments in concrete |
| 6.3.1 | 20.7.2 | | |
| | 26.8.1(a) | | |
| | 26.8.2(a) | | |
| 6.3.2 | 20.7.3 | | |
| | 26.5.2.1(e) | | |
| | 26.8.2(b) | | |
| 6.3.3 | 20.7.1 | | |
| 6.3.4 | --- | ~ | Outdated embedment requirements |
| 6.3.5 | --- | ~ | Outdated embedment requirements |
| 6.3.5.1 | --- | ~ | Outdated embedment requirements |
| 6.3.5.2 | --- | ~ | Outdated embedment requirements |
| 6.3.5.3 | 20.7.1 | | |
| 6.3.6 | --- | ~ | Outdated embedment requirements |
| 6.3.6.1 | --- | ~ | Outdated embedment requirements |
| 6.3.6.2 | --- | ~ | Outdated embedment requirements |
| 6.3.6.3 | --- | ~ | Outdated embedment requirements |
| 6.3.7 | 26.8.2(c) | | |
| 6.3.8 | 26.8.2(d) | | |
| 6.3.9 | 26.8.2(e) | | |

Chapter 6 - FORMWORK, EMBEDMENTS, AND CONSTRUCTION JOINTS

| 318-11 | 318-14 | Note | Description |
|---------------|-----------------------|-------------|-------------------------------------|
| 6.3.10 | 20.7.5 26.8.1(c) | | |
| 6.3.11 | 20.7.4 26.8.1(b) | | |
| 6.3.12 | 26.8.2(f) | | |
| 6.4 | --- | ‡ | Heading: Construction joints |
| 6.4.1 | 26.5.6.2(d) | | |
| 6.4.2 | 26.5.6.2(f) | | |
| 6.4.3 | 26.5.6.1(b) 20.7.1 | | |
| 6.4.4 | 26.5.6.2(b) | | |
| 6.4.5 | 26.5.6.2(c) | | |
| 6.4.6 | 26.5.7.2(a) | | |
| 6.4.7 | 26.5.7.2(b) | | |

Chapter 7 - DETAILS OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|---------------|--|-------------|---|
| 7.1 | --- | ‡ | Heading: Standard hooks |
| 7.1 | 25.3.1 | | |
| 7.1.1 | 25.3.1 | | |
| 7.1.2 | 25.3.1 | | |
| 7.1.3 | 25.3.2 | ~ | Revised so that standard hooks meet seismic hook requirements |
| 7.1.4 | 25.3.4 | | |
| 7.2 | --- | ‡ | Heading: Minimum bend diameters |
| 7.2.1 | 25.3.1 | | |
| 7.2.2 | 25.3.2 | | |
| 7.2.3 | 25.3.3 | | |
| 7.3 | --- | ‡ | Heading: Bending |
| 7.3.1 | 26.6.3.1(a) | | |
| 7.3.2 | 26.6.3.1(b) | | |
| 7.4 | --- | ‡ | Heading: Surface conditions of reinforcement |
| 7.4.1 | 26.6.1.2(d) | | |
| 7.4.2 | 26.6.1.2(b) | | |
| 7.4.3 | 26.6.1.2(c) | | |
| 7.5 | --- | ‡ | Heading: Placing reinforcement |
| 7.5.1 | 26.6.2.2(a) 26.10.2(b) 26.6.2.1(a) | | |
| 7.5.2 | 26.6.2.1(b) 26.10.1(d) | | |
| 7.5.2.1 | 26.6.2.1(a) | | |
| 7.5.2.2 | 26.6.2.1(b) | | |
| 7.5.3 | 7.7.3.7 | | |
| 7.5.4 | 26.6.4.1(b) | | |
| 7.6 | --- | ‡ | Heading: Spacing limits for reinforcement |
| 7.6.1 | 25.2.1 | | |
| 7.6.2 | 25.2.2 | | |
| 7.6.3 | 25.2.3 | | |
| 7.6.4 | 25.5.1.2 | | |
| 7.6.5 | 7.7.2.3 8.7.2.2 11.7.2.1 11.7.2.2 | | |
| 7.6.6 | --- | ‡ | Heading: Bundled bars |
| 7.6.6.1 | 25.6.1.1 | | |
| 7.6.6.2 | 25.6.1.2 | | |
| 7.6.6.3 | 25.6.1.3 | | |
| 7.6.6.4 | 25.6.1.4 | | |
| 7.6.6.5 | 25.6.1.6 | | |
| 7.6.7 | --- | ‡ | Heading: Tendons and ducts |

Chapter 7 - DETAILS OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|--------------|---------------|------|--|
| | 25.2.4 | | |
| 7.6.7.1 | 25.2.5 | | |
| | 25.2.6 | | |
| 7.6.7.2 | 25.6.2.1 | | |
| 7.7 | --- | ‡ | Heading: Concrete protection for reinforcement |
| | --- | ‡ | Heading: Cast-in-place concrete (nonprestressed) |
| | 20.6.1.1 | | |
| 7.7.1 | 20.6.1.3.1 | | |
| | 318.2-5.1 | | |
| | 318.2-5.1.1 | | |
| | --- | ‡ | Heading: Cast-in-place concrete (prestressed) |
| | 20.6.1.1 | | |
| 7.7.2 | 20.6.1.3.2 | | |
| | 318.2-5.1 | | |
| | 318.2-5.1.2 | | |
| | --- | ‡ | Heading: Precast concrete (manufactured under plant conditions) |
| 7.7.3 | 20.6.1.1 | | |
| | 20.6.1.3.3 | | |
| | 318.2-5.1 | | |
| | 318.2-5.1.3 | | |
| 7.7.4 | --- | ‡ | Heading: Bundled bars |
| 7.7.4 | 20.6.1.3.4 | | |
| 7.7.5 | --- | ‡ | Heading: Headed shear stud reinforcement |
| | 20.6.1.3.5 | | |
| 7.7.6 | --- | ‡ | Heading: Corrosive environments |
| 7.7.6 | 20.6.1.4.1 | | |
| | 318.2-5.1.4.1 | | |
| | 20.6.1.4.2 | | |
| 7.7.6.1 | 20.6.1.4.3 | | |
| | 318.2-5.1.4.2 | | |
| | 318.2-5.1.4.3 | | |
| | --- | ‡ | Heading: Future extensions |
| 7.7.7 | 26.6.1.1(i) | | |
| | 26.7.1(k) | | |
| | 26.8.1(d) | | |
| 7.7.8 | --- | ‡ | Heading: Fire protection |
| | 4.11.2 | | |
| 7.8 | --- | ‡ | Heading: Reinforcement details for columns |
| 7.8.1 | --- | ‡ | Heading: Offset bars |
| 7.8.1 | --- | ‡ | Introduction to section |
| 7.8.1.1 | 10.7.4.1 | | |
| 7.8.1.2 | 10.7.4.1 | | |

Chapter 7 - DETAILS OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|---------------|---|------|--|
| 7.8.1.3 | 10.7.6.4.1 10.7.6.4.2 | | |
| 7.8.1.4 | 26.6.3.1(c) | | |
| 7.8.1.5 | 10.7.4.2 | | |
| 7.8.2 | --- | ‡ | Heading: Steel cores |
| 7.8.2 | --- | ‡ | Introduction to section |
| 7.8.2.1 | 10.7.5.3.2 | | |
| 7.8.2.2 | 10.7.5.3.2 | | |
| 7.8.2.3 | --- | ‡ | Pointer to 15.8 |
| 7.8.2.4 | 16.3.1.3 | | |
| 7.9 | --- | ‡ | Heading: Connections |
| 7.9.1 | 15.4.3 | | |
| 7.9.2 | 15.4.3 | | |
| 7.10 | --- | ‡ | Heading: Transverse reinforcement for compression members |
| 7.10.1 | 10.7.6.1.5 | | |
| 7.10.2 | 10.7.6.1.5 | | |
| 7.10.3 | 10.7.6.1.5 | | |
| 7.10.4 | --- | ‡ | Heading: Spirals |
| 7.10.4.1 | 25.7.3.1 26.6.2.2(b) | | |
| 7.10.4.2 | 25.7.3.2 | | |
| 7.10.4.3 | 25.7.3.1 | | |
| 7.10.4.4 | 25.7.3.4 | | |
| 7.10.4.5 | 25.7.3.5 | ~ | Add fyt limit for lap splices |
| 7.10.4.5 | 25.7.3.6 | | |
| 7.10.4.6 | 10.7.6.3.1 10.7.6.3.2 | | |
| 7.10.4.7 | 10.7.6.3.2 | | |
| 7.10.4.8 | 10.7.6.3.2 | | |
| 7.10.4.9 | 26.6.2.2(a) | | |
| 7.10.5 | --- | ‡ | Heading: Ties |
| 7.10.5.1 | 9.7.6.4.2 25.6.1.2 25.7.2.2 25.7.2.2.1 | | |
| 7.10.5.2 | 9.7.6.4.3 23.6.3.1 25.7.2.1 | | |
| 7.10.5.3 | 9.7.6.4.4 23.6.3.3 25.7.2.3 | | |
| 7.10.5.4 | 25.7.2.4 25.7.2.4.1 | | |

Chapter 7 - DETAILS OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|-------------|------------|------|---|
| | 10.7.6.2.1 | | |
| 7.10.5.5 | 10.7.6.2.2 | | |
| | 23.6.3.2 | | |
| 7.10.5.6 | 10.7.6.2.2 | | |
| 7.10.5.7 | 10.7.6.1.6 | | |
| 7.11 | --- | ‡ | Heading: Transverse reinforcement for flexural members |
| | 9.7.6.4.1 | | |
| 7.11.1 | 9.7.6.4.2 | | |
| | 9.7.6.4.3 | | |
| | 9.7.6.3.1 | | |
| 7.11.2 | 9.7.6.4.1 | | |
| | 25.7.1.6.1 | | |
| | 25.7.1.7 | | |
| 7.11.3 | 25.7.1.6.1 | | |
| | 25.7.1.7 | | |
| | 25.7.2.3.1 | | |
| 7.12 | --- | ‡ | Heading: Shrinkage and temperature reinforcement |
| 7.12.1 | 24.4.1 | | |
| 7.12.1.1 | 24.4.1 | | |
| 7.12.1.2 | 24.4.2 | | |
| 7.12.2 | 24.4.3.1 | | |
| | 7.6.1.1 | | |
| 7.12.2.1 | 8.6.1.1 | | |
| | 24.4.3.2 | | |
| | 7.7.6.2.1 | | |
| 7.12.2.2 | 8.7.2.2 | | |
| | 24.4.3.3 | | |
| 7.12.2.3 | 24.4.3.4 | | |
| | 25.4.10.2 | | |
| 7.12.3 | 7.6.4.2 | | |
| | 24.4.4.1 | | |
| 7.12.3.1 | 24.4.4.1 | | |
| 7.12.3.2 | 7.6.4.2.1 | | |
| 7.12.3.3 | 7.6.4.2.2 | | |
| 7.12.3.4 | 7.6.4.2.3 | | |
| | 7.7.6.3.1 | | |
| 7.12.3.5 | 7.7.6.3.2 | ~ | Concrete area for S&T in prestressed |
| 7.13 | --- | ‡ | Heading: Requirements for structural integrity |
| 7.13.1 | 4.10.1.1 | | |
| 7.13.2 | --- | ‡ | Introduction to section |
| | 8.8.1.6 | | |
| 7.13.2.1 | 9.8.1.6 | | |
| | 25.4.10.2 | | |

Chapter 7 - DETAILS OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|----------|------------|------|---------------------------------|
| | 9.7.7.1(a) | | |
| | 9.7.7.1(b) | | |
| 7.13.2.2 | 9.7.7.3 | | |
| | 9.7.7.4 | | |
| | 25.4.10.2 | | |
| 7.13.2.3 | 9.7.7.1(c) | | |
| | 25.7.1.6 | | |
| 7.13.2.4 | 9.7.7.5 | | |
| | 9.7.7.6 | | |
| | 9.7.7.2 | | |
| | 9.7.7.3 | | |
| 7.13.2.5 | 9.7.7.4 | | |
| | 9.7.7.5 | | |
| | 9.7.7.6 | | |
| | 25.4.10.2 | | |
| 7.13.2.6 | --- | ‡ | Pointer to 13.3.8.5 |
| 7.13.2.7 | --- | ‡ | Pointer to 18.12.6 and 18.12.7 |
| 7.13.3 | 16.2.1.8 | | |
| 7.13.4 | --- | ‡ | Pointer to 13.3.8.6 and 18.12.8 |

Chapter 8 - ANALYSIS AND DESIGN – GENERAL CONSIDERATIONS

| 318-11 | 318-14 | Note | Description |
|---------------|-----------------|-------------|--|
| 8.1 | --- | ‡ | Heading: Design methods |
| 8.1.1 | 22.1.3 | | |
| 8.1.2 | --- | ~ | Pointer to Appendix B |
| 8.1.3 | --- | ~ | Pointer to Appendix D |
| 8.2 | --- | ‡ | Heading: Loading |
| 8.2.1 | 4.4.4 | | |
| 8.2.2 | 5.2.2 | | |
| | 5.2.3 | ~ | Add reference to ASCE 7 for live load reduction |
| 8.2.3 | 4.4.4 | | |
| 8.2.4 | 4.4.5 | | |
| | 5.3.4 | | |
| 8.3 | --- | ‡ | Heading: Methods of analysis |
| 8.3.1 | 6.2.2 | | |
| 8.3.2 | 6.5 | | |
| | 6.5.1 | | |
| 8.3.3 | 6.5.2 | | |
| | 6.5.4 | | |
| 8.3.4 | 6.2.4.3 | | |
| | 22.1.2 | | Pointer to Appendix A |
| 8.4 | --- | ‡ | Heading: Redistribution of moments in continuous flexural members |
| | 6.5.3 | | |
| | 6.6.1.2 | | |
| 8.4.1 | 6.6.5.1 | | |
| | 6.6.5.3 | | |
| | 6.7.1.4 | | |
| | 6.8.1.5 | | |
| 8.4.2 | 6.6.5.1 | | |
| 8.4.3 | 6.6.5.4 | | |
| | 6.6.5.5 | | |
| 8.5 | --- | ‡ | Heading: Modulus of elasticity |
| 8.5.1 | 19.2.2.1 | | |
| 8.5.2 | 20.2.2.2 | | |
| 8.5.3 | 20.3.2.1 | | |
| 8.6 | --- | ‡ | Heading: Lightweight concrete |
| | 19.2.4.1 | | |
| 8.6.1 | 19.2.4.2 | | |
| | 19.2.4.3 | | |
| | 26.4.2.1(a)(10) | | |
| 8.7 | --- | ‡ | Heading: Stiffness |
| 8.7.1 | 6.3.1.1 | | |
| 8.7.2 | 6.3.1.3 | | |
| | 24.2.3.2 | | |
| 8.8 | --- | ‡ | Heading: Effective stiffness to determine lateral deflections |

Chapter 8 - ANALYSIS AND DESIGN – GENERAL CONSIDERATIONS

| 318-11 | 318-14 | Note | Description |
|---------------|--|-------------|---|
| 8.8.1 | 6.6.3.2.2 6.7.2.2.2 | | |
| 8.8.2 | 6.6.3.1.1 6.6.3.1.2 | | |
| 8.8.3 | 6.6.3.1.3 | | |
| 8.9 | --- | ‡ | Heading: Span length |
| 8.9.1 | 2.2 | | Moved to definitions |
| 8.9.2 | 2.2 | | Moved to definitions |
| 8.9.3 | 7.4.2.1 8.4.2.1 9.4.2.1 | | |
| 8.9.4 | 6.6.2.3(a) | | |
| 8.10 | --- | ‡ | Heading: Columns |
| 8.10.1 | 10.4.2.1 | | |
| 8.10.2 | 6.6.2.2 | | |
| 8.10.3 | 6.3.1.2 | | |
| 8.10.4 | 6.5.5 6.6.2.1 | | |
| 8.11 | --- | ‡ | Heading: Arrangement of live loads |
| 8.11.1 | 6.3.1.2 6.4.1 | | |
| 8.11.2 | 6.4.2 | | |
| 8.12 | --- | ‡ | Heading: T-beam construction |
| 8.12.1 | 6.3.2.1 | | |
| 8.12.2 | 6.3.2.1 | | |
| 8.12.3 | 6.3.2.1 | | |
| 8.12.4 | 6.3.2.2 | | |
| 8.12.5 | 7.5.2.3 9.2.4.3 | | |
| 8.12.5.1 | 7.5.2.3 | | |
| 8.12.5.2 | 7.7.2.4 | | |
| 8.13 | --- | ‡ | Heading: Joist construction |
| 8.13.1 | 8.8.1.1 9.8.1.1 | | |
| 8.13.2 | 8.8.1.2 8.8.1.3 9.8.1.2 9.8.1.3 | | |
| 8.13.3 | 8.8.1.4 9.8.1.4 | | |
| 8.13.4 | 8.8.1.8 9.8.1.8 | | |
| 8.13.5 | 8.8.2.1 9.8.2.1 | | |

Chapter 8 - ANALYSIS AND DESIGN – GENERAL CONSIDERATIONS

| 318-11 | 318-14 | Note | Description |
|---------------|-------------------------------|-------------|---------------------------------------|
| 8.13.5.1 | 8.8.2.1.2 9.8.2.1.2 | | |
| 8.13.5.2 | 8.8.2.1.1 9.8.2.1.1 | | |
| 8.13.5.3 | 9.8.1.7 | | |
| 8.13.6 | 8.8.3.1 9.8.3.1 | | |
| 8.13.6.1 | 8.8.3.1 9.8.3.1 | | |
| 8.13.6.2 | 8.8.1.7 9.8.1.7 | | |
| 8.13.7 | --- | ~ | Outdated embedment requirements |
| 8.13.8 | 8.8.1.5 9.8.1.5 | | |
| 8.14 | --- | ‡ | Heading: Separate floor finish |
| 8.14.1 | 7.3.1.2 8.3.1.3 9.3.1.2 | | |
| 8.14.2 | 20.6.1.2 | | |

Chapter 9 - STRENGTH AND SERVICEABILITY REQUIREMENTS

| 318-11 | 318-14 | Note | Description |
|----------|----------|------|---|
| 9.1 | --- | ‡ | Heading: General |
| | 4.4.4 | | |
| | 4.6.2 | | |
| | 7.5.1.1 | | |
| | 8.5.1.1 | | |
| | 9.5.1.1 | | |
| | 10.5.1.1 | | |
| 9.1.1 | 11.5.1.1 | | |
| | 12.5.1.1 | | |
| | 14.5.1.1 | | |
| | 16.2.3.1 | | |
| | 16.3.3.1 | | |
| | 16.5.4.1 | | |
| | 22.1.3 | | |
| 9.1.2 | 4.7.1 | | |
| 9.1.3 | --- | ~ | Pointer to Appendix C |
| 9.2 | --- | ‡ | Heading: Required strength |
| 9.2.1 | 5.3.1 | | |
| | 5.3.2 | | |
| 9.2.1(a) | 5.3.3 | | |
| 9.2.1(b) | 5.3.5 | | |
| 9.2.1(c) | --- | ~ | Removal of the service-level load earthquake load combination |
| 9.2.2 | --- | ‡ | Heading: Impact effects |
| 9.2.2 | 5.3.4 | | |
| 9.2.3 | --- | ‡ | Heading: Self-straining effects |
| 9.2.3 | 5.3.6 | | |
| 9.2.4 | --- | ‡ | Heading: Fluid loads |
| 9.2.4 | 5.3.7 | | |
| 9.2.5 | --- | ‡ | Heading: Lateral soil pressure |
| 9.2.5 | 5.3.8 | | |
| 9.2.6 | --- | ‡ | Heading: Flood and ice loads |
| 9.2.6 | 5.3.9 | | |
| | 5.3.10 | | |
| 9.2.7 | --- | ‡ | Heading: Prestressing steel jacking force |
| 9.2.7 | 5.3.12 | | |
| | 25.9.2.1 | | |
| 9.3 | --- | ‡ | Heading: Design strength |
| 9.3.1 | 4.6.1 | | |
| | 21.2.1 | | |
| 9.3.2 | --- | ‡ | Introduction to section |
| 9.3.2.1 | 21.2.2 | | |
| | 4.1.3 | | |
| 9.3.2.2 | 21.2.2 | | |

Chapter 9 - STRENGTH AND SERVICEABILITY REQUIREMENTS

| 318-11 | 318-14 | Note | Description |
|---------------|--|-------------|---|
| 9.3.2.3 | 21.2.1 | | |
| 9.3.2.4 | 22.8.1.2 21.2.1 | | |
| 9.3.2.5 | 21.2.1 | | |
| 9.3.2.6 | 21.2.1 | | |
| 9.3.2.7 | 21.2.3 | | |
| 9.3.3 | 25.4.1.3 | | |
| 9.3.4 | 21.2.4 21.2.4.1 21.2.4.2 21.2.4.3 | | |
| 9.3.5 | 21.2.1 | | |
| 9.4 | --- | ‡ | Heading: Design strength for reinforcement |
| 9.4 | 20.2.2.4 | | |
| 9.5 | --- | ‡ | Heading: Control of deflections |
| 9.5.1 | 24.2.1 | | |
| 9.5.2 | --- | ‡ | Heading: One-way construction (nonprestressed) |
| 9.5.2.1 | 7.3.1.1 7.3.1.1.1 7.3.1.1.2 9.3.1.1 9.3.1.1.1 9.3.1.1.2 | | |
| Table 9.5(a) | Table 7.3.1.1 Table 9.3.1.1 | | |
| 9.5.2.2 | 24.2.3.1 | | |
| 9.5.2.3 | 19.2.3.1 24.2.3.5 | | |
| 9.5.2.4 | 24.2.3.6 24.2.3.7 | | |
| 9.5.2.5 | 24.2.4.1.1 24.2.4.1.2 24.2.4.1.3 | | |
| 9.5.2.6 | 24.2.2 | | |
| Table 9.5(b) | Table 24.2.2 | | |
| 9.5.3 | --- | ‡ | Heading: Two-way construction (nonprestressed) |
| 9.5.3.1 | 8.3.1.1 8.3.1.2 | | |
| 9.5.3.2 | 8.3.1.1 | | |
| Table 9.5(c) | Table 8.3.1.1 | | |
| 9.5.3.3 | 8.3.1.2 8.3.1.2.1 | | |

Chapter 9 - STRENGTH AND SERVICEABILITY REQUIREMENTS

| 318-11 | 318-14 | Note | Description |
|----------------|---------------|-------------|---|
| | 24.2.3.3 | | |
| 9.5.3.4 | 24.2.4.1.1 | | |
| | 8.3.2.1 | | |
| 9.5.4 | --- | ‡ | Heading: Prestressed concrete construction |
| 9.5.4.1 | 24.2.3.8 | | |
| 9.5.4.2 | 24.2.3.9 | | |
| 9.5.4.3 | 24.2.4.2.1 | | |
| 9.5.4.4 | 24.2.2 | | |
| 9.5.5 | --- | ‡ | Heading: Composite construction |
| 9.5.5.1 | --- | ‡ | Heading: Shored construction |
| | 24.2.5.1 | | |
| | 24.2.5.3 | | |
| 9.5.5.1 | 7.3.1.1.3 | | |
| | 9.3.1.1.3 | | |
| | 26.11.1.1(b) | | |
| 9.5.5.2 | --- | ‡ | Heading: Unshored construction |
| | 7.3.2.2 | | |
| 9.5.5.2 | 8.3.2.2 | | |
| | 9.3.2.2 | | |
| | 24.2.5.2 | | |
| 9.5.5.3 | 24.2.2 | | |

Chapter 10 - FLEXURE AND AXIAL LOADS

| 318-11 | 318-14 | Note | Description |
|----------|------------|------|--|
| 10.1 | --- | ‡ | Heading: Scope |
| 10.1 | --- | ‡ | Scope of chapter |
| 10.2 | --- | ‡ | Heading: Design assumptions |
| | 4.5.1 | | |
| 10.2.1 | 22.2.1.1 | | |
| | 13.2.6.2 | | |
| 10.2.2 | 22.1.2 | | |
| | 22.2.1.2 | | |
| 10.2.3 | 22.2.2.1 | | |
| 10.2.4 | 20.2.2.1 | | |
| 10.2.5 | 22.2.2.2 | | |
| 10.2.6 | 22.2.2.3 | | |
| 10.2.7 | 22.2.2.4 | | |
| 10.2.7.1 | 22.2.2.4.1 | | |
| 10.2.7.2 | 22.2.2.4.2 | | |
| 10.2.7.3 | 22.2.2.4.3 | | |
| 10.3 | --- | ‡ | Heading: General principles and requirements |
| 10.3.1 | 22.2.1.1 | | |
| 10.3.2 | 21.2.2 | | |
| | 21.2.2 | | |
| 10.3.3 | 21.2.2.1 | | |
| | 21.2.2.2 | | |
| 10.3.4 | 21.2.2 | | |
| | 7.3.3.1 | | |
| 10.3.5 | 8.3.3.1 | | |
| | 9.3.3.1 | | |
| 10.3.5.1 | 22.2.3.1 | | |
| 10.3.6 | 22.4.2.1 | | |
| | 22.4.2.1 | | |
| 10.3.6.1 | 22.4.2.2 | | |
| | 22.4.2.1 | | |
| 10.3.6.2 | 22.4.2.2 | | |
| | 22.4.2.1 | | |
| 10.3.6.3 | 22.4.2.3 | ~ | Define P_o for prestressed columns |
| | 6.2.6 | | |
| 10.3.7 | 10.4.2.1 | | |
| | 11.4.2.1 | | |
| 10.4 | --- | ‡ | Heading: Distance between lateral supports of flexural members |
| 10.4.1 | 9.2.3.1(a) | | |
| 10.4.2 | 9.2.3.1(b) | | |
| 10.5 | --- | ‡ | Heading: Minimum reinforcement of flexural members |
| 10.5.1 | 9.6.1.1 | | |
| | 9.6.1.2 | | |

Chapter 10 - FLEXURE AND AXIAL LOADS

| 318-11 | 318-14 | Note | Description |
|---------------|----------|------|---|
| 10.5.2 | 9.6.1.2 | | |
| 10.5.3 | 9.6.1.3 | | |
| 10.5.4 | 7.6.1.1 | | |
| | 7.7.2.3 | | |
| 10.6 | --- | ‡ | Heading: Distribution of flexural reinforcement in beams and one-way slabs |
| 10.6.1 | --- | ‡ | Scope of section |
| 10.6.2 | 8.7.2.2 | | |
| 10.6.3 | 11.7.2.4 | | |
| | 24.3.1 | | |
| 10.6.4 | 24.3.2 | | |
| | 24.3.2.1 | | |
| | 24.3.3 | | |
| 10.6.5 | 24.3.5 | | |
| 10.6.6 | 24.3.4 | | |
| 10.6.7 | 9.7.2.3 | | |
| 10.7 | --- | ‡ | Heading: Deep beams |
| 10.7.1 | 9.9.1.1 | | |
| | 9.9.1.2 | | |
| 10.7.2 | --- | ‡ | Pointer to 11.7 |
| 10.7.3 | 9.9.3.2 | | |
| 10.8 | --- | ‡ | Heading: Design dimensions for compression members |
| 10.8.1 | --- | ‡ | Heading: Isolated compression member with multiple spirals |
| 10.8.1 | 10.3.1.4 | | |
| 10.8.2 | --- | ‡ | Heading: Compression member built monolithically with wall |
| 10.8.2 | 10.3.1.3 | | |
| | 10.3.1.5 | | Editorial, from commentary |
| 10.8.3 | --- | ‡ | Heading: Equivalent circular compression member |
| 10.8.3 | 10.3.1.1 | | |
| 10.8.4 | --- | ‡ | Heading: Limits of section |
| 10.8.4 | 10.3.1.2 | | |
| 10.9 | --- | ‡ | Heading: Limits for reinforcement of compression members |
| 10.9.1 | 10.6.1.1 | | |
| 10.9.2 | 10.7.3.1 | | |
| 10.9.3 | 20.2.2.4 | | |
| | 25.7.3.3 | | |
| 10.10 | --- | ‡ | Heading: Slenderness effects in compression members |
| 10.10.1 | 6.2.5 | ~ | Change the sign convention for consistency |
| 10.10.1.1 | 2.2 | | Moved to definitions |
| 10.10.1.2 | 6.2.5.1 | | |

Chapter 10 - FLEXURE AND AXIAL LOADS

| 318-11 | 318-14 | Note | Description |
|----------------|------------|------|---|
| | 6.2.6 | | |
| 10.10.2 | 6.6.4.2 | | |
| | 6.7.1.3 | | |
| | 6.8.1.4 | | |
| 10.10.2.1 | 6.2.6 | | |
| | 6.6.1.1 | | |
| 10.10.2.2 | 6.6.4.6.4 | | |
| | 6.7.1.2 | | |
| | 6.8.1.3 | | |
| 10.10.3 | --- | ‡ | Heading: Nonlinear second-order analysis |
| 10.10.3 | 6.8.1.1 | | |
| | 6.8.1.2 | | |
| 10.10.4 | --- | ‡ | Heading: Elastic second-order analysis |
| 10.10.4 | 6.7.1.1 | | |
| | 6.6.3.1.1 | | |
| 10.10.4.1 | 6.6.4.2 | | |
| | 6.7.1.3 | | |
| | 6.8.1.4 | | |
| 10.10.4.2 | 6.6.3.1.1 | | |
| 10.10.5 | --- | ‡ | Heading: Moment magnification procedure |
| 10.10.5 | 6.6.4.1 | | |
| 10.10.5.1 | 6.6.4.3(a) | | |
| 10.10.5.2 | 6.6.4.3(b) | | |
| | 6.6.4.4.1 | | |
| 10.10.6 | --- | ‡ | Heading: Moment magnification procedure – Nonsway |
| | 6.6.4.4.2 | | |
| 10.10.6 | 6.6.4.5.1 | | |
| | 6.6.4.5.2 | | |
| 10.10.6.1 | 6.6.4.4.4 | | |
| 10.10.6.2 | 6.6.4.4.4 | | |
| 10.10.6.3 | 6.6.4.4.3 | | |
| 10.10.6.4 | 6.6.4.5.3 | ~ | Change the sign convention for consistency |
| 10.10.6.5 | 6.6.4.5.4 | | |
| 10.10.7 | --- | ‡ | Heading: Moment magnification procedure – Sway |
| 10.10.7 | 6.6.4.6.1 | | |
| 10.10.7.1 | 6.6.4.6.3 | | |
| 10.10.7.2 | 6.6.4.4.3 | | |
| 10.10.7.3 | 6.6.4.6.2 | | |
| 10.10.7.4 | 6.6.4.6.2 | | |
| 10.11 | --- | ‡ | Heading: Axially loaded members supporting slab system |
| 10.11 | --- | ‡ | Pointer to Chapters 10 and 13 |
| 10.12 | --- | ‡ | Heading: Transmission of column loads through floor system |
| 10.12 | 15.3.1 | | |

Chapter 10 - FLEXURE AND AXIAL LOADS

| 318-11 | 318-14 | Note | Description |
|----------------|---------------|-------------|---|
| | 15.3.1(a) | | |
| 10.12.1 | 26.5.7.1(d) | | |
| | 26.5.7.2(c) | | |
| 10.12.2 | 15.3.1(b) | | |
| 10.12.3 | 15.3.1(c) | | |
| 10.13 | --- | ‡ | Heading: Composite compression members |
| | 4.12.4.1 | | |
| 10.13.1 | 10.2.2.1 | | |
| 10.13.2 | 22.3.3.1 | | |
| 10.13.3 | 10.5.2.2 | | |
| 10.13.4 | 10.5.2.2 | | |
| | 6.2.5.2 | | |
| 10.13.5 | 6.6.4.4.5 | | |
| 10.13.6 | --- | ‡ | Heading: Structural steel encased concrete core |
| 10.13.6.1 | 10.3.1.6 | | |
| 10.13.6.2 | 6.2.5.2 | | |
| 10.13.7 | --- | ‡ | Heading: Spiral reinforcement around structural steel core |
| 10.13.7 | --- | ‡ | Introduction |
| 10.13.7.1 | 20.4.2.2 | | |
| 10.13.7.2 | --- | ‡ | Pointer to 10.9.3 |
| 10.13.7.3 | 10.6.1.2 | | |
| 10.13.7.4 | 6.2.5.2 | | |
| 10.13.8 | --- | ‡ | Heading: Tie reinforcement around structural steel core |
| 10.13.8 | --- | ‡ | Introduction |
| 10.13.8.1 | 20.4.2.2 | | |
| 10.13.8.2 | 22.4.2.1 | | |
| 10.13.8.3 | 10.7.6.1.4 | | |
| 10.13.8.4 | 10.7.6.1.4 | | |
| 10.13.8.5 | 10.6.1.2 | | |
| 10.13.8.6 | 10.7.3.2 | | |
| 10.13.8.7 | 6.2.5.2 | | |
| 10.14 | --- | ‡ | Heading: Bearing strength |
| 10.14.1 | 22.8.3.2 | | |
| 10.14.2 | 22.8.1.2 | | |

Chapter 11 - SHEAR AND TORSION

| 318-11 | 318-14 | Note | Description |
|----------|------------|------|---|
| 11.1 | --- | ‡ | Heading: Shear strength |
| | 7.5.1.1 | | |
| | 8.5.1.1 | | |
| | 9.5.1.1 | | |
| | 10.5.1.1 | | |
| 11.1.1 | 11.4.3.1 | | |
| | 11.5.1.1 | | |
| | 11.5.4.4 | | |
| | 16.5.4.1 | | |
| | 22.5.1.1 | | |
| | 7.2.1 | | |
| 11.1.1.1 | 8.2.2 | | |
| | 22.5.1.7 | | |
| 11.1.1.2 | 22.5.1.8 | | |
| | 22.5.1.9 | | |
| | 12.5.3.3 | | |
| | 12.5.3.4 | | |
| 11.1.2 | 22.5.3.1 | | |
| | 22.6.3.1 | | |
| | 22.7.2.1 | | |
| 11.1.2.1 | 22.5.3.2 | | |
| | 7.4.3.2 | | |
| 11.1.3 | 8.4.3.2 | | |
| | 9.4.3.2 | | |
| | 7.4.3.1 | | Editorial, from commentary |
| | 7.4.3.2 | | |
| 11.1.3.1 | 8.4.3.1 | | Editorial, from commentary |
| | 8.4.3.2 | | |
| | 9.4.3.1 | | Editorial, from commentary |
| | 9.4.3.2 | | |
| | 14.4.3.3.2 | | |
| | 7.4.3.2 | | |
| 11.1.3.2 | 8.4.3.2 | | |
| | 9.4.3.2 | | |
| 11.1.4 | --- | ‡ | Pointer to 11.7 through 11.11 |
| 11.2 | --- | ‡ | Heading: Shear strength provided by concrete for nonprestressed members |
| 11.2.1 | 22.5.5.1 | | |
| | 22.5.6.1 | | |
| 11.2.1.1 | 22.5.5.1 | | |
| | 22.5.6.1 | | |
| 11.2.1.2 | 11.5.4.6 | | |
| 11.2.1.3 | 22.5.7.1 | | |

Chapter 11 - SHEAR AND TORSION

| 318-11 | 318-14 | Note | Description |
|---------------|--|-------------|---|
| 11.2.2 | 22.5.5.1 22.5.6.1 | | |
| 11.2.2.1 | 22.5.5.1 | | |
| 11.2.2.2 | 22.5.6.1 | | |
| 11.2.2.3 | 22.5.7.1 11.5.4.6 | | |
| 11.2.3 | 22.5.2.2 | | |
| 11.3 | --- | ‡ | Heading: Shear strength provided by concrete for prestressed members |
| 11.3.1 | 22.5.2.1 22.6.2.2 | | |
| 11.3.2 | 22.5.8.2 | | |
| 11.3.3 | 22.5.8.3 | | |
| 11.3.3.1 | 22.5.8.3.1 | | |
| 11.3.3.2 | 22.5.8.3.2 22.5.8.3.3 22.5.8.3.4 | | |
| 11.3.4 | 22.5.9.1 22.5.9.2 22.5.9.3 | ~ | Revise the effect of prestress on shear at ends of members |
| 11.3.5 | 22.5.9.1 22.5.9.4 22.5.9.5 | ~ | Revise the effect of prestress on shear at ends of members |
| 11.4 | --- | ‡ | Heading: Shear strength provided by shear reinforcement |
| 11.4.1 | --- | ‡ | Heading: Types of shear reinforcement |
| 11.4.1.1 | 22.5.10.5.1 22.5.10.4 | | |
| 11.4.1.2 | 22.5.10.5.2 22.5.10.6.1 | | |
| 11.4.2 | 20.2.2.4 22.5.2.1 | | |
| 11.4.3 | 22.6.2.2 22.7.7.1.1 | | |
| 11.4.4 | 25.7.1.1 | | |
| 11.4.5 | --- | ‡ | Heading: Spacing limits for shear reinforcement |
| 11.4.5.1 | 9.7.6.2.2 10.7.6.5.2 | | |
| 11.4.5.2 | 9.7.6.2.3 | | |
| 11.4.5.3 | 9.7.6.2.2 10.7.6.5.2 | | |
| 11.4.6 | --- | ‡ | Heading: Minimum shear reinforcement |
| 11.4.6.1 | 7.6.3.1 9.6.3.1 10.6.2.1 | | |

Chapter 11 - SHEAR AND TORSION

| 318-11 | 318-14 | Note | Description |
|---------------|--|-------------|--|
| 11.4.6.2 | 7.6.3.2 9.6.3.2 | | |
| 11.4.6.3 | 9.6.3.3 10.6.2.2 15.4.2 | | |
| 11.4.6.4 | 9.6.3.3 | | |
| 11.4.7 | --- | ‡ | Heading: Design of shear reinforcement |
| 11.4.7.1 | 22.5.10.1 22.5.10.5.3 | | |
| 11.4.7.2 | 22.6.7.2 22.6.8.2 | | |
| 11.4.7.3 | 22.5.2.2 22.5.10.5.5 22.5.10.5.6 | | |
| 11.4.7.4 | 22.5.10.5.4 | | |
| 11.4.7.5 | 22.5.10.6.2 | | |
| 11.4.7.6 | 22.5.10.6.3 | | |
| 11.4.7.7 | 22.5.10.6.1 | | |
| 11.4.7.8 | 22.5.10.4 | | |
| 11.4.7.9 | 22.5.1.2 | | |
| 11.5 | --- | ‡ | Heading: Design for torsion |
| 11.5 | --- | ‡ | Pointer to 11.5.1 through 11.5.6 and 11.5.7 |
| 11.5.1 | --- | ‡ | Heading: Threshold torsion |
| 11.5.1 | 9.5.4.1 22.7.1.1 22.7.4.1 | | |
| 11.5.1.1 | 9.2.4.4 9.2.4.4(b) | | |
| 11.5.2 | --- | ‡ | Heading: Calculation of factored torsional moment |
| 11.5.2.1 | 22.7.3.1 22.7.3.2 | | |
| 11.5.2.2 | 22.7.3.3 22.7.5.1 | | |
| 11.5.2.3 | 9.4.4.1 | | |
| 11.5.2.4 | 9.4.4.2 9.4.4.3 | | |
| 11.5.2.5 | 9.4.4.2 9.4.4.3 | | |
| 11.5.3 | --- | ‡ | Heading: Torsional moment strength |
| 11.5.3.1 | 22.7.7.1 22.7.7.1.1 | | |
| 11.5.3.2 | 22.7.6.1.2 | | |
| 11.5.3.3 | 22.7.7.2 | | |
| 11.5.3.4 | 20.2.2.4 | | |

Chapter 11 - SHEAR AND TORSION

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| 11.5.3.5 | 22.7.3.1 | | |
| | 22.7.6.1 | | |
| 11.5.3.6 | 22.7.6.1.1 | | |
| | 22.7.6.1.2 | | |
| 11.5.3.7 | 22.7.6.1 | | |
| 11.5.3.8 | 9.5.4.3 | | |
| 11.5.3.9 | 9.5.4.5 | | |
| 11.5.3.10 | 9.5.4.4 | | |
| 11.5.3.11 | 9.5.4.5 | | |
| 11.5.4 | --- | ‡ | Heading: Details of torsional reinforcement |
| | 9.7.6.3.1 | | |
| 11.5.4.1 | 25.7.1.6 | | |
| | 25.7.2.5 | | |
| 11.5.4.2 | 25.7.1.6 | | |
| | 25.7.2.5 | | |
| 11.5.4.3 | 9.7.5.4 | | |
| | 25.4.10.2 | | |
| 11.5.4.4 | 9.7.6.3.4 | | |
| 11.5.5 | --- | ‡ | Heading: Minimum torsional reinforcement |
| 11.5.5.1 | 9.6.4.1 | | |
| 11.5.5.2 | 9.6.4.2 | | |
| 11.5.5.3 | 9.6.4.3 | | |
| 11.5.6 | --- | ‡ | Heading: Spacing of torsional reinforcement |
| 11.5.6.1 | 9.7.6.3.3 | | |
| | 9.7.5.1 | | |
| 11.5.6.2 | 9.7.5.2 | | |
| | 25.7.1.2 | | |
| 11.5.6.3 | 9.7.5.3 | | |
| | 9.7.6.3.2 | | |
| 11.5.7 | --- | ‡ | Heading: Alternative design for torsion |
| 11.5.7 | 9.5.4.6 | | |
| 11.6 | --- | ‡ | Heading: Shear-friction |
| 11.6.1 | 22.9.1.1 | | |
| 11.6.2 | 22.9.3.1 | | |
| 11.6.3 | 22.9.1.2 | | |
| 11.6.3.1 | --- | ‡ | Introduction to the remaining sections |
| 11.6.4 | --- | ‡ | Heading: Shear-friction design method |
| 11.6.4.1 | 22.9.4.2 | | |
| 11.6.4.2 | 22.9.4.3 | | |
| 11.6.4.3 | 22.9.4.2 | | |
| 11.6.5 | 22.9.4.1 | | |
| | 22.9.4.4 | | |
| 11.6.6 | 20.2.2.4 | | |

Chapter 11 - SHEAR AND TORSION

| 318-11 | 318-14 | Note | Description |
|---------------|--|-------------|---|
| 11.6.7 | 22.9.4.5 22.9.4.6 | | |
| 11.6.8 | 22.9.5.1 25.4.10.2 | | |
| 11.6.9 | 22.9.4.2 26.5.6.1(b) 26.5.6.1(c) 26.5.6.2(d) 26.5.6.2(e) | | |
| 11.6.10 | 26.5.6.1(d) | | |
| 11.7 | --- | ‡ | Heading: Deep beams |
| 11.7.1 | 9.9.1.1 9.9.1.2 | | |
| 11.7.2 | 9.9.1.3 23.2.8 | | |
| 11.7.3 | 9.9.2.1 | | |
| 11.7.4 | 9.9.3.1 | | |
| 11.7.4.1 | 9.9.3.1(a) 9.9.4.3 | | |
| 11.7.4.2 | 9.9.3.1(b) 9.9.4.3 | | |
| 11.8 | --- | ‡ | Heading: Provisions for brackets and corbels |
| 11.8.1 | 16.5.1.1 16.5.2.1 23.2.9 | | |
| 11.8.2 | 16.5.2.2 | | |
| 11.8.3 | 16.5.3.1 | | |
| 11.8.3.1 | 21.2.1 | | |
| 11.8.3.2 | 16.5.4.4 | | |
| 11.8.3.2.1 | 16.5.2.4 | | |
| 11.8.3.2.2 | 16.5.2.5 | | |
| 11.8.3.3 | 16.5.4.5 | | |
| 11.8.3.4 | 16.5.3.4 16.5.3.5 16.5.4.1 16.5.4.3 | | |
| 11.8.3.5 | 16.5.5.1 | | |
| 11.8.4 | 16.5.5.2 16.5.6.6 | | |
| 11.8.5 | 16.5.5.1 | | |
| 11.8.6 | 16.5.6.3 25.4.10.2 | | |
| 11.8.7 | 16.5.2.3 | | |

Chapter 11 - SHEAR AND TORSION

| 318-11 | 318-14 | Note | Description |
|---------------|----------------------------------|-------------|--|
| 11.9 | --- | ‡ | Heading: Provisions for walls |
| 11.9.1 | 11.5.4.1 | | |
| 11.9.2 | 11.5.4.5 11.5.4.6 | | |
| 11.9.3 | 11.5.4.3 | | |
| 11.9.4 | 11.5.4.2 | | |
| 11.9.5 | 11.5.4.5 11.5.4.6 | | |
| 11.9.6 | 11.5.4.6 | | |
| 11.9.7 | 11.5.4.7 | | |
| 11.9.8 | 11.6.1 11.6.2 | | |
| 11.9.9 | --- | ‡ | Heading: Design for shear reinforcement for walls |
| 11.9.9.1 | 11.5.4.8 | | |
| 11.9.9.2 | 11.6.2 | | |
| 11.9.9.3 | 11.7.3.1 11.7.3.2 | | |
| 11.9.9.4 | 11.6.2 | | |
| 11.9.9.5 | 11.7.2.1 11.7.2.2 | | |
| 11.10 | --- | ‡ | Heading: Transfer of moments to columns |
| 11.10.1 | 15.2.2 15.2.3 15.2.4 | | |
| 11.10.2 | 15.2.5 15.4.1 15.4.2.1 | | |
| 11.11 | --- | ‡ | Heading: Provisions for slabs and footings |
| 11.11.1 | 8.5.3.1 | | |
| 11.11.1.1 | 8.5.3.1.1 | | |
| 11.11.1.2 | 22.6.4.1 | | |
| 11.11.1.3 | 22.6.4.2 14.4.3.4.2 | | |
| 11.11.2 | 22.6.1.1 | | |
| 11.11.2.1 | 22.6.5.2 22.6.5.3 | | |
| 11.11.2.2 | 22.6.5.3 22.6.5.4 22.6.5.5 | | |
| 11.11.3 | 8.7.6.1 22.6.7.1 | | |
| 11.11.3.1 | 22.6.6.1 22.6.7.2 | | |
| 11.11.3.2 | 22.6.6.2 | | |

Chapter 11 - SHEAR AND TORSION

| 318-11 | 318-14 | Note | Description |
|----------------|---------------|-------------|---|
| 11.11.3.3 | 8.7.6.3 | | |
| 11.11.3.4 | 8.7.6.2 | | |
| 11.11.4 | 22.6.1.1 | | |
| 11.11.4.1 | 22.6.9.1 | | |
| 11.11.4.2 | 22.6.9.2 | | |
| 11.11.4.3 | 22.6.9.3 | | |
| 11.11.4.4 | 22.6.9.4 | | |
| 11.11.4.5 | 22.6.9.5 | | |
| 11.11.4.6 | 22.6.9.6 | | |
| 11.11.4.7 | 22.6.9.8 | | |
| 11.11.4.8 | 22.6.9.10 | | |
| 11.11.4.9 | 22.6.9.7 | | |
| 11.11.4.10 | 22.6.9.11 | | |
| | 8.7.7.1 | | |
| 11.11.5 | 8.7.7.1.1 | | |
| | 22.6.8.1 | | |
| | 22.6.6.1 | | |
| 11.11.5.1 | 22.6.6.2 | | |
| | 22.6.8.2 | | |
| | 22.6.8.3 | | |
| 11.11.5.2 | 8.7.7.1.2 | | |
| 11.11.5.3 | 8.7.7.1.2 | | |
| 11.11.5.4 | 22.6.4.2 | | |
| | 22.6.6.1 | | |
| 11.11.6 | --- | ‡ | Heading: Openings in slabs |
| 11.11.6 | 22.6.4.3 | | |
| 11.11.6.1 | 22.6.4.3 | | |
| 11.11.6.2 | 22.6.9.9 | | |
| 11.11.7 | --- | ‡ | Heading: Transfer of moment in slab-column connections |
| 11.11.7.1 | 8.4.4.2.1 | | |
| | 8.4.4.2.2 | | |
| | 8.4.4.2.3 | | |
| | 8.5.1.1 | | |
| 11.11.7.2 | 22.6.1.2 | | |
| | 22.6.1.3 | | |
| | 22.6.6.1 | | |
| 11.11.7.3 | 22.6.9.12 | | |

Chapter 12 - DEVELOPMENT AND SPLICES OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| 12.1 | --- | ‡ | Heading: Development of reinforcement – General |
| | 7.7.3.1 | | |
| | 9.7.3.1 | | |
| 12.1.1 | 25.4.1.1 | | |
| | 25.4.1.2 | | |
| 12.1.2 | 25.4.1.4 | | |
| 12.1.3 | 4.10.2.1 | | |
| 12.2 | --- | ‡ | Heading: Development of deformed bars and deformed wire in tension |
| 12.2.1 | 25.4.2.1 | | |
| 12.2.2 | 25.4.2.2 | | |
| 12.2.3 | 25.4.2.3 | | |
| 12.2.4 | 25.4.2.4 | | |
| 12.2.5 | --- | ‡ | Heading: Excess reinforcement |
| 12.2.5 | 25.4.10.1 | | |
| 12.3 | --- | ‡ | Heading: Development of deformed bars and deformed wire in compression |
| 12.3.1 | 25.4.9.1 | | |
| | 25.4.9.2 | | |
| 12.3.2 | 25.4.9.3 | | |
| | 25.4.9.3 | | |
| 12.3.3 | 25.4.10.1 | | |
| 12.4 | --- | ‡ | Heading: Development of bundled bars |
| 12.4.1 | 25.6.1.5 | | |
| 12.4.2 | 25.6.1.6 | | |
| 12.5 | --- | ‡ | Heading: Development of standard hooks in tension |
| 12.5.1 | 25.4.3.1 | | |
| | 25.4.3.1 | | |
| 12.5.2 | 25.4.3.2 | | |
| | 25.4.3.2 | | |
| 12.5.3 | 25.4.10.1 | | |
| 12.5.4 | 25.4.3.3 | | |
| 12.5.5 | 25.4.1.2 | | |
| 12.6 | --- | ‡ | Heading: Development of headed and mechanically anchored deformed bars in tension |
| 12.6.1 | 25.4.4.1 | | |
| | 25.4.4.1 | | |
| 12.6.2 | 25.4.4.2 | | |
| | 25.4.4.3 | | |
| 12.6.3 | 25.4.1.2 | | |
| 12.6.4 | 25.4.5.1 | | |
| 12.7 | --- | ‡ | Heading: Development of welded deformed wire reinforcement in tension |

Chapter 12 - DEVELOPMENT AND SPLICES OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| | 25.4.6.1 | | |
| 12.7.1 | 25.4.6.2 | | |
| | 25.4.10.1 | | |
| 12.7.2 | 25.4.6.3 | | |
| 12.7.3 | 25.4.6.4 | | |
| 12.7.4 | 25.4.6.5 | | |
| 12.8 | --- | ‡ | Heading: Development of welded plain wire reinforcement in tension |
| | 25.4.7.1 | | |
| 12.8 | 25.4.7.2 | | |
| | 25.4.10.1 | | |
| 12.9 | --- | ‡ | Heading: Development of prestressing strand |
| | 25.4.8.1 | | |
| 12.9.1 | 25.4.8.2 | | |
| 12.9.1.1 | 25.4.8.3 | | |
| 12.9.2 | --- | ~ | Removed since the requirement is already covered by other provisions (see 9.5.1.1, 21.2.3, and 25.4.8.1 in 318-14) |
| 12.9.3 | 25.4.8.1 | | |
| 12.10 | --- | ‡ | Heading: Development of flexural reinforcement – General |
| 12.10.1 | 9.7.3.7 | | |
| | 7.7.3.2 | | |
| 12.10.2 | 9.7.3.2 | | |
| | 7.7.3.3 | | |
| 12.10.3 | 9.7.3.3 | | |
| | 7.7.3.4 | | |
| 12.10.4 | 9.7.3.4 | | |
| | 7.7.3.5 | | |
| 12.10.5 | 9.7.3.5 | | |
| | 7.7.3.5(a) | | |
| 12.10.5.1 | 9.7.3.5(a) | | |
| | 7.7.3.5(b) | | |
| 12.10.5.2 | 9.7.3.5(b) | | |
| | 7.7.3.5(c) | | |
| 12.10.5.3 | 9.7.3.5(c) | | |
| | 7.7.3.6 | | |
| 12.10.6 | 9.7.3.6 | | |
| | 9.9.4.4 | | |
| 12.10.6 | 13.2.8.4 | | |
| | 16.5.6.5 | | |

Chapter 12 - DEVELOPMENT AND SPLICES OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|----------------|---------------|-------------|--|
| 12.11 | --- | ‡ | Heading: Development of positive moment reinforcement |
| | 7.7.3.8.1 | | |
| | 7.7.3.8.2 | | |
| 12.11.1 | 9.7.3.8.1 | | |
| | 9.7.3.8.2 | | |
| | 18.3.2 | | |
| | 18.4.2.1 | | |
| 12.11.2 | 18.3.2 | | |
| | 18.4.2.1 | | |
| | 25.4.10.2 | | |
| 12.11.3 | 7.7.3.8.3 | | |
| | 9.7.3.8.3 | | |
| 12.11.4 | 9.9.4.5 | | |
| | 9.9.4.6 | | |
| | 25.4.10.2 | | |
| 12.12 | --- | ‡ | Heading: Development of negative moment reinforcement |
| | 7.7.3.1 | | |
| 12.12.1 | 9.7.3.1 | | |
| | 16.5.6.4 | | |
| 12.12.2 | --- | ‡ | Pointer |
| 12.12.3 | 7.7.3.8.4 | | |
| | 9.7.3.8.4 | | |
| 12.12.4 | 9.9.4.6 | | |
| 12.13 | --- | ‡ | Heading: Development of web reinforcement |
| 12.13.1 | 25.7.1.1 | | |
| 12.13.2 | --- | ‡ | Introduction |
| 12.13.2.1 | 25.7.1.3 | | |
| 12.13.2.2 | 25.7.1.3 | | |
| 12.13.2.3 | 25.7.1.4 | | |
| 12.13.2.4 | 25.7.1.5 | | |
| 12.13.2.5 | 25.7.1.3 | | |
| 12.13.3 | 25.7.1.2 | | |
| 12.13.4 | 9.7.6.2.4 | | |
| 12.13.5 | 25.7.1.7 | | |
| 12.14 | --- | ‡ | Heading: Splices of reinforcement – General |
| | 26.6.1.1(d) | | |
| | 26.6.1.1(e) | | |
| 12.14.1 | 26.6.1.1(f) | | |
| | 26.6.1.1(g) | | |
| | 26.6.2.2(c) | | |
| 12.14.2 | --- | ‡ | Heading: Lap splices |
| 12.14.2.1 | 25.5.1.1 | | |
| | 25.5.5.2 | | |
| 12.14.2.2 | 25.6.1.7 | | |

Chapter 12 - DEVELOPMENT AND SPLICES OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|----------------|--------------------------|-------------|---|
| 12.14.2.3 | 25.5.1.3 | | |
| 12.14.3 | --- | ‡ | Heading: Mechanical and welded splices |
| 12.14.3.1 | 25.5.7.1 | | |
| 12.14.3.2 | 25.5.7.1 | | |
| 12.14.3.3 | 26.6.4.1(a) | | |
| 12.14.3.4 | 25.5.7.1 | | |
| 12.14.3.5 | --- | ~ | Elimination of mechanical and welded splices with strengths less than 125% of f_y . |
| 12.15 | --- | ‡ | Heading: Splices of deformed bars and deformed wire in tension |
| 12.15.1 | 25.5.1.4 25.5.2.1 | | |
| 12.15.2 | 25.5.2.1 | | |
| 12.15.3 | 25.5.2.2 | | |
| 12.15.4 | 25.5.7.1 | | |
| 12.15.5 | --- | ~ | Elimination of mechanical and welded splices with strengths less than 125% of f_y . |
| 12.15.5.1 | --- | ~ | Elimination of mechanical and welded splices with strengths less than 125% of f_y . |
| 12.15.5.2 | --- | ~ | Elimination of mechanical and welded splices with strengths less than 125% of f_y . |
| 12.15.5.3 | --- | ~ | Elimination of mechanical and welded splices with strengths less than 125% of f_y . |
| 12.15.6 | 25.5.7.3 25.5.7.4 | | |
| 12.16 | --- | ‡ | Heading: Splices of deformed bars in compression |
| 12.16.1 | 25.5.5.1 | | |
| | 25.5.5.2 | | |
| 12.16.2 | 25.5.5.3 | | |
| | 25.5.5.4 | | |
| 12.16.3 | 25.5.7.1 | | |
| 12.16.4 | --- | ‡ | Heading: End-bearing splices |
| 12.16.4.1 | 25.5.6.1 26.6.2.2(d) | | |
| 12.16.4.2 | 25.5.6.3 26.6.2.2(e) | | |
| 12.16.4.3 | 25.5.6.2 | | |
| 12.17 | --- | ‡ | Heading: Splice requirements for columns |
| 12.17.1 | 10.7.5.1.1 10.7.5.1.2 | | |

Chapter 12 - DEVELOPMENT AND SPLICES OF REINFORCEMENT

| 318-11 | 318-14 | Note | Description |
|----------------|------------------------|-------------|--|
| 12.17.2 | --- | ‡ | Heading: Lap splices in columns |
| 12.17.2.1 | 10.7.5.2.1 | | |
| 12.17.2.2 | 10.7.5.2.2 | | |
| 12.17.2.3 | 10.7.5.2.2 | | |
| 12.17.2.4 | 10.7.5.2.1 | | |
| 12.17.2.5 | 10.7.5.2.1 | | |
| 12.17.3 | --- | ‡ | Heading: Mechanical or welded splices in columns |
| 12.17.3 | 25.5.7.1 | | |
| 12.17.4 | --- | ‡ | Heading: End-bearing splices in columns |
| 12.17.4 | 10.7.5.3.1 | | |
| 12.18 | --- | ‡ | Heading: Splices of welded deformed wire reinforcement in tension |
| 12.18.1 | 25.5.1.4 25.5.3.1 | | |
| 12.18.2 | 25.5.3.1.1 | | |
| 12.18.3 | 25.5.3.1 25.5.3.1.2 | | |
| 12.19 | --- | ‡ | Heading: Splices of welded plain wire reinforcement in tension |
| 12.19.1 | --- | ‡ | Introduction |
| 12.19.1.1 | 25.5.1.4 25.5.4.1 | | |
| 12.19.1.2 | 25.5.1.4 25.5.4.2 | | |

Chapter 13 - TWO-WAY SLABS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------------------|-------------|---|
| 13.1 | --- | ‡ | Heading: Scope |
| 13.1.1 | 8.1.1 | | |
| 13.1.2 | 8.4.1.4 | | |
| 13.1.3 | 8.1.1 | | |
| 13.1.4 | 8.3.1.1 | | |
| 13.2 | --- | ‡ | Heading: General |
| 13.2.1 | 8.4.1.5 | | |
| 13.2.2 | 8.4.1.6 | | |
| 13.2.3 | 8.4.1.7 | | |
| 13.2.4 | 8.4.1.8 9.2.4.4(a) | | |
| 13.2.5 | 8.2.4 | | |
| 13.2.6 | 8.2.5 | | |
| 13.3 | --- | ‡ | Heading: Slab reinforcement |
| 13.3.1 | 8.6.1.1 | | |
| 13.3.2 | 8.7.2.2 | | |
| 13.3.3 | 8.7.4.1.1(a) | | |
| 13.3.4 | 8.7.4.1.1(b) 25.4.10.2 | | |
| 13.3.5 | 8.7.4.1.2 | | |
| 13.3.6 | 8.7.3.1 | | |
| 13.3.6.1 | 8.7.3.1 | | |
| 13.3.6.2 | 8.7.3.1.1 | | |
| 13.3.6.3 | 8.7.3.1.2 | | |
| 13.3.6.4 | 8.7.3.1.3 | | |
| 13.3.7 | 8.5.2.2 | | |
| 13.3.8 | --- | ‡ | Heading: Details of reinforcement in slabs without beams |
| 13.3.8.1 | 8.7.4.1.3(a) | | |
| Fig. 13.3.8 | Fig. 8.7.4.1.3(a) | | |
| 13.3.8.2 | 8.7.4.1.3(b) | | |
| 13.3.8.3 | 8.7.4.1.3(c) | | |
| 13.3.8.4 | 8.7.4.1.3(a) | | |
| 13.3.8.5 | 8.7.4.2.1 8.7.4.2.2 | | |
| 13.3.8.6 | 8.7.4.2.3 8.9.1 | | |
| 13.4 | --- | ‡ | Heading: Openings in slab systems |
| 13.4.1 | 8.5.4.1 | | |
| 13.4.2 | 8.5.4.2 | | |
| 13.4.2.1 | 8.5.4.2(a) | | |
| 13.4.2.2 | 8.5.4.2(b) | | |
| 13.4.2.3 | 8.5.4.2(c) | | |
| 13.4.2.4 | 8.5.4.2(d) | | |
| 13.5 | --- | ‡ | Heading: Design procedures |

Chapter 13 - TWO-WAY SLABS

| 318-11 | 318-14 | Note | Description |
|---------------|------------|------|---|
| | 8.2.1 | | |
| 13.5.1 | 8.10.1.2 | | |
| | 13.2.6.2 | | |
| 13.5.1.1 | 8.2.1 | | |
| | 8.4.1.2 | | |
| 13.5.1.2 | 6.3.1.1 | | |
| 13.5.1.3 | 8.4.1.9 | | |
| 13.5.2 | 8.5.1.1 | | |
| 13.5.3 | 8.4.2.3.1 | | |
| 13.5.3.1 | 8.4.2.3.6 | | |
| 13.5.3.2 | 8.4.2.3.2 | | |
| | 8.4.2.3.3 | | |
| 13.5.3.3 | 8.4.2.3.4 | | |
| 13.5.3.4 | 8.4.2.3.5 | | |
| 13.5.4 | --- | ‡ | Pointer to Ch. 11 |
| 13.6 | --- | ‡ | Heading: Direct design method |
| 13.6.1 | --- | ‡ | Heading: Limitations |
| 13.6.1 | 8.10.1.1 | | |
| 13.6.1.1 | 8.10.2.1 | | |
| 13.6.1.2 | 8.10.2.3 | | |
| 13.6.1.3 | 8.10.2.2 | | |
| 13.6.1.4 | 8.10.2.4 | | |
| 13.6.1.5 | 8.10.2.5 | | |
| | 8.10.2.6 | | |
| 13.6.1.6 | 8.10.2.7 | | |
| 13.6.1.7 | 8.10.4.3 | | |
| 13.6.1.8 | 8.10.1.2 | | |
| 13.6.2 | --- | ‡ | Heading: Total factored static moment for a span |
| 13.6.2.1 | 8.10.3.1 | | |
| | 8.10.3.2 | | |
| | 8.10.3.2.1 | | |
| 13.6.2.3 | 8.10.3.2.2 | | |
| 13.6.2.4 | 8.10.3.2.3 | | |
| 13.6.2.5 | 8.10.1.3 | | |
| | 8.10.3.2.1 | | |
| 13.6.3 | --- | ‡ | Heading: Negative and positive factored moments |
| 13.6.3.1 | 8.10.1.3 | | |
| | 8.10.4.4 | | |
| 13.6.3.2 | 8.10.4.1 | | |
| 13.6.3.3 | 8.10.4.2 | | |
| 13.6.3.4 | 8.10.4.5 | | |
| 13.6.3.5 | 8.10.4.6 | | |
| 13.6.3.6 | 8.10.7.3 | | |
| 13.6.4 | --- | ‡ | Heading: Factored moments in column strips |

Chapter 13 - TWO-WAY SLABS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|---|
| 13.6.4.1 | 8.10.5.1 | | |
| 13.6.4.2 | 8.10.5.2 | | |
| | 8.10.5.3 | | |
| 13.6.4.3 | 8.10.5.4 | | |
| 13.6.4.4 | 8.10.5.5 | | |
| 13.6.4.5 | 8.10.5.6 | | |
| 13.6.5 | --- | ‡ | Heading: Factored moments in beams |
| 13.6.5.1 | 8.10.5.7.1 | | |
| 13.6.5.2 | 8.10.5.7.1 | | |
| 13.6.5.3 | 8.10.5.7.2 | | |
| 13.6.6 | --- | ‡ | Heading: Factored moments in middle strips |
| 13.6.6.1 | 8.10.6.1 | | |
| 13.6.6.2 | 8.10.6.2 | | |
| 13.6.6.3 | 8.10.6.3 | | |
| 13.6.7 | --- | ‡ | Heading: Modification of factored moments |
| 13.6.7 | 8.10.4.3 | | |
| 13.6.8 | --- | ‡ | Heading: Factored shear in slab systems with beams |
| 13.6.8.1 | 8.10.8.1 | | |
| 13.6.8.2 | 8.10.8.1 | | |
| 13.6.8.3 | 8.10.8.2 | | |
| 13.6.8.4 | 8.10.8.3 | | |
| 13.6.8.5 | 8.5.3.1 | | |
| 13.6.9 | --- | ‡ | Heading: Factored moments in columns and walls |
| 13.6.9.1 | 8.10.7.1 | | |
| 13.6.9.2 | 8.10.7.2 | | |
| 13.7 | --- | ‡ | Heading: Equivalent frame method |
| 13.7.1 | 8.11.1.1 | | |
| 13.7.1.1 | 8.11.1.3 | | |
| 13.7.1.2 | 8.11.1.4 | | |
| 13.7.2 | --- | ‡ | Heading: Equivalent frame |
| 13.7.2.1 | 8.11.2.1 | | |
| 13.7.2.2 | 8.11.2.2 | | |
| 13.7.2.3 | 8.11.2.4 | | |
| 13.7.2.4 | 8.11.2.3 | | |
| 13.7.2.5 | 8.11.2.5 | | |
| 13.7.2.6 | 8.11.2.6 | | |
| 13.7.3 | --- | ‡ | Heading: Slab-beams |
| 13.7.3.1 | 8.11.3.3 | | |
| 13.7.3.2 | 8.11.3.2 | | |
| 13.7.3.3 | 8.11.3.1 | | |
| 13.7.4 | --- | ‡ | Heading: Columns |
| 13.7.4.1 | 8.11.4.3 | | |
| 13.7.4.2 | 8.11.4.2 | | |
| 13.7.4.3 | 8.11.4.1 | | |

Chapter 13 - TWO-WAY SLABS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| 13.7.5 | --- | ‡ | Heading: Torsional members |
| 13.7.5.1 | 8.11.5.1 | | |
| 13.7.5.2 | 8.11.5.2 | | |
| 13.7.6 | --- | ‡ | Heading: Arrangement of live load |
| 13.7.6.1 | 6.4.3.1 | | |
| 13.7.6.2 | 6.4.3.2 | | |
| 13.7.6.3 | 6.4.3.3 | | |
| 13.7.6.4 | 6.4.3 | | |
| 13.7.7 | --- | ‡ | Heading: Factored moments |
| 13.7.7.1 | 8.11.6.1 | | |
| 13.7.7.2 | 8.11.6.2 | | |
| | 8.11.6.3 | | |
| 13.7.7.3 | 8.11.6.4 | | |
| 13.7.7.4 | 8.11.6.5 | | |
| 13.7.7.5 | 8.11.6.6 | | |

Chapter 14 - WALLS

| 318-11 | 318-14 | Note | Description |
|---------------|----------------------------------|------|--|
| 14.1 | --- | ‡ | Heading: Scope |
| 14.1.1 | 11.1.1 | | |
| 14.1.2 | 11.1.4 | | |
| 14.2 | --- | ‡ | Heading: General |
| 14.2.1 | 11.4.1.4 | | |
| 14.2.2 | 11.5.2.1 | | |
| 14.2.3 | --- | ‡ | Pointer to 11.9 |
| 14.2.4 | 11.2.3.1 | | |
| 14.2.5 | --- | ‡ | Pointer to 10.8.2 |
| 14.2.6 | 11.2.4.1 | | |
| 14.2.7 | 11.3.1.1 11.6.1 | | |
| 14.2.8 | 11.2.2.2 | | |
| 14.3 | --- | ‡ | Heading: Minimum reinforcement |
| 14.3.1 | 11.6.1 11.6.2 | | |
| 14.3.2 | 11.6.1 | | |
| 14.3.3 | 11.6.1 | | |
| 14.3.4 | 11.7.2.3 | | |
| 14.3.5 | 11.7.2.1 11.7.3.1 11.7.3.2 | | |
| 14.3.6 | 11.7.4.1 | | |
| 14.3.7 | 11.7.5.1 25.4.10.2 | | |
| 14.4 | --- | ‡ | Heading: Walls designated as compression members |
| 14.4 | 11.5.2.1 | | |
| 14.5 | --- | ‡ | Heading: Empirical design method |
| 14.5.1 | 11.5.3.1 | | |
| 14.5.2 | 11.5.3.1 11.5.3.2 | | |
| 14.5.3 | --- | ‡ | Heading: Minimum thickness of walls designed by empirical design method |
| 14.5.3.1 | 11.3.1.1 | | |
| 14.5.3.2 | 11.3.1.1 | | |
| 14.6 | --- | ‡ | Heading: Nonbearing walls |
| 14.6.1 | 11.3.1.1 | | |
| 14.7 | --- | ‡ | Heading: Walls as grade beams |
| 14.7.1 | 13.3.5.1 13.3.5.2 | | |
| 14.7.2 | 13.3.5.3 | | |

Chapter 14 - WALLS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|---|
| 14.8 | --- | ‡ | Heading: Alternative design of slender walls |
| 14.8.1 | 11.4.1.3 | | |
| 14.8.2 | 11.8.1.1 | | |
| 14.8.2.1 | 11.8.2.1 | | |
| 14.8.2.2 | 11.8.1.1(a) | | |
| 14.8.2.3 | 11.8.1.1(b) | | |
| 14.8.2.4 | 11.8.1.1(c) | | |
| 14.8.2.5 | 11.8.2.2 | | |
| 14.8.2.6 | 11.8.1.1(d) | | |
| 14.8.3 | 11.8.3.1 | | |
| | 11.8.1.1(e) | | |
| | 11.8.4.1 | | |
| 14.8.4 | 11.8.4.2 | | |
| | 11.8.4.3 | | |
| | 11.8.4.4 | | |

Chapter 15 - FOOTINGS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|---|
| 15.1 | --- | ‡ | Heading: Scope |
| 15.1.1 | --- | ‡ | Scope of chapter |
| 15.1.2 | --- | ‡ | Pointer |
| 15.2 | --- | ‡ | Heading: Loads and reactions |
| | 13.2.6.1 | | |
| 15.2.1 | 13.3.2.1 | | |
| | 13.3.3.1 | | |
| | 13.3.4.1 | | |
| 15.2.2 | 13.3.1.1 | | |
| | 13.4.1.1 | | |
| 15.2.3 | 13.4.2.2 | | |
| 15.3 | --- | ‡ | Heading: Footings supporting circular or regular polygon-shaped columns or pedestals |
| 15.3 | 13.2.7.3 | | |
| | 22.6.4.1.2 | | |
| 15.4 | --- | ‡ | Heading: Moment in footings |
| 15.4.1 | 13.2.6.4 | | |
| 15.4.2 | 13.2.7.1 | | |
| 15.4.3 | 13.3.2.2 | | |
| | 13.3.3.2 | | |
| 15.4.4 | 13.3.3.3 | | |
| 15.4.4.1 | 13.3.3.3 | | |
| 15.4.4.2 | 13.3.3.3 | | |
| 15.5 | --- | ‡ | Heading: Shear in footings |
| 15.5.1 | 13.2.7.2 | | |
| 15.5.2 | 13.2.7.2 | | |
| | 13.2.6.3 | | |
| 15.5.3 | 13.4.2.3 | | |
| | 13.4.2.4 | | |
| 15.5.4 | 13.4.2.5 | | |
| 15.5.4.1 | 13.4.2.5 | | |
| 15.5.4.2 | 13.4.2.5 | | |
| 15.5.4.3 | 13.4.2.5 | | |
| 15.6 | --- | ‡ | Heading: Development of reinforcement in footings |
| 15.6.1 | 13.2.8.1 | | |
| 15.6.2 | 13.2.8.2 | | |
| | 25.4.1.1 | | |
| 15.6.3 | 13.2.7.1 | | |
| | 13.2.8.2 | | |
| 15.7 | --- | ‡ | Heading: Minimum footing depth |
| 15.7 | 13.3.1.2 | | |
| | 13.4.2.1 | | |

Chapter 15 - FOOTINGS

| 318-11 | 318-14 | Note | Description |
|---------------|----------------------|-------------|---|
| 15.8 | --- | ‡ | Heading: Transfer of force at base of column, wall, or reinforced pedestal |
| 15.8.1 | 16.3.1.1 | | |
| 15.8.1.1 | 16.3.3.4 | | |
| 15.8.1.2 | 16.3.1.2 | | |
| 15.8.1.3 | 16.3.5.2 | | |
| 15.8.1.4 | 16.3.3.5 | | |
| 15.8.2 | 16.3.5.1 | | |
| 15.8.2.1 | 16.3.4.1 | | |
| 15.8.2.2 | 16.3.4.2 | | |
| 15.8.2.3 | 16.3.5.4 25.5.5.4 | | |
| 15.8.2.4 | 16.3.5.3 | | |
| 15.8.3 | 16.3.3.6 | | |
| 15.8.3.1 | 16.3.3.1 16.3.6.1 | | |
| 15.8.3.2 | 16.3.3.1 16.3.6.1 | | |
| 15.8.3.3 | 16.3.3.5 16.3.3.6 | | |
| 15.9 | --- | ‡ | Heading: Sloped or stepped footings |
| 15.9.1 | 13.3.1.3 | | |
| 15.9.2 | 26.5.7.1(c) | | |
| 15.10 | --- | ‡ | Heading: Combined footings and mats |
| 15.10.1 | 13.6.2.1 | | |
| 15.10.2 | 13.3.4.2 | | |
| 15.10.3 | 13.3.4.3 | | |
| 15.10.4 | 13.3.4.4 | | |

Chapter 16 - PRECAST CONCRETE

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| 16.1 | --- | ‡ | Heading: Scope |
| 16.1.1 | --- | ‡ | Scope |
| 16.2 | --- | ‡ | Heading: General |
| | 4.12.1.1 | | |
| 16.2.1 | 16.2.1.5 | | |
| | 16.2.1.6 | | |
| | 16.3.3.6 | | |
| 16.2.2 | 4.12.1.3 | | |
| | 16.2.1.4 | | |
| 16.2.3 | 4.12.1.2 | | |
| | 16.2.1.6 | | |
| | 26.9.1(a) | | |
| 16.2.4 | 26.4.2.2(a) | | |
| | 26.9.1(b) | | |
| | 26.9.2(c) | | |
| 16.2.4(a) | 26.9.1(b) | | |
| | 26.9.2(c) | | |
| 16.2.4(b) | 26.4.2.2(a) | | |
| 16.3 | --- | ‡ | Heading: Distribution of forces among members |
| 16.3.1 | 4.12.1.5 | | |
| 16.3.2 | 4.12.1.4 | | |
| 16.3.2.1 | 4.12.1.4(a) | | |
| 16.3.2.2 | 4.12.1.4(b) | | |
| 16.4 | --- | ‡ | Heading: Member design |
| 16.4.1 | 11.6.1 | | |
| | 24.4.3.5 | | |
| 16.4.2 | 11.6.1 | | |
| | 11.7.2.2 | | |
| | 11.7.3.2 | | |
| 16.5 | --- | ‡ | Heading: Structural integrity |
| 16.5.1 | 16.2.4.1 | | |
| 16.5.1.1 | 16.2.4.1 | | |
| 16.5.1.2 | 16.2.4.2 | | |
| 16.5.1.3 | 16.2.4.3 | | |
| | 16.3.6.2 | | |
| 16.5.1.4 | 16.2.1.3 | | |
| 16.5.2 | 16.2.5 | | |
| 16.5.2.1 | 16.2.5.1(a) | | |
| | 16.2.5.1(b) | | |
| | 16.2.5.1(c) | | |
| 16.5.2.2 | 16.2.5.1(d) | | |
| 16.5.2.3 | 16.2.5.1(e) | | |
| 16.5.2.4 | 16.2.5.1(f) | | |
| 16.5.2.5 | 16.2.5.2 | | |

Chapter 16 - PRECAST CONCRETE

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|---|
| 16.6 | --- | ‡ | Heading: Connection and bearing design |
| 16.6.1 | 16.2.1.1 | | |
| 16.6.1.1 | 16.2.1.2 | | |
| | 16.2.3.4 | | |
| 16.6.1.2 | 16.2.1.7 | | |
| 16.6.2 | --- | ‡ | Introduction to section |
| 16.6.2.1 | 16.2.3.3 | | |
| | 16.2.6.1 | | |
| 16.6.2.2 | 16.2.6.2 | | |
| | 16.2.6.3 | | |
| 16.6.2.3 | 7.7.3.8.1 | | |
| | 9.7.3.8.1 | | |
| 16.7 | --- | ‡ | Heading: Items embedded after concrete placement |
| 16.7.1 | 26.9.2(e) | | |
| | 26.9.2(e)(1) | | |
| 16.7.1.1 | 26.9.2(e)(2) | | |
| 16.7.1.2 | 26.9.2(e)(3) | | |
| 16.7.1.3 | 26.9.2(e)(4) | | |
| 16.8 | --- | ‡ | Heading: Marking and identification |
| 16.8.1 | 26.9.2(a) | | |
| 16.8.2 | 26.9.2(b) | | |
| 16.9 | --- | ‡ | Heading: Handling |
| 16.9.1 | 4.12.1.1 | | |
| 16.9.2 | 26.9.2(d) | | |
| 16.10 | --- | ‡ | Heading: Strength evaluation of precast construction |
| 16.10.1 | 27.4.1.4 | | |
| 16.10.1.1 | 27.4.1.4(a) | | |
| 16.10.1.2 | 27.4.1.4(b) | | |
| 16.10.2 | --- | ‡ | Pointer to 20.5 |

Chapter 17 - COMPOSITE CONCRETE FLEXURAL MEMBERS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|---|
| 17.1 | --- | ‡ | Heading: Scope |
| | 4.12.3.1 | | |
| 17.1.1 | 22.3.3.1 | | |
| | 22.5.4.1 | | |
| 17.1.2 | --- | ‡ | Scope |
| 17.2 | --- | ‡ | Heading: General |
| 17.2.1 | 22.3.3.2 | | |
| | 22.5.4.4 | | |
| 17.2.2 | 4.12.3.2 | | |
| 17.2.3 | 22.3.3.4 | | |
| | 22.5.4.3 | | |
| 17.2.4 | 22.3.3.3 | | |
| | 22.5.4.2 | | |
| 17.2.5 | 4.12.3.3 | | |
| 17.2.6 | 4.12.3.4 | | |
| 17.2.7 | 24.2.5 | | Pointer to 9.5.5 |
| 17.3 | --- | ‡ | Heading: Shoring |
| 17.3 | 26.11.1.1(c) | | |
| 17.4 | --- | ‡ | Heading: Vertical shear strength |
| 17.4.1 | 22.5.4.4 | | |
| | 22.5.4.5 | | |
| 17.4.2 | 22.5.4.5 | | |
| | 16.4.7.3 | | |
| 17.4.3 | 16.4.4.4 | | |
| | 16.4.5.3 | | |
| 17.5 | --- | ‡ | Heading: Horizontal shear strength |
| 17.5.1 | 16.4.1.1 | | |
| 17.5.2 | 16.4.4.3 | | |
| 17.5.3 | 16.4.3.1 | | |
| 17.5.3.1 | 16.4.4.2 | | |
| 17.5.3.2 | 16.4.4.2 | | |
| 17.5.3.3 | 16.4.4.2 | | |
| 17.5.3.4 | 16.4.4.1 | | |
| 17.5.4 | 16.4.5.1 | | |
| 17.5.4.1 | 16.4.5.2 | | |
| 17.5.5 | 16.4.1.2 | | |
| 17.6 | --- | ‡ | Heading: Ties for horizontal shear |
| 17.6.1 | 16.4.6.1 | | |
| | 16.4.7.2 | | |
| 17.6.2 | 16.4.7.1 | | |
| 17.6.3 | 16.4.7.3 | | |

Chapter 18 - PRESTRESSED CONCRETE

| 318-11 | 318-14 | Note | Description |
|---------------|--|-------------|--|
| 18.1 | --- | ‡ | Heading: Scope |
| 18.1.1 | --- | ‡ | Scope |
| 18.1.2 | --- | ‡ | Scope |
| 18.1.3 | --- | ‡ | Resolved the intent of this provision |
| 18.2 | --- | ‡ | Heading: General |
| 18.2.1 | --- | ‡ | Introduction to section |
| 18.2.2 | 4.12.2.1 | | |
| 18.2.3 | 4.12.2.3 | | |
| 18.2.4 | 4.12.2.2 | | |
| 18.2.5 | 9.2.3.2 | | |
| 18.2.6 | 4.12.2.4 | | |
| 18.3 | --- | ‡ | Heading: Design assumptions |
| 18.3.1 | 22.2.1.1 | | |
| 18.3.2 | 24.5.1.2 | | |
| 18.3.2.1 | 22.2.1.4 24.5.1.2(a) | | |
| 18.3.2.2 | 22.2.2.2 24.5.1.2(b) | | |
| 18.3.3 | 8.3.4.1 24.5.2.1 | | |
| 18.3.4 | 24.5.2.2 24.5.2.3 | | |
| 18.3.5 | 24.2.2 24.2.3.8 24.2.3.9 24.2.4.2.1 | | Pointer to 9.5.4 Pointer to 9.5.4 Pointer to 9.5.4 Pointer to 9.5.4 |
| 18.4 | --- | ‡ | Heading: Serviceability requirements – Flexural members |
| 18.4.1 | 24.5.3.1 24.5.3.2 24.5.3.2.1 | | |
| 18.4.2 | 24.5.4.1 | | |
| 18.4.3 | 24.5.1.1 | | |
| 18.4.4 | 24.3.1 24.3.3 24.3.5 | | Pointer to 10.6.4 |
| 18.4.4.1 | 24.3.2 | | |
| 18.4.4.2 | 24.3.2 24.3.2.2 | | |
| 18.4.4.3 | 24.3.2.2 | | |
| 18.4.4.4 | 9.7.2.3 | | |
| 18.5 | --- | ‡ | Heading: Permissible stresses in prestressed reinforcement |
| 18.5.1 | 20.3.2.5.1 25.9.2.1 | | |
| 18.6 | --- | ‡ | Heading: Loss of prestress |

Chapter 18 - PRESTRESSED CONCRETE

| 318-11 | 318-14 | Note | Description |
|---------------|--|-------------|---|
| 18.6.1 | 20.3.2.6.1 | | |
| 18.6.2 | --- | ‡ | Heading: Friction loss in post-tensioning tendons |
| 18.6.2.1 | 26.10.1(a) | | |
| 18.6.2.2 | 20.3.2.6.2 | | |
| 18.6.2.3 | 26.10.2(e) 26.10.2(f) | | |
| 18.6.3 | 20.3.2.6.3 | | |
| 18.7 | --- | ‡ | Heading: Flexural strength |
| 18.7.1 | 22.2.1.3 | | |
| 18.7.2 | 20.3.2.3.1 20.3.2.4.1 | | |
| 18.7.3 | 22.3.2.1 22.3.2.2 | | |
| 18.8 | --- | ‡ | Heading: Limits for reinforcement of flexural members |
| 18.8.1 | 21.2.2 | | |
| 18.8.2 | 7.6.2.1 7.6.2.2 8.6.2.2 8.6.2.2.1 9.6.2.1 9.6.2.2 | | |
| 18.8.3 | 7.7.2.3 11.7.2.4 24.3.1 | | |
| 18.9 | --- | ‡ | Heading: Minimum bonded reinforcement |
| 18.9.1 | 7.6.2.3 8.6.2.3 9.6.2.3 | ~ | Require the same amount of unbonded reinforcement for bonded and unbonded prestressed two-way slabs |
| 18.9.2 | 7.6.2.3 9.6.2.3 | | |
| 18.9.2.1 | 11.7.2.4 24.3.1 | | |
| 18.9.2.2 | 7.6.2.3 9.6.2.3 | | |
| 18.9.3 | 8.6.2.3 | ~ | Require the same amount of unbonded reinforcement for bonded and unbonded prestressed two-way slabs |
| 18.9.3.1 | 8.6.2.3 | ~ | Require the same amount of unbonded reinforcement for bonded and unbonded prestressed two-way slabs |
| 18.9.3.2 | 8.6.2.3 | ~ | Require the same amount of unbonded reinforcement for bonded and unbonded prestressed two-way slabs |

Chapter 18 - PRESTRESSED CONCRETE

| 318-11 | 318-14 | Note | Description |
|----------------|---------------|-------------|---|
| 18.9.3.3 | 8.6.2.3 | ~ | Require the same amount of unbonded reinforcement for bonded and unbonded prestressed two-way slabs |
| | 8.7.5.3 | ~ | Require the same amount of unbonded reinforcement for bonded and unbonded prestressed two-way slabs |
| 18.9.4 | 7.7.4.4.1 | | |
| | 8.7.5.5.1 | | |
| | 9.7.4.4.1 | | |
| 18.9.4.1 | 7.7.4.4.1(a) | | |
| | 8.7.5.5.1(a) | | |
| | 9.7.4.4.1(a) | | |
| 18.9.4.2 | 7.7.4.4.1(b) | | |
| | 8.7.5.5.1(b) | | |
| | 9.7.4.4.1(b) | | |
| 18.9.4.3 | 7.7.4.2 | | |
| | 8.7.5.2 | | |
| | 9.7.4.2 | | |
| 18.10 | --- | ‡ | Heading: Statically indeterminate structures |
| 18.10.1 | 4.12.2.1 | | |
| 18.10.2 | 4.7.1 | | |
| 18.10.3 | 5.3.11 | | |
| | 6.6.5.2 | | |
| | 6.6.5.4 | | |
| | 8.4.1.3 | | |
| 18.10.4 | --- | ‡ | Heading: Redistribution of moments in continuous prestressed flexural members |
| 18.10.4.1 | 6.6.5.1 | | |
| 18.10.4.2 | 6.6.5.4 | | |
| 18.11 | --- | ‡ | Heading: Minimum bonded reinforcement |
| 18.11.1 | 22.4.1.1 | | |
| 18.11.2 | --- | ‡ | Heading: Limits for reinforcement of prestressed compression members |
| 18.11.2.1 | 10.6.1.1 | | |
| | 10.7.3.1 | | |
| | 11.6.1 | | |
| 18.11.2.2 | 10.7.6.1.3 | | |
| 18.11.2.2(a) | --- | ‡ | Pointer |
| 18.11.2.2(b) | 25.7.2.1 | | |
| | 25.7.2.2 | | |
| | 25.7.2.2.1 | | |
| 18.11.2.2(c) | 10.7.6.2.1 | | |
| | 10.7.6.2.2 | | |
| 18.11.2.2(d) | 10.7.6.2.2 | | |
| 18.11.2.3 | 11.6.1 | | |

Chapter 18 - PRESTRESSED CONCRETE

| 318-11 | 318-14 | Note | Description |
|----------------|--|-------------|--|
| 18.12 | --- | ‡ | Heading: Slab systems |
| 18.12.1 | 8.4.1.2 | | |
| 18.12.2 | 7.5.1.1 8.5.1.1 | | |
| 18.12.3 | 8.3.2.1 | | |
| 18.12.4 | 7.2.1 8.2.2 8.2.3 8.6.2.1 8.7.2.3 8.7.2.4 | | |
| 18.12.5 | 8.12.5 9.2.4.3 | | |
| 18.12.6 | 8.7.5.6.1 8.7.5.6.2 | ~ | Require the same structural integrity requirements for bonded and unbonded prestressed two-way slabs |
| 18.12.7 | 8.7.5.6.3 8.7.5.6.3.1 8.7.5.6.3.2 8.7.5.6.3.3 | ~ | Require the same structural integrity requirements for bonded and unbonded prestressed two-way slabs |
| 18.12.8 | 8.9.1 | | Pointer to 13.3.8.6 |
| 18.13 | --- | ‡ | Heading: Post-tensioned tendon anchorage zones |
| 18.13.1 | --- | ‡ | Heading: Anchorage zone |
| 18.13.1 | 25.9.1.1 25.9.4.1 25.9.4.2 | | |
| 18.13.2 | --- | ‡ | Heading: Local zone |
| 18.13.2.1 | 25.9.2.1 | | |
| 18.13.2.2 | 25.9.3.1 | | |
| 18.13.2.3 | 25.9.3.1 | | |
| 18.13.3 | --- | ‡ | Heading: General zone |
| 18.13.3.1 | 25.9.2.1 | | |
| 18.13.3.2 | 25.9.4.4.2 | | |
| 18.13.3.3 | 25.9.4 | | |
| 18.13.4 | --- | ‡ | Heading: Nominal material strengths |
| 18.13.4.1 | 25.9.4.5.1 | | |
| 18.13.4.2 | 25.9.4.5.2 25.9.4.5.3 | | |

Chapter 18 - PRESTRESSED CONCRETE

| 318-11 | 318-14 | Note | Description |
|----------------|---------------|------|---|
| | 25.9.1.4 | | |
| | 25.9.4.5.4 | | |
| | 25.9.4.5.5 | | |
| 18.13.4.3 | 26.4.2.2(a) | | |
| | 26.10.2(j) | | |
| | 26.10.2(k) | | |
| | 26.10.2(k)(1) | | |
| | 26.10.2(k)(2) | | |
| 18.13.5 | --- | ‡ | Heading: Design methods |
| 18.13.5.1 | 25.9.4.3.1 | ~ | Update references in AASHTO |
| 18.13.5.2 | 25.9.4.3.2 | | |
| 18.13.5.3 | 25.9.1.5 | | |
| | 26.10.1(b) | | |
| 18.13.5.4 | 25.9.4.3.3 | | |
| 18.13.5.5 | 25.9.4.4.3 | | |
| | 25.4.10.2 | | |
| 18.13.5.6 | 25.9.4.4.4 | | |
| 18.13.5.7 | 25.9.4.4.5 | | |
| 18.13.5.8 | 25.9.4.4.1 | | |
| 18.13.6 | --- | ‡ | Heading: Detailing requirements |
| 18.13.6 | 25.9.5.1 | | |
| 18.14 | --- | ‡ | Heading: Design of anchorage zones for monostrand or single 5/8 in. diameter bar tendons |
| 18.14.1 | --- | ‡ | Heading: Local zone design |
| 18.14.1 | 25.9.3.1(a) | | |
| 18.14.2 | --- | ‡ | Heading: General-zone design for slab tendons |
| 18.14.2.1 | 25.9.4.4.6 | | |
| 18.14.2.2 | 25.9.4.4.6(a) | | |
| 18.14.2.3 | 25.9.4.4.6(b) | | |
| 18.14.2.4 | 25.9.4.4.6 | | |
| 18.14.3 | --- | ‡ | Heading: General-zone design for groups of monostrand tendons in beams and girders |
| 18.14.3 | 25.9.4 | | |
| 18.15 | --- | ‡ | Heading: Design of anchorage zones for multistrand tendons |
| 18.15.1 | --- | ‡ | Heading: Local zone design |
| 18.15.1 | 25.9.3.1(b) | ~ | Update references in AASHTO |
| | 25.9.3.1(c) | ~ | Update references in AASHTO |
| 18.15.2 | --- | ‡ | Heading: Use of special anchorage devices |
| 18.15.2 | 25.9.3.2 | | |
| | 25.9.3.2.1 | | |
| 18.15.3 | --- | ‡ | Heading: General-zone design |
| 18.15.3 | 25.9.4 | | |
| 18.16 | --- | ‡ | Heading: Corrosion protection for unbonded tendons |
| 18.16.1 | 20.6.3.1 | | |

Chapter 18 - PRESTRESSED CONCRETE

| 318-11 | 318-14 | Note | Description |
|----------------|--------------------------|-------------|---|
| 18.16.2 | 20.6.3.1 | | |
| 18.16.3 | 20.6.3.2 | | |
| 18.16.4 | 20.6.3.3 | | |
| 18.17 | --- | ‡ | Heading: Post-tensioning ducts |
| 18.17 | 26.10.1(f) | | |
| 18.17.1 | 20.8.4.1 | | |
| 18.17.2 | 20.8.4.3 | | |
| 18.17.3 | 20.8.4.4 | | |
| 18.17.4 | 20.8.4.2 | | |
| 18.18 | --- | ‡ | Heading: Grout for bonded tendons |
| 18.18 | 26.10.1(g) | | |
| 18.18.1 | --- | ~ | Reference PTI M55.1 |
| 18.18.2 | --- | ~ | Reference PTI M55.1 |
| 18.18.2.1 | --- | ~ | Reference PTI M55.1 |
| 18.18.2.2 | --- | ~ | Reference PTI M55.1 |
| 18.18.2.3 | --- | ~ | Reference PTI M55.1 |
| 18.18.2.4 | --- | ~ | Reference PTI M55.1 |
| 18.18.3 | --- | ‡ | Heading: Selection of grout proportions |
| 18.18.3.1 | --- | ~ | Reference PTI M55.1 |
| 18.18.3.2 | --- | ~ | Reference PTI M55.1 |
| 18.18.3.3 | --- | ~ | Reference PTI M55.1 |
| 18.18.3.4 | --- | ~ | Reference PTI M55.1 |
| 18.18.4 | --- | ‡ | Heading: Mixing and pumping grout |
| 18.18.4.1 | --- | ~ | Reference PTI M55.1 |
| 18.18.4.2 | --- | ~ | Reference PTI M55.1 |
| 18.18.4.3 | --- | ~ | Reference PTI M55.1 |
| 18.19 | --- | ‡ | Heading: Protection for prestressing steel |
| 18.19 | 26.10.2(d) | | |
| 18.20 | --- | ‡ | Heading: Application and measurement of prestressing force |
| 18.20.1 | 26.10.2(e) 26.10.2(f) | | |
| 18.20.2 | 26.10.2(h) | | |
| 18.20.3 | 26.10.2(i) | | |
| 18.20.4 | 26.10.2(g) | | |
| 18.21 | --- | ‡ | Heading: Post-tensioning anchorages and couplers |
| 18.21.1 | 25.8.1 25.8.2 | | |
| 18.21.2 | 25.8.4 26.10.2(c) | | |
| 18.21.3 | 25.8.3 | | |
| 18.21.4 | 20.6.5.1 26.10.1(e) | | |

Chapter 18 - PRESTRESSED CONCRETE

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| 18.22 | --- | ‡ | Heading: External post-tensioning |
| 18.22.1 | 4.12.2.5 | | |
| | 7.5.2.2 | | |
| 18.22.2 | 8.5.2.3 | | |
| | 9.5.2.3 | | |
| | 7.7.4.1 | | |
| 18.22.3 | 8.7.5.1 | | |
| | 9.7.4.1 | | |
| 18.22.4 | 20.8.6.1 | | |
| | 26.10.1(e) | | |

Chapter 19 - SHELLS AND FOLDED PLATE MEMBERS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| 19.1 | --- | ‡ | Heading: Scope and definitions |
| 19.1.1 | 318.2-1.1.1 | | |
| 19.1.2 | 318.2-1.1.2 | | |
| 19.1.3 | 318.2-2.1.1 | | |
| 19.1.4 | 318.2-2.1.2 | | |
| 19.1.5 | 318.2-2.1.3 | | |
| 19.1.6 | 318.2-2.1.4 | | |
| 19.1.7 | 318.2-2.1.5 | | |
| 19.1.8 | 318.2-2.1.6 | | |
| 19.1.9 | 318.2-2.1.7 | | |
| 19.2 | --- | ‡ | Heading: Analysis and design |
| 19.2.1 | 318.2-3.1.1 | | |
| 19.2.2 | 318.2-3.1.2 | | |
| 19.2.3 | 318.2-3.1.3 | | |
| 19.2.4 | 318.2-3.1.4 | | |
| 19.2.5 | 318.2-3.1.5 | | |
| 19.2.6 | 318.2-3.1.6 | | |
| 19.2.7 | 318.2-3.1.7 | | |
| 19.2.8 | 318.2-3.1.8 | | |
| 19.2.9 | 318.2-3.1.9 | | |
| 19.2.10 | 318.2-3.1.10 | | |
| 19.2.11 | 318.2-3.1.11 | | |
| 19.3 | --- | ‡ | Heading: Design strength of materials |
| 19.3.1 | 318.2-4.1.1 | | |
| 19.3.2 | 318.2-4.1.2 | | |
| 19.4 | --- | ‡ | Heading: Shell reinforcement |
| 19.4.1 | 318.2-6.1.1 | | |
| 19.4.2 | 318.2-6.1.2 | | |
| 19.4.3 | 318.2-6.1.3 | | |
| 19.4.4 | 318.2-6.1.4 | | |
| 19.4.5 | 318.2-6.1.5 | | |
| 19.4.6 | 318.2-6.1.6 | | |
| 19.4.7 | 318.2-6.1.7 | | |
| 19.4.8 | 318.2-6.1.8 | | |
| 19.4.9 | 318.2-6.1.9 | | |
| 19.4.10 | 318.2-6.1.10 | | |
| 19.4.11 | 318.2-6.1.11 | | |
| 19.4.12 | 318.2-6.1.12 | | |
| 19.5 | --- | ‡ | Heading: Construction |
| 19.5.1 | 318.2-7.1.1 | | |
| 19.5.2 | 318.2-7.1.2 | | |

Chapter 20 - STRENGTH EVALUATION OF EXISTING STRUCTURES

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| 20.1 | --- | ‡ | Heading: Strength evaluation – General |
| 20.1.1 | 27.2.1 | | |
| 20.1.2 | 27.2.2 | | |
| 20.1.3 | 27.2.3 | | |
| 20.1.4 | 27.2.4 | | |
| 20.2 | --- | ‡ | Heading: Determination of required dimensions and material properties |
| 20.2.1 | 27.3.1.1 | | |
| 20.2.2 | 27.3.1.2 | | |
| 20.2.3 | 27.3.1.3 | | |
| | 27.3.1.4 | | |
| 20.2.4 | 27.3.1.5 | | |
| 20.2.5 | 27.3.2.1 | | |
| 20.3 | --- | ‡ | Heading: Load test procedure |
| 20.3.1 | --- | ‡ | Heading: Load arrangement |
| 20.3.1 | 27.4.2.1 | | |
| 20.3.2 | --- | ‡ | Heading: Load intensity |
| 20.3.2 | 27.4.2.2 | | |
| | 27.4.2.3 | | |
| | 27.4.2.4 | | |
| 20.3.3 | 27.4.1.3 | | |
| 20.4 | --- | ‡ | Heading: Loading criteria |
| 20.4.1 | 27.4.4.1 | | |
| | 27.4.4.2 | | |
| 20.4.2 | 27.4.3.1 | | |
| 20.4.3 | 27.4.3.2 | | |
| 20.4.4 | 27.4.3.3 | | |
| | 27.4.4.3 | | |
| 20.4.5 | 27.4.3.4 | | |
| 20.4.6 | 27.4.4.4 | | |
| 20.5 | --- | ‡ | Heading: Acceptance criteria |
| 20.5.1 | 27.4.5.1 | | |
| | 27.4.5.5 | | |
| 20.5.2 | 27.4.5.6 | | |
| | 27.4.5.7 | | |
| 20.5.3 | 27.4.5.2 | | |
| 20.5.4 | 27.4.5.3 | | |
| 20.5.5 | 27.4.5.4 | | |
| 20.6 | --- | ‡ | Heading: Provision for lower load rating |
| 20.6 | 27.5.1 | | |
| 20.7 | --- | ‡ | Heading: Safety |
| 20.7.1 | 27.4.1.1 | | |
| 20.7.2 | 27.4.1.2 | | |

Chapter 21 - EARTHQUAKE-RESISTANT STRUCTURES

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| 21.1 | --- | ‡ | Heading: General requirements |
| 21.1.1 | --- | ‡ | Heading: Scope |
| 21.1.1.1 | 18.1.2 | | |
| 21.1.1.2 | 18.2.1.1 | | |
| 21.1.1.3 | 18.2.1.2 | | |
| 21.1.1.4 | 18.2.1.3 | | |
| 21.1.1.5 | 18.2.1.4 | | |
| 21.1.1.6 | 18.2.1.5 | | |
| | 4.4.6.2 | | |
| 21.1.1.7 | 4.4.6.3 | | |
| | 18.2.1.6 | | |
| 21.1.1.8 | 18.2.1.7 | | |
| 21.1.2 | --- | ‡ | Heading: Analysis and proportioning of structural members |
| 21.1.2.1 | 18.2.2.1 | | |
| 21.1.2.2 | 4.4.6.5 | | |
| 21.1.2.2 | 4.4.6.6 | | |
| 21.1.2.2 | 18.2.2.2 | | |
| 21.1.2.3 | 18.2.2.3 | | |
| 21.1.3 | --- | ‡ | Heading: Strength reduction factors |
| 21.1.3 | 18.2.4.1 | | |
| 21.1.4 | --- | ‡ | Heading: Concrete in special moment frames and special structural walls |
| 21.1.4.1 | 19.2.1.1 | | |
| 21.1.4.2 | 19.2.1.1 | | |
| 21.1.4.3 | 19.2.1.1 | | |
| 21.1.5 | --- | ‡ | Heading: Reinforcement in special moment frames and special structural walls |
| 21.1.5.1 | 20.2.2.4 | | |
| | 20.2.2.4 | | |
| 21.1.5.2 | 20.2.2.5 | ~ | Elongation of seismic reinforcement |
| | 26.13.2.3 | | |
| 21.1.5.3 | 20.3.1.3 | | |
| 21.1.5.4 | 20.2.2.4 | | |
| 21.1.5.5 | 20.2.2.4 | | |
| 21.1.6 | --- | ‡ | Heading: Mechanical splices in special moment frames and special structural walls |
| 21.1.6.1 | 18.2.7.1 | | |
| 21.1.6.2 | 18.2.7.2 | | |
| 21.1.7 | --- | ‡ | Heading: Welded splices in special moment frames and special structural walls |
| 21.1.7.1 | 18.2.8.1 | | |
| 21.1.7.2 | 18.2.8.2 | | |
| 21.1.8 | --- | ‡ | Heading: Anchoring to concrete |
| 21.1.8 | 18.2.3.1 | | |

Chapter 21 - EARTHQUAKE-RESISTANT STRUCTURES

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--|
| 21.2 | --- | ‡ | Heading: Ordinary moment frames |
| 21.2.1 | --- | ‡ | Heading: Scope |
| 21.2.1 | 18.3.1.1 | | |
| | 18.3.2 | | |
| 21.2.2 | 18.4.2.1 | | |
| | 25.4.10.2 | | |
| 21.2.3 | 18.3.3 | | |
| 21.3 | --- | ‡ | Heading: Intermediate moment frames |
| 21.3.1 | --- | ‡ | Heading: Scope |
| 21.3.1 | 18.4.1.1 | | |
| 21.3.2 | 18.4.2.6 | | |
| 21.3.3 | --- | ‡ | Heading: Shear strength |
| 21.3.3.1 | 18.4.2.3 | | |
| 21.3.3.2 | 18.3.3 | | |
| 21.3.3.2 | 18.4.3.1 | | |
| 21.3.4 | --- | ‡ | Heading: Beams |
| 21.3.4.1 | 18.4.2.2 | | |
| 21.3.4.2 | 18.4.2.4 | | |
| 21.3.4.3 | 18.4.2.5 | | |
| 21.3.5 | --- | ‡ | Heading: Columns |
| 21.3.5.1 | 18.4.3.2 | | |
| 21.3.5.2 | 18.4.3.3 | | |
| 21.3.5.3 | 18.4.3.4 | | |
| 21.3.5.4 | 18.4.3.5 | | |
| 21.3.5.5 | 18.4.4.1 | | |
| 21.3.5.6 | 18.4.3.6 | | |
| 21.3.6 | --- | ‡ | Heading: Two-way slabs without beams |
| 21.3.6.1 | 18.4.5.1 | | |
| 21.3.6.2 | 18.4.5.2 | | |
| 21.3.6.3 | 18.4.5.3 | | |
| 21.3.6.4 | 18.4.5.4 | | |
| 21.3.6.5 | 18.4.5.5 | | |
| 21.3.6.6 | 18.4.5.6 | | |
| | 25.4.10.2 | | |
| 21.3.6.7 | 18.4.5.7 | | |
| | 25.4.10.2 | | |
| 21.3.6.8 | 18.4.5.8 | | |
| 21.4 | --- | ‡ | Heading: Intermediate precast structural walls |
| 21.4.1 | --- | ‡ | Heading: Scope |
| 21.4.1 | 18.5.1.1 | | |
| 21.4.2 | 18.5.2.1 | | |
| 21.4.3 | 18.5.2.2 | | |
| 21.4.4 | 18.5.2.3 | | |
| 21.5 | --- | ‡ | Heading: Flexure members of special moment frames |

Chapter 21 - EARTHQUAKE-RESISTANT STRUCTURES

| 318-11 | 318-14 | Note | Description |
|-----------------|---------------|-------------|--|
| 21.5.1 | --- | ‡ | Heading: Scope |
| 21.5.1 | 18.6.1.1 | | |
| 21.5.1.1 | 18.6.4.7 | | |
| 21.5.1.2 | 18.6.2.1 | | |
| 21.5.1.3 | 18.6.2.1 | | |
| 21.5.1.4 | 18.6.2.1 | | |
| 21.5.2 | --- | ‡ | Heading: Longitudinal reinforcement |
| 21.5.2.1 | 18.6.3.1 | | |
| 21.5.2.2 | 18.6.3.2 | | |
| 21.5.2.3 | 18.6.3.3 | | |
| 21.5.2.4 | 18.6.3.4 | | |
| 21.5.2.5 | 18.6.3.5 | | |
| 21.5.3 | --- | ‡ | Heading: Transverse reinforcement |
| 21.5.3.1 | 18.6.4.1 | | |
| 21.5.3.2 | 18.6.4.4 | | |
| 21.5.3.2 | 18.6.4.7 | | |
| 21.5.3.3 | 18.6.4.2 | | |
| 21.5.3.4 | 18.6.4.6 | | |
| 21.5.3.5 | 18.6.4.5 | | |
| | 18.6.4.3 | | |
| 21.5.3.6 | 25.3.5 | | |
| | 25.7.4.2 | | |
| 21.5.4 | --- | ‡ | Heading: Shear strength requirements |
| 21.5.4.1 | --- | ‡ | Heading: Design forces |
| 21.5.4.1 | 18.6.5.1 | | |
| 21.5.4.2 | --- | ‡ | Heading: Transverse reinforcement |
| 21.5.4.2 | 18.6.5.2 | | |
| 21.6 | --- | ‡ | Heading: Special moment frame members subjected to bending and axial load |
| 21.6.1 | --- | ‡ | Heading: Scope |
| 21.6.1 | 18.7.1.1 | | |
| 21.6.1.1 | 18.7.2 | | |
| 21.6.1.2 | 18.7.2 | | |
| 21.6.2 | --- | ‡ | Heading: Minimum flexural strength of columns |
| 21.6.2.1 | 18.7.3.1 | | |
| 21.6.2.2 | 18.7.3.2 | | |
| 21.6.2.3 | 18.7.3.3 | | |
| 21.6.3 | --- | ‡ | Heading: Longitudinal reinforcement |
| 21.6.3.1 | 18.7.4.1 | | |
| 21.6.3.2 | 18.7.4.2 | | |
| 21.6.3.3 | 18.7.4.3 | | |
| 21.6.4 | --- | ‡ | Heading: Transverse reinforcement |
| 21.6.4.1 | 18.7.5.1 | | |
| 21.6.4.2 | 18.7.5.2 | ~ | Revised confinement for columns |

Chapter 21 - EARTHQUAKE-RESISTANT STRUCTURES

| 318-11 | 318-14 | Note | Description |
|-----------------|---------------|-------------|---|
| 21.6.4.3 | 18.7.5.3 | | |
| 21.6.4.4 | 18.7.5.4 | ~ | Revised confinement for columns |
| 21.6.4.5 | 18.7.5.5 | | |
| 21.6.4.6 | 18.7.5.6 | | |
| 21.6.4.7 | 18.7.5.7 | | |
| 21.6.5 | --- | ‡ | Heading: Shear strength requirements |
| 21.6.5.1 | --- | ‡ | Heading: Design forces |
| 21.6.5.1 | 18.7.6.1.1 | | |
| 21.6.5.2 | --- | ‡ | Heading: Transverse reinforcement |
| 21.6.5.2 | 18.7.6.2.1 | | |
| 21.7 | --- | ‡ | Heading: Joints of special moment frames |
| 21.7.1 | --- | ‡ | Heading: Scope |
| 21.7.1 | 18.8.1.1 | | |
| 21.7.2 | --- | ‡ | Heading: General requirements |
| 21.7.2.1 | 18.8.2.1 | | |
| 21.7.2.2 | 18.8.2.2 | | |
| 21.7.2.3 | 18.8.2.3 | | |
| 21.7.3 | --- | ‡ | Heading: Transverse reinforcement |
| 21.7.3.1 | 18.8.3.1 | ~ | Revised confinement for columns |
| 21.7.3.2 | 18.8.3.2 | ~ | Revised confinement for columns |
| 21.7.3.3 | 18.8.3.3 | | |
| 21.7.4 | --- | ‡ | Heading: Shear strength |
| | 18.8.4.1 | | |
| 21.7.4.1 | 18.8.4.2 | | |
| | 18.8.4.3 | | |
| 21.7.4.2 | 18.8.4.1 | | |
| 21.7.5 | --- | ‡ | Heading: Development length of bars in tension |
| 21.7.5.1 | 18.8.5.1 | | |
| | 25.4.10.2 | | |
| 21.7.5.2 | 18.8.5.3 | | |
| | 25.4.10.2 | | |
| 21.7.5.3 | 18.8.5.4 | | |
| 21.7.5.4 | 18.8.5.5 | | |
| 21.8 | --- | ‡ | Heading: Special moment frame members constructed using precast concrete |
| 21.8.1 | --- | ‡ | Heading: Scope |
| 21.8.1 | 18.9.1.1 | | |
| 21.8.2 | 18.9.2.1 | | |
| 21.8.3 | 18.9.2.2 | | |
| | 25.4.10.2 | | |
| 21.8.4 | 18.9.2.3 | | |
| 21.9 | --- | ‡ | Heading: Special structural walls and coupling beams |
| 21.9.1 | --- | ‡ | Heading: Scope |

Chapter 21 - EARTHQUAKE-RESISTANT STRUCTURES

| 318-11 | 318-14 | Note | Description |
|----------------|--|-------------|---|
| 21.9.1 | 18.10.1.1 18.10.1.2 | | |
| 21.9.2 | --- | ‡ | Heading: Reinforcement |
| 21.9.2.1 | 18.10.2.1 | | |
| 21.9.2.2 | 18.10.2.2 | ~ | Revised detailing for special structural walls |
| 21.9.2.3 | 18.10.2.3 25.4.10.2 | | |
| 21.9.3 | --- | ‡ | Heading: Design forces |
| | 18.10.3 | | |
| 21.9.4 | --- | ‡ | Heading: Shear strength |
| 21.9.4.1 | 18.10.4.1 | | |
| 21.9.4.2 | 18.10.4.2 | | |
| 21.9.4.3 | 18.10.4.3 | | |
| 21.9.4.4 | 18.10.4.4 | | |
| 21.9.4.5 | 18.10.4.5 | | |
| 21.9.5 | --- | ‡ | Heading: Design for flexure and axial loads |
| 21.9.5.1 | 18.10.5.1 | | |
| 21.9.5.2 | 18.10.5.2 | | |
| 21.9.6 | --- | ‡ | Heading: Boundary elements of special structural walls |
| 21.9.6.1 | 18.10.6.1 | | |
| 21.9.6.2 | 18.10.6.2 | ~ | Revised detailing for special structural walls |
| 21.9.6.3 | 18.10.6.3 | ~ | Revised detailing for special structural walls |
| 21.9.6.4 | 18.10.6.4 25.4.10.2 | ~ | Revised detailing for special structural walls Revised confinement for columns |
| 21.9.6.5 | 18.10.6.5 | ~ | Revised detailing for special structural walls |
| 21.9.7 | --- | ‡ | Heading: Coupling beams |
| 21.9.7.1 | 18.10.7.1 | | |
| 21.9.7.2 | 18.10.7.2 | | |
| 21.9.7.3 | 18.10.7.3 | | |
| 21.9.7.4 | 18.10.7.4 25.4.10.2 | ~ | Revised confinement for columns |
| 21.9.8 | --- | ‡ | Heading: Wall piers |
| 21.9.8.1 | 18.10.8.1 | | |
| 21.9.8.2 | 18.10.8.2 | | |
| 21.9.9 | --- | ‡ | Heading: Construction joints |
| 21.9.9 | 18.10.9.1 26.5.6.1(b) 26.5.6.1(c) 26.5.6.2(e) | | |
| 21.9.10 | --- | ‡ | Heading: Discontinuous walls |
| 21.9.10 | 18.10.10.1 | | |

Chapter 21 - EARTHQUAKE-RESISTANT STRUCTURES

| 318-11 | 318-14 | Note | Description |
|-----------|-------------|------|--|
| 21.10 | --- | ‡ | Heading: Special structural walls constructed using precast concrete |
| 21.10.1 | --- | ‡ | Heading: Scope |
| 21.10.1 | 18.11.1.1 | | |
| 21.10.2 | 18.11.2.1 | | |
| 21.10.3 | 18.11.2.2 | | |
| 21.11 | --- | ‡ | Heading: Structural diaphragms and trusses |
| 21.11.1 | --- | ‡ | Heading: Scope |
| 21.11.1 | 18.12.1.1 | | |
| | 18.12.1.2 | | |
| 21.11.2 | --- | ‡ | Heading: Design forces |
| | 21.11.2.1 | | |
| 21.11.3 | --- | ‡ | Heading: Seismic load path |
| 21.11.3.1 | 12.2.1 | | |
| | 18.12.3.1 | | |
| 21.11.3.2 | 18.12.3.2 | | |
| 21.11.4 | --- | ‡ | Heading: Cast-in-place composite-topping slab diaphragms |
| | 18.12.4.1 | | |
| | 26.5.6.1(e) | | |
| 21.11.5 | --- | ‡ | Heading: Cast-in-place topping slab diaphragms |
| | 18.12.5.1 | | |
| 21.11.6 | --- | ‡ | Heading: Minimum thickness of diaphragms |
| | 18.12.6.1 | | Editorial |
| 21.11.7 | --- | ‡ | Heading: Reinforcement |
| 21.11.7.1 | 18.12.7.1 | | |
| 21.11.7.2 | 12.5.1.4 | | |
| | 18.12.7.2 | | |
| 21.11.7.3 | 18.12.7.3 | | |
| | 25.4.10.2 | | |
| 21.11.7.4 | 18.12.7.4 | | |
| 21.11.7.5 | 18.12.7.5 | | |
| 21.11.7.6 | 18.12.7.6 | | |
| 21.11.8 | --- | ‡ | Heading: Flexural strength |
| | 12.5.2.1 | | |
| | 18.12.8.1 | | |
| 21.11.9 | --- | ‡ | Heading: Shear strength |
| 21.11.9.1 | 12.5.3.3 | | |
| | 12.5.3.5 | | |
| | 18.12.9.1 | | |
| 21.11.9.2 | 12.5.3.4 | | |
| | 18.12.9.2 | | |
| 21.11.9.3 | 18.12.9.3 | | |
| 21.11.9.4 | 18.12.9.4 | | |

Chapter 21 - EARTHQUAKE-RESISTANT STRUCTURES

| 318-11 | 318-14 | Note | Description |
|-----------------|---------------|-------------|--|
| 21.11.10 | --- | ‡ | Heading: Construction joints |
| | 18.12.10.1 | | |
| 21.11.11 | --- | ‡ | Heading: Structural trusses |
| 21.11.11.1 | 18.12.11.1 | ~ | Revised confinement for columns |
| | 18.12.11.2 | | |
| 21.11.11.2 | 25.4.10.2 | | |
| 21.12 | --- | ‡ | Heading: Foundations |
| 21.12.1 | --- | ‡ | Heading: Scope |
| 21.12.1.1 | 18.13.1.1 | | |
| 21.12.1.2 | 18.13.1.2 | | |
| 21.12.2 | --- | ‡ | Heading: Footings, foundation mats, and pile caps |
| | 18.13.2.1 | | |
| | 25.4.10.2 | | |
| 21.12.2.2 | 18.13.2.2 | | |
| | 18.13.2.3 | | |
| 21.12.2.3 | 25.4.10.2 | | |
| | 18.13.2.4 | | |
| 21.12.2.4 | 18.13.2.4 | | |
| 21.12.2.5 | 18.13.2.5 | | |
| 21.12.3 | --- | ‡ | Heading: Grade beams and slabs-on-ground |
| | 18.13.3.1 | | |
| | 25.4.10.2 | | |
| 21.12.3.2 | 18.13.3.2 | | |
| 21.12.3.3 | 18.13.3.3 | | |
| | 18.13.3.4 | | |
| 21.12.3.4 | 26.5.7.1(b) | | |
| | 26.5.7.2(d) | | |
| 21.12.4 | --- | ‡ | Heading: Piles, piers, and caissons |
| 21.12.4.1 | --- | ‡ | Introduction |
| 21.12.4.2 | 18.13.4.1 | | |
| 21.12.4.3 | 18.13.4.2 | | |
| 21.12.4.4 | 18.13.4.3 | | |
| 21.12.4.5 | 18.13.4.4 | | |
| 21.12.4.6 | 18.13.4.5 | | |
| 21.12.4.7 | 18.13.4.6 | | |

Chapter 21 - EARTHQUAKE-RESISTANT STRUCTURES

| 318-11 | 318-14 | Note | Description |
|----------------|---------------|-------------|--|
| 21.13 | --- | ‡ | Heading: Members not designated as part of the seismic-force-resisting system |
| 21.13.1 | --- | ‡ | Heading: Scope |
| 21.13.1 | 18.14.1.1 | | |
| 21.13.2 | 18.14.3.1 | | |
| 21.13.3 | 18.14.2.1 | | |
| | 18.14.3.2 | | |
| 21.13.3.1 | 18.14.3.2(a) | | |
| 21.13.3.2 | 18.14.3.2(b) | | |
| 21.13.3.3 | 18.14.3.2(c) | | |
| 21.13.4 | 18.14.3.3 | | |
| 21.13.4.1 | 18.14.3.3(a) | | |
| 21.13.4.2 | 18.14.3.3(b) | | |
| 21.13.4.3 | 18.14.3.3(c) | | |
| 21.13.5 | 18.14.4.1 | | |
| 21.13.6 | 18.14.2.1 | | |
| | 18.14.5.1 | | |
| 21.13.7 | 18.14.6.1 | | |

Chapter 22 - STRUCTURAL PLAIN CONCRETE

| 318-11 | 318-14 | Note | Description |
|---------------|----------------------|------|--|
| 22.1 | --- | ‡ | Heading: Scope |
| 22.1.1 | 14.1.1 | | |
| 22.1.2 | --- | ‡ | List of applicable provisions |
| 22.1.3 | 14.1.1 | | |
| 22.2 | --- | ‡ | Heading: Limitations |
| 22.2.1 | 14.1.3 14.1.5 | | |
| 22.2.2 | 14.1.2 | | |
| 22.2.3 | --- | ‡ | Heading: Minimum specified strength |
| 22.2.3 | 19.2.1.1 | | |
| 22.2.4 | --- | ‡ | Heading: Lightweight concrete |
| 22.2.4 | 14.5.1.5 19.2.4.2 | | |
| 22.3 | --- | ‡ | Heading: Joints |
| 22.3.1 | 14.3.4.1 | | |
| 22.3.2 | 14.3.4.2 | | |
| 22.4 | --- | ‡ | Heading: Design method |
| 22.4.1 | 5.3.1 14.4.1.1 | | |
| 22.4.2 | --- | ‡ | Unnecessary statement |
| 22.4.3 | 14.5.1.4 | | |
| 22.4.4 | 14.5.1.3 | | |
| 22.4.5 | 14.5.1.6 | | |
| 22.4.6 | 14.2.2.1 14.4.1.3 | | |
| 22.4.7 | 14.5.1.7 | | |
| 22.5 | --- | ‡ | Heading: Strength design |
| 22.5.1 | 14.5.1.1 14.5.2.1 | | |
| 22.5.2 | 14.5.1.1 14.5.3.1 | | |
| 22.5.3 | 14.5.4.1 | | |
| 22.5.4 | 14.5.1.1 14.5.5.1 | | |
| 22.5.5 | 14.5.1.1 14.5.6.1 | | |
| 22.6 | --- | ‡ | Heading: Walls |
| 22.6.1 | 14.1.3 | | |
| 22.6.2 | 14.4.1.1 | | |
| 22.6.3 | 14.4.2.1 14.5.4.2 | | |
| 22.6.4 | 14.5.1.1 | | |
| 22.6.5 | --- | ‡ | Heading: Empirical design method |
| 22.6.5.1 | 14.5.4.2 | | |

Chapter 22 - STRUCTURAL PLAIN CONCRETE

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|---|
| 22.6.5.2 | 14.5.4.2 | | |
| 22.6.6 | --- | ‡ | Heading: Limitations |
| 22.6.6.1 | 14.5.1.8 | | |
| 22.6.6.2 | 14.3.1.1 | | |
| 22.6.6.3 | 14.3.1.1 | | |
| 22.6.6.4 | 14.2.2.2 | | |
| 22.6.6.5 | 14.6.1 | | |
| 22.7 | --- | ‡ | Heading: Footings |
| 22.7.1 | 14.4.1.1 | | |
| 22.7.2 | 14.3.2.2 | | |
| 22.7.3 | 14.1.5 | | |
| 22.7.4 | 14.3.2.1 | | |
| 22.7.5 | 14.4.3.2.1 | | |
| 22.7.6 | --- | ‡ | Heading: Shear in plain concrete footings |
| 22.7.6.1 | --- | ‡ | List of applicable provisions |
| 22.7.6.2 | 14.4.3.3.1 | | |
| | 14.4.3.4.1 | | |
| 22.7.7 | 14.4.3.1.1 | | |
| 22.7.8 | 14.5.1.1 | | |
| 22.8 | --- | ‡ | Heading: Pedestals |
| 22.8.1 | 14.4.1.1 | | |
| 22.8.2 | 14.3.3.1 | | |
| 22.8.3 | 14.5.1.1 | | |
| 22.9 | --- | ‡ | Heading: Precast members |
| 22.9.1 | 4.12.1.1 | | |
| | 14.2.3.1 | | |
| 22.9.2 | 14.1.3 | | |
| 22.9.3 | 14.2.3.2 | | |
| 22.9.4 | 26.9.2(d) | | |
| 22.10 | --- | ‡ | Heading: Plain concrete in earthquake-resisting structures |
| 22.10.1 | 14.1.4 | | |

Appendix A - STRUT-AND-TIE MODELS

| 318-11 | 318-14 | Note | Description |
|------------|-----------|------|---|
| A.1 | --- | ‡ | Heading: Definitions |
| A.1 | 2.3 | | |
| A.2 | --- | ‡ | Heading: Strut-and-tie model design procedures |
| | 23.1.2 | | |
| A.2.1 | 23.2.1 | | |
| | 23.2.2 | | |
| | 23.2.3 | | |
| A.2.2 | 23.2.4 | | |
| A.2.3 | 23.2.2 | | |
| A.2.4 | 23.2.5 | | |
| | 23.2.6 | | |
| A.2.5 | 23.2.7 | | |
| A.2.6 | 23.3.1 | | |
| A.3 | --- | ‡ | Heading: Strength of struts |
| A.3.1 | 23.4.1 | | |
| | 23.4.2 | | |
| A.3.2 | 23.4.3 | | |
| A.3.2.1 | 23.4.3 | | |
| A.3.2.2 | 23.4.3 | | |
| A.3.2.3 | 23.4.3 | | |
| A.3.2.4 | 23.4.3 | | |
| A.3.3 | 23.5.1 | | |
| A.3.3.1 | 23.5.3 | | |
| A.3.3.2 | 23.5.3.1 | | |
| A.3.4 | 23.4.4 | | |
| | 23.4.1 | | |
| A.3.5 | 23.6.1 | | |
| | 23.6.2 | | |
| | 23.6.3 | | |
| | 23.6.4 | | |
| A.4 | --- | ‡ | Heading: Strength of ties |
| | 22.4.3.1 | ~ | Added a tensile strength of a section for all members |
| A.4.1 | 23.7.1 | | |
| | 23.7.2 | | |
| | 23.7.3 | | |
| A.4.2 | 23.8.1 | | |
| A.4.3 | 23.8.2 | | |
| A.4.3.1 | 23.8.3(a) | | |
| A.4.3.2 | 23.8.3(b) | | |
| A.4.3.3 | 23.8.3(b) | | |
| A.4.3.4 | 23.5.2 | | |
| A.5 | --- | ‡ | Heading: Strength of nodal zones |
| A.5.1 | 23.9.1 | | |
| | 23.9.4 | | |

Appendix A - STRUT-AND-TIE MODELS

| 318-11 | 318-14 | Note | Description |
|---------------|------------------|-------------|--------------------|
| A.5.2 | 23.9.2 23.9.3 | | |
| A.5.2.1 | 23.9.2 | | |
| A.5.2.2 | 23.9.2 | | |
| A.5.2.3 | 23.9.2 | | |
| A.5.3 | 23.9.5 | | |

**Appendix B - ALTERNATIVE PROVISIONS FOR REINFORCED AND PRESTRESSED
CONCRETE FLEXURAL AND COMPRESSION MEMBERS**

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--------------------|
| App. B | --- | ~ | Removed appendix |

Appendix C - ALTERNATIVE LOAD AND STRENGTH REDUCTION FACTORS

| 318-11 | 318-14 | Note | Description |
|---------------|---------------|-------------|--------------------|
| App. C | --- | ~ | Removed appendix |

Appendix D - ANCHORING TO CONCRETE

| 318-11 | 318-14 | Note | Description |
|----------------|---------------------|------|--|
| D.1 | 2.3 | | |
| D.2 | --- | ‡ | Heading: Scope |
| D.2.1 | 17.1.1 | | |
| D.2.2 | 17.1.2 | | |
| D.2.3 | 17.1.3 26.7.1(a) | | |
| D.2.4 | 17.1.4 | | |
| D.3 | --- | ‡ | Heading: General requirements |
| D.3.1 | 17.2.1 | | |
| D.3.1.1 | 17.2.1.1 | | |
| D.3.2 | 17.2.2 | | |
| D.3.3 | --- | ‡ | Heading: Seismic design requirements |
| D.3.3.1 | 17.2.3.1 | | |
| D.3.3.2 | 17.2.3.2 | | |
| D.3.3.3 | 17.2.3.3 | | |
| D.3.3.4 | --- | ‡ | Heading: Requirements for tensile loading |
| D.3.3.4.1 | 17.2.3.4.1 | | |
| D.3.3.4.2 | 17.2.3.4.2 | | |
| D.3.3.4.3 | 17.2.3.4.3 | | |
| D.3.3.4.4 | 17.2.3.4.4 | | |
| D.3.3.4.5 | 17.2.3.4.5 | | |
| D.3.3.5 | --- | ‡ | Heading: Requirements for shear loading |
| D.3.3.5.1 | 17.2.3.5.1 | | |
| D.3.3.5.2 | 17.2.3.5.2 | | |
| D.3.3.5.3 | 17.2.3.5.3 | | |
| D.3.3.5.4 | 17.2.3.5.4 | | |
| D.3.3.6 | 17.2.3.6 | | |
| D.3.3.7 | 17.2.3.7 | | |
| D.3.4 | 17.2.4 | | |
| D.3.5 | 17.2.5 | | |
| D.3.6 | 17.2.6 | | |
| D.3.7 | 17.2.7 | | |
| D.4 | --- | ‡ | Heading: General requirements for strength of anchors |
| D.4.1 | 17.3.1 | | |
| D.4.1.1 | 17.3.1.1 | | |
| Table D.4.1.1 | Table 17.3.1.1 | | |
| D.4.1.2 | 17.3.1.2 | | |
| D.4.1.3 | 17.3.1.3 | | |
| D.4.2 | 17.3.2 | | |
| D.4.2.1 | 17.3.2.1 | | |
| D.4.2.2 | 17.3.2.2 | | |
| D.4.2.3 | 17.3.2.3 | | |
| D.4.3 | 17.3.3 | | |
| D.4.4 | --- | ~ | Remove information related to Appendix C |

Appendix D - ANCHORING TO CONCRETE

| 318-11 | 318-14 | Note | Description |
|---------------|----------------|------|---|
| D.5 | --- | ‡ | Heading: Design requirements for tensile loading |
| D.5.1 | --- | ‡ | Heading: Steel strength of anchor in tension |
| D.5.1.1 | 17.4.1.1 | | |
| D.5.1.2 | 17.4.1.2 | | |
| D.5.2 | --- | ‡ | Heading: Concrete breakout strength of anchor in tension |
| D.5.2.1 | 17.4.2.1 | | |
| D.5.2.2 | 17.4.2.2 | | |
| D.5.2.3 | 17.4.2.3 | | |
| D.5.2.4 | 17.4.2.4 | | |
| D.5.2.5 | 17.4.2.5 | | |
| D.5.2.6 | 17.4.2.6 | | |
| D.5.2.7 | 17.4.2.7 | | |
| D.5.2.8 | 17.4.2.8 | | |
| D.5.2.9 | 17.4.2.9 | | |
| D.5.3 | --- | ‡ | Heading: Pullout strength of cast-in, post-installed expansion and undercut anchors in tension |
| D.5.3.1 | 17.4.3.1 | | |
| D.5.3.2 | 17.4.3.2 | | |
| D.5.3.3 | 17.4.3.3 | | |
| D.5.3.4 | 17.4.3.4 | | |
| D.5.3.5 | 17.4.3.5 | | |
| D.5.3.6 | 17.4.3.6 | | |
| D.5.4 | --- | ‡ | Heading: Concrete side-face blowout strength of a headed anchor in tension |
| D.5.4.1 | 17.4.4.1 | | |
| D.5.4.2 | 17.4.4.2 | | |
| D.5.5 | --- | ‡ | Heading: Bond strength of adhesive anchor in tension |
| D.5.5.1 | 17.4.5.1 | | |
| D.5.5.2 | 17.4.5.2 | | |
| Table D.5.5.2 | Table 17.4.5.2 | | |
| D.5.5.3 | 17.4.5.3 | | |
| D.5.5.4 | 17.4.5.4 | | |
| D.5.5.5 | 17.4.5.5 | | |
| D.6 | --- | ‡ | Heading: Design requirements for shear loading |
| D.6.1 | --- | ‡ | Heading: Steel strength of anchor in shear |
| D.6.1.1 | 17.5.1.1 | | |
| D.6.1.2 | 17.5.1.2 | | |
| D.6.1.3 | 17.5.1.3 | | |
| D.6.2 | --- | ‡ | Heading: Concrete breakout strength of anchor in shear |
| D.6.2.1 | 17.5.2.1 | | |
| D.6.2.2 | 17.5.2.2 | | |
| D.6.2.3 | 17.5.2.3 | | |
| D.6.2.4 | 17.5.2.4 | | |
| D.6.2.5 | 17.5.2.5 | | |

Appendix D - ANCHORING TO CONCRETE

| 318-11 | 318-14 | Note | Description |
|--------------|--------------|------|--|
| D.6.2.6 | 17.5.2.6 | | |
| D.6.2.7 | 17.5.2.7 | | |
| D.6.2.8 | 17.5.2.8 | | |
| D.6.2.9 | 17.5.2.9 | | |
| D.6.3 | --- | ‡ | Heading: Concrete pryout strength of anchor in shear |
| D.6.3.1 | 17.5.3.1 | | |
| D.7 | --- | ‡ | Heading: Interaction of tensile and shear forces |
| D.7 | 17.6 | | |
| D.7.1 | 17.6.1 | | |
| D.7.2 | 17.6.2 | | |
| D.7.3 | 17.6.3 | | |
| D.8 | --- | ‡ | Heading: Required edge distances, spacings, and thicknesses to preclude splitting failure |
| D.8 | 17.7 | | |
| D.8.1 | 17.7.1 | | |
| D.8.2 | 17.7.2 | | |
| D.8.3 | 17.7.3 | | |
| D.8.4 | 17.7.4 | | |
| D.8.5 | 17.7.5 | | |
| D.8.6 | 17.7.6 | | |
| D.8.7 | 17.7.7 | | |
| | 26.7.1(c) | | |
| D.9 | --- | ‡ | Heading: Installation and inspection of anchors |
| | 17.8.1 | | |
| D.9.1 | 26.7.1(g) | | |
| | 26.7.2(a) | | |
| | 17.8.2 | | |
| D.9.2 | 26.13.3.3(f) | | |
| | 26.13.3.3(g) | | |
| | 17.8.2.1 | | |
| D.9.2.1 | 26.7.1(f) | | |
| | 26.7.1(j) | | |
| | 17.8.2.2 | | |
| D.9.2.2 | 26.7.1(i) | | |
| | 17.8.2.3 | | |
| D.9.2.3 | 26.7.1(i) | | |
| | 17.8.2.4 | | |
| D.9.2.4 | 26.7.1(h) | | |
| | 26.13.3.2(c) | | |



American Concrete Institute
Always advancing

38800 Country Club Drive
Farmington Hills, MI 48331 USA
+1.248.848.3700
www.concrete.org

The American Concrete Institute (ACI) is a leading authority and resource worldwide for the development and distribution of consensus-based standards and technical resources, educational programs, and certifications, for individuals and organizations involved in concrete design, construction, and materials, who share a commitment to pursuing the best use of concrete.

Individuals interested in the activities of ACI are encouraged to explore the ACI website for membership opportunities, committee activities, and a wide variety of concrete resources. As a volunteer member-driven organization, ACI invites partnerships and welcomes all concrete professionals who wish to be part of a respected, connected, social group that provides an opportunity for professional growth, networking and enjoyment.