ACI 318-11 to ACI 318-14 and ACI 318.2-14

Building Code Requirements for Structural Concrete

Transition Key

American Concrete Institute
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The following chart is a mapping of provisons 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 indentify 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**
1.1.1	1.2.2		
	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)		
1.2.1(e)	26.3.1(a)		
	26.6.1.1(b)		
	26.6.1.1(c)		
	26.10.1(c)		

Chapter 1 - GENERAL REQUIREMENTS

318-11	318-14	Note	Description
1.2.1(f)	26.7.1(b)		
	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	~	Regulate the use of headed bars in hoops
	25.7.4.1		
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		
	20.6.2.1		
3.5.3.9	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		
	20.6.2.1		
3.5.3.10	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		
	20.2.1.7.1		
3.5.3.11	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
	20.2.1.7		
3.5.4.2	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**
4.1.1	19.2.1.1		
	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" Changing "P" to "W"
	26.4.2.1(b)		
Table 4.2.1	Table 19.3.1.1	~	Changing description of "F Conditions" Changing "P" to "W"
4.3	---	‡	**Heading: Requirments for concrete mixtures**
4.3.1	19.3.2.1	~	Changing "P" to "W" and changing values of "F" Update of cement types
	26.4.2.1(a)(3)		
	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)		
Tabel 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 proporting 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 proporting and reference ACI 301
5.3.1	**---**	**‡**	**Heading: Sample standard deviation**
5.3.1.1	---	~	Remove statistical mix proporting and ref. ACI 301 Clarify the length of time to keep records
5.3.1.2	---	~	Remove statistical mix proporting and reference ACI 301
Table 5.3.1.2	---	~	Remove statistical mix proporting and reference ACI 301
5.3.2	**---**	**‡**	**Heading: Required average strength**
5.3.2.1	---	~	Remove statistical mix proporting and reference ACI 301
Table 5.3.2.1	---	~	Remove statistical mix proporting and reference ACI 301
5.3.2.2	---	~	Remove statistical mix proporting and reference ACI 301
Table 5.3.2.2	---	~	Remove statistical mix proporting and reference ACI 301
5.3.3	**---**	**‡**	**Heading: Documentation of average compressive strength**
5.3.3	26.4.4.1(a)	~	Remove statistical mix proporting and reference ACI 301
5.3.3.1	---	~	Remove statistical mix proporting and reference ACI 301
5.3.3.2	---	~	Remove statistical mix proporting 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 proporting and reference ACI 301
5.4.2	---	~	Remove statistical mix proporting and reference ACI 301
5.5	**---**	**‡**	**Heading: Average compressive strength reduction**
5.5	26.4.4.1(c)	~	Remove statistical mix proporting 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**
5.13	26.5.5.1(a)		
	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)		
6.1.5	26.11.1.2(a)		
	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)		
7.5.2	26.6.2.1(a)		
	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**

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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)**
	20.6.1.1		
7.7.3	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		
	25.7.1.6.1		
7.11.3	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
7.13.2.2	9.7.7.1(a)		
	9.7.7.1(b)		
	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		
7.13.2.5	9.7.7.2		
	9.7.7.3		
	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		
8.3.3	6.5.1		
	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**
8.4.1	6.5.3		
	6.6.1.2		
	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**
8.6.1	19.2.4.1		
	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**
9.1.1	4.4.4		
	4.6.2		
	7.5.1.1		
	8.5.1.1		
	9.5.1.1		
	10.5.1.1		
	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		
9.3.2.2	21.2.2		
9.3.2.3	21.2.1		

Chapter 9 - STRENGTH AND SERVICEABILITY REQUIREMENTS

318-11	318-14	Note	Description
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		
	8.3.2.2		
9.5.5.2	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**
10.2.1	4.5.1		
	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		
10.3.3	21.2.2		
	21.2.2.1		
	21.2.2.2		
10.3.4	21.2.2		
10.3.5	7.3.3.1		
	8.3.3.1		
	9.3.3.1		
10.3.5.1	22.2.3.1		
10.3.6	22.4.2.1		
10.3.6.1	22.4.2.1		
	22.4.2.2		
10.3.6.2	22.4.2.1		
	22.4.2.2		
10.3.6.3	22.4.2.1		
	22.4.2.3	~	Define P_o for prestressed columns
10.3.7	6.2.6		
	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
10.12.1	15.3.1(a)		
	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**
10.13.1	4.12.4.1		
	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		
10.13.5	6.2.5.2		
	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**
11.1.1	7.5.1.1		
	8.5.1.1		
	9.5.1.1		
	10.5.1.1		
	11.4.3.1		
	11.5.1.1		
	11.5.4.4		
	16.5.4.1		
	22.5.1.1		
11.1.1.1	7.2.1		
	8.2.2		
	22.5.1.7		
11.1.1.2	22.5.1.8		
	22.5.1.9		
11.1.2	12.5.3.3		
	12.5.3.4		
	22.5.3.1		
	22.6.3.1		
	22.7.2.1		
11.1.2.1	22.5.3.2		
11.1.3	7.4.3.2		
	8.4.3.2		
	9.4.3.2		
11.1.3.1	7.4.3.1		Editorial, from commentary
	7.4.3.2		
	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		
11.1.3.2	7.4.3.2		
	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		
11.2.1.2	22.5.6.1		
	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		
11.4.1.2	22.5.10.4		
	22.5.10.5.2		
	22.5.10.6.1		
11.4.2	20.2.2.4		
11.4.3	22.5.2.1		
	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		
11.4.7.2	22.5.10.5.3		
	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		
11.5.2.2	22.7.3.2		
	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		

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318-11	318-14	Note	Description
11.5.3.5	22.7.3.1		
11.5.3.6	22.7.6.1		
	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**
11.5.4.1	9.7.6.3.1		
	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		
11.5.6.2	9.7.5.1		
	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		

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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		
11.7.2	9.9.1.2		
	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		

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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		
11.10.2	15.2.3		
	15.2.4		
	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		

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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		
11.11.5	8.7.7.1		
	8.7.7.1.1		
	22.6.8.1		
11.11.5.1	22.6.6.1		
	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		
11.11.7.2	8.4.4.2.3		
	8.5.1.1		
	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**
12.1.1	7.7.3.1		
	9.7.3.1		
	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		
12.3.2	25.4.9.2		
	25.4.9.3		
12.3.3	25.4.9.3		
	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		
12.5.2	25.4.3.1		
	25.4.3.2		
12.5.3	25.4.3.2		
	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		
12.6.2	25.4.4.1		
	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
12.7.1	25.4.6.1		
	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**
12.8	25.4.7.1		
	25.4.7.2		
	25.4.10.1		
12.9	---	‡	**Heading: Development of prestressing strand**
12.9.1	25.4.8.1		
	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		
12.10.2	7.7.3.2		
	9.7.3.2		
12.10.3	7.7.3.3		
	9.7.3.3		
12.10.4	7.7.3.4		
	9.7.3.4		
12.10.5	7.7.3.5		
	9.7.3.5		
12.10.5.1	7.7.3.5(a)		
	9.7.3.5(a)		
12.10.5.2	7.7.3.5(b)		
	9.7.3.5(b)		
12.10.5.3	7.7.3.5(c)		
	9.7.3.5(c)		
12.10.6	7.7.3.6		
	9.7.3.6		
12.10.6	9.9.4.4		
	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**
12.11.1	7.7.3.8.1		
	7.7.3.8.2		
	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**
12.12.1	7.7.3.1		
	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**
12.14.1	26.6.1.1(d)		
	26.6.1.1(e)		
	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 fy.
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 fy.
12.15.5.1	---	~	Elimination of mechanical and welded splices with strengths less than 125% of fy.
12.15.5.2	---	~	Elimination of mechanical and welded splices with strengths less than 125% of fy.
12.15.5.3	---	~	Elimination of mechanical and welded splices with strengths less than 125% of fy.
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		
12.16.2	25.5.5.2		
	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 reinforcment 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 reinforcment 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: Emperical 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		
14.8.4	11.8.1.1(e)		
	11.8.4.1		
	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**
15.2.1	13.2.6.1		
	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		
15.5.3	13.2.6.3		
	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**
16.2.1	4.12.1.1		
	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		
16.6.2.2	16.2.6.1		
	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**
17.1.1	4.12.3.1		
	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		Pointer to 9.5.4
	24.2.3.8		Pointer to 9.5.4
	24.2.3.9		Pointer to 9.5.4
	24.2.4.2.1		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		Pointer to 10.6.4
	24.3.5		
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**

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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	~	Require the same amount of unbonded reinforcement for bonded and unbonded prestressed two-way slabs
	9.6.2.3		
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

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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		

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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	~	Require the same structural integrity requirements for bonded and unbonded prestressed two-way slabs
	8.7.5.6.2		
18.12.7	8.7.5.6.3	~	Require the same structural integrity requirements for bonded and unbonded prestressed two-way slabs
	8.7.5.6.3.1		
	8.7.5.6.3.2		
	8.7.5.6.3.3		
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		

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318-11	318-14	Note	Description
18.13.4.3	25.9.1.4		
	25.9.4.5.4		
	25.9.4.5.5		
	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		

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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	20.6.4.1		
18.17.2	20.6.4.3		
18.17.3	20.6.4.4		
18.17.4	20.6.4.2		
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)		

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318-11	318-14	Note	Description
18.22	**---**	**‡**	**Heading: External post-tensioning**
18.22.1	4.12.2.5		
18.22.2	7.5.2.2		
	8.5.2.3		
	9.5.2.3		
18.22.3	7.7.4.1		
	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		
20.5.2	27.4.5.5		
	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		
21.1.1.7	4.4.6.2		
	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		
21.1.5.2	20.2.2.4		
	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		
21.2.2	18.3.2		
	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		
21.5.3.6	18.6.4.3		
	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**
21.7.4.1	18.8.4.1		
	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	~	Revised detailing for special structural walls Revised confinement for columns
	25.4.10.2		
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	~	Revised confinement for columns
	25.4.10.2		
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
21.11.11.2	18.12.11.2		
	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**
21.12.2.1	18.13.2.1		
	25.4.10.2		
21.12.2.2	18.13.2.2		
21.12.2.3	18.13.2.3		
	25.4.10.2		
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**
21.12.3.1	18.13.3.1		
	25.4.10.2		
21.12.3.2	18.13.3.2		
21.12.3.3	18.13.3.3		
21.12.3.4	18.13.3.4		
	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: Emperical 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**
A.2.1	23.1.2		
	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		
A.3.5	23.4.1		
	23.6.1		
	23.6.2		
	23.6.3		
	23.6.4		
A.4	---	‡	**Heading: Strength of ties**
A.4.1	22.4.3.1	~	Added a tensile strength of a section for all members
	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**
D.9.1	17.8.1		
	26.7.1(g)		
	26.7.2(a)		
D.9.2	17.8.2		
	26.13.3.3(f)		
	26.13.3.3(g)		
D.9.2.1	17.8.2.1		
	26.7.1(f)		
	26.7.1(j)		
D.9.2.2	17.8.2.2		
	26.7.1(i)		
D.9.2.3	17.8.2.3		
	26.7.1(i)		
D.9.2.4	17.8.2.4		
	26.7.1(h)		
	26.13.3.2(c)		

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