6

CHAPTER 9 BEAMS

- 9.1—Scope, p. 127
- 9.2—General, p. 127
- 9.3—Design limits, p. 128
- 9.4—Required strength, p. 130
- 9.5—Design strength, p. 133
- 9.6—Reinforcement limits, p. 135
- 9.7—Reinforcement detailing, p. 139
- 9.8—Nonprestressed one-way joist systems, p. 150
- 9.9—Deep beams, p. 152

CHAPTER 10 COLUMNS

- 10.1—Scope, p. 155
- 10.2—General, p. 155
- 10.3—Design limits, p. 155
- 10.4—Required strength, p. 156
- 10.5—Design strength, p. 157
- 10.6—Reinforcement limits, p. 157
- 10.7—Reinforcement detailing, p. 158

CHAPTER 11 WALLS

- 11.1—Scope, p. 165
- 11.2—General, p. 165
- 11.3—Design limits, p. 166
- 11.4—Required strength, p. 166
- 11.5—Design strength, p. 167
- 11.6—Reinforcement limits, p. 170
- 11.7—Reinforcement detailing, p. 171
- 11.8—Alternative method for out-of-plane slender wall analysis, p. 172

CHAPTER 12 DIAPHRAGMS

- 12.1—Scope, p. 175
- 12.2—General, p. 176
- 12.3—Design limits, p. 177
- 12.4—Required strength, p. 178
- 12.5—Design strength, p. 181
- 12.6—Reinforcement limits, p. 188
- 12.7—Reinforcement detailing, p. 188

CHAPTER 13 FOUNDATIONS

- 13.1—Scope, p. 191
- 13.2—General, p. 193
- 13.3—Shallow foundations, p. 197
- 13.4—Deep foundations, p. 199

CHAPTER 14 PLAIN CONCRETE

- 14.1—Scope, p. 203
- 14.2—General, p. 204
- 14.3—Design limits, p. 204
- 14.4—Required strength, p. 206
- 14.5—Design strength, p. 207
- 14.6—Reinforcement detailing, p. 210

PART 4: JOINTS/CONNECTIONS/ANCHORS

CHAPTER 15

BEAM-COLUMN AND SLAB-COLUMN JOINTS

- 15.1—Scope, p. 211
- 15.2—General, p. 211
- 15.3—Detailing of joints, p. 212
- 15.4—Strength requirements for beam-column joints, p. 213
- 15.5—Transfer of column axial force through the floor system, p. 214

CHAPTER 16

CONNECTIONS BETWEEN MEMBERS

- 16.1—Scope, p. 217
- 16.2—Connections of precast members, p. 217
- 16.3—Connections to foundations, p. 222
- 16.4—Horizontal shear transfer in composite concrete flexural members, p. 225
- 16.5—Brackets and corbels, p. 227

CHAPTER 17

ANCHORING TO CONCRETE

- 17.1—Scope, p. 233
- 17.2—General, p. 234
- 17.3—Design Limits, p. 235
- 17.4—Required strength, p. 236
- 17.5—Design strength, p. 236
- 17.6—Tensile strength, p. 246
- 17.7—Shear strength, p. 261
- 17.8—Tension and shear interaction, p. 270
- 17.9—Edge distances, spacings, and thicknesses to preclude splitting failure, p. 270
- 17.10—Earthquake-resistant anchor design requirements, p. 272
- 17.11—Attachments with shear lugs, p. 277

