

	APPLICATION	ACI 318-25	WIRE REINFORCEMENT INSTITUTE REMARKS
MANUFACTURE	YIELD STRENGTH MEASUREMENT	20.2.1.2	
	ASTM SPECIFICATION REQUIREMENT	20.2.1.7	DEFORMED WIRE SIZES D4 - D31 ARE PERMITTED
	MINIMUM BEND DIAMETER – HOOKS FOR TENSION	25.3.1	RULES FOR BARS ADOPTED BY WIRE INDUSTRY
	MINIMUM BEND DIAMETER	25.3.3	INSIDE BEND DIAMETERS FOR WWR STIRRUPS AND TIES
DESIGN	MOMENT AND AXIAL STRENGTH	22.2	BASIC EQUILIBRIUM AND STRAIN COMPATIBILITY
	AXIAL AND FLEXURE STRENGTH REDUCTION FACTOR, ϕ	21.2.2.1, TABLE 21.2.2, & R21.2.2	PHI FACTOR AS A FUNCTION OF NET TENSILE STRAIN APPLIES; BOTH REBAR AND WIRE/WWR
	ONE-WAY SHEAR STRENGTH	22.5.5	
	WWR SHEAR REINFORCEMENT IN ONE-WAY SYSTEM	22.5.8.5.1	
	TWO-WAY SHEAR STRENGTH	22.6	
	WWR SHEAR REINFORCEMENT IN TWO-WAY SYSTEM	22.6.7.1	
	DEVELOPMENT LENGTH (TENSION) – DEFORMED WIRES	25.4.2.1 → 25.4.2.4	RULES FOR BARS APPLY, UP TO D31
	DEVELOPMENT LENGTH (TENSION) – DEFORMED WWR	25.4.6.1 → 25.4.6.5	RULES FOR BAR/WIRE APPLY IF WELDS IGNORED
MINIMUMS	TENSION LAP SPLICE – DEFORMED WIRE AND WWR	25.5.2 & 25.5.3	LAP SPLICE PER FIGURE R25.5.3.1.1 IS PREFERABLE
	FLEXURAL R/F: ONE-WAY NONPRESTRESSED SLABS	7.6.1	
	BONDED MILD R/F: ONE-WAY PRESTRESSED SLABS	7.6.2	
	SHEAR R/F: ONE-WAY SLABS	7.6.3	
	FLEXURAL R/F: TWO-WAY NONPRESTRESSED SLABS	8.6.1	
	BONDED MILD R/F: TWO-WAY PRESTRESSED SLABS	8.6.2.3 & 8.7.5.3	
	SHEAR R/F: TWO-WAY SLABS	8.7.6	ALSO SEE 8.4.4 AND 22.6.6
	FLEXURAL R/F: NONPRESTRESSED BEAMS	9.6.1	
	BONDED MILD R/F: PRESTRESSED BEAMS	9.6.2.3	
	SHEAR R/F: NONPRESTRESSED BEAMS	9.6.3.1	
	REINFORCEMENT: WALLS	11.6 & 18.10.2	WWR USED FOR SHEAR IN SPECIAL STRUCTURAL WALLS; WWR FOR FLEXURE, AXIAL, S&T IN OTHER WALLS
	DEFORMED R/F: SHRINKAGE AND TEMPERATURE	24.4.3	
DETAILING	TRANSVERSE REINFORCEMENT (STIRRUPS)	25.7.1.1 → 25.7.1.7	WWR STIRRUPS CAN BE PRODUCED WITH HOOKS, OR WITH ANCHORAGE WIRES IN LIEU OF HOOKS*
	TENSION DEVELOPMENT AND LAP SPLICE OF WWR	25.4.6 & 25.5.3	ANCHORAGE WIRES “REPLACE” HOOKS*
SEISMIC	FLEXURAL AND AXIAL REINFORCEMENT IN SPECIAL SEISMIC SYSTEMS	20.2.2.4	WWR NOT USED IN THESE APPLICATIONS
	FLEXURAL AND AXIAL REINFORCEMENT, OTHER SYSTEMS	20.2.2.4	NO EXCEPTIONS TO WWR USE
	LATERAL SUPPORT OF BARS, CONCRETE CONFINEMENT, SHEAR, AND TORSION IN SPECIAL SEISMIC SYSTEMS	TABLE 20.2.2.4(a), FOOTNOTE [6]	TO RESIST STRESSES ASSOCIATED WITH THE ACTIONS LISTED, USE HOOKS IN LIEU OF WELDED ANCHORAGE WIRES.
	TOPPING SLABS OVER PRECAST, SDC D, E, AND F	18.12.7.1	SPACING PROVISION FOR STRAIN DISTRIBUTION
WELDING	DISTINCTION BETWEEN MACHINE AND MANUAL WELDS	R26.6.4	

* Use of welded anchorage wires in lieu of bends would require EOR approval where bends are originally specified in the contract documents.