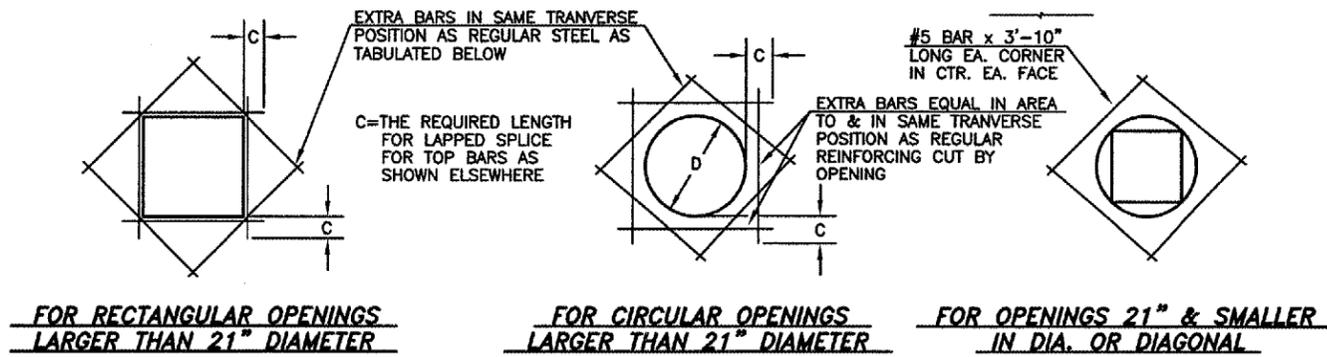


THICKNESS OF CONCRETE	BAR SIZE	RECT. OPENING	CIRC. OPENING
12"	4	3'-0"	D+6"
12"-18"	5	3'-0"	D+6"
18"	6	3'-8"	D+6"

CONCRETE COVER FOR REINFORCEMENT	
LOCATION	MINIMUM COVER
UNFORMED SUFACES ADJACENT TO EXCAVATION	3"
FORMED OR TOP SURFACES EXPOSED TO WEATHER OR SATURATED AIR, SUBMERGED OR IN CONTACT WITH EARTH	
#6 OR LARGER BARS	2"
#5 OR SMALLER BARS	1 1/2"
OTHER LOCATIONS	
BARS IN BEAMS OR GIRDERS, INCLUDING STIRRUPS & COLUMN SPIRALS OR TIES, SLABS, WALLS, & JOISTS	1 1/2"
#14 AND #18	1 1/2"
#11 AND SMALLER	3/4"

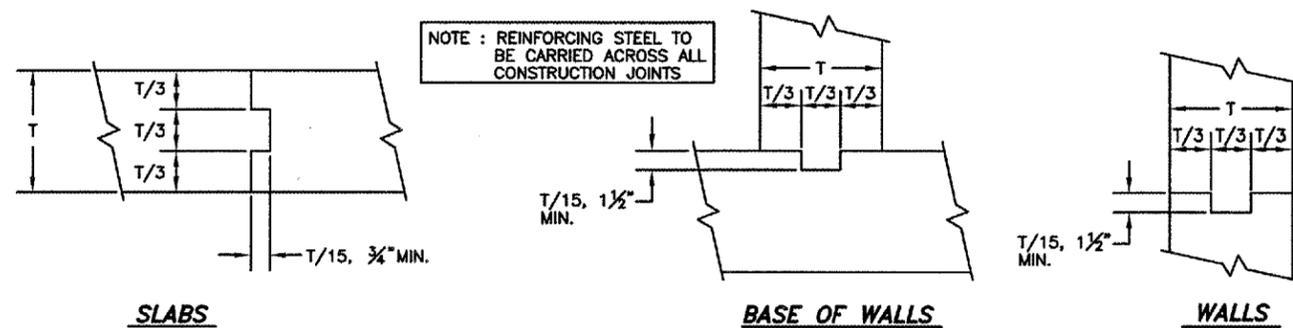
TOLERANCES FOR CONCRETE COVER & THE PLACING OF REINFORCEMENT SHALL CONFORM TO SECTION 7.5 OF ACI 318. TOLERANCES FOR THE FABRICATION OF REINFORCEMENT SHALL CONFORM TO SECTION 4.3 OF ACI 315.



TYPICAL EXTRA REINFORCING AT OPENINGS  
SCALE : NONE

BAR SIZE	LENGTH OF LAPPED SPLICES FOR REINF. (INCHES)		LENGTH OF DEVELOPMENT FOR END ANCHORAGE OF REINF. (INCHES)		
	*TOP BARS	OTHERS	*TOP BARS	OTHERS	HOOKED BARS
3	20	20	12	12	6
4	22	20	14	12	8
5	29	20	17	12	10
6	37	26	22	15	12
7	50	36	29	21	14
8	66	47	39	28	18
9	83	60	49	35	18
10	106	76	62	45	20
11	130	93	77	55	22
14			104	74	38
18			135	96	50

\*TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR. HORIZONTAL BARS IN WALLS ARE TO BE PROVIDED WITH LAPS AS REQUIRED FOR TOP BARS. STRAIGHT BARS SPACED LESS THAN 6 INCHES ON CENTER SHALL HAVE A DEVELOPMENT LENGTH OF 1.25 TIMES THE LENGTH SHOWN. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, DEVELOPMENT LENGTHS FOR END ANCHORAGE & LAPPED SPLICES SHALL NOT BE LESS THAN (NO MINUS TOLERANCE) SHOWN ABOVE. LAPPED SPLICES SHALL NOT BE MADE AT POINTS OF MAXIMUM STRESS AS DETERMINED BY THE ENGINEER. IF SPLICES ARE STAGGERED SO THAT NO MORE THAN 1/2 ARE SPLICED IN A LAP SPLICE LENGTH, THE SPLICE LENGTH CAN BE REDUCED TO 75% OF THE LENGTHS TABULATED.



TYPICAL CONSTRUCTION JOINTS  
SCALE : NONE

GALESBURG MUNICIPAL AIRPORT GALESBURG, ILLINOIS	
TYPICAL FOUNDATION STRUCTURAL DETAILS	
HUTCHISON ENGINEERING, INC. JACKSONVILLE, ILLINOIS	
DRAWN BY: LAW	ILL. PROJ. NO. 686-3433
DATE : MARCH, 2006	AP PROJ. NO. 3-17-0047-B8