

Revision	By	Approved	Date
ORIGINAL		Kercheval	12/75
Add Metric		T. Stanton	03/03
Reviewed		T. Stanton	04/06
Edited		T. Stanton	02/09
Edited	S.S.	T. Regello	03/11

SAN DIEGO REGIONAL STANDARD DRAWING

TRIPLE BOX CULVERT
DETAILS No. 1

DRAWING NUMBER
D-78D

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Johnston 7/26/2012
Chairperson R.C.E. 19246 Date

SPAN 8' (all measurements in feet and/or inches)

SPAN				8'																	
HEIGHT		4'			5'			6'			7'				8'						
STRENGTH CLASSIFICATION		A	B	C	A	B	C	A	B	C	A	B	C	D	A	B	C	D			
MAX FILL OVER TOP		2	11	20	2	11	20	2	11	20	2	11	20	28	2	11	20	28			
Conc.	Top Slab	T ₁	8 1/4	8 1/4	10 1/4	8 1/4	8 1/4	10 1/4	8 1/4	8 1/4	10 1/4	8 1/4	8 1/4	10 1/4	11 1/2	8 1/4	8 1/4	10 1/4	11 1/2		
	Bottom Slab	T ₂	6 1/2	9	11	6 1/2	9 1/4	11	6 1/2	9 1/4	11	6 3/4	9 1/4	11	12 1/4	6 3/4	9 1/4	11	12 1/4		
	Sidewalls	T ₃	6	6	6	6	6	6	6	6	6	6	6	6 1/2	6 1/2	7	7	7 1/2	8 1/2		
Reinforcing Steel	"a"	Size Bar #	6	5	5	6	5	5	6	5	5	6	5	5	6	5	5	5	6		
		Spacing	11 1/2	12	12	11 1/2	12	12	11 1/2	12	12	11 1/2	12	12	10 1/2	11 1/2	11 1/2	12	10 1/2		
		Length	26-10	26-9	26-9	26-10	26-9	26-9	26-10	26-9	26-9	26-10	26-9	26-11	27-4	27-2	27-1	27-3	27-8		
	"b" or "b ₁ "	Size Bar #	6	6	7	6	6	7	6	6	7	6	6	7	7	6	6	7	7		
		Spacing	11 1/2	12	12	11 1/2	12	12	11 1/2	12	12	11 1/2	12	12	10 1/2	11 1/2	11 1/2	12	10 1/2		
		Length "b"	26-5	26-5	26-7	26-5	26-5	26-7	26-5	26-5	26-7	26-5	26-5	26-9	27-3	26-9	26-9	27-1	27-7		
	"c"	Length "b ₁ "	26	26-4	26-7	26	26-5	26-7	26	26-5	26-7	26-1	26-5	26-9	27-3	26-5	26-9	27-1	27-7		
		Size Bar #	4	6	7	4	6	7	4	6	7	4	6	7	7	4	6	7	7		
		Spacing	11 1/2	12	12	11 1/2	12	12	11 1/2	12	12	11 1/2	12	12	10 1/2	11 1/2	11 1/2	12	10 1/2		
	"d" Dist Bars	Length	17	17	17	17	17	17	17	17	17	17	17	17-1	17-3	17-2	17-2	17-3	17-5		
		Top Slab-Tot. No.	24	12	12	24	12	12	24	12	12	24	12	12	12	24	12	12	12		
	"e" Bars	Bottom Slab-Tot. No.	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
		Size Bar #	4	4	4	4	4	5	4	5	6	4	6	7	7	4	6	7	7		
	Quan.	Spacing	18	18	12	18	12	12	18	12	12	11 1/2	12	12	10 1/2	11 1/2	11 1/2	12	10 1/2		
		Spacers	Number	58			62			62			66				70				88
		Concrete: C.Y. per lin. ft.	1.47	1.67	1.99	1.54	1.76	2.06	1.62	1.84	2.14	1.71	1.91	2.26	2.57	1.90	2.10	2.46	2.79		
Reinf :lbs per lin. ft.		261	250	301	266	257	310	267	264	320	276	277	336	409	283	295	347	441			

NOTE

For boxes of height less than that shown in table, use next greater table height slabs, wall dimensions and reinforcing steel, and make necessary changes in bar lengths, number of spacers and quantities. Number of "d" bars in table is slab total for all cells.