

Top Slab "E"

Cover Depth	Maintenance Hole Diameter (in)							
42" to 7'	60	72	84	96	108	120	132	144
T (in)	12	12	12	12	12	12	14	14
"A" Bars (under)	No 5 @ 4" long	No 5 @ 8"	No 5 @ 6"	No 5 @ 6"	No 6 @ 7"	No 6 @ 7"	No 6 @ 6"	No 7 @ 8"
"B" Bars (over)	No 5 @ 4" diag**	No 5 @ 8"	No 5 @ 6"	No 5 @ 6"	No 6 @ 7"	No 6 @ 7"	No 6 @ 6"	No 7 @ 8"
Temperature Reinforcement	N/A						No. 4 @ 12" E.W.	No. 4 @ 12" E.W.

Cover Depth	Maintenance Hole Diameter (in)							
7' to 22'	60	72	84	96	108	120	132	144
T (in)	12	12	12	14	16	16	16	16
"A" Bars (under)	No 5 @ 4" long	No 5 @ 6"	No 6 @ 5"	No 6 @ 5"	No 7 @ 6"	No 8 @ 7"	No 8 @ 6"	No 9 @ 7"
"B" Bars (over)	No 5 @ 4" diag**	No 5 @ 6"	No 6 @ 5"	No 6 @ 5"	No 7 @ 6"	No 8 @ 7"	No 8 @ 6"	No 9 @ 7"
Temperature Reinforcement	N/A			No. 4 @ 12" E.W.	No. 4 @ 12" E.W.	No. 4 @ 12" E.W.	No. 4 @ 12" E.W.	No. 4 @ 12" E.W.

Precast Maintenance Hole Base Slab

0 - 15' depth	Maintenance Hole Diameter (in)							
	60	72	84	96	108	120	132	144
Ts (in)	11	11	12	12	13	13	14	14
"E" Bars	No 4 @ 10"	No 4 @ 8"	No 4 @ 6"	No 5 @ 7"	No 5 @ 6"	No 6 @ 7"	No 6 @ 6"	No 6 @ 5"

15' to 30' depth	Maintenance Hole Diameter (in)							
	60	72	84	96	108	120	132	144
Ts (in)	12	12	13	14	15	16	17	18
"E" Bars	No 4 @ 8"	No 5 @ 8"	No 5 @ 7"	No 5 @ 6"	No 6 @ 6"	No 6 @ 6"	No 6 @ 5"	No 6 @ 5"

NOTE:

** See detail drawings for reinforcement layout.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.

Manufacturing Standards for Precast Concrete Products

Appendix A

Precast Concrete Maintenance Hole - Top Slab "E" and Base Slabs



Bureau of Environmental Services
CITY OF PORTLAND, OREGON

Chief Engineer

Calc. Book No.
001

Effective Date
01-01-09

Standard Drawing No.

P-149