

**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

**William Ryan**  
Digitally signed by William Ryan  
Date: 2020.08.31 13:45:23 -0700  
Chief Engineer

Calc. Book No.  
001

Effective Date  
01-01-09

Standard Drawing No.

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