

20-JUL-2020
RD382.dgn

FILL HEIGHT TABLE

PIPE		ALUMINUM ARCH PIPE					STEEL ARCH PIPE				
		2⅔"x½"					2⅔"x½"				
		HELICAL SEAM (LOCK)					HELICAL SEAM (LOCK OR WELDED)				
EQUIVALENT ROUND DIAMETER (Inches)	ARCH PIPE * SIZE (Inches)	MINIMUM CORNER RADIUS (Inches)	SPECIFIED THICKNESS		MINIMUM COVER (Feet)	MAXIMUM COVER (Feet)	MINIMUM CORNER RADIUS (Inches)	SPECIFIED THICKNESS		MINIMUM COVER (Feet)	MAXIMUM COVER (Feet)
			(Inches)	(Gage)				(Inches)	(Gage)		
15	17x13	3	0.060	16	1.0	22	3	0.064	16	1.0	22
18	21x15	3	0.060	16	1.0	17	3	0.064	16	1.0	17
21	24x18	3	0.060	16	1.0	15	3	0.064	16	1.0	15
24	28x20	3	0.075	14	1.5	13	3	0.064	16	1.0	13
30	35x24	3	0.075	14	1.5	10	3	0.064	16	1.0	10
36	42x29	3.5	0.105	12	2.0	10	3.5	0.064	16	1.0	10
42	49x33	4	0.105	12	2.0	10	4	0.079	14	1.0	10
48	57x38	5	0.135	10	2.0	10	5	0.109	12	1.5	10
54	64x43	6	0.135	10	2.0	11	6	0.109	12	1.5	11
60	71x47	7	0.164	8	2.5	12	7	0.138	10	1.5	12
66	77x52						8	0.168	8	2.0	12
72	83x57						9	0.168	8	2.0	13

* See general note 9

FILL HEIGHT TABLE

PIPE		ALUMINUM ARCH PIPE					STEEL ARCH PIPE								
		3"x1"					3"x1"				5"x1"				
		HELICAL SEAM (LOCK)					HELICAL SEAM (LOCK OR WELDED)				HELICAL SEAM (LOCK OR WELDED)				
EQUIVALENT ROUND DIAMETER (Inches)	ARCH PIPE SIZE *	MINIMUM CORNER RADIUS (Inches)	SPECIFIED THICKNESS		MINIMUM COVER (Feet)	MAXIMUM COVER (Feet)	MINIMUM CORNER RADIUS (Inches)	SPECIFIED THICKNESS		MINIMUM COVER (Feet)	MAXIMUM COVER (Feet)	SPECIFIED THICKNESS		MINIMUM COVER (Feet)	MAXIMUM COVER (Feet)
			(Inches)	(Gage)				(Inches)	(Gage)			(Inches)	(Gage)		
36	40x31	5	0.060	16	2.0	15	5	0.064	16	1.0	15				
42	46x36	6	0.060	16	2.0	16	6	0.064	16	1.0	16				
48	53x41	7	0.060	16	2.0	16	7	0.064	16	1.0	16	0.109	12	1.0	25
54	60x46	8	0.060	16	2.0	16	8	0.064	16	1.5	16	0.109	12	1.5	25
60	66x51	9	0.075	14	2.0	17	9	0.064	16	1.5	17	0.109	12	1.5	25
66	73x55	12	0.105	12	2.5	20	12	0.064	16	1.5	20	0.109	12	1.5	24
72	81x59	14	0.105	12	2.5	21	14	0.064	16	2.0	21	0.109	12	1.5	21
78	87x63	14	0.105	12	3.0	20	14	0.079	14	2.0	20	0.109	12	1.5	20
84	95x67	16	0.135	10	3.0	21	16	0.109	12	2.0	21	0.109	12	1.5	20
90	103x71	16	0.164	8	3.5	19	16	0.109	12	2.5	19	0.109	12	1.5	20
96	112x75	18	0.164	8	3.5	20	18	0.109	12	2.5	20	0.109	12	2.0	20
102	117x79						18	0.138	10	2.5	19	0.109	12	2.0	19
108	128x83						18	0.138	10	3.0	17	0.109	12	2.0	19
114	137x87						18	0.168	8	3.0	16	0.109	12	2.0	19
120	142x91						18					0.138	10	2.0	19

GENERAL NOTES FOR ALL TABLES ON THIS SHEET:

1. Maximum height of cover is greatest vertical distance from top of pipe to finish grade.
2. Minimum height of cover is least vertical distance from top of pipe to subgrade.
3. For ODOT, arch pipes with equivalent round diameter greater than 72" must be reviewed by the Geo-Environmental Section.
4. For ODOT, arch pipes with maximum cover greater than those shown in the Tables shall be approved by the Senior Standards Engineer.
5. For multiple pipe installations, see Std. Dwg. RD304.
6. Heavy solid line denotes boundary between minimum cover requirements.
7. Open ends of pipes normally require a site specific design, and may require special treatment (Sloped ends, culvert embankment protection, paved end slopes, safety end sections, or other measures).
See special details or Standard Drawings as called for on plans.
8. For minimum thickness, see AASHTO M197, M218, and M274.
9. Cross-sectional dimensions may vary with different materials.

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 and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

FILL HEIGHT TABLES FOR ALUMINUM AND STEEL ARCH PIPE

2024

DATE	REVISION	DESCRIPTION

CALC. BOOK NO. _ _ _ _

N/A _ _ _

SDR DATE- 11-JUL-2011 _

RD382