



SHEET THICKNESS - GAGE RELATIONSHIP		
GAGE	THICKNESS - EQUIVALENT IN INCHES	
	GALV. STEEL	ALUM. ALLOY
18	.0516	.048
16	.0635	.060
14	.0785	.075
12	.1084	.105
10	.1382	.135
8	.1681	.164

ROUND PIPE			PIPE-ARCH				
PIPE DIA. (IN.)	END AREA SQ. FT.	3" x1" & 5" x1" GAGE (MIN.)	SPAN (IN.)	RISE (IN.)	END AREA SQ. FT.	3" x1" GAGE (MIN.)	5" x1" GAGE (MIN.)
36	7.1	16	40-1.8	31+1.8	7.0	14	--
42	9.6	16	46-2.1	36+2.1	9.4	14	--
48	12.6	16	53-2.4	41+2.4	11.7	14	12
54	15.9	16	60-2.7	46+2.7	15.6	14	12
60	19.6	16	66-3.0	51+3.0	19.3	14	12
66	23.8	16	73-3.3	55+3.3	23.2	14	12
72	28.3	16	81-3.6	59+3.6	27.4	14	12
78	33.2	14	87-4.4	63+4.4	32.1	14	12
84	38.5	12	95-4.8	67+4.8	37.0	12	12
90	44.2	12	103-5.2	71+5.2	42.4	12	12
96	50.4	12	112-5.6	75+5.6	48.0	12	12
102	56.7	12	117-5.9	79+5.9	54.2	12	12
108	63.6	10	128-6.4	83+6.4	60.5	10	10
114	70.9	8	137-6.9	87+6.9	67.4	8	8
120	78.5	8	142-7.1	91+7.1	74.5	8	8

ELONGATE ROUND PIPE VERTICAL AXIS 5% MORE THAN THE NORMAL DIAMETER WHEN CALLED FOR IN THE PLANS.

DO NOT VARY THE AVERAGE INSIDE DIAMETER OF CIRCULAR PIPE MORE THAN ONE PERCENT OR ONE-HALF INCH, WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS.

FOR PIPE ARCH THE NEGATIVE AND POSITIVE NUMBERS LISTED WITH SPAN AND RISE DIMENSIONS ARE NEGATIVE AND POSITIVE TOLERANCES. ALL DIMENSIONS ARE MEASURED FROM THE INSIDE CRESTS OF THE CORRUGATIONS.

REFER TO THE MnDOT DRAINAGE MANUAL FOR ALLOWABLE FILL HEIGHTS. 5" x 1" CORRUGATED METAL PIPE IS AVAILABLE IN 48" - 120" DIAMETERS.

APPROVED FEBRUARY 22, 2021

Rom Slin
STATE DESIGN ENGINEER

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

CORRUGATED METAL PIPE
3" x 1" OR 5" x 1" CORRUGATION

SPECIFICATION
REFERENCE

2501
2502
2503

STANDARD
PLATE
NO.

3041E