

**1/2 inch Steel EMT Chime Length Calculator for the C-9 Chord (C E G B<sup>b</sup> D) Inches version**  
 A-440 For a Tube or Rod unrestricted at both ends

To determine the resonant frequency for a rod set the ID=0 and enter the OD and Metal Type

**Enter values in BLUE, answers in ORANGE (inches) and in YELLOW (mm)**

OD inches = <b>0.706</b>		ID inches = <b>0.622</b>		Metal = <b>Aluminum</b> < Click to Select							
Wall = 0.042 inches		Length calculated for fundamental F Hang Point is for fundamental F node									
Note	Freq Hz	Length inches	Hang Point	Length mm	Hang Point	Note	Freq Hz	Length inches	Hang Point	Length mm	Hang Point
C1	32.70	71 5/16	16	1811.3	406.1	C5	523.30	17 13/16	4	452.4	101.4
E	41.21	63 1/2	14 1/4	1612.9	361.6	E	659.30	15 7/8	3 9/16	403.2	90.4
G	49.00	58 1/4	13 1/16	1479.6	331.7	G	784.00	14 9/16	3 1/4	369.9	82.9
A <sup>#</sup> /B <sup>b</sup>	58.30	53 7/16	12	1357.3	304.3	A <sup>#</sup> /B <sup>b</sup>	932.30	13 3/8	3	339.7	76.2
D2	73.41	47 5/8	10 11/16	1209.7	271.2	D6	1,174.61	11 7/8	2 11/16	301.6	67.6
Total feet =		24.5	Total cm=	747.1		Total feet required		6.1	Total cm=	186.7	
C2	65.40	50 7/16	11 5/16	1281.1	287.2	C6	1,046.50	12 5/8	2 13/16	320.7	71.9
E	82.40	44 15/16	10 1/16	1141.4	255.9	E	1,318.50	11 1/4	2 1/2	285.8	64.1
G	98.01	41 3/16	9 1/4	1046.2	234.5	G	1,568.00	10 5/16	2 5/16	261.9	58.7
A <sup>#</sup> /B <sup>b</sup>	116.50	37 13/16	8 1/2	960.4	215.3	A <sup>#</sup> /B <sup>b</sup>	1,864.60	9 7/16	2 1/8	239.7	53.7
D3	146.80	33 11/16	7 9/16	855.7	191.8	D7	2,349.20	8 7/16	1 7/8	214.3	48.0
Total feet required		17.3	Total cm=	528.5		Total feet required		4.3	Total cm=	132.2	
C3	130.81	35 11/16	8	906.5	203.2	C7	2,093.00	8 15/16	2	227.0	50.9
E	164.80	31 3/4	7 1/8	806.5	180.8	E	2,637.00	7 15/16	1 3/4	201.6	45.2
G	196.00	29 1/8	6 1/2	739.8	165.9	G	3,136.00	7 5/16	1 5/8	185.7	41.6
A <sup>#</sup> /B <sup>b</sup>	233.10	26 11/16	6	677.9	152.0	A <sup>#</sup> /B <sup>b</sup>	3,729.20	6 11/16	1 1/2	169.9	38.1
D4	293.70	23 13/16	5 5/16	604.8	135.6	D8	4,698.40	5 15/16	1 5/16	150.8	33.8
Total feet required		12.3	Total cm=	373.5		Total feet required		3.1	Total cm=	93.5	
C4	261.60	25 3/16	5 5/8	639.8	143.4						
E	329.61	22 7/16	5	569.9	127.8						
G	392.00	20 5/8	4 5/8	523.9	117.5						
A <sup>#</sup> /B <sup>b</sup>	466.20	18 7/8	4 1/4	479.4	107.5						
D5	587.30	16 13/16	3 3/4	427.0	95.7						
Total feet required		8.7	Total cm=	264.0							
<b>Calculate Length or Frequency for ID &amp; OD entered above</b>											
Enter F=	<b>220.00</b>	27 1/2	6 3/16	698.5	156.6	<b>Convert</b>	<b>2.000</b>	inches to	50.8	mm	
		Enter L ↓					<b>60</b>	mm to	2 3/8	inches	
F=	357.72	<b>21 9/16</b>	4 13/16	547.7	122.8	<a href="https://leehite.org/Chimes.htm">https://leehite.org/Chimes.htm</a>					