

1 inch Steel EMT Chime Length Calculator for the C-9 Chord (C E G B^b 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 = 1.163		ID inches = 1.049		Metal = Steel < Click to Select							
Wall = 0.057 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	92 7/8	20 13/16	2359.0	528.9	C5	523.30	23 3/16	5 3/16	589.0	132.0
E	41.21	82 11/16	18 9/16	2100.3	470.9	E	659.30	20 11/16	4 5/8	525.5	117.8
G	49.00	75 7/8	17	1927.2	432.1	G	784.00	18 15/16	4 1/4	481.0	107.8
A [#] /B ^b	58.30	69 9/16	15 5/8	1766.9	396.1	A [#] /B ^b	932.30	17 3/8	3 7/8	441.3	98.9
D2	73.41	62	13 7/8	1574.8	353.1	D6	1,174.61	15 1/2	3 1/2	393.7	88.3
Total feet =		31.9	Total cm=	972.8		Total feet required		8.0	Total cm=	243.0	
C2	65.40	65 11/16	14 3/4	1668.5	374.1	C6	1,046.50	16 7/16	3 11/16	417.5	93.6
E	82.40	58 1/2	13 1/8	1485.9	333.1	E	1,318.50	14 5/8	3 1/4	371.5	83.3
G	98.01	53 5/8	12	1362.1	305.4	G	1,568.00	13 7/16	3	341.3	76.5
A [#] /B ^b	116.50	49 3/16	11	1249.4	280.1	A [#] /B ^b	1,864.60	12 5/16	2 3/4	312.7	70.1
D3	146.80	43 13/16	9 13/16	1112.8	249.5	D7	2,349.20	10 15/16	2 7/16	277.8	62.3
Total feet required		22.6	Total cm=	687.9		Total feet required		5.6	Total cm=	172.1	
C3	130.81	46 7/16	10 7/16	1179.5	264.4	C7	2,093.00	11 5/8	2 5/8	295.3	66.2
E	164.80	41 3/8	9 1/4	1050.9	235.6	E	2,637.00	10 5/16	2 5/16	261.9	58.7
G	196.00	37 15/16	8 1/2	963.6	216.0	G	3,136.00	9 1/2	2 1/8	241.3	54.1
A [#] /B ^b	233.10	34 3/4	7 13/16	882.7	197.9	A [#] /B ^b	3,729.20	8 11/16	1 15/16	220.7	49.5
D4	293.70	31	6 15/16	787.4	176.5	D8	4,698.40	7 3/4	1 3/4	196.9	44.1
Total feet required		16.0	Total cm=	486.4		Total feet required		4.0	Total cm=	121.6	
C4	261.60	32 13/16	7 3/8	833.4	186.9						
E	329.61	29 1/4	6 9/16	743.0	166.6						
G	392.00	26 13/16	6	681.0	152.7						
A [#] /B ^b	466.20	24 9/16	5 1/2	623.9	139.9						
D5	587.30	21 15/16	4 15/16	557.2	124.9						
Total feet required		11.3	Total cm=	343.9							
Calculate Length or Frequency for ID & OD entered above											
Enter F=	220.00	35 13/16	8	909.6	203.9	Convert	2.000	inches to	50.8	mm	
		Enter L ↓					60	mm to	2 3/8	inches	
F=	606.37	21 9/16	4 13/16	547.7	122.8	https://leehite.org/Chimes.htm					