

3 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 = 3.500		ID inches = 3.356		Metal = Aluminum < Click to Select							
Wall = 0.072 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	161 7/8	36 5/16	4111.6	921.8	C5	523.30	40 1/2	9 1/16	1,028.7	230.6
E	41.21	144 3/16	32 5/16	3662.4	821.1	E	659.30	36 1/16	8 1/16	916.0	205.4
G	49.00	132 1/4	29 5/8	3359.2	753.1	G	784.00	33 1/16	7 7/16	839.8	188.3
A [#] /B ^b	58.30	121 1/4	27 3/16	3079.8	690.5	A [#] /B ^b	932.30	30 5/16	6 13/16	769.9	172.6
D2	73.41	108 1/16	24 1/4	2744.8	615.4	D6	1,174.61	27	6 1/16	685.8	153.8
Total feet =		55.6	Total cm=	1695.8		Total feet required		13.9	Total cm=	424.0	
C2	65.40	114 1/2	25 11/16	2908.3	652.0	C6	1,046.50	28 5/8	6 7/16	727.1	163.0
E	82.40	102	22 7/8	2590.8	580.9	E	1,318.50	25 1/2	5 11/16	647.7	145.2
G	98.01	93 1/2	20 15/16	2374.9	532.5	G	1,568.00	23 3/8	5 1/4	593.7	133.1
A [#] /B ^b	116.50	85 3/4	19 1/4	2178.1	488.3	A [#] /B ^b	1,864.60	21 7/16	4 13/16	544.5	122.1
D3	146.80	76 7/16	17 1/8	1941.5	435.3	D7	2,349.20	19 1/8	4 5/16	485.8	108.9
Total feet required		39.3	Total cm=	1199.4		Total feet required		9.8	Total cm=	299.9	
C3	130.81	80 15/16	18 1/8	2055.8	460.9	C7	2,093.00	20 1/4	4 9/16	514.4	115.3
E	164.80	72 1/8	16 3/16	1832.0	410.7	E	2,637.00	18	4 1/16	457.2	102.5
G	196.00	66 1/8	14 13/16	1679.6	376.6	G	3,136.00	16 9/16	3 11/16	420.7	94.3
A [#] /B ^b	233.10	60 5/8	13 9/16	1539.9	345.2	A [#] /B ^b	3,729.20	15 3/16	3 3/8	385.8	86.5
D4	293.70	54	12 1/8	1371.6	307.5	D8	4,698.40	13 1/2	3	342.9	76.9
Total feet required		27.8	Total cm=	847.9		Total feet required		7.0	Total cm=	212.1	
C4	261.60	57 1/4	12 13/16	1454.2	326.0						
E	329.61	51	11 7/16	1295.4	290.4						
G	392.00	46 3/4	10 1/2	1187.5	266.2						
A [#] /B ^b	466.20	42 7/8	9 5/8	1089.0	244.2						
D5	587.30	38 3/16	8 9/16	970.0	217.5						
Total feet required		19.7	Total cm=	599.6							
Calculate Length or Frequency for ID & OD entered above											
Enter F=	220.00	62 7/16	14	1585.9	355.6	Convert	2.000	inches to	50.8	mm	
		Enter L ↓					60	mm to	2 3/8	inches	
F=	1843.50	21 9/16	4 13/16	547.7	122.8	https://leehite.org/Chimes.htm					