

2 1/2 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 = 2.875		ID inches = 2.731		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	146 7/16	32 13/16	3719.5	833.9	C5	523.30	36 5/8	8 3/16	930.3	208.6
E	41.21	130 7/16	29 1/4	3313.1	742.8	E	659.30	32 5/8	7 5/16	828.7	185.8
G	49.00	119 5/8	26 13/16	3038.5	681.2	G	784.00	29 7/8	6 11/16	758.8	170.1
A [#] /B ^b	58.30	109 5/8	24 9/16	2784.5	624.3	A [#] /B ^b	932.30	27 7/16	6 1/8	696.9	156.2
D2	73.41	97 11/16	21 7/8	2481.3	556.3	D6	1,174.61	24 7/16	5 1/2	620.7	139.2
Total feet =		50.3	Total cm=	1533.7		Total feet required		12.6	Total cm=	383.5	
C2	65.40	103 1/2	23 3/16	2628.9	589.4	C6	1,046.50	25 7/8	5 13/16	657.2	147.3
E	82.40	92 1/4	20 11/16	2343.2	525.3	E	1,318.50	23 1/16	5 3/16	585.8	131.3
G	98.01	84 9/16	18 15/16	2147.9	481.6	G	1,568.00	21 1/8	4 3/4	536.6	120.3
A [#] /B ^b	116.50	77 9/16	17 3/8	1970.1	441.7	A [#] /B ^b	1,864.60	19 3/8	4 3/8	492.1	110.3
D3	146.80	69 1/8	15 1/2	1755.8	393.6	D7	2,349.20	17 1/4	3 7/8	438.2	98.2
Total feet required		35.6	Total cm=	1084.6		Total feet required		8.9	Total cm=	271.0	
C3	130.81	73 3/16	16 7/16	1859.0	416.8	C7	2,093.00	18 5/16	4 1/8	465.1	104.3
E	164.80	65 3/16	14 5/8	1655.8	371.2	E	2,637.00	16 5/16	3 11/16	414.3	92.9
G	196.00	59 13/16	13 7/16	1519.2	340.6	G	3,136.00	14 15/16	3 3/8	379.4	85.1
A [#] /B ^b	233.10	54 13/16	12 5/16	1392.2	312.1	A [#] /B ^b	3,729.20	13 11/16	3 1/16	347.7	77.9
D4	293.70	48 7/8	10 15/16	1241.4	278.3	D8	4,698.40	12 3/16	2 3/4	309.6	69.4
Total feet required		25.2	Total cm=	766.8		Total feet required		6.3	Total cm=	191.6	
C4	261.60	51 3/4	11 5/8	1314.5	294.7						
E	329.61	46 1/8	10 5/16	1171.6	262.7						
G	392.00	42 5/16	9 1/2	1074.7	241.0						
A [#] /B ^b	466.20	38 3/4	8 11/16	984.3	220.7						
D5	587.30	34 9/16	7 3/4	877.9	196.8						
Total feet required		17.8	Total cm=	542.3							
Calculate Length or Frequency for ID & OD entered above											
Enter F=	220.00	56 7/16	12 5/8	1433.5	321.4	Convert	2.000	inches to	50.8	mm	
		Enter L ↓					60	mm to	2 3/8	inches	
F=	1507.55	21 9/16	4 13/16	547.7	122.8	https://leehite.org/Chimes.htm					