

Tubular Wind Chime Dimensions

Copper, Type M (Red), Nominal size = 1 1/2"

A=440 Hz, tube open at both ends

OD inches = 1.625		ID inches = 1.527				Material = Copper					
Wall = 0.049 inches		* Tubing length calculated for fundamental frequency ** Hang Point is for fundamental frequency node									
Octave Note	A=440 Freq. Hz	Length * inches	Hang Point** inches	Length * mm	Hang Point** mm	Octave Note	A=440 Freq. Hz	Length * inches	Hang Point** inches	Length * mm	Hang Point** mm
C1	32.70	91 3/4	20 9/16	2,328.6	522.1	C5	523.30	22 15/16	5 1/8	582.2	130.5
C#/D ^b	34.60	89 3/16	20	2,263.6	507.5	C#/D ^b	554.40	22 5/16	5	566.3	127.0
D	36.70	86 5/8	19 7/16	2,198.5	492.9	D	587.30	21 5/8	4 7/8	548.8	123.1
D#/E ^b	38.90	84 1/8	18 7/8	2,135.1	478.7	D#/E ^b	622.30	21 1/16	4 3/4	534.6	119.8
E	41.21	81 3/4	18 5/16	2,074.8	465.2	E	659.30	20 7/16	4 9/16	518.7	116.3
F	43.70	79 3/8	17 13/16	2,014.5	451.7	F	698.50	19 7/8	4 7/16	504.4	113.1
F#/G ^d	46.30	77 1/8	17 5/16	1,957.4	438.9	F#/G ^d	740.00	19 5/16	4 5/16	490.2	109.9
G	49.00	74 15/16	16 13/16	1,901.9	426.4	G	784.00	18 3/4	4 3/16	475.9	106.7
G#/A ^d	51.90	72 13/16	16 5/16	1,848.0	414.3	G#/A ^d	830.60	18 3/16	4 1/16	461.6	103.5
A	55.01	70 3/4	15 7/8	1,795.6	402.6	A	880.00	17 11/16	3 15/16	448.9	100.6
A#/B ^d	58.30	68 3/4	15 7/16	1,744.9	391.2	A#/B ^d	932.30	17 3/16	3 7/8	436.2	97.8
B	61.70	66 13/16	15	1,695.7	380.2	B	987.80	16 11/16	3 3/4	423.5	95.0
C2	65.40	64 7/8	14 9/16	1,646.5	369.2	C6	1,046.50	16 1/4	3 5/8	412.4	92.5
C#/D ^b	69.30	63 1/16	14 1/8	1,600.5	358.8	C#/D ^b	1,108.70	15 3/4	3 1/2	399.7	89.6
D	73.41	61 1/4	13 3/4	1,554.5	348.5	D	1,174.61	15 5/16	3 7/16	388.6	87.1
D#/E ^b	77.80	59 1/2	13 5/16	1,510.1	338.6	D#/E ^b	1,244.50	14 7/8	3 5/16	377.5	84.6
E	82.40	57 13/16	12 15/16	1,467.3	329.0	E	1,318.50	14 7/16	3 1/4	366.4	82.2
F	87.30	56 3/16	12 5/8	1,426.0	319.7	F	1,397.00	14 1/16	3 1/8	356.9	80.0
F#/G ^d	92.50	54 9/16	12 1/4	1,384.8	310.5	F#/G ^d	1,480.00	13 5/8	3 1/16	345.8	77.5
G	98.01	53	11 7/8	1,345.1	301.6	G	1,568.00	13 1/4	3	336.3	75.4
G#/A ^d	103.80	51 1/2	11 9/16	1,307.1	293.0	G#/A ^d	1,661.20	12 7/8	2 7/8	326.8	73.3
A	110.00	50 1/16	11 1/4	1,270.6	284.9	A	1,760.00	12 1/2	2 13/16	317.3	71.1
A#/B ^d	116.50	48 5/8	10 7/8	1,234.1	276.7	A#/B ^d	1,864.60	12 1/8	2 11/16	307.7	69.0
B	123.50	47 1/4	10 9/16	1,199.2	268.9	B	1,975.50	11 13/16	2 5/8	299.8	67.2
C3	130.81	45 7/8	10 5/16	1,164.3	261.0	C7	2,093.00	11 1/2	2 9/16	291.9	65.4
C#/D ^b	138.60	44 9/16	10	1,131.0	253.6	C#/D ^b	2,217.40	11 1/8	2 1/2	282.4	63.3
D	146.80	43 5/16	9 11/16	1,099.3	246.5	D	2,349.20	10 13/16	2 7/16	274.4	61.5
D#/E ^b	155.60	42 1/16	9 7/16	1,067.5	239.3	D#/E ^b	2,489.01	10 1/2	2 3/8	266.5	59.7
E	164.80	40 7/8	9 3/16	1,037.4	232.6	E	2,637.00	10 1/4	2 5/16	260.1	58.3
F	174.61	39 11/16	8 7/8	1,007.3	225.8	F	2,794.00	9 15/16	2 1/4	252.2	56.5
F#/G ^d	185.00	38 9/16	8 5/8	978.7	219.4	F#/G ^d	2,960.00	9 5/8	2 3/16	244.3	54.8
G	196.00	37 1/2	8 7/16	951.8	213.4	G	3,136.00	9 3/8	2 1/8	237.9	53.3
G#/A ^d	207.70	36 7/16	8 3/16	924.8	207.3	G#/A ^d	3,322.41	9 1/8	2 1/16	231.6	51.9
A	220.00	35 3/8	7 15/16	897.8	201.3	A	3,520.00	8 7/8	2	225.2	50.5
A#/B ^d	233.10	34 3/8	7 11/16	872.4	195.6	A#/B ^d	3,729.20	8 9/16	1 15/16	217.3	48.7
B	246.90	33 3/8	7 1/2	847.1	189.9	B	3,951.00	8 3/8	1 7/8	212.6	47.7
C4	261.60	32 7/16	7 1/4	823.3	184.6	C8	4,186.00	8 1/8	1 13/16	206.2	46.2
C#/D ^b	277.20	31 1/2	7 1/16	799.5	179.2	C#/D ^b	4,434.81	7 7/8	1 3/4	199.9	44.8
D	293.70	30 5/8	6 7/8	777.3	174.3	D	4,698.40	7 5/8	1 11/16	193.5	43.4
D#/E ^b	311.10	29 3/4	6 11/16	755.1	169.3	D#/E ^b	4,978.00	7 7/16	1 11/16	188.8	42.3
E	329.61	28 7/8	6 1/2	732.8	164.3	E	5,274.00	7 1/4	1 5/8	184.0	41.3
F	349.30	28 1/16	6 5/16	712.2	159.7	F	5,588.00	7	1 9/16	177.7	39.8
F#/G ^d	370.00	27 1/4	6 1/8	691.6	155.1	F#/G ^d	5,920.00	6 13/16	1 1/2	172.9	38.8
G	392.00	26 1/2	5 15/16	672.6	150.8	G	6,272.00	6 5/8	1 1/2	168.1	37.7
G#/A ^d	415.30	25 3/4	5 3/4	653.5	146.5	G#/A ^d	6,644.80	6 7/16	1 7/16	163.4	36.6
A	440.01	25	5 5/8	634.5	142.3	A	7,040.00	6 1/4	1 3/8	158.6	35.6
A#/B ^d	466.20	24 5/16	5 7/16	617.1	138.3	A#/B ^d	7,458.40	6 1/16	1 3/8	153.9	34.5
B	493.91	23 5/8	5 5/16	599.6	134.4	B	7,902.01	5 7/8	1 5/16	149.1	33.4
						C9	8,367.01	5 3/4	1 5/16	145.9	32.7

www.leeHITE.org/Chimes.htm

Caution, these values allow you to get close to the desired note (typically within 1%) but if you desire an exact note, cut slightly long and grind to the final frequency, but not required for wind chimes. Do not use these calculations for an orchestra or a musical setting unless you are certain they use A=440 Hz. An orchestra or symphony may brighten slightly and will typically tune for A=442, 43 or 44.