

## Tubular Wind Chime Dimensions

EMT aka thin-wall steel conduit, Nominal size = 1/2"

A=440 Hz, tube open at both ends

| OD inches = <b>0.706</b> |                | ID inches = <b>0.622</b>   |                     |             |                 | Material = <b>Steel</b> |                |                 |                     |             |                 |
|--------------------------|----------------|--|---------------------|-------------|-----------------|-------------------------|----------------|-----------------|---------------------|-------------|-----------------|
| Wall = 0.042 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          | 72 1/16  | 16 3/16             | 1,828.9     | 410.0           | C5                      | 523.30         | 18              | 4 1/16              | 456.8       | 102.4           |
| C#/D <sup>b</sup>        | 34.60          | 70 1/16  | 15 11/16            | 1,778.2     | 398.7           | C#/D <sup>b</sup>       | 554.40         | 17 1/2          | 3 15/16             | 444.2       | 99.6            |
| D                        | 36.70          | 68   | 15 1/4              | 1,725.8     | 386.9           | D                       | 587.30         | 17              | 3 13/16             | 431.5       | 96.7            |
| D#/E <sup>b</sup>        | 38.90          | 66 1/16  | 14 13/16            | 1,676.7     | 375.9           | D#/E <sup>b</sup>       | 622.30         | 16 1/2          | 3 11/16             | 418.8       | 93.9            |
| E                        | 41.21          | 64 3/16  | 14 3/8              | 1,629.1     | 365.2           | E                       | 659.30         | 16 1/16         | 3 5/8               | 407.7       | 91.4            |
| F                        | 43.70          | 62 5/16  | 14                  | 1,581.5     | 354.6           | F                       | 698.50         | 15 9/16         | 3 1/2               | 395.0       | 88.6            |
| F#/G <sup>d</sup>        | 46.30          | 60 9/16  | 13 9/16             | 1,537.1     | 344.6           | F#/G <sup>d</sup>       | 740.00         | 15 1/8          | 3 3/8               | 383.9       | 86.1            |
| G                        | 49.00          | 58 7/8   | 13 3/16             | 1,494.2     | 335.0           | G                       | 784.00         | 14 11/16        | 3 5/16              | 372.8       | 83.6            |
| G#/A <sup>d</sup>        | 51.90          | 57 3/16  | 12 13/16            | 1,451.4     | 325.4           | G#/A <sup>d</sup>       | 830.60         | 14 5/16         | 3 3/16              | 363.3       | 81.4            |
| A                        | 55.01          | 55 9/16  | 12 7/16             | 1,410.2     | 316.2           | A                       | 880.00         | 13 7/8          | 3 1/8               | 352.1       | 79.0            |
| A#/B <sup>d</sup>        | 58.30          | 53 15/16   | 12 1/16             | 1,368.9     | 306.9           | A#/B <sup>d</sup>       | 932.30         | 13 1/2          | 3                   | 342.6       | 76.8            |
| B                        | 61.70          | 52 7/16  | 11 3/4              | 1,330.9     | 298.4           | B                       | 987.80         | 13 1/8          | 2 15/16             | 333.1       | 74.7            |
| C2                       | 65.40          | 50 15/16   | 11 7/16             | 1,292.8     | 289.8           | C6                      | 1,046.50       | 12 3/4          | 2 7/8               | 323.6       | 72.5            |
| C#/D <sup>b</sup>        | 69.30          | 49 1/2   | 11 1/8              | 1,256.3     | 281.7           | C#/D <sup>b</sup>       | 1,108.70       | 12 3/8          | 2 3/4               | 314.1       | 70.4            |
| D                        | 73.41          | 48 1/16  | 10 3/4              | 1,219.8     | 273.5           | D                       | 1,174.61       | 12              | 2 11/16             | 304.6       | 68.3            |
| D#/E <sup>b</sup>        | 77.80          | 46 11/16   | 10 7/16             | 1,184.9     | 265.7           | D#/E <sup>b</sup>       | 1,244.50       | 11 11/16        | 2 5/8               | 296.6       | 66.5            |
| E                        | 82.40          | 45 3/8   | 10 3/16             | 1,151.6     | 258.2           | E                       | 1,318.50       | 11 3/8          | 2 9/16              | 288.7       | 64.7            |
| F                        | 87.30          | 44 1/16  | 9 7/8               | 1,118.3     | 250.7           | F                       | 1,397.00       | 11              | 2 7/16              | 279.2       | 62.6            |
| F#/G <sup>d</sup>        | 92.50          | 42 13/16   | 9 5/8               | 1,086.6     | 243.6           | F#/G <sup>d</sup>       | 1,480.00       | 10 11/16        | 2 3/8               | 271.2       | 60.8            |
| G                        | 98.01          | 41 5/8   | 9 5/16              | 1,056.4     | 236.9           | G                       | 1,568.00       | 10 3/8          | 2 5/16              | 263.3       | 59.0            |
| G#/A <sup>d</sup>        | 103.80         | 40 7/16  | 9 1/16              | 1,026.3     | 230.1           | G#/A <sup>d</sup>       | 1,661.20       | 10 1/8          | 2 1/4               | 257.0       | 57.6            |
| A                        | 110.00         | 39 1/4   | 8 13/16             | 996.2       | 223.3           | A                       | 1,760.00       | 9 13/16         | 2 3/16              | 249.0       | 55.8            |
| A#/B <sup>d</sup>        | 116.50         | 38 3/16  | 8 9/16              | 969.2       | 217.3           | A#/B <sup>d</sup>       | 1,864.60       | 9 9/16          | 2 1/8               | 242.7       | 54.4            |
| B                        | 123.50         | 37 1/16  | 8 5/16              | 940.6       | 210.9           | B                       | 1,975.50       | 9 1/4           | 2 1/16              | 234.8       | 52.6            |
| C3                       | 130.81         | 36   | 8 1/16              | 913.7       | 204.8           | C7                      | 2,093.00       | 9               | 2                   | 228.4       | 51.2            |
| C#/D <sup>b</sup>        | 138.60         | 35   | 7 7/8               | 888.3       | 199.2           | C#/D <sup>b</sup>       | 2,217.40       | 8 3/4           | 1 15/16             | 222.1       | 49.8            |
| D                        | 146.80         | 34   | 7 5/8               | 862.9       | 193.5           | D                       | 2,349.20       | 8 1/2           | 1 7/8               | 215.7       | 48.4            |
| D#/E <sup>b</sup>        | 155.60         | 33   | 7 3/8               | 837.5       | 187.8           | D#/E <sup>b</sup>       | 2,489.01       | 8 1/4           | 1 7/8               | 209.4       | 46.9            |
| E                        | 164.80         | 32 1/16  | 7 3/16              | 813.7       | 182.4           | E                       | 2,637.00       | 8               | 1 13/16             | 203.0       | 45.5            |
| F                        | 174.61         | 31 3/16  | 7                   | 791.5       | 177.5           | F                       | 2,794.00       | 7 13/16         | 1 3/4               | 198.3       | 44.5            |
| F#/G <sup>d</sup>        | 185.00         | 30 5/16  | 6 13/16             | 769.3       | 172.5           | F#/G <sup>d</sup>       | 2,960.00       | 7 9/16          | 1 11/16             | 191.9       | 43.0            |
| G                        | 196.00         | 29 7/16  | 6 5/8               | 747.1       | 167.5           | G                       | 3,136.00       | 7 3/8           | 1 5/8               | 187.2       | 42.0            |
| G#/A <sup>d</sup>        | 207.70         | 28 9/16  | 6 3/8               | 724.9       | 162.5           | G#/A <sup>d</sup>       | 3,322.41       | 7 1/8           | 1 5/8               | 180.8       | 40.5            |
| A                        | 220.00         | 27 3/4   | 6 1/4               | 704.3       | 157.9           | A                       | 3,520.00       | 6 15/16         | 1 9/16              | 176.1       | 39.5            |
| A#/B <sup>d</sup>        | 233.10         | 27   | 6 1/16              | 685.3       | 153.6           | A#/B <sup>d</sup>       | 3,729.20       | 6 3/4           | 1 1/2               | 171.3       | 38.4            |
| B                        | 246.90         | 26 1/4   | 5 7/8               | 666.2       | 149.4           | B                       | 3,951.00       | 6 9/16          | 1 1/2               | 166.6       | 37.3            |
| C4                       | 261.60         | 25 1/2   | 5 11/16             | 647.2       | 145.1           | C8                      | 4,186.00       | 6 3/8           | 1 7/16              | 161.8       | 36.3            |
| C#/D <sup>b</sup>        | 277.20         | 24 3/4   | 5 9/16              | 628.2       | 140.8           | C#/D <sup>b</sup>       | 4,434.81       | 6 3/16          | 1 3/8               | 157.0       | 35.2            |
| D                        | 293.70         | 24 1/16  | 5 3/8               | 610.7       | 136.9           | D                       | 4,698.40       | 6               | 1 3/8               | 152.3       | 34.1            |
| D#/E <sup>b</sup>        | 311.10         | 23 3/8   | 5 1/4               | 593.3       | 133.0           | D#/E <sup>b</sup>       | 4,978.00       | 5 13/16         | 1 5/16              | 147.5       | 33.1            |
| E                        | 329.61         | 22 11/16   | 5 1/16              | 575.8       | 129.1           | E                       | 5,274.00       | 5 11/16         | 1 1/4               | 144.3       | 32.4            |
| F                        | 349.30         | 22 1/16  | 4 15/16             | 559.9       | 125.5           | F                       | 5,588.00       | 5 1/2           | 1 1/4               | 139.6       | 31.3            |
| F#/G <sup>d</sup>        | 370.00         | 21 7/16  | 4 13/16             | 544.1       | 122.0           | F#/G <sup>d</sup>       | 5,920.00       | 5 3/8           | 1 3/16              | 136.4       | 30.6            |
| G                        | 392.00         | 20 13/16   | 4 11/16             | 528.2       | 118.4           | G                       | 6,272.00       | 5 3/16          | 1 3/16              | 131.7       | 29.5            |
| G#/A <sup>d</sup>        | 415.30         | 20 3/16  | 4 1/2               | 512.4       | 114.9           | G#/A <sup>d</sup>       | 6,644.80       | 5 1/16          | 1 1/8               | 128.5       | 28.8            |
| A                        | 440.01         | 19 5/8   | 4 3/8               | 498.1       | 111.7           | A                       | 7,040.00       | 4 15/16         | 1 1/8               | 125.3       | 28.1            |
| A#/B <sup>d</sup>        | 466.20         | 19 1/16  | 4 1/4               | 483.8       | 108.5           | A#/B <sup>d</sup>       | 7,458.40       | 4 3/4           | 1 1/16              | 120.6       | 27.0            |
| B                        | 493.91         | 18 9/16  | 4 3/16              | 471.1       | 105.6           | B                       | 7,902.01       | 4 5/8           | 1 1/16              | 117.4       | 26.3            |
|                          |                |  |                     |             |                 | C9                      | 8,367.01       | 4 1/2           | 1                   | 114.2       | 25.6            |

[www.leeHITE.org/Chimes.htm](http://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.