



Zoning Resolution

THE CITY OF NEW YORK

Eric Adams, Mayor

CITY PLANNING COMMISSION

Daniel R. Garodnick, Chair

42-42 - Performance Standards Regulating Vibration

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42-42 - Performance Standards Regulating Vibration

LAST AMENDED

6/6/2024

42-421 - Definitions

LAST AMENDED

6/6/2024

For the purposes of this Section, the following terms are defined:

Frequency

A "frequency" is the number of oscillations per second of a vibration.

Impact vibrations

"Impact vibrations" are earth-borne oscillations occurring in discrete pulses at or less than 100 pulses per minute.

Steady state vibrations

"Steady state vibrations" are earth-borne oscillations that are continuous. Discrete pulses that occur more frequently than 100 times per minute shall be considered to be #steady state vibrations#.

Three-component measuring system

A "three-component measuring system" is a device for recording the intensity of any vibration in three mutually perpendicular directions.

42-422 - Method of measurement

LAST AMENDED

6/6/2024

For the purpose of measuring vibration, a #three-component measuring system# approved by the Commissioner of Buildings shall be employed.

42-423 - Maximum permitted steady state vibration displacement

LAST AMENDED

6/6/2024

In all #Manufacturing Districts#, no activity shall cause or create a #steady state vibration# at any point on any #lot line#, with a displacement in excess of the permitted #steady state vibration# displacement for the #frequencies# as set forth in the following table for the district indicated.

MAXIMUM PERMITTED STEADY STATE VIBRATION DISPLACEMENT

(in inches)

| | |
|--|----------|
| | District |
|--|----------|

| #Frequency# (cycles per second) | M1 | M2 | M3 |
|------------------------------------|-------|-------|-------|
| 10 and below | .0008 | .0020 | .0039 |
| 10 - 20 | .0005 | .0010 | .0022 |
| 20 - 30 | .0003 | .0006 | .0011 |
| 30 - 40 | .0002 | .0004 | .0007 |
| 40 - 50 | .0001 | .0003 | .0005 |
| 50 - 60 | .0001 | .0002 | .0004 |
| 60 and over | .0001 | .0001 | .0004 |

42-424 - Maximum permitted impact vibration displacement

LAST AMENDED

6/6/2024

In all #Manufacturing Districts#, no activity shall cause or create an #impact vibration#, at any point on any #lot line#, with a displacement in excess of the permitted #impact vibration# displacement for the #frequencies# as set forth in the following table for the district indicated.

MAXIMUM PERMITTED IMPACT VIBRATION DISPLACEMENT

(in inches)

| | District | | |
|------------------------------------|----------|-------|-------|
| #Frequency# (cycles per second) | M1 | M2 | M3 |
| 10 and below | .0016 | .0040 | .0078 |
| 10 - 20 | .0010 | .0020 | .0044 |
| 20 - 30 | .0006 | .0012 | .0022 |

| | | | |
|-------------|-------|-------|-------|
| 30 - 40 | .0004 | .0008 | .0014 |
| 40 - 50 | .0002 | .0006 | .0010 |
| 50 - 60 | .0002 | .0004 | .0008 |
| 60 and over | .0002 | .0002 | .0008 |

42-425 - Special provisions applying along district boundaries

LAST AMENDED

6/6/2024

Whenever an M2 or M3 District adjoins a #Residence District#, the #steady state# and #impact vibration# displacement, measured at the district boundary, shall not exceed the maximum permitted for an M1 District for the #frequencies# as set forth in the tables in Section [42-423](#) (Maximum permitted steady state vibration displacement) or Section [42-424](#) (Maximum permitted impact vibration displacement).