

Managing construction vibration

What is felt?

You can often feel vibration during construction. Diggers, drillers, piling machines, heavy rollers and vehicles are the most common causes. In most cases, the project will not cause vibration that would significantly disturb people. We will also be managing vibration to avoid damage to properties.

The human body is sensitive to vibration and people can feel movements at low levels. This varies depending on how close they are to the source of vibration. Vibration can be perceived as annoying if it goes on for a long time or at certain times (eg at night in bed, more vibration may be perceived than during the day).

Limits

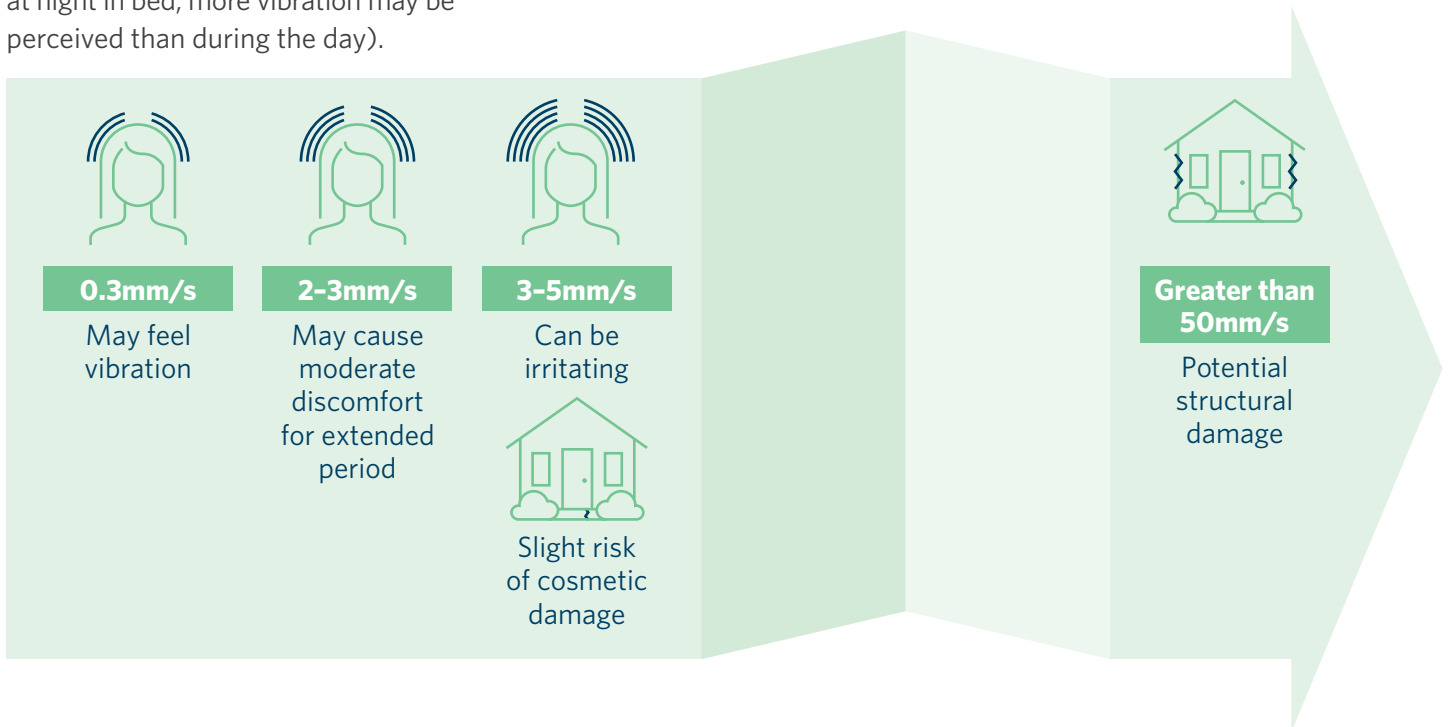
The vibration criteria we work to are within our consent conditions. These are based on the German standard DIN 4150-3:1999 'Structural Vibration - Part 3: Effects of Vibration on Structures.' The conditions are set well below those that can cause damage to nearby properties.

Managing vibration

Managing construction vibration includes:

- assessment of individual activities/locations
- provision of information
- pre-construction building condition surveys and monitoring

Regular monitoring takes place during the work to check the levels of vibration. If vibration is higher than expected, then construction activity and methods are reviewed to see if any changes can be made. An independent specialist may also check the condition of a property.



For frequently asked questions on noise and vibration levels and criteria, visit www.nzta.govt.nz/roads-and-rail/highways-information-portal/technical-disciplines/environment-and-sustainability-in-our-operations/environmental-technical-areas/noise-and-vibration/frequently-asked-questions

For more information and to sign up for project updates, go to our website www.nzta.govt.nz/penlink
Contact the O Mahurangi project team via email omahurangi@nzta.govt.nz or phone 0800 7365 465.