

Sound Level Measurements for Council Noise Compliance

Each Council's web site normally contains a noise compliance document or plan, which identifies the limits and the method of measurement. A sound level meter compliant with IEC 60651 or equivalent International Standard should be used to make measurements in accordance with NZS 6801 (Measurement of Sound) and NZS 6802 (Assessment of Environmental Sound). Meters will be either Type 1 (more accurate & higher cost) or Type 2 (less accurate & lower cost). Extech manufacture Type 2 instruments normally suitable for people wanting to check their own compliance. A consultant or enforcing body would normally use a Type 1 instrument with greater accuracy.

Compliance is generally required to 2 different noise level parameters, L_{10} and L_{max} . L_{max} is the maximum level of noise in a given period of measurement and every model RF Test Solutions sell has a maximum value function. L_{10} is the noise level which is exceeded for no more than 10% of the measurement time. Integrating sound level meters such as the Extech 407780 are required to make automated L_{10} measurements. Please note that if the noise level is constant, the L_{10} and L_{max} value will be the same.

Recommendations:

If the noise level you produce is constant or if you only want to check your maximum noise level, we would recommend the Extech 407732. If you want to log noise level over time then the Extech HD600 provides this functionality. You could carry out analysis of the HD600 data to estimate the L_{10} value but this requires manual processing of the information. If the noise level fluctuates and you want to measure the L_{10} value, we recommend the Extech 407780 integrating sound level datalogger. This will give you a direct L_{10} value.

Please note RF Test Solutions have several models available, so please let us know if you have specific requirements to meet.

Sound Level Measurements for Department of Labour Compliance

To comply with the “Limits for Occupational Noise Exposure” stated in the Department of Labour’s approved code of practice document (which can be viewed on their website), a working environment must be less than 85dBA with a peak level of 140dBA.

Here are 3 effective methods of checking that you comply with this.

- 1) Use any logging meter such as the 407760 or the HD600 to record the sound levels throughout the day and then view the results on a computer.
- 2) Place a SL130G Sound Level Alert in the area which is worst affected. The large display and clear visual alarm indication allows the employees to monitor the readings and help ensure their own safety.
- 3) Have an employee attach a 407355 Personal Noise Dosimeter to record the levels that they are exposed to throughout their day.

Please note RF Test Solutions have several different models available, so please let us know if you have specific requirements to meet.