



THE SOCIALIST REPUBLIC OF VIETNAM

QCVN 27: 2010/BTNMT

National Technical Regulation on Vibration

(This English version is for reference only)

HANOI - 2010

Foreword

QCVN 27:2010/BTNMT was prepared by the Committee of the National Technical Regulation on Noise and Vibration, submitted by the General Department of Environment, Science and Technology Department and the Legal Department and promulgated in accordance with Circular No. 39/2010/TT-BTNMT dated December 16th, 2010 by the Minister of Natural Resources and Environment.

National Technical Regulation on Vibration

1. GENERAL PROVISIONS

1.1. Scope of regulation

This Regulation defines the maximum permitted levels of vibration acceleration in the regions where human beings live, operate and work.

Vibration in this regulation includes vibration, shock emitted by human activities, not clarify the sources and positions of vibration, shock.

This regulation is not applied for assessing vibration levels in the works of production, construction, trade, services.

1.2. Subject of regulation

This Regulation applies to organizations, individuals with activities causing vibration, shock which affects the regions where human beings live, operate and work in Vietnam territory.

1.3. Explanation of terms

1.3.1. Special areas

The areas within the boundary of the medical services, library, kindergartens, schools, churches, temples, pagodas and other areas with special regulations.

1.3.2. Normal areas

Includes: residential areas, houses , hotels, administrative offices

1.3.3. Base level

The vibration acceleration level measured without activities of production, construction, trade, services at the assessed areas.

2. TECHNICAL REGULATIONS

2.1 Sources causing vibration, shock emitted by construction activities shall not exceed limits given in the Table 1.

Table 1- Allowed maximum levels on vibration acceleration for construction works

No.	Areas	Time for use during the day	Allowed levels of vibration acceleration, dB
1.	Special areas	6 am – 18 pm	75
		18 pm – 6 am	Base level
2.	Normal areas	6 am – 21 pm	75
		21 pm – 6 am	Base level

2.2 Sources causing vibration, shock emitted by production, trade, services activities shall not exceed limits given in the Table 2.

STT	Areas	Time for use during the day and allowed levels of vibration acceleration, dB	
		6 am – 21 pm	21 pm – 6 am
1.	Special areas	60	55
2.	Normal areas	70	60

Levels of vibration acceleration given in Table 1 and 2 included:

- 1) Measured levels when stably fluctuating, or
- 2) The average levels of maximum value for each fluctuation measured with cycle or broken time, or
- 3) The average values of 10 measured values for each 5 s or its equivalence (L10) when fluctuations are not stable and at random.

3. DETERMINATION METHOD

3.1. Determination method of vibration, shock emitted by works of construction, productions and trade shall be made in accordance with the following national standards:

- TCVN 6963:2001 Vibration and shock. Vibration emitted by construction works and factories. Method of measurement

In specific cases and requirements, determination method of vibration, shock (vibration acceleration level) can be in accordance with other standards or the other methods given by the relevant authority.

3.2. When changing value of vibration acceleration levels by dB and vibration acceleration levels by m/s^2 , use the table as follows:

Vibration acceleration levels, dB	55	60	65	70	75
Vibration acceleration, m/s^2	0,006	0.010	0,018	0,030	0,055

4. ORGANIZATION OF IMPLEMENTATION

4.1. This Regulation is applied for replacing TCVN 6962:2001 Vibration and shock. Vibration emitted by construction works and factories. Maximum permitted levels in the environment of public and residential areas, which is within the List of Vietnam Standards on Environment mandatorily applied together with Decision No. 35/2002/QĐ-BKHCMNT dated June 25th, 2002 by the Minister of Science, Technology and Quality

4.2. Organizations, individuals relating to vibration, shock emitted by construction, production, trade and services works must comply with requirements of this Regulation.

4.3. The state management body on environment shall be responsible for guiding, inspecting and supervising the implementation of this Regulation.

4.4. In that case that national standards on the determination method cited in 3.1 of this Regulation have amendments, supplements or replacements, shall apply the new ones.

