

Noise, Radiation, and Other Exposures for Construction

Self-Inspection Checklist




Optional Information

Name of School:
Date of Inspection:
Career-Technical program/course/room:
Signature of inspector:


Guidelines:

This checklist covers selected construction regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1926. It applies to temporary worksites associated with construction, alteration, demolition, and repair including painting and decorating. Fixed facilities, such as career-technical educational classrooms, are not covered by the construction regulations. This checklist covers exposure to noise, ionizing radiation, nonionizing radiation (lasers and microwaves), gases, vapors, fumes, dusts and mists. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.

 Questions marked with this symbol may require the help of an outside expert.

Compliance with the regulations dealing with exposures cannot be completely determined by using a checklist. Many factors are involved in making judgements about exposures including the amount and duration of exposure, sensitive populations, engineering controls such as ventilation, adequacy and use of personal protective equipment, and operating conditions. The following checklist is meant to provide guidance in identifying potential problems. If problems are identified, outside expert professional assistance is recommended.

Gases, Vapors, Fumes, Dusts, and Mists

1 	If employees or students may be exposed to excessive amounts of breathing gases, vapors, fumes, dusts, and mists, has the exposure been evaluated by a competent person to determine whether the exposure is harmful? [29 CFR 1926.55(a)]
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U.S. Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

Safety Checklist Program for Schools
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Gases, Vapors, Fumes, Dusts, and Mists

2		If situations of excessive exposure exist, are administrative and engineering controls implemented (if practical) to eliminate or reduce the exposure so that students and employees no longer have to wear respirator protection? [29 CFR 1926.55(b)]
3		If such controls are not feasible to achieve full compliance, do students use respirators on an interim basis? [29 CFR 1926.55(b)] <i>Note: See the Respiratory Protection checklist for additional information on implementing a respiratory protection program.</i>
4		If any respirators are being used voluntarily, has the respiratory protection program been implemented as required by 29 CFR 1910.134? <i>Note: See the Respiratory Protection checklist for additional information on implementing a respiratory protection program.</i>

Noise

5		Have noise levels been evaluated by a competent person to determine whether noise levels exceed 90 dBA as an 8-hour time-weighted- average or 140 dB as a peak value? [29 CFR 1926.52(a)] <i>Note: NIOSH recommends a different, more protective standard to prevent hearing loss. Please contact NIOSH for information on their recommendations (1-800-35-NIOSH).</i>
6		If employees or students are exposed to noise levels above 90 dBA as an 8-hour time-weight- average, are feasible administrative or engineering controls used to reduce the noise level to below 90 dBA? [29 CFR 1926.52(b)]
7		If employees or students are exposed to noise levels above 90 dBA as an 8-hour time-weighted- average, are they required to wear hearing protection? [29 CFR 1926.52(b) and 1926.101(a)]
8		If students or employees are exposed to noise levels above 90 dBA as an 8-hour time-weighted- average, is a continuing, effective hearing conservation program being administered? [29 CFR 1926.52(d)(1)]
9		If hearing protection is used, is the type of hearing protection fitted or determined by a competent person? [29 CFR 1926.101(b)]
10		Is the use of plain cotton as hearing protection prohibited? [29 CFR 1926.101(c)]

Ionizing Radiation

11		If ionizing radiation sources are used (such as radioactive materials or X-rays), are precautions taken to protect against radiation exposure? [29 CFR 1926.53(a)]
12		Are activities involving ionizing radiation sources (such as radioactive materials or X-rays) only performed by competent persons specially trained in the proper and safe operation of such equipment? [29 CFR 1926.53(b)]

Nonionizing Radiation–Lasers


13		Do only qualified and trained persons install, adjust, and operate laser equipment? [29 CFR 1926.54(a)]
14		If lasers are used, do operators have proof of qualification available at all times? [29 CFR 1926.54(b)]
15		If lasers are used that have a potential to give reflected light greater than 0.005 watts (5 milliwatts), are antilaser eye- protection devices used? [29 CFR 1926.54(c)]
16		Do laser safety glass or goggles provide sufficient protection for the wavelength of the laser, and is the optical density adequate for the energy involved? [29 CFR 1926.102(b)(2)(i)]
17		Are all laser goggles labeled with the laser wavelengths for which use is intended, the optical density of those wavelengths, and the visible light transmission? [29 CFR 1926.102(b)(2)(ii)(a),(b),and(c)]
18		If lasers are used, are areas posted with a standard laser warning placard? [29 CFR 1926.54(d)]

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Nonionizing Radiation–Lasers

19	Are beam shutters or caps used for lasers, or is the laser turned off when laser transmission is not required? [29 CFR 1926.54(e)]
20	Are lasers turned off when left unattended? [29 CFR 1926.54(e)]
21	Are only mechanical or electronic means used as a detector for guiding the internal alignment of the laser (not your eyes)? [29 CFR 1926.54(f)]
22	Are lasers prohibited from being directed at students and teachers? [29 CFR 1926.54(g)]
23	Are lasers prohibited from being used during conditions of rain, snow, dust, or fog? [29 CFR 1926.54(h)]
24	Are lasers labeled with the maximum output? [29 CFR 1926.54(i)]
25	Where practical, are laser set up above the heads of students and teachers? [29 CFR 1926.54(k)]

Nonionizing Radiation–Microwaves

26 	If students and teachers have exposure to microwaves, has the exposure been evaluated by a competent person to determine whether the exposure is harmful? [29 CFR 1926.54(l)]
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Definitions

dB: noise levels in decibels.

dBA: noise levels in decibels with a weighting factor imposed to simulate how humans hear noise levels at different frequencies.

Respirator: a device designed to protect the wearer from inhaling harmful atmospheres. Types of respirators include self-contained breathing apparatus (SCBA), air-line respirators and air-purifying respirators.