

## **Estates Development and Projects**

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### Noise Policy

The following describes how the Estates Division discharges our duties under the Control of Noise at Work Regulations 2005. Excessive noise levels can cause permanent damage to hearing and lead to risks to safety. Therefore, it is our policy to ensure individuals are not exposed to noise levels exceeding legal limits, by eliminating risks where possible, reducing risk levels where elimination is not possible by the use of engineering controls where appropriate. The use of Personal Protective Equipment will be used as a last resort.

This will be achieved by following the hierarchy of control during the design and construction process as follows:-

- Reviewing designs to eliminate noisy works where possible. For example, leaving and reusing, or designing around, existing block/brick/concrete walls, floors and plant bases.
- Where elimination is not possible, or practical, look at design options to reduce the noise hazard. For example, limiting the quantity of demolition needed to achieve the Client's brief and by employing quieter plant and work processes.
- Identifying sources of excessive workplace noise (greater than 80dBA).
- Advising operatives when noise levels are likely to exceed 80dBA / 85dBA.
- Undertaking risk assessments and identifying practical noise reducing measures.
- Considering, for example, the use of engineering controls such as noise reducing blankets, enclosing and confining the noisy works, to reduce the impact on the workforce and the local environment, or using remotely controlled machinery for concrete cutting, or crushing tasks.
- As a last resort, providing operatives with hearing protection, as well as information, instruction and supervision.

If it is not reasonably practicable to reduce noise levels below 85dBA by design and the contractor is required to manage controls on site, contractors will be required to undertake dynamic risk assessments during noisy operations. This is a follow up action after desk top exercises and following receipt of risk assessments from sub-contractors have identified generic anticipated noise levels for specific tasks to be undertaken on site.

Dynamic risk assessments will be undertaken by suitably qualified contractor's staff using hand held, fully calibrated noise reading meters. Following on-site noise readings, the contractor should adjust the originally agreed controls as necessary, including the attenuation levels of any PPE issued by the users employer. Attenuation levels should not reduce the hearing of operatives to less than 75dBA. This is in line with HSE's advice, to ensure operators can still communicate and hear verbal instructions and on-site alarms.

Disposable ear inserts should only be employed for tasks lasting less than 30 minutes and should not be used for tasks where noise levels are likely to exceed 85dBA. Disposable hearing protection is not suitable for all persons, as many individuals are uncomfortable with inserting anything into the ear canal and will not fully engage with the process, thereby putting themselves at risk. The other reason to discourage ear inserts is for reasons of hygiene.

Hearing protection that is worn as a control of last resort on Imperial College London construction sites must be over-ear and properly fitted hearing protection, conforming to BS EN352 and with attenuation levels that reduce noise levels to the individuals, to about 75dBA, in line with HSE's advice.

Where site conditions and dynamic risk assessments conclude that PPE is to be adopted, Site Managers and Supervisors will be responsible for ensuring suitable hearing protection is provided, properly worn, maintained and stored and for ensuring that replacement hearing protection is readily available.

Prior to any project starting, noise assessment should be undertaken to identify the impact of noise on the Client's core business activities. This assessment should be undertaken with the selected contractor and as early as possible, to allow sufficient time for any necessary changes to design, sequencing of the work and/or management changes required by the Client, to assist the contractor meet his programme dates.





When carrying out this assessment and determining the level of impact noise may cause, the following areas should be considered as an absolute minimum:-

- The extent of the works?
- The programme for the works.
- Does the programme run through exam times?
- Are there any planned lectures, conferences or events that can't be changed and/or relocated?
- What times of the day is noisy works permitted?
- What impact will noisy works have on occupied areas?
- Does the site have any existing delivery/noise restrictions?
- Are there any on-going or historical disputes/complaints?

The outcome of this global risk assessment will likely impact of the contractor's programme and/or sequence of works and must be agreed in advance with the Client.

The following control measures and principals should be considered (this list is by no means exhaustive and the control measures may vary greatly from project to project):

- Methods of control - Consider the use of specialist products such as noise booths, acoustic screens/curtains/hoardings, mats etc. to help control specific elements of work (examples in table below).
- Alter the programme - By moving noisy works to set times that are agreed with other users of the building.
- General equipment - Consider the use of less noisy tools and equipment. For example, the use of 110v cement mixers in place of fuel powered. Ensure operatives know and understand the use of the equipment and are aware of attenuation levels.
- Communication - Ensure that all contractors are fully aware of the noise controls on the site via Daily Activity Briefings and Tool Box Talks.
- Signage - Utilise signage and notices to help communicate details of noise levels, working times and restricted areas. Regardless of noise zones, noted in Regulations, we would expect to see more noise enclosures as a matter of course to isolate and minimise disturbance to others.
- Monitoring - Consider the use of noise monitoring to keep track of the noise levels being created. Noise readings to be taken before works start with risk assessments reviewed and PPE / controls adjusted accordingly.

Description, Usage and Benefits	Example image
<p><b>Mobile acoustic tents / enclosures</b></p> <ul style="list-style-type: none"> <li>• Can be quickly erected to contain isolated noise sources such as cutting, breaking out or drilling. Some models offer up to 24dB reduction in noise.</li> <li>• Can be easily assembled / dismantled / repositioned allowing excellent flexibility on site.</li> </ul>	
<p><b>Acoustic curtains</b></p> <ul style="list-style-type: none"> <li>• Can be easily fitted to existing hoarding, fences and walls to reduce the noise transfer between the work area and local residents, businesses and / or other surrounding premises.</li> <li>• Can be hired / purchased in individual sheets allowing greater flexibility and manoeuvrability on site.</li> </ul>	
<p><b>Acoustic site hoardings</b></p> <ul style="list-style-type: none"> <li>• Designed to be used on longer running projects where a semi-permanent solution is required.</li> <li>• Offers similar benefits to acoustic curtains, albeit with less flexibility. Typically supplied and installed by specialist contractors.</li> </ul>	
<p><b>Noise activated signage</b></p> <ul style="list-style-type: none"> <li>• Used to alert people carrying out work when noise is exceeding a pre-determined level.</li> <li>• Can be positioned near to local residents, businesses and/or other surrounding premises to provide accurate measurements.</li> <li>• Large number of styles and designs available.</li> </ul>	

### Personal noise alarms

- Used to alert people carrying out work when noise is exceeding a pre-determined level.
- Worn by operative carrying out noisy work so gives very accurate reading.
- Large number of styles and designs available.



Health surveillance must be provided for all your employees who are likely to be frequently exposed above the upper exposure action values, or are at risk for any reason, e.g. they already suffer from hearing loss or are particularly sensitive to damage. You will need to keep health records containing information on the outcomes of health surveillance and fitness for work. Health records must be kept separate from any confidential medical results.

All contractors must have a suitable occupational health scheme in place, such as Constructing Better Health (CBH) and have a policy in place reflecting this. Occupational health schemes must be offered to all supply chain partners by the end of 2015. Registration with CBH for supply chain partners and the self-employed will satisfy the Client's requirements in this respect.

All policy objectives are agreed by our contractors through monthly meetings of the Safety, Health, Environmental Leadership Team (SHELT).

Noise issues will be monitored via the RAG Health & Safety site inspections undertaken regularly by Estates Projects. Breaches of any legislation witnessed on site, will be discussed with the Site Manager, prior to leaving the site. The final score for the RAG Health & Safety inspection report, in respect of breaches of this policy will be discussed and agreed with the Head of Health and Safety – Estates Projects, before the report is issued.