



## Information for employees and students working at the Faculty of Science (W&N)

This AMD information sheet describes special environmental and safety regulations that apply to working in classified rooms in general, and the requirements to be met by the layout of those rooms.

## 1 What are classified rooms?

Classified rooms are rooms in which research is performed with heightened risks upon unprepared entry, or research that is subject to special laws and regulations, such as (environmental) permits. The work in and the layout of the room are subject to requirements set by law or the university.

Therefore, certain matters, such as changes in working methods, persons allowed entrance, and alterations to the room, must be reported to the AMD to ensure that legal requirements are met. Please do take into account in planning your research that the actual process of obtaining of the proper permits, and perhaps taking the required courses, takes time!

*Working without proper permits is considered a criminal act by the supervising authorities. A criminal record may harm your scientific career: it would, for example, make it impossible to visit the US for a conference!*

## 2 Recognizing classified rooms and the risks

### 2.1 Room warning signs

Classified rooms may be recognized by the special rectangular room warning signs. In the Huygens building these are predominantly the signs of the old system; those are yellow with black text and black symbols. In the new Gorlaeus building and Sylvius the new signs are used already. Those are grey with blue letters and are analogous to the room warning signs in the LUMC. The signs simplify the recognition of rooms. This is, among other things, to protect people who just happen to visit (technical services, outside firms, cleaning services, etc.), as well as the emergency services in case of calamities. The application and set-up of the signs, and the meaning of the symbols are disclosed in the [university's regulations for room signage \(in Dutch\)](#).

Room warning signs must be applied to rooms in which work is performed with:

- Genetically modified organisms (GMOs): animals, micro-organisms, as well as plants
- Laboratory animals

Symbol for Biohazard

This indicates the classification. In this case of a GMO lab at ML-I level.

Name and internal phone number of the room's contact person (and possibly an expert). A private or cell phone number to call in case of calamities after office hours is also required.

- Ionizing radiation (radioactivity), when working with isotopes as well as working with radiation equipment
- Lasers of class 3 or higher
- Strong magnetic fields
- Equipment releasing ultraviolet radiation into the room
- Pressurized toxic gasses, such as CO, H<sub>2</sub>S, NO<sub>x</sub>, and Cl<sub>2</sub>
- Nanomaterials (as determined by the project's nanomaterials risk assessment)

## 2.2 Risks in classified rooms

Just like all other research, any work requires a risk assessment, see [AMD information sheet A010 Research risk assessment](#). In the following, the risks of classified work for man and environment are clarified, briefly. In addition to requirements that apply to the rooms, the classified work itself is also subject to requirements, such as the application for permits and following courses before starting the work. This kind of information may be found on the AMD website under the heading: **Working safely using ...** . Following the links below will take you directly to the proper information.

- [Biohazard \(Infosheets VOM031-VOM039\)](#)  
Two types of risks: 1) activities with potentially pathogenic micro-organisms, such as certain cells, bacteria, fungi, or viruses. These are a potential risk to man. 2) activities with organisms of which the DNA is altered (GMOs), which thereby constitute a potential risk to the environment. These may be micro-organisms, but also animals (for example, mice or zebrafish) or plants (seeds, pollen, etc.) which upon escaping into the environment may disturb the ecological balance by displacement of natural species.
- [Laser \(VOM090\)](#)  
Activities with a laser of class 3 or higher. An uncontained bundle within a room may cause skin burns or (permanent) eye injuries.
- [Magnetic fields \(VOM100\)](#)  
Strong magnetic fields may constitute a heightened risk to people with pacemakers or other medical electronics, as well as to the unborn child. Strong magnetic fields may erase electronic data, such as those on bankcards.
- [Radioactivity \(VOM080\)](#)  
Activities with radioactive substances, or equipment using x-rays may induce a heightened risk of cancer in humans, or contamination of the environment.
- [Toxic gasses \(VOM021, VOM022\)](#)  
May get released upon leakage or fire, and bring about a heightened risk of intoxication/poisoning, sometimes even without you noticing (for example, in case of carbon monoxide).
- [Nanomaterials \(VOM050\)](#)  
May penetrate several types of tissues. The effects are still mostly unknown, and depend, among other things, on particle shape and size. The effects of fibrous nanomaterials are probably comparable to those of asbestos.

- [UV light \(VOM110\)](#)  
May cause snow-blindness or actinic conjunctivitis upon looking into the lamp.

### 3 General requirements for classified rooms

Regulations that apply to all classified rooms, are:

*Are there any changes in (the organization regarding) the classified lab? Or did you discover any deficiencies in the room? **Please report this!***

- The layout and finish of classified rooms are subject to requirements set by law and/or the university. This entails the following:
  - Alterations, relocations, discontinuation of a lab, or changes in the classification due to changes in the work performed should, therefore, always be reported to the AMD, because these affect the permits and the room signage.
  - Please report deficiencies of the room (such as damaged floors and walls, deficiencies in the ventilation, etc.) as soon as possible through [selfservice facilitair](#) to have these repaired.
- The room warning sign contains the data of the user and sometimes the supervisor of the lab. Room warning signs may only be placed, changed, moved, or removed by, or with permission of, the AMD ([safety regulations Faculty of Science](#) Art. 15). Therefore, if the contact persons or their phone numbers change, this should be reported to the AMD and amended on the list of classified rooms pertaining to said environmental permit.
- Doors to classified rooms are equipped with a working door-spring.
- Wearing proper work clothes and/or [personal protection equipment \(PPE\)](#) (see RhL020) is mandatory in all classified rooms ([safety regulations Faculty of Science](#) Art. 18). Non-scientific work in classified rooms, such as cleaning and repair/maintenance, may only be performed after consulting with the room's contact person. The researcher is responsible for the proper instruction of any persons performing the work, and also for the safety within the room during the agreed upon period. See also [AMD information sheet A050 Betreden van labs \(in Dutch only\)](#) and [AMD information sheet RhL080 Third party activities](#).
- Preferably, classified rooms are used only for the classified work *or* shared with other researchers performing the same type of classified work. Placement of classified work in a normal lab may be done only when the risk assessment (see RhL010) takes both the risks of the general and classified project into account [plus their possible interactions](#). It should show that the residual risk is acceptable and the proper measures are taken.
- In case of shared classified research facilities the institutes or departments are required to establish clear agreements about the management and supervision of the rooms.