Safety regulations

Department of Electromechanical, Systems and Metal Engineering

Research group EELAB

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Building P

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This document is complementary to the environmental, health and safety guidelines, Ugent (see EN2015_W-Mgids_web.pdf (ugent.be)

(https://www.irc.ugent.be/fileadmin/hosting/eip/public/EN2015_W-Mgids_web.pdf)

1. General.

1.1. Each supervisor is responsible for informing his/her staff members about the safety guidelines below, encouraging them to participate in safety-related information sessions and ensuring that the safety guidelines are strictly followed. Each lecturer (in charge or co-lecturer) is responsible for informing his/her students of the applicable safety guidelines.

1.2. Safety contact point is Danny De Baets.

1.3. Employees should alert each other to potential hazards and risks without being perceived as reprimand. This peer pressure leads to increased safety awareness and a greater sense of responsibility in this regard. In addition, when observing safety hazards, especially defective infrastructure, everyone has the task of reporting this to the safety contact point.

1.4. Each researcher is responsible for preparing safety instructions for the non-generic infrastructure he/she designs and/or uses. Thus, consideration is given to the safety of the tasks to be performed and the proprietary infrastructure used for that purpose. This is done in collaboration with the supervisor/promotor who is given the authority to make decisions. This is reported in writing by the researcher to the safety contact point and supervisor/promotor on a six-monthly basis.

1.5. If there is a suspicious person walking around in Building P, report it to Danny De Baets, the reception in the hall or to the emergency number 092488888 (internal emergency number).

2. Working safely with machinery, tools and infrastructure.

2.1. Order and cleanliness are visible signs that care is being taken of the work environment and equipment. A messy environment is usually not very safe either. In the labs the users of these areas have the duty to ensure order and cleanliness, in particular to keep their own work spaces neat and orderly as well as not to create disorder at the work spaces of other employees.

2.2. Equipment (work tools, power supplies, measuring tools, electrical resistors...) may be used in the lab. These must be put back in place after use. If equipment is not found or defective, inform Danny De Baets.

2.3. For safety reasons, the use of infrastructure outside conventional working hours (conventional = Monday to Friday, 8.00 to 16.00, no official holiday) is not allowed without the presence of a second person.

2.4. Bachelor and master students, in particular master's thesis students have access to the building only during standard opening hours.

2.5. Electricity : the electrical boards may only be opened by BA4/BA5 personnel. For building P, this is Danny De Baets.

2.6. Lights must be turned off when you leave a work zone as the last person, in particular when there are no automatic switches.

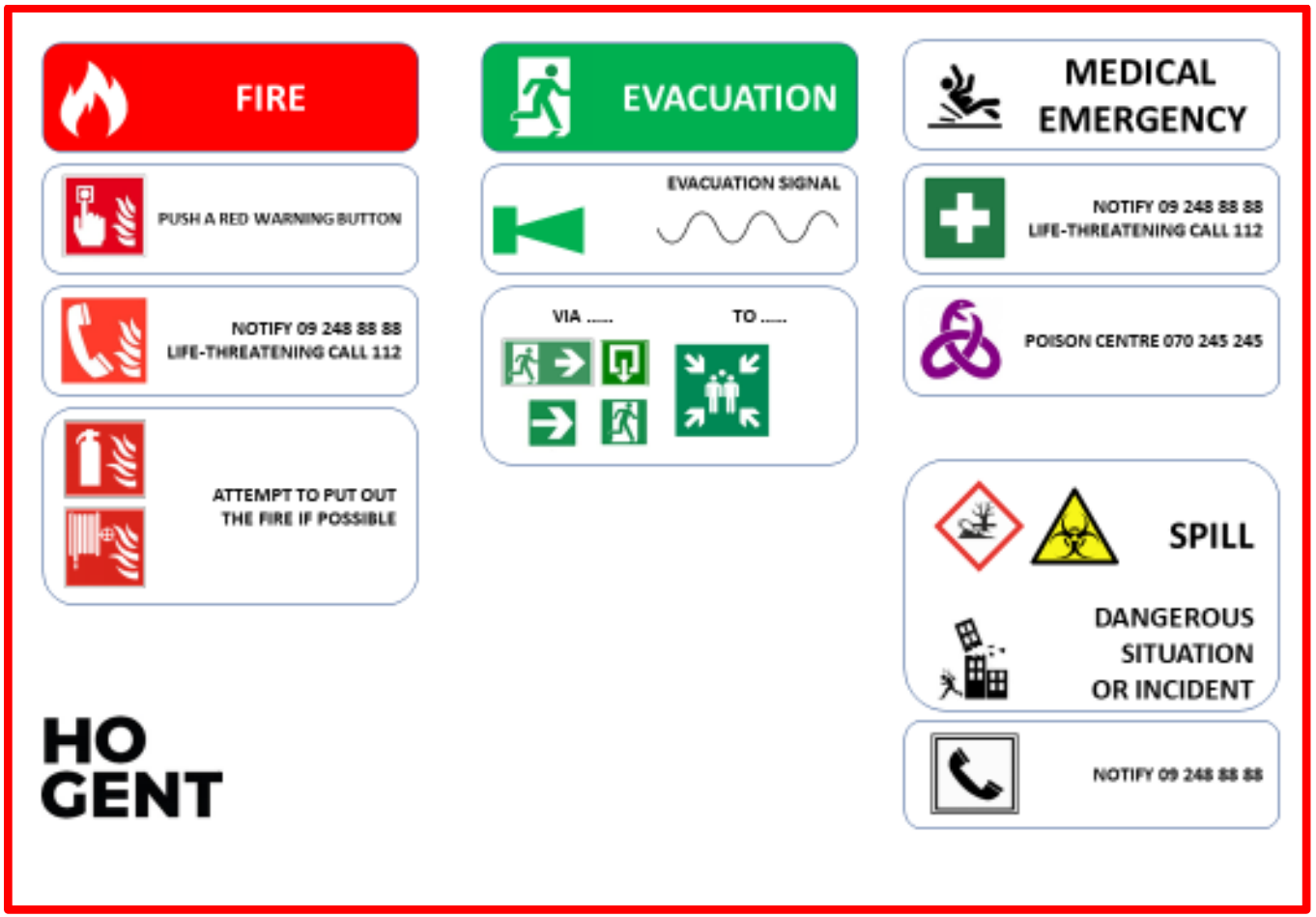
2.7. Windows must be closed during a thunderstorm.

2.8. The CO2 meters in the labs and hall must be checked.

2.8.1. If CO2 > 900 ppm and <1200 ppm: ventilation through the windows is recommended. If CO2> 1200ppm: ventilation through windows is mandatory. If possible, a break must be taken.

3. Emergency situations.

3.1. Follow the emergency instruction below.



3.2. To facilitate an evacuation and investigate warning alarms, building P has a first intervention squad (EIP). This squad provides first aid.

Intervention and first aid colleagues for UGent are :

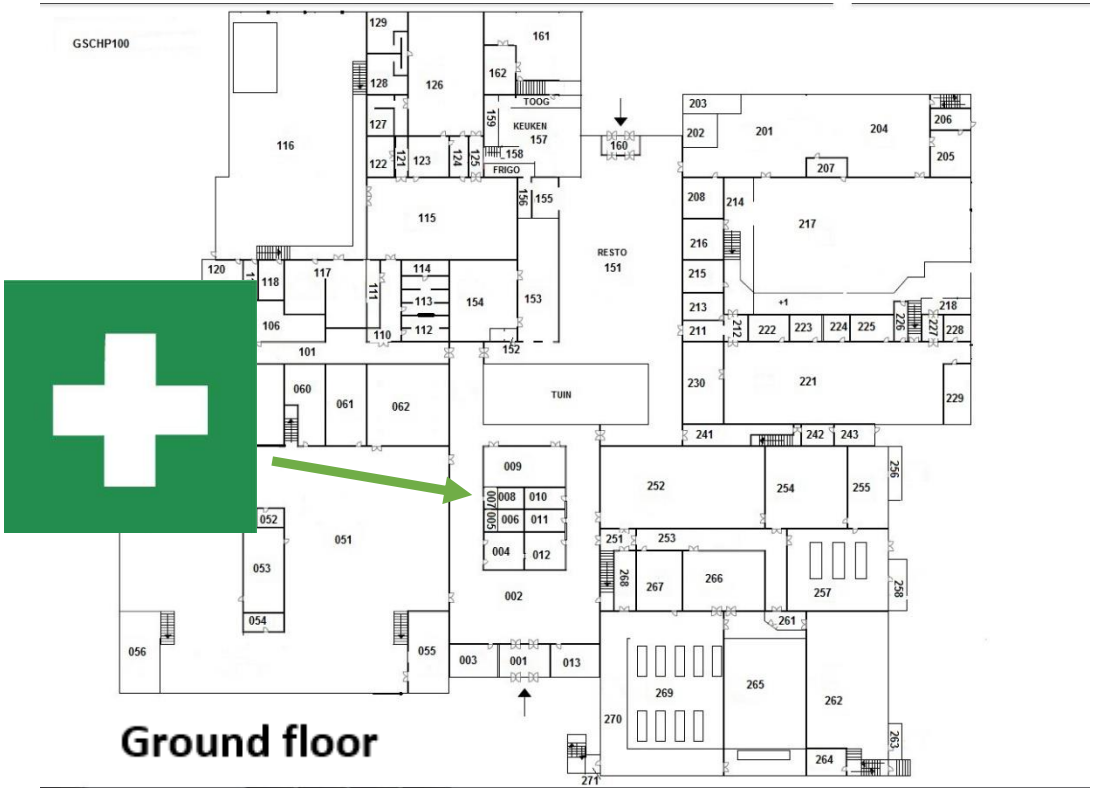
- De Baets Danny
- Saillé Tim
- Dauwels Christof

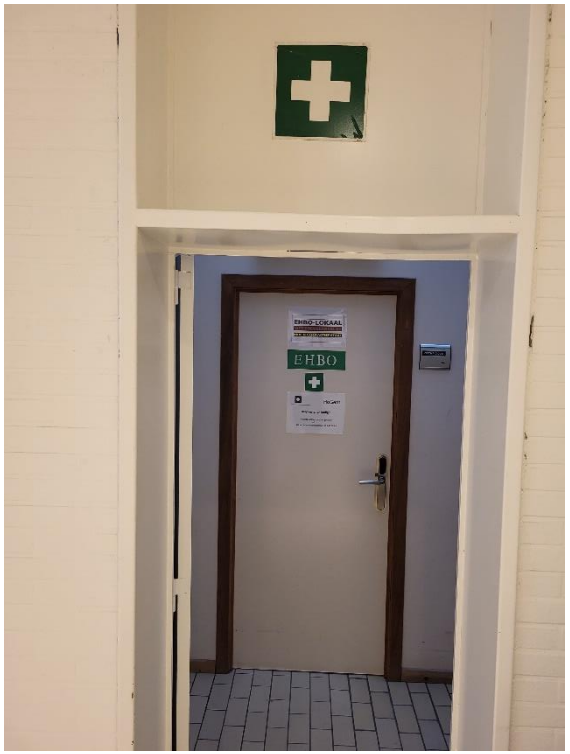
Building P also has a (HoGent) first intervention squad(EIP).

During an intervention, the intervention leaders wear an orange fluorescent jacket, the intervention members wear a yellow fluorescent jacket.

3.3. First Aid .

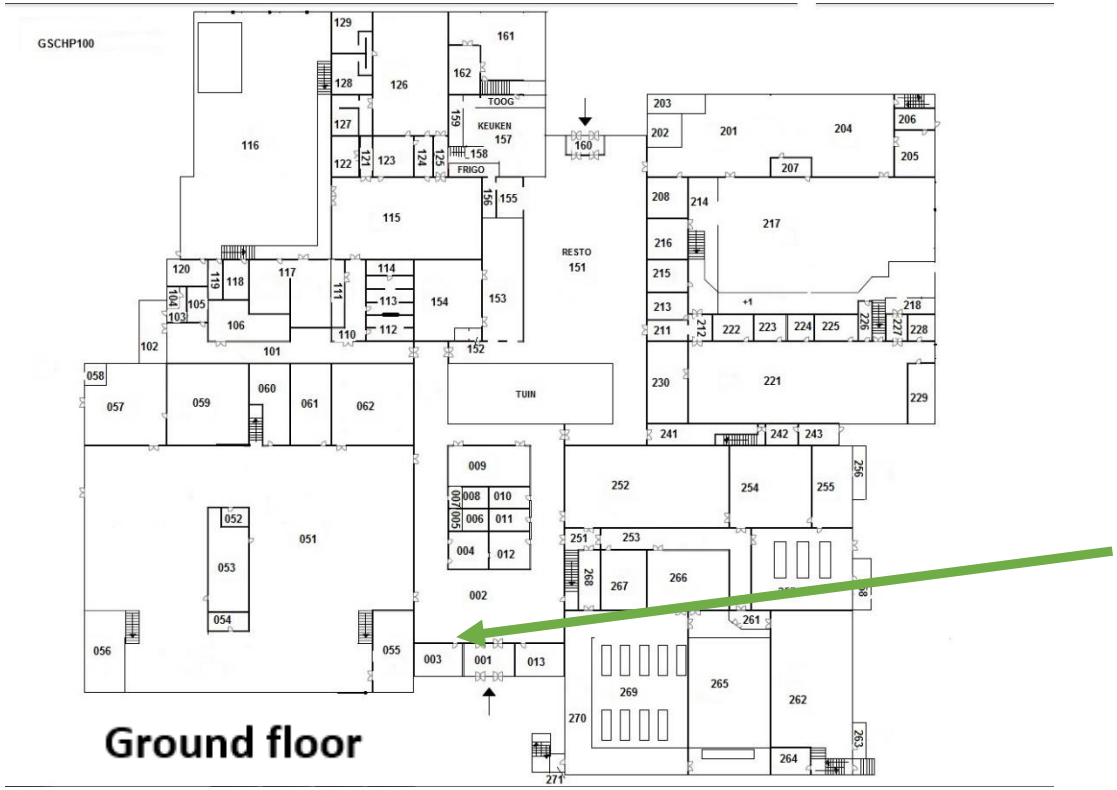
3.3.1. On the ground floor, there is the first aid room.





3.3.2. In the first aid room there is a first aid cabinet and a bed.

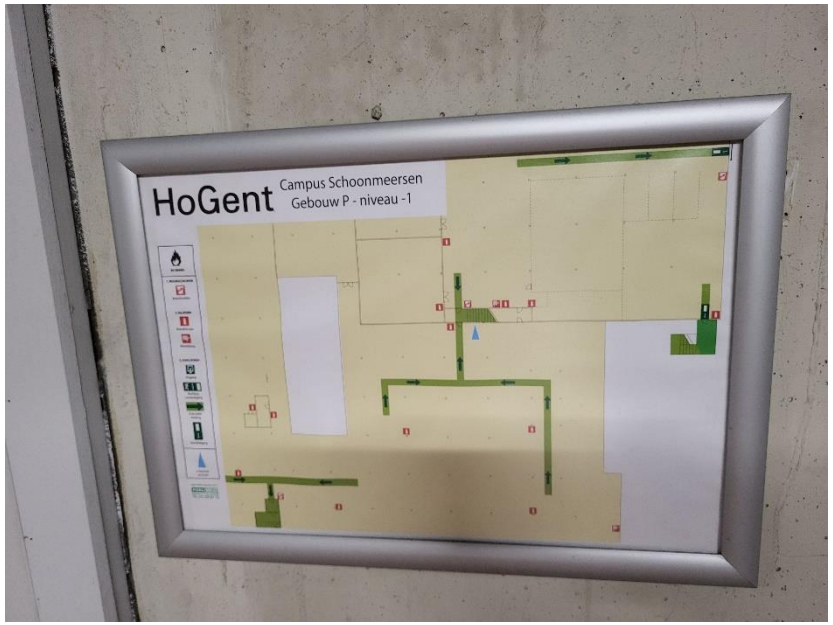
3.3.3. On the ground floor, there is an automated external defibrillator (AED)



3.4. **Evacuation alarm** : a two-tone continuous siren. Evacuate according to the evacuation escape route and proceed to the assembly point. When doing so, follow the instructions of the first intervention team (EIP) and also pass on relevant information to EIP. Also warn colleague(s) who have not heard or understood the evacuation signal. An incident must first be reported via the emergency number 09248888 (permanence center).

3.4.1. On each floor hangs the evacuation escape route for that floor. You must know the evacuation escape routes.

3.4.1.1. Car Park:



3.4.1.2. Groundfloor:

3.4.2. To find the emergency exit : follow these symbols.

3.4.3. There are emergency lights in building P to make it easier to follow the evacuation escape route. If the electricity is out, the emergency lights will be on for +- 30 minutes.

3.4.4. The emergency route must not be blocked (bicycles,boxes,...).

3.4.5. In the event of an evacuation of Building P, people present in building P should proceed to the assembly area. This is located between building P and building S(sports hall).

3.5. Fire suppression at a fire incident in building P

3.5.1. A fire incident with a real danger of fire spread must first be reported via the emergency number 0924888**88** (permanence center).

3.5.2. In case of life-threatening situations call 112 and provide correct information upon location, what happened, are there victims.

3.5.3. Appoint someone to await the emergency services.

3.5.4. In the early stages of a fire incident (e.g. smoldering materials), if it can be done safely, remove these materials from Building P and isolate them outside. This (preferably) by the first intervention team (EIP) and always with 2 people.

3.5.5. One extinguishing attempt is allowed (preferably) by the first intervention team (EIP). This should always be done (if possible) with 2 people. Extinguishing can be done only after consulting the permanence center, in case of a small fire and if extinguishing can be done safely. Carefully read the instructions on the extinguishing equipment.

3.5.6. Flammable materials are indicated by fire classes. Here is the overview of building P.

FIRE CLASSES AND APPLICABILITY IN BUILDING P

CLASS A : BURNING OF SOLIDS
SOLIDS PRESENT ALL OVER THE BUILDING

CLASS B : BURNING OF LIQUIDS
LIQUIDS PRESENT IN THE WORKSHOP

CLASS C : GAS FIRES
GAS PRESENT IN THE WORKSHOP : ACETYLENE FOR WELDING, AEROSOLS

CLASS D : METAL FIRES
METAL PRESENT IN THE WORKSHOP : METALWORKING METAL CHIPS

CLASS F : OIL FIRES LARGER THAN 5 LITER
THESE OILS NOT PRESENT

3.5.7. The extinguishing agents in building P.

3.5.7.1. Water hoses in the halls.

- Advantages : large cooling capacity, can extinguish the core
- Disadvantages : a lot of extinguishing damage, electrically conductive, not suitable for liquids and metal

3.5.7.2. Foam extinguishers : throughout the building.

- Advantages : cooling insulation layer, sealing off oxygen, can be applied preventively, electrically non-conductive up to 1000V
- Disadvantages : (limited) extinguishing damage

3.5.7.3. CO_2 extinguishers : in most laboratories.

- Advantages : little extinguishing damage, electrically non-conductive
- Disadvantages : risk of freezing injuries, small extinguishing power, displaces (limited) breathing air.

3.5.8. Control of possible smoke development in Building P is very important. Smoke development is a major danger.

3.5.8.1. Smoke domes are installed in laboratory GSCHP.0.251 and GSCHP.0.269. The operation of the smoke domes will be done by the intervention service of HoGent or the fire department.

3.5.8.2. Smoke development can be prevented by compartmentalization into zones.

3.5.8.3. The zones are separated by fire doors. These doors have stamps on the hinge side**.**

3.5.8.4. A number of fire doors in Building P are equipped with acoustic door guards. This is to keep the doors open and avoid the use of wedges under the doors. The doors close on the warning alarm.

3.5.8.5. Fire doors should not be forced to open.