



COVID-19 Workspace Safety Plan Stage 2 Amendment for: Centre for Flexible Electronics and Textiles (CFET, Lab 444, 04)

UBC is starting Phase/Stage 2 of the COVID-19 response. Timing of the restart and requirements may vary by Faculty. This form is intended to amend the original workspace plan submitted as part of the Phase 1 return to research. The amendment will be reviewed by members of the Local Safety Team and/or by others appointed by the Director of AMPEL.

During Stage 2, the overall laboratory occupancy should be the lower of either 2/3rds of normal occupancy, or the maximum number of people allowable given physical distancing requirements and access considerations. Weekend (7AM-6PM) access may now be requested. Faculty office use may be allowed in a limited number of cases.

In this document, workspace plan refers to the Return to Research document or Workspace Safety Plan that was filled out and approved as part of phase I. Stage II refers to the next phase (Stage 2 follows Phase 1).

1. Occupancy

Normally occupancy will stay the same as it was in Phase 1, unless modifications are requested. If changes are requested, please indicate the new occupancy levels and provide a map depicting the individual workstations. Include a 2 m diameter circle for scaling. Also provide arrows indicating directions of circulation, if appropriate.

Maximum 5 people is permitted in lab 444, and a maximum of 3 people is permitted in lab 04 (as long as physical distancing is maintained). Only one person per each color-assigned area (see the layout of the labs) in the lab is permitted.

2. Updated Access List for Laboratory Space:

How many researchers and others normally have access to the laboratory space?

The number of the normal users has not changed from the Phase 1. CFET facility manager has access to the building and the labs. All other users shall obtain access permission to the Brimacombe building through their supervisors/department... prior to requesting access to the CFET labs (section d of the CFET Guidelines Phase 2).

3. Working within 2 m:

Working in close proximity should be avoided where possible. Double protection is required (face mask plus face shield) for people working within 2 m. Nitrile gloves and a lab coat are recommended.

Are there situations (training, special procedures etc.) where two or more people will need to work in close proximity?



YES. It is highly recommended that all personnel always maintain a minimum distance of two (2) meters to the next person and working in close proximity be avoided where possible. However, in cases such as training, people who have to work within 2 m are required to use double protection PPEs (facemask plus face shield, gloves and a lab coat) is required (section j of the CFET Guidelines Phase 2).

4. Weekend and After-Hours Access:

Access is now possible on weekends from 7 AM to 6 PM. During the weekends occupants should not make use of building common areas, except washrooms. Only the washroom nearest to the lab should be used. Do you plan to have researchers access the lab over the weekend (Saturday/ Sunday 7 AM to 6 PM) or after hours?

Yes. It is highly recommended that all the work be performed during the hours 9 am to 5:30 pm Monday to Friday. The work should be finished and users should exit the labs by 5:30 pm. In case of high priority works, only well experienced users (graduate students, postdocs, and staff) will be permitted to use the CFET facilities outside the business hours, on weekends, and BC statutory holidays. The permission needs to be approved and scheduled in advance by the CFET facility manager (section c of the CFET Guidelines Phase 2).

5. Supervision and Working Alone

Please outline any working alone, supervision and other safety procedures. If the procedures have not changed since Phase I, please refer to the relevant section(s)/pages in the workspace plan.

In case of necessary to work alone for more than 2 hours, another person (preferably either the user's supervisor or one of the user's colleagues) should check on the user (either in person or through text message) once per hour to ensure the safety of the user. This has to be arranged in advance and approved by the CFET facility manager (section c of the CFET Guidelines Phase 2).

6. Faculty Offices

The Faculty level stage II plan limits the number of faculty returning to 25%. All returning faculty must complete the mandatory safety training. If you are requesting the use of faculty offices, please outline the rationale. Due to the limited access allowed at this time, we may not be able to approve all requests.

7. Staff and Researcher Office Space

Researchers and office staff who can work from home are expected to continue to work from home. Please contact the AMPEL Director if you have a need to use office space in Brimacombe.



The same as the Phase 1, the CFET facility manager will need to access his office. He also need to have access to the photocopy room, and high head area to check on the equipment and gas delivery.

Signatures

I/We agree to abide by the procedures described in the approved phase I workspace plan, as amended by this document. I/We will ensure that all researchers and staff who have access to the spaces covered in this document are aware that they also need to abide by these procedures, and that they complete safety training, including COVID-19 training, before returning to work. They have been made aware of physical distancing requirements, procedures for working in close proximity (where relevant), scheduling, working alone procedures and other safety considerations. I/We will arrange to keep track of and maintain records of occupancy during the period of COVID-19 restrictions. I/We will arrange for records of completed training and of the procedures (workspace plan and this amendment) to be accessible from the workspaces. Occupancy limits will also be posted in each space.

Principal Investigator (Director or Manager in case of shared facilities)

Name: Saeid Soltanian
Date: 18/08/2020

Signature:

Signed

Additional PI/Manager (copy as needed)

Name:
Date:

Signature:

Approvals

Director of AMPEL or Designate
Name: John D Madden
Date: 27 August 2020

Signature:

Signed

Department Head or Designate

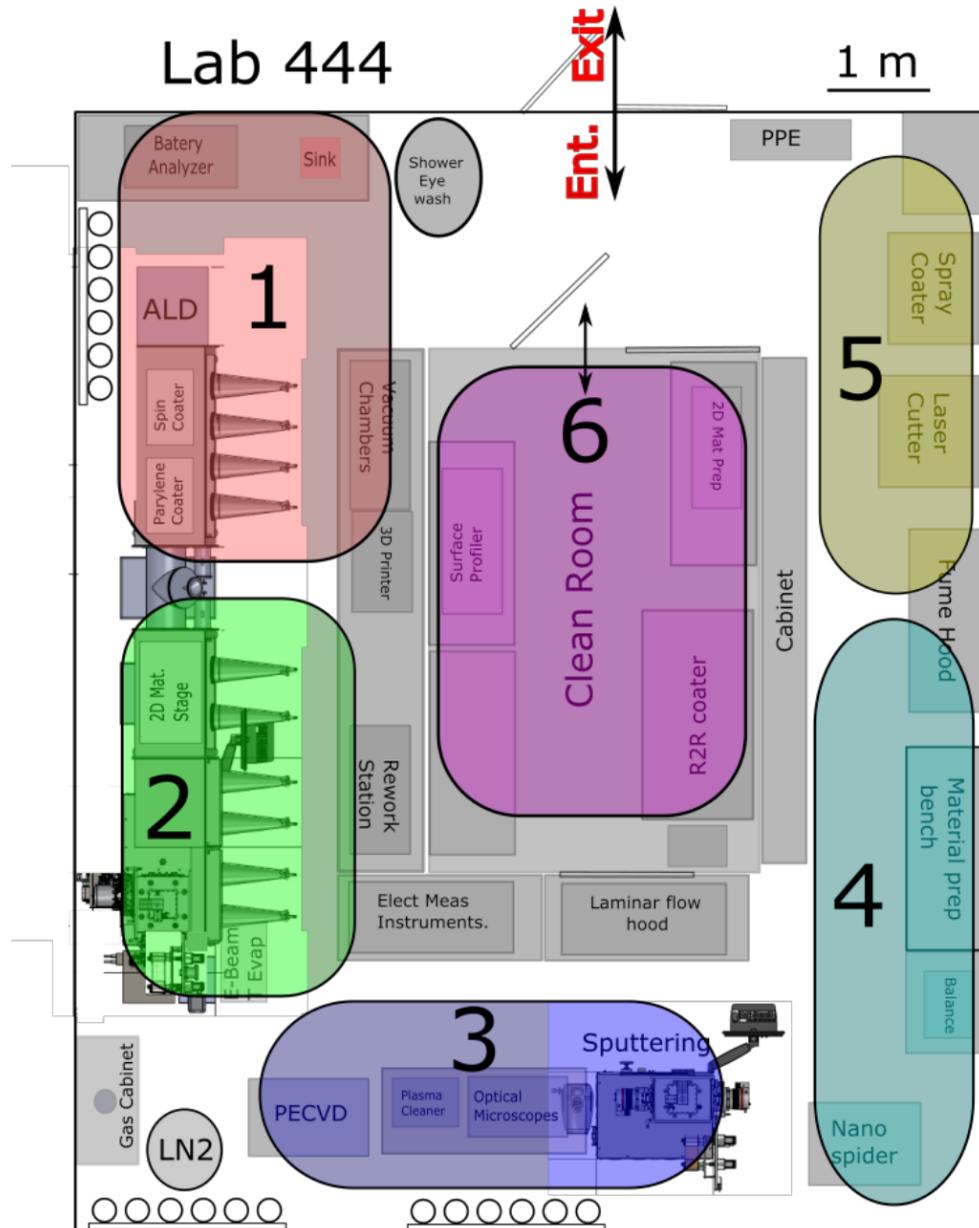
Name: Michael Wolf
Date: Aug 28, 2020

Signature:

Signed



Layout of Lab 444 and areas that users are allowed to be present
Brimacombe Building, 2355 East Mall, Lab 444; Maximum capacity 5 people

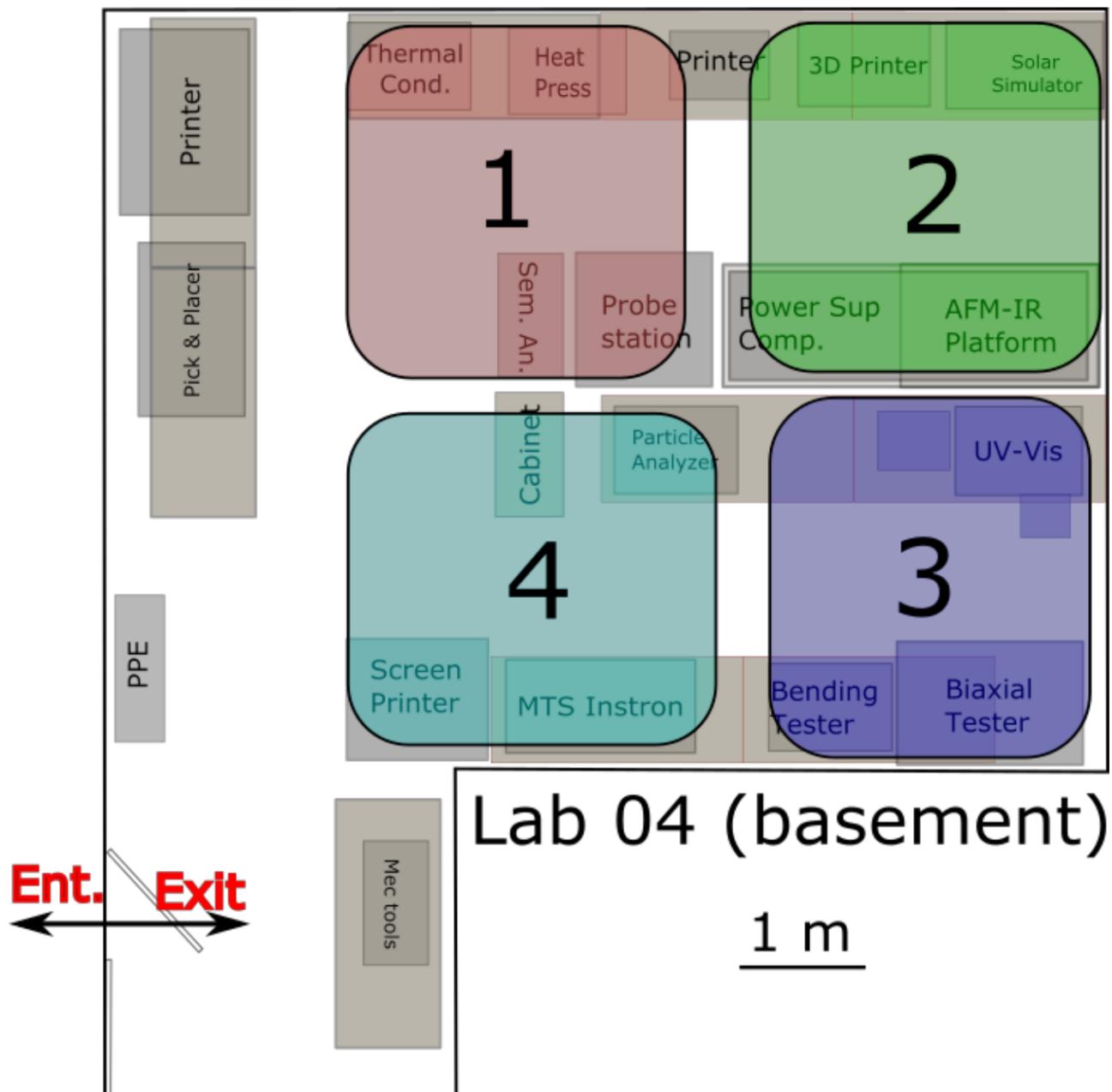


Only one user is allowed to be present at each time in each area.

1. Battery analyzer/ Electrochemical workstation, ALD, Parylene coater, right side of the glovebox, vacuum chamber, 3D printer
2. Left side of the glovebox, 2D materials preparation stage, PVD (E-beam, thermal evaporator)
3. PECVD, plasma cleaner, optical microscopes, sputtering
4. Nanospider, balance, materials preparation bench
5. Spray coater, laser cutter
6. Cleanroom area



**Layout of Lab 04 and area that users are allowed to be present
Brimacombe Building, 2355 East Mall, Lab 04; Maximum capacity 5 people**



Only one user is allowed to be present at each time in each area.

1. Thermal conductivity, heat press, probe station

2. 3D printer, solar simulator, AFM

3. UV-Visible, biaxial tester, bending tester

4. Screen printer, particle analyzer, MTS Instron

CFET guidelines for re-opening (Phase 2)

During the COVID-19 situation, all CFET users are required to follow the following CFET guideline to reduce the risk of acquiring and spreading the virus in the facility.

- a. All users must have Chemical Safety Course certificate. All users are required to have access permission to the Brimacombe building and to certify that they have read the Brimacombe Safety Plan and the documents referenced from the Brimacombe Plan and the CFET guidelines. They also must have UBC COVID-19 safety training certificate.
- b. The facility is operating on an appointment-only basis to restrict the number of people in the labs at one time to 5 in the lab 444 and 3 in the Lab 04.
- c. All the work should be performed during the business hours 9 am to 5:30 pm Monday to Friday. The work should be finished and users should exit the labs by 5:30 pm. In case of high priority works, only well experienced users (graduate students, postdocs, and staff) will be permitted to use the CFET facilities outside the business hours, on weekends, and BC statutory holidays. The permission needs to be approved and scheduled in advance by the CFET facility manager.
- d. In case of necessary to work alone for more than 2 hours, another person (preferably either the user's supervisor or one of the user's colleagues) should check on the user (either in person or through text message) once per hour to ensure the safety of the user. This has to be arranged in advance and approved by the CFET facility manager.
- e. Every appointment will be coordinated through the facility manager. Users shall obtain access permission to the Brimacombe building through their supervisors/department... prior to requesting access to the CFET labs.
- f. Online Booking shall not be used during the phase 2 process. Users need to submit "CFET Booking Request Form" along with a copy of their building access permission to the facility manager (saeid.soltanian@ubc.ca) to schedule their work. Users will receive a scheduled confirmation. *Prioritization will be given to users with COVID-related research and those who are working on time-sensitive projects such as students close to degree completion, grant deadlines...
- g. Protective measures must be used all the time in the facility. All users must bring their own:
 - pen/pencil to sign the forms.
 - lab coat (mandatory), safety glass (mandatory), and mask (encouraged).
- h. To access labs, walk in the directions marked in the hallway. There will be one-way traffic in the hallway, follow the sign. There is no sign for the direction of travel in the labs and verbal communications between users is required if one user needs to pass

another to obtain access (e.g. if one user wants to use the back of the lab, while two others in the path). The person wanting to get in and out should wait for the other user to move out of the way, and should patiently wait for a convenient time. The elevator has a maximum capacity of 2 people.

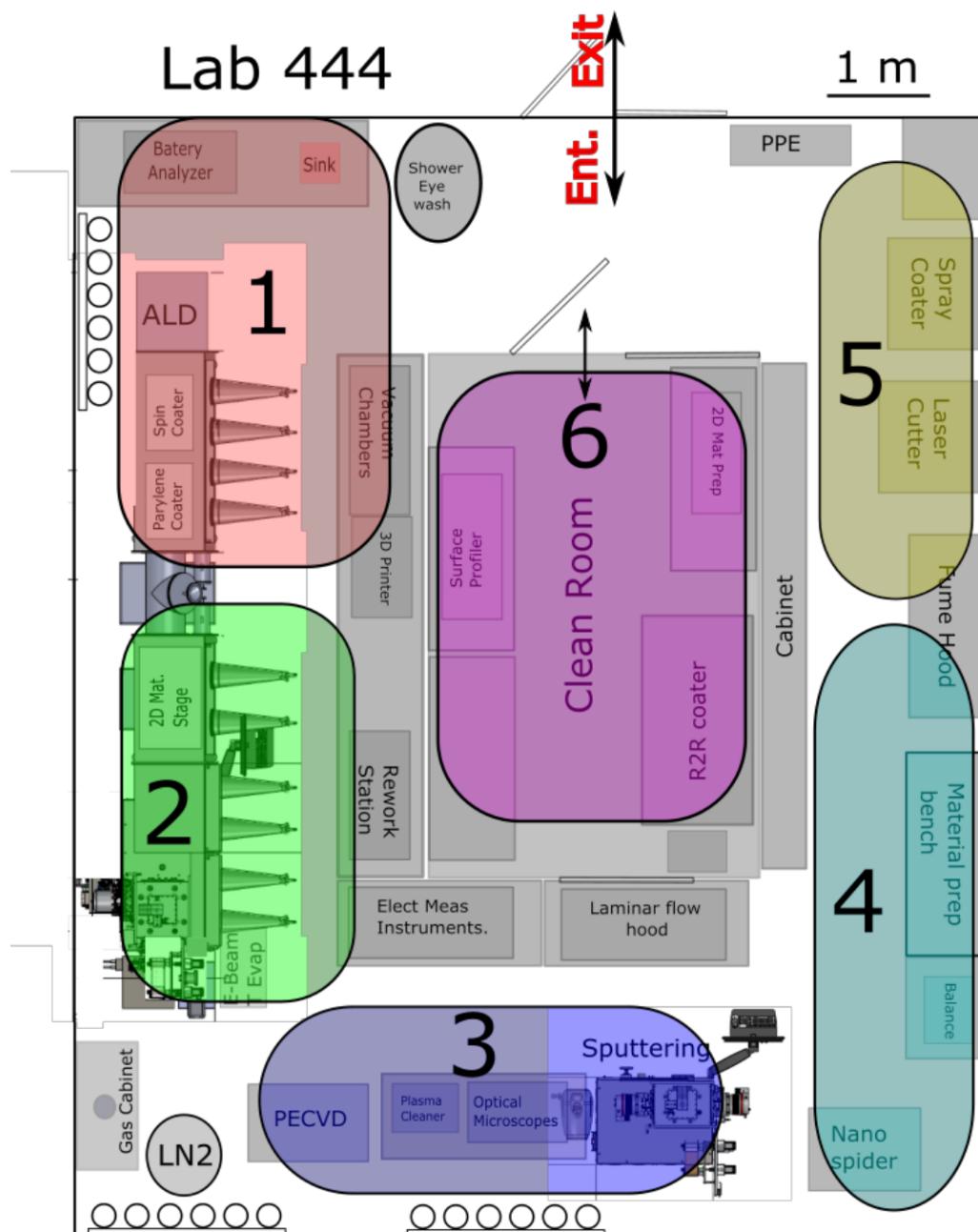
- i. All personnel shall sign in/out upon entering the lab and exit. “User sign-in/sign-out sheet” will be posted at the entrance doors of each lab.
- j. Limited hands-on or one-on-one/group training will be available for the new users while the physical distancing is maintained. The trained and qualified users are allowed to continue access the facility similar to the phase 1.
- k. All personnel should always maintain a minimum distance of two (2) meters to the next person. Working in close proximity should be avoided where possible. Double protection PPEs (facemask plus face shield, gloves and a lab coat) is required for people who have to work within 2 m.
- l. Maximum 5 people is permitted in lab 444, and a maximum of 3 people is permitted in lab 04 (as long as physical distancing is maintained). Only one person per each color-assigned area (see the layout of the labs) in the lab is permitted.
- m. Each user is required to sanitize the high-contact points (such as keyboards, mice operation knobs, eyepieces, desk, chair...) before and after each session of use. There will be a checklist beside each equipment and every user must fill it at every use to ensure that surfaces are sanitized appropriately. Sanitizing materials will be placed on the PPE cabinet.

Note: Any concerns or unsafe situations should be reported to CFET facility manager Saeid Soltanian (saeid.soltanian@ubc.ca) and the building manager Gary Lockhart (Gary.Lockhart@ubc.ca).

Layout of Lab 444 and areas that users are allowed to be present

Building: Brimacombe

Address: 2355 East Mall, Lab 444; Maximum capacity 5 people



Only one user is allowed to be present at each time in each area.

1. Battery analyzer/ Electrochemical workstation, ALD, Parylene coater, right side of the glovebox, vacuum chamber, 3D printer

2. Left side of the glovebox, 2D materials preparation stage, PVD (E-beam, thermal evaporator)

3. PECVD, plasma cleaner, optical microscopes, sputtering

4. Nanospider, balance, materials preparation bench

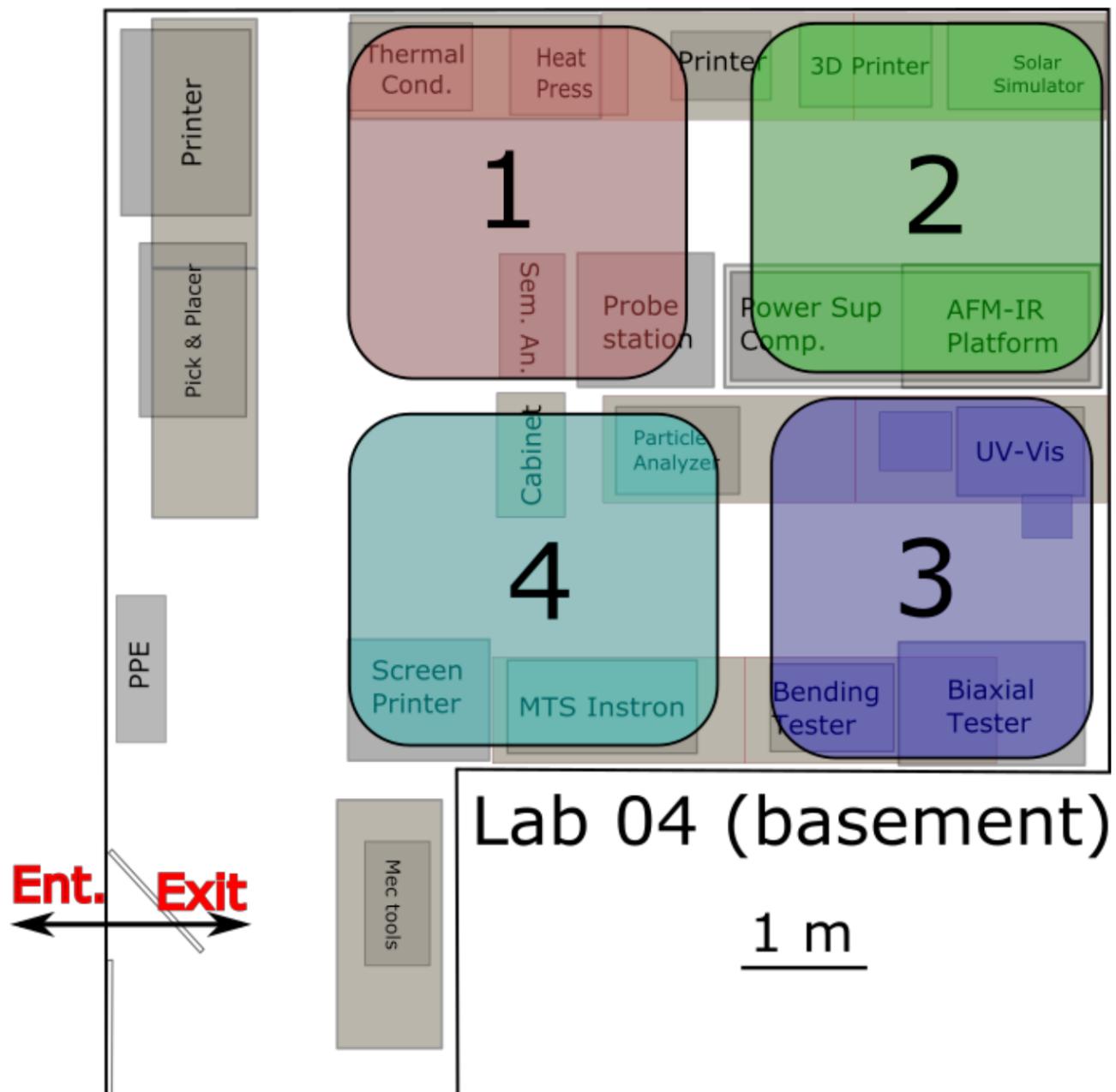
5. Spray coater, laser cutter

6. Cleanroom area

Layout of Lab 04 and area that users are allowed to be present

Building: Brimacombe

Address: 2355 East Mall, Lab 444; Maximum capacity 3 people



Only one user is allowed to be present at each time in each area.

1. Thermal conductivity, heat press, probe station

2. 3D printer, solar simulator, AFM

3. UV-Visible, biaxial tester, bending tester

4. Screen printer, particle analyzer, MTS Instron