GENERAL HEALTH AND SAFETY RISK ASSESSMENT FORM

| Site | **Plasma Building** | **Department** | **Metallurgy and Materials** | **Version / Ref No.** | **2** |
| --- | --- | --- | --- | --- | --- |
| **Activity Location** | **Elms Road , University of Birmingham campus**  | **Activity Description** | **Return to Campus COVID-19: Building Risk Assessment for research staff, essential maintenance and support contractors** **Contractors, research staff and students.** **Occupancy:****1 person in the analytical lab, 1 in the jet mill lab and 2 in the main open plan laboratory on each floor.** **2 persons in open plan conference/kitchen area with 2M distancing** |
| **Assessor** | **Dr Daniel Reed****Prof Allan Walton****Mr Andy Bradshaw** | **Assessment Date** | **15/04/21** | **Date of Assessment Review** | **17/05/2021** |
| **Academic / Manager Name** | **Allan Walton**  | **Academic / Manager Signature** |  |
| Hazard Assessment | Control Assessment | Actions |
| Hazard Category | Hazards Identified | Who might be harmed?StaffStudentsContractors Others | How might people be harmed? | Existing Control Measures | Initial Risk Rating | Are these adequate?Yes/No | Changes to/ Additional Controls | Residual Risk Rating | Owner | Due Date | Action Complete |
| S | L | R | S | L | R |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Organisational | Psychological well being | Staff / Students | Anxiety and stress caused by concerns around returning to work and studies on Campus | Regular communication is in place (individual and group) via *building user group meetings, research group meetings, one to one meetings and school forum* to ensure staff and students are not ill-informed about returning to work safely.Advice is shared with staff members and staff have been fully briefed and kept up to date with current advice on staying protected through the University’s lines of communications (i,e line managers, Internal Comms) and shared with staff via *building user group meetings, research group meetings, one to one meetings, school forum* and the University’s Coronavirus FAQs [click here](https://intranet.birmingham.ac.uk/staff/coronavirus/faqs-for-staff.aspx). Risk assessment shared with staff and an electronic copy is available on the *BearShare drive and Canvas*. New workplace/controls put in place to reduce risk of exposure to COVID 19 are documented in procedures and policies and disseminated to employees through Line Managers and *academic leads*. These include:* ***Social distancing: General guidance for staff and students***
* ***Social distancing: Buildings adaptations guidance***
* ***Social distancing***: ***Product solutions booklet***
* ***Social distancing: Building checklist***
* ***On-line induction materials for returning to campus***: combination of the guidance and videos.

https://intranet.birmingham.ac.uk/staff/coronavirus/essential-resources-and-checklist.aspx* ***Return to Campus COVID-19: Building Risk Assessment* (This completed Risk Assessment)**

Line managers are aware of how big changes to working arrangements may cause additional work-related stress and affect their employees’ mental health and wellbeing.  | 3 | 2 | 6 | Yes | N/A |  |  |  |  |  |  |
| Organisational | Psychological well being | Staff / Students | Anxiety and stress caused by concerns around returning to work on Campus | Managers hold regular informal discussions with their team and look at ways to reduce causes of stress are through weekly online team meetings. Concerns on workload issues or support needs are escalated to line manager via regular one to one meetingsStaff who were previously advised by Occupational Health or a medical professional (including a midwife in respect of pregnancy) ***not*** to work on campus, have had arrangements made to ensure they do not return to working on campus until such time as advised by Occupational Health.Staff who are in the [clinically extremely vulnerable group](https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19%22%20%5Cl%20%22what-will-change-from-1-august) (i.e. those previously advised to shield), have had arrangements made to work from home, where possible, for the duration of the roadmap as per the Government advice. Where this is not possible, managers have discussed possible options with the individuals regarding working on campus. Prior to working on campus, staff in this category have been referred to Occupational Health for review using the specific Covid-19 Occupational Health referral form is available [here](https://intranet.birmingham.ac.uk/hr/wellbeing/index.aspx). Staff who are clinically vulnerable (any of the conditions detailed on the Government’s guidance page, available [here](https://www.gov.uk/government/publications/staying-alert-and-safe-social-distancing/staying-alert-and-safe-social-distancing-after-4-july%22%20%5Cl%20%22clinically-vulnerable-people)) have discussed their working arrangements and the requirement for on campus presence, with their line manager to consider how they can continue to work safely including working from home. Where people cannot work from home previous returning to working on campus assessments undertaken in Autumn 2020 have been reviewed to ensure that no significant factors have changed in the intervening period. If there have been any changes then a new review has been undertaken. If there have been no significant change in factors, the previous assessment and any prior mitigating actions agreed (where they are still relevant) have been applied.Existing risk assessments including those for new or expectant mothers reviewed and revised to reflect new working arrangements. Reasonable adjustments made, including those needed for PEEPs especially in relation to who will assist with their evacuation in an emergency, to avoid staff that require them including disabled workers being put at a disadvantage. Employees invited to return back to work on Campus who have concerns about either continuing to work on Campus or working from home/remotely have discussed these with their line manager or supervisor either using the [University’s Covid-19 Return to Campus Discussion Form](https://intranet.birmingham.ac.uk/hr/documents/public/Wellbeing/Covid-19-Return-to-Campus-Discussion-Form.docx) or an alternative method whereby concerns have been formally recorded and where necessary an occupational health referral has been made using a standard Management Referral available via the HR Portal.Employees are made aware of supportive mechanisms available to them (e.g. counselling, occupational health, HR, etc) through line managers, internal communications and University webpages: <https://intranet.birmingham.ac.uk/staff/coronavirus/faqs-for-staff.aspx><https://intranet.birmingham.ac.uk/hr/wellbeing/index.aspx><https://intranet.birmingham.ac.uk/hr/wellbeing/workhealth/index.aspx> | 3 | 2 | 6 | Yes | N/A |  |  |  |  |  |  |
| Biological | Virus transmission in the workplace | Staff / Students/Contractors | Exposure to respiratory droplets carrying COVID-19 from an infectious individual transmitted via sneezing, coughing or speaking. | ***Social distancing: Plasma Building checklist***has been completed to identify the control measures to consider reducing the risk of workplace infections.Staff work using the mixed model of site and home based as agreed with line manager, in line with Government and University guidance. Managers/supervisors ensure staff and students with any form of illness do not attend work/campus until the illness has been verified as not being Covid-19. Managers/supervisors keep track of when staff and students can return to work/ Campus after the symptom free period. Regular access to the Lateral Flow Device screening tests provided to staff and students who are coming onto campus.The University’s ***[On-line induction materials for returning to campus](https://intranet.birmingham.ac.uk/staff/coronavirus/essential-resources-and-checklist.aspx)***  combination of the guidance and videos have been provided and completed for all staff returning to work in University buildings*.* To help with consistency and adherence to building specific measures such as access routes, occupancy limits etc. staff from other departments accessing the building (such as cleaning and Estates) have received a building specific induction including information and inductions.Posters are displayed that encourage staying home when sick, cough and sneeze etiquette are displayed in the entrance to the building.Managers keep track of when staff can return to work after the symptom free period. Schedules for essential services and contractor visits revised to reduce interaction and overlap between people e.g., carrying out services out of hours. Un-essential trips within buildings and sites discouraged and reduced, e.g. access to some areas restricted. Staff and students encouraged to use telephone communication and online chats (e.g. via Teams) rather than visit colleagues in other labs/offices | 4 | 2 | 8 | Yes | N/A |  |  |  |  |  |  |
| EnvironmentalEnvironmentalEnvironmentalEnvironmentalEnvironmental | Virus transmission in the workplace due to lack of social distancing Virus transmission in the workplace due to lack of social distancing Virus transmission in the workplace due to lack of social distancing Virus transmission in the workplace due to lack of social distancing Virus transmission in the workplace due to lack of social distancing  | Staff / Students/ContractorsStaff / Students/ContractorsStaff / Students/ContractorsStaff / Students/ContractorsStaff / Students/Contractors | Exposure to respiratory droplets carrying COVID-19 from an infectious individual transmitted via sneezing, coughing or speaking.Exposure to respiratory droplets carrying COVID-19 from an infectious individual transmitted via sneezing, coughing or speaking.Exposure to respiratory droplets carrying COVID-19 from an infectious individual transmitted via sneezing, coughing or speaking.Exposure to respiratory droplets carrying COVID-19 from an infectious individual transmitted via sneezing, coughing or speaking.Exposure to respiratory droplets carrying COVID-19 from an infectious individual transmitted via sneezing, coughing or speaking. | Only work authorised and approved by the Government and University is permitted in University buildings. Workplace routines changed to ensure room/building capacity calculated to maintain social distancing is not exceeded including * Change to peak staff entry and exit times.
* Changes to core working hours.
* Amended shift routines, staff handovers and team briefings.
* Staff have been separated into teams to reduce contact between employees.
* Fixed teams or adjusted booking processes in use to reduce the number of people in a lab at the same time to avoid overcrowding.
* Job and location rotation reduced, measurements to be undertaken by a nominated person as a service to reduce number of users.

To help contain clusters and outbreaks and assist the University with any requests for data by the NHS Test and Trace service a temporary record of shift patterns and teams and attendance in the building is kept for 21 days. NHS Test and Trace QR code is displayed in the building for visitors and staff to scan using the NHS Covid-19 app.Work has been arranged so that staff are able to maintain the government guidelines for social distancing based on our industry which are included in the ***Social distancing: Plasma Building checklist***(The latest Guidance on these measures can be found by clicking the following link [Social Distancing Guidelines](https://www.gov.uk/guidance/social-distancing-in-the-workplace-during-coronavirus-covid-19-sector-guidance%22%20%5Cl%20%22shops-running-a-pick-up-or-delivery-service)). Visual aids and signage are used for maintaining two metres distance throughout the building/workplace. A one way system is not possible in this building. Maximum occupancy of each area outlined on lab doors.Arrival and departure times at work have been staggered to reduce crowding into and out of the workplace, taking account of the impact on those with protected characteristics. Activities are segregated to allow 2 metres distance including: * Work stations/equipment moved or staff relocated. Provision of additional screens where needed to segregate people.
* Areas of work marked out with floor tape to ensure adequate social distancing is in place. Visual management aids in place to remind people of the need for social distancing,
* Headcount capacity to ensure social distances standards have been achieved have been set and displayed in shared rooms e.g. laboratories.
* Staff encouraged to remain on-site including bringing their own lunch and, when not possible, maintaining social distancing while off-site.
* Where available safe outside areas used for break.
* Any work requiring work at less than 2M, such as moving and installing equipment, to be risk assessed and approved by the head of school prior to work starting.

A single occupancy toilet and handwashing sink has now been fitted and a cleaning services rota established.* Additional sink for handwashing has been provided and with 2 persons occupancy can be used as a welfare area in adjoining conference room

Visits from people outside of the building are managed via the schools Technical Manager and Operations Manager, visitor arrangements have been revised to ensure social distancing and hygiene at all times. These measures are monitored by the local supervising staff member and where necessary concerns fed back to the third party manager e.g. LEV inspections and test – Estates Manager, Cleaner – Campus Services Domestic Manager. All corridors are :* Marked in areas to ensure social distancing is adhered to (lines on floor 2m apart).
* A one way system cannot be implemented in the plasma building so social distancing will be achieved by maximum occupancy in the entrance way to the building and stairs.

Additional signage in corridors reminding staff about social distancingOne person on the stairwell at a time. It is possible to see all the way to the top of the stairwell from the entrance way. Signs will indicate this.Additional signage in stairwells reminding staff about social distancing.Wash hand / use hand sanitiser on exit from stairwell.Social gathering amongst employees have been discouraged whilst at work including meetings where alternative arrangements have been provided e.g. virtual meetings. Managers perform frequent building walkaround to ensure social distances controls are being followed. Staff are reminded on a daily basis of the importance of social distancing both in the workplace and outside of it. Near-miss reporting is encouraged to identify where controls cannot be followed or people are not doing what they should.Only work authorised and approved by the Government and University is permitted in University buildings. Where the 2m social distancing guidelines cannot be followed in full in relation to a particular activity, for example one to one training, consideration has been given to whether that activity needs to continue, and, if so, all the mitigating actions possible to reduce the risk of transmission between staff have been included in a task specific risk assessment and are being taken. Mitigating actions include: * Further increasing the frequency of hand washing and provision of hand sanitiser and surface cleaning.
* Keeping the activity time involved as short as possible.
* Using screens or barriers to separate people from each other.
* Using back-to-back or side-to-side working (rather than face-to-face) whenever possible.

Reducing the number of people each person has contact with by using ‘fixed teams or partnering’ (so each person works with only a few others* Re-engineering the technical activity.
* Improving ventilation by re-organising the indoor space to optimise the ventilation available.
* Individuals (including staff, students, visitors and contractors), unless exempt, are required to wear face coverings, inside University buildings where 2m social distancing isn’t possible and cannot be maintained. Information provided in the University and local communications and local inductions and signs displayed informing people of the mandatory requirement to wear a face covering within the building.

Individuals (including staff, students, visitors and contractors), unless exempt, are required to wear face coverings, inside all University buildings at all times except where there is reasonable justification for not wearing them e.g. in single occupancy rooms, in multi-occupancy staff workplaces where there is over 2m social distancing between staff and good ventilation. Information provided in the University and local communications and local inductions and signs displayed informing people of the mandatory requirement to wear a face covering within the building.Individuals have been reminded through induction and signage of how to use face coverings safely including the following:When wearing a face covering you should:* wash your hands thoroughly with soap and water for 20 seconds or use hand sanitiser before putting a face covering on
* avoid wearing on your neck or forehead
* avoid touching the part of the face covering in contact with your mouth and nose, as it could be contaminated with the virus
* change the face covering if it becomes damp or if you’ve touched it
* avoid taking it off and putting it back on a lot in quick succession (for example, when leaving and entering buildings)

When removing a face covering:* wash your hands thoroughly with soap and water for 20 seconds or use hand sanitiser before removing
* only handle the straps, ties or clips
* do not give it to someone else to use
* if single-use, dispose of it carefully in a residual waste bin and do not recycle
* if reusable, wash it in line with manufacturer’s instructions at the highest temperature appropriate for the fabric
* wash your hands thoroughly with soap and water for 20 seconds or use hand sanitiser once removed

PPE is provided for individuals working as first aiders. The taking of PPE home is not permitted.Adequate training has been provided on what PPE is required i.e. gloves, masks, aprons, Filtering Face Pieces (P3), goggles, the correct donning/doffing of PPE and face fit testing. Government advice is followed:<https://www.gov.uk/government/collections/coronavirus-covid-19-personal-protective-equipment-ppe><https://www.gov.uk/government/publications/covid-19-decontamination-in-non-healthcare-settings/covid-19-decontamination-in-non-healthcare-settings>PHE quick guides for correct donning and doffing of PPE for [non-AGPs.](https://www.gov.uk/government/publications/covid-19-personal-protective-equipment-use-for-non-aerosol-generating-procedures) as well as for[AGPs](https://www.gov.uk/government/publications/covid-19-personal-protective-equipment-use-for-aerosol-generating-procedures) has been utilised for examples in best practice for putting on and taking off (donning and doffing). | 4 | 2 | 8 | Yes | N/A |  |  |  |  |  |  |
| Biological BiologicalBiological | Suspected case of COVID-19 Suspected case of COVID-19 Suspected case of COVID-19  | Staff / Students/ContractorsStaff / Students/ContractorsStaff / Students/Contractors | Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19.Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19.Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19. | Response plan in place in the event of a confirmed or suspected case of COVID-19 and communicated and includes:* If a person becomes unwell in the workplace with suspected COVID-19, they will be sent home in accordance to the University guidance. If any students appear unwell or make comment or complain to staff members that they are feeling unwell they will be asked to leave the building with immediate effect and to follow the University and Government advice. Managers will follow the NHS Test and Trace workplace guidance: <https://www.gov.uk/guidance/nhs-test-and-trace-workplace-guidance>
* The area will be cleaned in accordance with the specific Government [guidance](https://www.gov.uk/government/publications/covid-19-decontamination-in-non-healthcare-settings/covid-19-decontamination-in-non-healthcare-settings)
* Provision and monitoring of adequate supplies of cleaning materials are in place.
* Team briefed *via staff meetings on*  actions to be taken in the event of someone being suspected of having COVID-19.
* Staff must tell their line manager if they develop symptoms. Absence will be managed in accordance to the University guidance provided.
* Employees to follow the Government advice: <https://www.gov.uk/coronavirus>
* Line managers will maintain regular contact with staff members during this time, in accordance with the University sickness absence guidance and monitor for signs of symptoms in the remaining workforce and keep Senior Managers informed of the situation whilst following the Government’s guidance for contact tracing: contact with co-workers: <https://www.gov.uk/guidance/nhs-test-and-trace-workplace-guidance>
* If an individual tests positive for COVID-19 this will be managed in accordance with the University’s [Test, Trace and Protect Process](https://intranet.birmingham.ac.uk/staff/coronavirus/test-and-trace.aspx).
* If multiple cases of coronavirus appear in a workplace, an outbreak control team from either the local authority or Public Health England will, if necessary, be assigned to help the University manage the outbreak. The University will seek advice from the local authority in the first instance.
* Individuals will be told to isolate because they:
	+ have coronavirus symptoms and are awaiting a test result
	+ have tested positive for coronavirus
	+ are a member of the same household as someone who has symptoms or has tested positive for coronavirus
	+ have been in close recent contact with someone who has tested positive and received a notification to self-isolate from NHS test and trace.

<https://www.gov.uk/government/publications/covid-19-stay-at-home-guidance/stay-at-home-guidance-for-households-with-possible-coronavirus-covid-19-infection> | 4 | 1 | 4 | yes | N/A |  |  |  |  |  |  |
| Biological | Someone entering the workplace with COVID-19 | Staff / Students/Contractors | Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19. | Companies who regularly attend or work in the building requested to provide their health and safety policy/arrangements / or RAMS (risk assessment and method statement) regarding COVID-19. Services are working with the University’s supply chain to ensure that they’re adopting good practices to prevent the spread of COVID-19 to discuss arrangements and control measures. Anybody visiting site will be informed that they are not to enter if they’re experiencing COVID-19 symptoms or should be self-isolating under the government Guidelines.If a person becomes unwell in a University workplace with suspected COVID-19, they will be sent home in accordance to their company’s guidance. University managers will follow the NHS Test and Trace workplace guidance for any University staff that may have come into contact with them: <https://www.gov.uk/guidance/nhs-test-and-trace-workplace-guidance> | 4 | 2 | 8 | Yes | N/A |  |  |  |  |  |  |
| EnvironmentalEnvironmentalEnvironmentalEnvironmental | Virus transmission in the workplaceVirus transmission in the workplaceVirus transmission in the workplaceVirus transmission in the workplace | Staff / Students/ContractorsStaff / Students/ContractorsStaff / Students/ContractorsStaff / Students/Contractors | Contact with an object that has been contaminated with COVID-19 and which subsequently transmits this to another person e.g. surfaces, any inanimate objects & touch points including work surfaces, work equipment, door handles, banisters, chair arms and floors.Contact with an object that has been contaminated with COVID-19 and which subsequently transmits this to another person e.g. surfaces, any inanimate objects & touch points including work surfaces, work equipment, door handles, banisters, chair arms and floors.Contact with an object that has been contaminated with COVID-19 and which subsequently transmits this to another person e.g. surfaces, any inanimate objects & touch points including work surfaces, work equipment, door handles, banisters, chair arms and floors. | Individuals have been instructed and are regularly reminded to clean their hands frequently with soap and water for 20 seconds and the importance of proper drying in accordance with the NHS Guidance:<https://www.nhs.uk/live-well/healthy-body/best-way-to-wash-your-hands/> during the Metallurgy and Materials Building and Plasma Building inductions and at group meetings. Posters are displayed in the entrance area, and on each landing Soap and water and hand sanitiser are provided in the workplace and adequate supplies are maintained and are placed at the entrance to the building and on the first floor main equipment area.Individuals have been informed to check their skin for dryness and cracking and to inform their line manager or supervisor if there is a problem.Awareness posters such as “Catch it, Bin it, Kill it” need to be displayed around the workplace to remind staff and to avoid touching face, eyes, nose or mouth with unclean hands.To help reduce the spread of coronavirus (COVID-19) individuals are reminded via(University and School email communications) of the public health advice :<https://www.gov.uk/government/publications/coronavirus-outbreak-faqs-what-you-can-and-cant-do/coronavirus-outbreak-faqs-what-you-can-and-cant-do>A review of the cleaning regime for the building/area to ensure controls are in place to keep surfaces clean and free of contamination, cleaning products and disposable cloths have been made available to all occupants and everyone has been briefed (via induction and signage) on the importance of keeping surfaces and work equipment clean. Cleaning supplies are located in the ground floor characterization labSharing of equipment is restricted where possible (additional equipment/hand tools may need to be purchased), and cleaned / disinfected before and after use. All tool cabinets have been removed or locked.Objects and surfaces that are touched regularly are cleaned frequently with antibacterial wipes, such as door handles and keyboards, and making sure there are adequate disposal arrangements.Internal doors that **are not** signed as fire doors (unless held open with a mechanical device) kept open whilst working (last person out shuts the doors) to prevent multiple people using door handles. Where possible all goods will be delivered to the School of Metallurgy and Materials, for larger deliveries there are cleaning procedures in place when goods enter the site. Greater handwashing and handwashing facilities have been introduced for workers handling goods and merchandise and hand sanitiser provided where this is not practical. Non-business deliveries stopped, for example, personal deliveries to workers.Everyone is encouraged to keep personal items clean including washing spectacles with soap and water, clean phones, keyboards and shared machinery handles etc before after and during work. Staff/students are advised during regular inductions and reminded via regular team briefingsStaff have been encouraged to bring their own food and kitchen utensils including mugs/cups, cutlery etc.Lab clothing and equipment such as goggles will be bagged, taken to Stores to be laundered by specialist company rather than by individual staff members at home COVID-19 cleaning products used have a current valid chemical risk assessment in place and are used in accordance with all prescribed risk controls and monitoring requirements. They are stored so that they are readily available to all users and are labelled according to the Globally Harmonised System of Classification and Labelling (GHS). (See location specific chemical risk assessments for cleaning products used within the area). All university staff are encouraged to avoid direct personal contact with others i.e. shaking hands etc. | 4 | 2 | 8 | Yes | N/A |  |  |  |  |  |  |
| Organisational OrganisationalOrganisational | Exposure to Existing HazardsExposure to Existing HazardsExposure to Existing Hazards | Staff / Students/ContractorsStaff / Students/ContractorsStaff / Students/Contractors | Increased risk of harm due to controls included in existing risk assessments & safety arrangements affected by COVID-19 measuresIncreased risk of harm due to controls included in existing risk assessments & safety arrangements affected by COVID-19 measuresIncreased risk of harm due to controls included in existing risk assessments & safety arrangements affected by COVID-19 measures | All relevant pre-existing (non COVID) risk assessments including lone working assessments and procedures have been reviewed to take into account the impacts of social distancing and other COVID counter measures.PPE related risk assessments have been reviewed to ensure that PPE is provided on an individual basis. Usage is monitored to ensure suitable level of stock of certain PPE such as face masks etc during this time due to global shortages. Individuals maintain their own equipment in a sterile condition. Storage has been reviewed to provide individual storage arrangements. The taking of PPE home is not permitted.Emergency Procedures reviewed and revised including:* **Communication**: people have been made aware (during induction) that in an emergency, for example, an accident or chemical spill or fire, people do not have to stay 2m apart if it would be unsafe.
* **Fire procedures:** number and details of nominated fire warden(s) in place, fire muster point confirmed and PEEP requirements defined including who will assist with their evacuation in an emergency. Required modifications to fire alarm practices and evacuation drills to cater for COVID-19 measures have been addressed; ensuring that the activity is still compliant with relevant building and fire codes.
* **First Aid:** First aid needs assessment reviewed to take into account any new Guidelines issued by the [University](https://intranet.birmingham.ac.uk/staff/coronavirus/faqs-for-staff.aspx) or [HSE](https://www.hse.gov.uk/), and first aid information including the location of first aid kits and first aider contact information up to date.
* **Hygiene:** Washing facilities with soap/gel available (see Cleaning below). People involved in the provision of assistance to others have been informed to pay particular attention to sanitation measures immediately afterwards including washing hands.

Safety critical roles will remain in place to aid safe operation. In the event of safety critical roles not being available then a dynamic risk assessment shall be performed by the School of Metallurgy and Materials technical manager to ensure measures are introduced to mitigate risk (for example, another area within the building or campus could have a critical role such as first aider that could cover as a temporary solution).Security implications of changes made to operations and practices in response to COVID-19 Local or National Government requirements, have been considered,Business continuity and disaster recovery plans updated based on COVID-19 implications including Contingency plan in place for possible switch back to lockdown.Life-saving rules, will continue to be governed, enforced and communicated during COVID-19 in particular “speaking up” if they witness any unsafe behaviours, conditions or symptoms related to COVID-19. | 4 | 2 | 8 | Yes | N/A |  |  |  |  |  |  |
| Environmental | Inbound & Outbound Goods including Post | Staff / Students/ | Exposure to contact with an object that has been contaminated with COVID-19. | Logistics for the deliveries to the building are the same as those for the Metallurgy and Materials building, to enable social distancing to be maintained at all times has been considered and include: * Pick-up and drop-off collection points, procedures, signage and markings revised.
* Unnecessary contact at delivery bay has been minimised e.g. non-contact deliveries where the nature of the product allows for use of electronic pre-booking.
* Methods to reduce frequency of deliveries in place - ordering larger quantities less often.
* Where possible and safe, single workers load or unload vehicles or if not possible the same pairs of people are used for loads where more than one is needed.
* Drivers encouraged to stay in their vehicles where this does not compromise their safety and existing safe working practice, such as preventing drive-ways.
* Electronic paperwork is used where possible, and procedures reviewed to enable safe exchange of paper copies where needed, for example, required transport documents.
* Delivery and receipt confirmation made contactless and physical contact when handing goods over to the customer has been avoided.
* Where possible all deliveries are stripped of all packaging (which is disposed of).
* Strict hand washing procedure in place after handling all deliveries.
* Where possible deliveries to remain isolated and untouched for a minimum of 48 hours.
 | 4 | 1 | 4 | Yes  | N/A |  |  |  |  |  |  |
| Environmental | Virus transmission outside of the workplace | Staff / Students/Contractors | Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19. | On the outside / approach to the building there is signage to warn all prior to entering this building social distancing is in place (keep 2m apart).There is signage advising staff to wash their hands regularly and not to touch their face.There are two main points of entry. 1) large doors at back of main hanger space and 2) the main entrance at the front of the building. Signage will be present at both doors outlining social distancing measures. Building access control is used during busy spells in the building i.e. users are book a time slot where they are able to enter the building/labs using online booking tools. | 4 | 1 | 4 | Yes | N/A |  |  |  |  |  |  |
| Organisational | Travelling to work | Staff / Students/ | Exposure to respiratory droplets carrying COVID-19. | Sufficient parking restrictions to maintain social distancing measures in place and additional parking is provided.Additional facilities such as bike-racks are provided to help people walk, run or cycle to work where possible.Workers told to avoid public transport where applicable and using alternatives e.g. cycling, walking to work etc. Where staff are not able to avoid public transport they do so in accordance with Government and University Guidance: <https://www.gov.uk/coronavirus>https://intranet.birmingham.ac.uk/staff/coronavirus/faqs-for-staff.aspxNon-essential travel is not permitted during the National Lockdown periods and is minimised at all other times – remote options considered first.  | 4 | 1 | 4 | Yes | N/A |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mechanical | Machinery & Equipment | Staff / Students/ | Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19. | Equipment and surfaces that are touched regularly will be frequently cleaned and disinfected. Sterilising chemicals and cloths are provided in the area to clean machines and equipment prior to the commencement of work and upon completion. If machines and equipment are shared, sterilising will be carried out between operations by *users* | 4 | 2 | 8 | Yes | N/A |  |  |  |  |  |  |
| Environmental | Ventilation | Staff / Students/ | Exposure to respiratory droplets carrying COVID-19. | Recirculation of unfiltered air within the workplace has been avoided or reduced as far as possible.Ventilation systems are maintained in line with planned and preventative maintenance schedules, including filter changes.An assessment of the ventilation in the building, and where necessary individual areas/rooms, has been undertaken which included checks such as:* Is the space naturally or mechanically ventilated
* All areas within the building which are usually occupied and have poor ventilation have been identified and the use of the area re-assessed (see below).
* An assessment of Fresh air (ventilation) has been undertaken for the workplace and where necessary individual workspaces. This included how fresh air is provided (natural, mechanical or combination of both), how many people occupy/use the area, how much time people spend in the areas, how large the area is, what activities take place in the areas, the equipment and machinery in the workspaces, the use of fans and Local Exhaust Ventilation.

Natural ventilation can be improved by fully or partially opening windows, air vents and doors, not signed as fire doors. Rooms can be purged (aired) when not in use by leaving the windows and doors fully open. However, it is important to plan and close windows to minimise the risk of rodent and pigeon issues.Mechanical ventilation has typically been set at maximum fresh air settings and operate 24/7; but as minimum of 3 hours before or after any stated occupancy times. Staff have been informed, via this risk assessment of the following steps which they can take to make sure their workplace is adequately ventilated whilst maintaining a comfortable temperature:* opening windows and doors partially can still provide acceptable ventilation while keeping the workplace comfortable. Opening higher-level windows will probably create fewer draughts.
* if the area is cold relax dress codes so people can wear extra layers and warmer clothing
* use [natural ventilation](https://www.hse.gov.uk/coronavirus/equipment-and-machinery/air-conditioning-and-ventilation/improve-natural-ventilation.htm) alongside heating systems to maintain a reasonable temperature in the workplace.

Ventilation Instruction signs displayed throughout the building instructing individuals to “Please ensure you open all windows on arrival and close on departure.”Most mechanical ventilation systems are monitored by building management systems that will raise a fault alarm; but please ensure that any potential fault with mechanical or natural ventilation is raised with the Building Management and or the Estates Helpdesk. General considerations reflected on during reopening of the buildings in relation to the ventilation and fresh air to occupied spaces. Core strategy based on ‘[CIBSE Covid-19 Ventilation Guidance](https://www.cibse.org/knowledge/knowledge-items/detail?id=a0q3Y00000HsaFtQAJ)’, [REHVA guidance](https://www.rehva.eu/fileadmin/user_upload/REHVA_COVID-19_guidance_document_V4_09122020.pdf), [HSE guidance](https://www.hse.gov.uk/coronavirus/equipment-and-machinery/air-conditioning-and-ventilation.htm), [Government](https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19%22%20%5Cl%20%22shops-running-a-pick-up-or-delivery-service) and other relevant industry guidance. The guidance is constantly under review by the University’s Estates, as SARS-CoV2 transmission routes become more clearly defined, and any updated recommendations assessed and implemented where relevant to University systems. Links used above:<https://www.cibse.org/knowledge/knowledge-items/detail?id=a0q3Y00000HsaFtQAJ> | 4 | 2 | 8 | Yes |  |  |  |  |  |  |  |
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**Risk Assessment Guidance**

Risk Scoring System

The scoring system is provided as a tool to help structure thinking about assessments and to provide a framework for identifying which are the most serious risks and why.

|  | **Consequence / Severity score (severity levels) and examples of descriptors**  |
| --- | --- |
|  | **1**  | **2**  | **3**  | **4**  | **5**  |
| **Domains**  | **Negligible**  | **Minor**  | **Moderate**  | **Major**  | **Catastrophic**  |
| **Impact on the safety of staff, students or public (physical / psychological harm)**  | Minimal injury not requiring first aid or requiring no/minimal intervention or treatment. No time off work | Minor injury or illness, first aid treatment needed or requiring minor intervention.Requiring time off work for <3 days  | Moderate injury requiring professional intervention Requiring time off work for 4-14 days RIDDOR / MHRA / agency reportable incident  | Major injury leading to long-term incapacity/ disability (loss of limb)Requiring time off work for >14 days  | Incident leading to death Multiple permanent injuries or irreversible health effects |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Likelihood score**  | **1**  | **2**  | **3**  | **4**  | **5**  |
| **Frequency** | **Rare**  | **Unlikely**  | **Possible**  | **Likely**  | **Almost certain**  |
| **Broad descriptor**  | This will probably never happen/occur | Do not expect it to happen/occur but it is possible it may do so | Might happen or occur occasionally | Will probably happen/occur but it is not a persisting issue | Will undoubtedly happen/occur, possibly frequently |
| **Time-framed descriptor** | Not expected to occurfor years | Expected to occurat least annually | Expected to occur atleast monthly | Expected to occur at least weekly | Expected to occur at least daily |
| **Probability** Will it happen or not? | <0.1 per cent | 0.1–1 per cent | 1.1–10 per cent | 11–50 per cent | >50 per cent |

The overall ***level of risk*** is then calculated by multiplying the two scores together.

**Risk Level = Consequence / Severity x Likelihood (C x L)**

|  |  |
| --- | --- |
|  | **Likelihood**  |
| **Likelihood score**  | **1**  | **2**  | **3**  | **4**  | **5**  |
|  | **Rare**  | **Unlikely**  | **Possible**  | **Likely**  | **Almost certain**  |
| **5 Catastrophic**  | 5  | 10  | 15  | 20  | 25  |
| **4 Major**  | 4  | 8  | 12  | 16  | 20  |
| **3 Moderate**  | 3  | 6  | 9  | 12  | 15  |
| **2 Minor**  | 2  | 4  | 6  | 8  | 10  |
| **1 Negligible**  | 1  | 2  | 3  | 4  | 5  |

The Initial Risk Rating is the level of risk before control measures have been applied or with current control measures in place.

The Residual Risk is the level of risk after further control measures are put in place.