## Generic Risk Assessment: Personal fall arrest/fall restraint equipment (FMRA 0007)

**Only staff and contractors who are ‘Authorised’ by Estates Facilities management are allowed to access roof areas. Those who need access who are not ‘Authorised’ must seek permission via the** [**Estates Facilities Permit to Work**](http://www.imperial.ac.uk/estates-facilities/contractors/permit-to-work/) **system or via permission from the Measured Term Contractor.**

This generic risk assessment has been produced in order to assist those who need to use fall arrest/restraint equipment whilst working at height.Staff are encouraged to contribute their expertise in the further development of this Risk Assessment. The control measures detailed below are to be applied by Workers, Managers and Supervisors to assist them in producing a ‘safe system of work’ and must be observed at all times. At the foot of this document you will find the links to Technical Guidance Notes (TGN) from the Working At Height Safety Association (WAHSA) which are referenced in this Risk Assessment.

Please note the term “workers” when used below includes any person authorised to be working at height.

|  |  |  |  |
| --- | --- | --- | --- |
| Hazard | **Persons at Risk** | **Existing Controls** | **Further Action Required** |
| Unsafe anchorage, unsafe or inappropriate fall protection systems. | Workers | Fall protection systems are designed, specified and installed by registered professionals and regularly inspected according to schedule. When any device be it a single point anchor, horizontal safety line system or fall arrest apparatus which has arrested a fall it must be taken out of service. The advice of the manufacturer of the device / system must be sought and remedial measures as specified undertaken before re-commissioning of the system. | Periodic (annual at minimum) inspection and certification of installations. Do not use fall protection systems which are not within service inspection date; report out of date equipment as soon as possible. See TGN 06 (link below). |
| Lack of awareness of fall hazards in workplace. | Workers | Users are properly trained and assessed for their competency. Competent persons train workers at risk of falls with regard to types of fall hazards, risk reduction, limitations of fall arrest/fall restraint equipment, dangers of hanging in a harness and emergency rescue planning. | Where fall arrest protection is used a rescue methodology must be provided, appropriately resourced and task / area specific. See TGN 05. |
| Failure to observe good practice in the use of fall arrest/fall restraint equipment, or misuse of such equipment. E.g. fall arresters used incorrectly in the horizontal plane, over a potential edge. | Workers | Competent persons train workers in selection, inspection and correct use of fall arrest/fall restraint equipment. A qualified person must supervise the setting up of work and equipment. A full body harness is always required when using fall protection equipment. | Training must cover site specific hazards. Use the right type of fall prevention/protection equipment for the task to be carried out and fall hazard. See TGNs 01 and 07. |
| Hazard | **Persons at Risk** | **Existing Controls** | **Further Action Required** |
| Pre-existing medical conditions made worse by fall in harness. | Workers | Workers to self-declare any health issues or concerns before working at height. | Further assessment of risk as required.  |
| Use of Fall Arrest Blocks by workers weighing more than 100kg (15st 10lb). | Workers | The manufacturer is to be consulted for specific data about anticipated arrest forces and deployment lengths. |  |
| Use of Fall Arrest Blocks on slopes or where the worker could fall onto unstable materials e.g. sludge, grain, powder. | Workers | Select alternative protection as worker may not reach the descent speed necessary for device to deploy. |  |
| Changes to the workplace or fall equipment. Conditions can vary; e.g. other works may impact adversely upon a previously good work methodology. | Workers | Risk Assessments revaluated and reissued.  | Re-training may be required. [Risk assess, taking into account the new factors](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/estates-facilities/public/health-and-safety/safety-guidance/risk-assessment.pdf). |
| Body strain, discomfort. | Workers | Make sure harnesses fit workers properly and are comfortable; shoulder and back pads can reduce harness pressure. A properly fitting harness spreads the stopping force over thighs, pelvis, chest and shoulders. Full body cross-chest harnesses are more comfortable for women and can reduce bruising when falls are halted. |  |
| Fall arrest/fall restraint equipment failure. | Workers | Follow manufacturer’s instructions with regard to inspection, care and storage. Inspect prior to every use and at specified intervals, at least yearly and more often for frequently used equipment and equipment used in arduous conditions. Even a slight defect can have a very serious impact upon performance, with potentially fatal consequences. | If the equipment fails inspection or it is shortly due for maintenance tag it “Do not use”, remove it from service and report it. Use alternative equipment. Similarly do not use equipment without evidence it has passed inspection and is in date. See TGNs 03 and 04. |

|  |  |  |  |
| --- | --- | --- | --- |
| Hazard | **Persons at Risk** | **Existing Controls** | **Further Action Required** |
| Combined use of incompatible safety equipment. | Workers | Training to include ensuring that workers are aware of one component of equipment adversely affecting the safety of another. For example using an energy absorbing lanyard to extend an inertia reel will adversely affect the inertia reel’s performance and will likely cause it to fail completely. | Assess compatibility when selecting equipment. |
| Use of inappropriate equipment. E.g. using a restraint system for fall arrest. | Workers | Training to cover selection as well as correct usage of equipment |  |

I have read and understood the above risk assessment and Guidance Notes and received appropriate relevant training:

Employee’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Employee’s Name (print): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Risk Assessment Signed Off by: Steve Hughes Date: July 2017 Next review date: July 2018.

Where a risk assessment is subsequently modified or updated a copy of the out of date assessment must be retained for a period of not less than three years, this is to be stored in a Departmental electronic archive folder.

Work at Height Safety Association website [www.wahsa.org.uk](http://www.wahsa.org.uk) has useful Technical Guidance Notes.

The Advisory Committee for Roofwork have published a couple of useful documents which may be of interest:

[*(Part 1) Best Practice for the use of Horizontal Safety Lines in Roofwork*](http://www.roofworkadvice.info/MAGENTA_BOOK_BEST_PRACTICE_FOR_USE_OF_HORIZONTAL_LINES_IN_ROOFWORK_webFINALv25-05-08.pdf) ***(14 page pdf)*** and

[*(Part 2) Testing of Roof Anchors on Roof Systems*](http://www.roofworkadvice.info/Magenta_Book_Test_Methods_WebFinal29-08-09.pdf).  (12 page pdf).

British Standards (BS) have produced three Codes of Practice of direct relevance to this topic:

* **BS 8437:2005+A1:2012:** Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace.
* **BS 7883:2005:** Code of practice for the design, selection, installation, use and maintenance of anchor devices conforming to BS EN 795.
* **BS 8454:2006:** Code of practice for the delivery of training and education for work at height and rescue.