The Management of Hazardous Manual Handling Operations

Number	MS - 09
Scope	This document provides the information necessary to identify and manage hazardous manual handling activities.
Law	The Management of Health and Safety at Work Regulations Manual Handling Operations Regulations 1992 (as amended)
Related H&S standards	MS 0 12 Risk Assessment MS – 02 Management of Contractors
Training / information / instruction required	Manual Handing Risk Assessment Training Manual handling Practical Training
Additional sources of information	

Introduction

1. The aim of the Standard reflects the main aim of the Manual Handling at Work Regulations, that is to avoid injury to any part of the body as a result of carrying out a manual handling activity.

2. To achieve this it is necessary to identify manual handling activities that are hazardous and carry out an ergonomic assessment to determine the risk of injury and identify suitable remedial actions.

3. A manual handling assessment only considers the risk created by the weight of the object and the effort required to move or support the load. Other physical properties of an object such as the temperature or sharp edges are not considered.

Definitions

Load

4. A load is defined as a discreet movable object, for example a sheet of plywood, box of paper, a person or a table.

5. An implement or tool, such as a chainsaw, is not considered to be a load when used for its intended purpose and a specific manual handling assessment does not need to be carried out. However if it is heavy or requires considerable effort this should be addressed in the general risk assessment.

Manual handling operation or activity

6. This is defined as the handling of loads by human effort, not by mechanical means. Effort may be applied directly or indirectly by, for example, hauling on a rope or lever. Introducing mechanical assistance may reduce but not eliminate manual handling as human effort is still required to move, steady or position the load.

7. Manual handling includes both transporting a load and supporting a load in a static position. The load may be moved or supported by hands or any other part of the body.

8. Manual handling also includes the intentional dropping and throwing of a load, whether into a container or from one person to another.

Duties and responsibilities

Managers and those in charge of manual handling operations

9. The Regulations provide a 'hierarchy of measures' identifying the duties of employers and those managing manual handling activities, as follows;

   1st Avoid all manual handling operations so far as is reasonably practicable

   2nd Identify and make a suitable and sufficient assessment of any hazardous manual handling operations that cannot be avoided.

   3rd Reduce the risk of injury from those operations as far as is reasonably practicable. Where possible mechanical assistance should be provided e.g. a sack trolley or hoist. Where this is not reasonably practicable then changes to the task, load and working environment should be made.

10. The standard 'reasonably practicable' will be satisfied if it can be shown that the cost of any further preventive steps to reduce injury would be grossly disproportionate to the further benefit resulting from their introduction. The same standards should be applied to manual handling activities carried out by students and student helpers.

11. If, by applying the standards of reasonable practicability, it is not possible to reduce the risks of injury to an acceptable level the activity should not be carried out.

12. Steps taken to avoid manual handling or reduce the risk of injury should be checked periodically to ensure they have the desired result. If these control measures do not reduce the risk as anticipated alternative measures will have to be found.

13. All control measures should reflect current best practice and technology. Control measures should be reviewed periodically to ensure they are up to date.

Working away from UAL sites

14. When working off site it is important to maintain safe standards of manual handling and avoid the risk of injury. It is not always possible to be in complete control of off-site working environments. However the task, provision of training and equipment and perhaps the load can usually be controlled, the activities assessed and a safe system of work established. As with work being undertaken on UAL sites, if it isn't possible to work safely then activities should cease unless and until a solution can be found.

15. The people/ organisations in charge of non-UAL sites have a duty towards those visiting their sites in the same way the University has a duty toward everyone visiting our site. These duties include ensuring the premises and any equipment or plant provided is safe and well maintained.

Duty of staff, students and others involved in manual handling operations

Duty toward non UAL employees

16. The University of the Arts has a duty to ensure the safety of all those visiting our sites, or who may be affected by the things we do. This duty extends to those carrying out manual handling activities. Information that may affect safety must be made clear to those carrying out manual handling activities (see HS Standard MS – 02, Control of Contractors).

The assessment of hazardous manual handling activities

17. As mentioned above only hazardous manual handling activities need to be assessed and the assessment is based on good ergonomic practice. The HSE recommends a two stage approach to identifying and then assessing activities. The first stage is a filter that will identify low risk activities that do not require the second stage, in-depth assessment.

1st stage The filter

18. If an activity cannot be avoided but appears to be low risk then the 1st stage should be completed and, if confirmed as low risk, then a complete manual handling assessment need not be carried out.

19. This initial assessment is **likely** to be of use if (a) the activities being assessed are **unlikely** to involve significant risk or; (b) the activities are simple and the assessment takes no longer than 10 minutes. If either a or b is true the initial assessment is unlikely to save time and you should go straight to the second stage assessment

Note

20. The filter applies when the load is easy to grasp and hold and there is a good working environment i.e. no, or minimal restrictions on movement, no high winds, the lighting is adequate, no significant changes in level etc.

21. If the filter shows that the risk is within the guidelines the in-depth manual handling risk assessment is not normally required **unless** there are individuals who may be at significant risk, for example, pregnant workers, young people, someone with significant health problems or a recent manual handling injury.

22. Application of the guidelines will provide a reasonable level of protection to around 95% of working men and women. However the guidelines should not be regarded as safe weight limits for lifting. There is no safe threshold below which manual handling operations may be regarded as safe. Even operations lying within the boundary mapped out by the guidelines should be avoided or made less demanding where it is reasonably practicable to do so.

Appendix 1

Stage 1 – the risk assessment filter

The following assessment filter is relevant to:

- Lifting and lowering
- Carrying short distance (no more that 10m)
- Pushing and pulling and
- Handling while seated

23. This filter is designed to be used for activities that are thought be low risk. A more detailed assessment will be needed if:

24. Using the following filter shows the activity exceeds the guideline figure

25. The activities do not come within the guidelines e.g. if lifting and lowering unavoidably takes place beyond the box zones in figure 1 below or there are other considerations to take into account e.g. health considerations, pregnancy, age, environmental considerations

26. The assumptions made in the filter are not applicable, for example when carrying the load it is not held against the body.

27. For a task that cannot be assessed quickly. The HSE recommend that any stage 1 assessment should be able to be completed within 10 minutes (although the first few times the assessment is used even a simple assessment may take longer).

Lifting and lowering

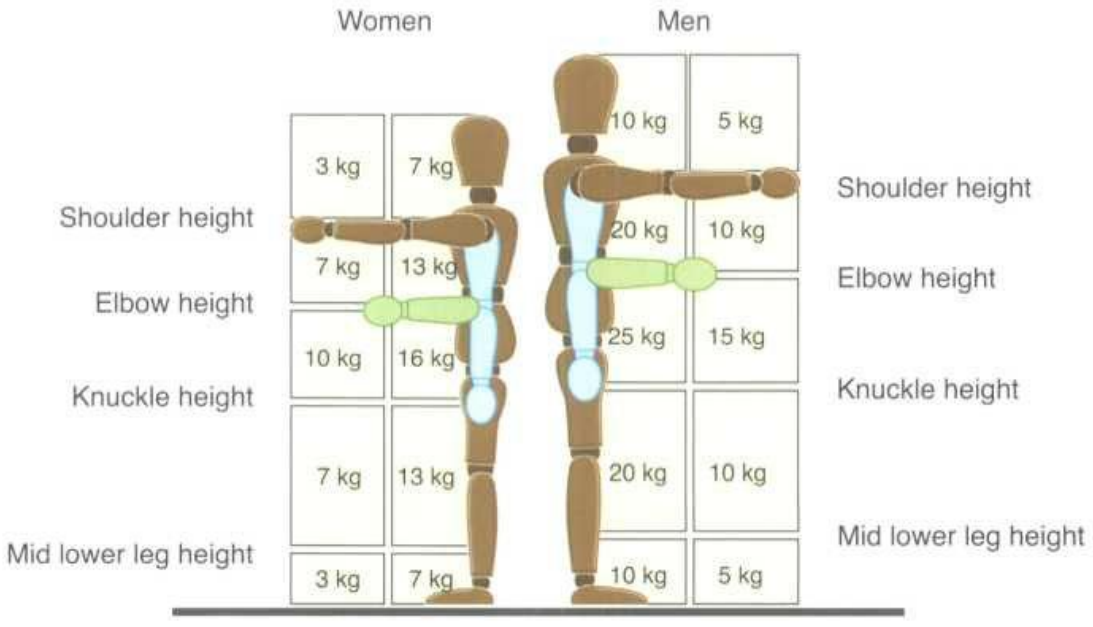

Figure 1

28. Each box in the diagram contains a guideline weight for lifting and lowering in that zone. Using the diagram enables the assessor to take into account the vertical and horizontal position of the hands as they move the load in relation to the height and reach of the individual handler. As can be seen from the diagram the guideline weights are reduced if handling is done with arms extended or at high or low levels, as that is when injuries are most likely.

29. Observe the work activity being assessed and compare it to the diagram. First decide which box or boxes the lifter's hands pass through when moving the load, then assess the maximum weight being handled. If it is less than the figure given in the box, the operation is within the guidelines.

30. If the lifter's hands enter more than one box during the operation then the smallest weight applies. An intermediate weight can be chosen if the hands are close to a boundary between boxes.

31. The guideline figures for lifting and lowering assume:

    - The load is easy to grasp with both hands;
    - The operation takes place in reasonable working conditions; and
    - The handler is in a stable body position.

32. If these are not valid assumptions it will be necessary to make a full assessment.

Frequent lifting and lowering

33. The basic guideline figures for lifting and lowering in figure 1 are for relatively infrequent operations – up to approximately 30 operations per hour or one lift every two minutes. The guideline figures will have to be reduced if the operation is repeated more often. Table 1 below can be used as a rough guide:

Table 1

Where operations are repeated	**figures should be reduced by**
Once or twice per minute	30%
Five to eight times per minute	50%
More than 12 times per minute	80%

34. Even if the conditions are satisfied, a more detailed risk assessment should be made where;

- The worker does not control the pace of work;
- Pauses for rest are inadequate or there is no change of activity which provides an opportunity to use different muscles; or
- The handler must support the load for any length of time.

Twisting

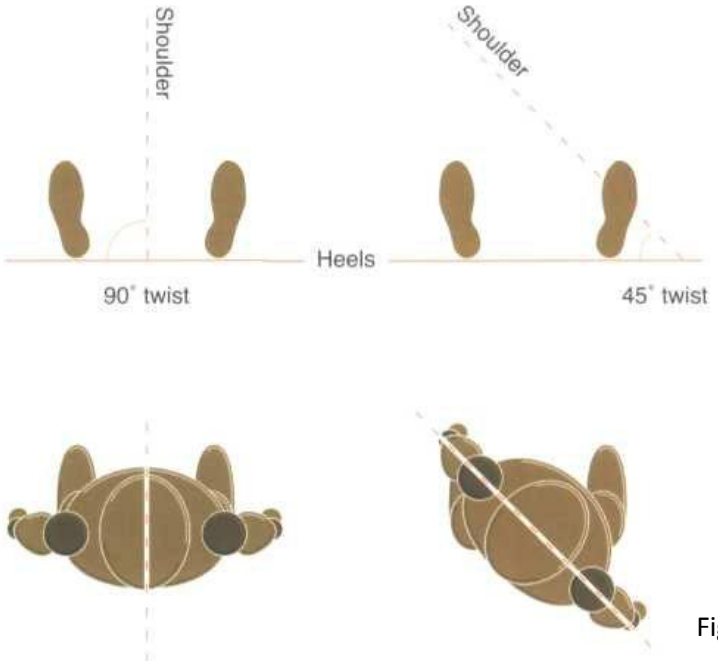

Figure 2

35. In many cases manual handling operations will involve some twisting, i.e. moving the upper body while the feet are static (see figure 2 above). The combination of twisting and lifting and twisting, stooping and lifting are particularly stressful on the back. Therefore where the handling involves twisting and turning a detailed assessment should normally be made.

36. However if the operation is:

    - Relatively infrequent (up to approximately 30 operations per hour or one lift every two minutes); and
    - There are no other posture problems,

    Then the guideline figures in the relevant part of this filter can be used, but with a suitable reduction according to the amount the handler twists to the side during the operation. Table 2 below can be used as a rough guide:

Table 2

If handler twists through (from front)	Guideline figures (fig. 2) should be reduced by
45°	10%
90°	20%

37. Where the handling involves turning i.e. moving in another direction when the lift is in progress and twisting, then a detailed assessment should be made.

Guidelines for carrying

38. The guideline figures for lifting and lowering (fig 1) apply to carrying operations where the load is:

    - Held against the body;
    - Carried no further than about 10m without resting.
    - Where the load can be carried securely on the shoulder without first having to be lifted (as, for example, when unloading sacks from a lorry) the guidelines can be applied to carrying distances in excess of 10m

39. A more detailed assessment should be made for all carrying operations if:

    - The load is carried over a longer distance without resting; or
    - The loads are below knuckle height or above elbow height (due to static loading on arm muscles).

Guidelines for pushing and pulling

40. For pushing and pulling operations (where the load is slid, rolled or supported on wheels) the guideline figures assume the force is applied with the hands, between knuckle or shoulder height. It is also assumed that the distance involved is no more than about 20m, if these assumptions are not correct, a more detailed risk assessment is required (contact the Local H&S Adviser for further information)

Table 3

	Men	Women
Guideline figure for stopping	20kg	15kg

or starting a load	(i.e. about 200 newtons)	(i.e. about 150 newtons)
Guideline figure for keeping the load in motion	10 kg (i.e. about 100 newtons)	7kg (i.e. about 70 newtons)

41. As a rough guide the amount of force that needs to be applied to move a load over a flat, level surface using a well-maintained handling aid is at least 2% of the load weight. For example if the load is weight 400kg, then the force needed to move the load will be at least 8kg. The force needed will be greater, perhaps significantly so, if conditions are not perfect (e.g. wheels not in the right position or a device that is poorly maintained). Moving an object over soft or uneven surfaces also requires higher forces. On an uneven surface, the force needed to start the load moving should be increased by up to 10% of the load weight although this might be offset to some extent by using larger wheels. Pushing and pulling forces will need to be increased if workers have to negotiate a slope or ramp. **Even where the guideline figures in the above table are met, a detailed risk assessment will be necessary if risk factors such as uneven floors, confined spaces or trapping hazards are present.**

42. If it is not possible to make a reasonable estimate of the amount of force required to push or pull a load then it should be measured. This requires specialist equipment that can be hired. The Local Health and Safety Adviser should be involved in measuring the forces.

43. There is no specific limit to the distance over which the load is pushed or pulled as long as there are adequate opportunities for rest or recovery.

Guidelines for handling while seated

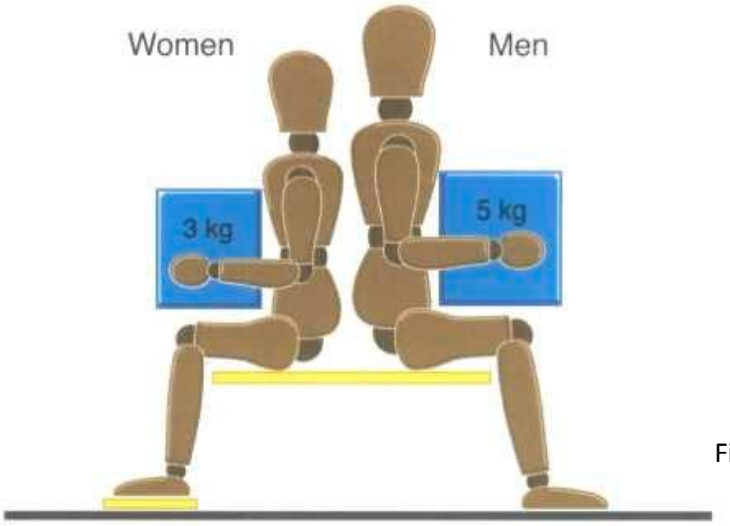

Figure 3

Table 4

Men	**Women**
5kg	3kg

44. The basic guidelines only apply when hands are within the box zone indicated in figure 3. If handling beyond the box zone is unavoidable a more detailed assessment should be made

Guidelines for group handling

45. When more than one person is involved in a manual handling activity the risks of injury and appropriate weight of the object have to be calculated. Because of the factors listed below it is not simply a case of dividing the weight of an object, or the effort required to push or pull an object, by the number of people involved in the lift.

    - The proportion of the load borne by each member of the team will vary to some extent, particularly when objects are being pick up or put down, on sloping or uneven ground, up and down stairs and if doors have to be opened or closed.
    - Team members get in the way of each others' sight or movement
    - The load does not have sufficient handholds
    - The weight of the load is unevenly distributed
    - No one is directing the activity and/or communication is poor.

46. The HSE gives an approximate guide for group handling.

- Two people can lift approximately two thirds the sum of their individual capabilities
- Three people can lift approximately half the sum of their individual capabilities; and
- Teams of four or more are unlikely to be successful.

Teams of four or more may be successful if the object is large, with adequate hand holds and there is excellent communication between group members.

Recording findings and reaching a decision.

47. For each task, use the filter to assess each of the activities involved (some tasks may only involve one activity, e.g. lifting and lowering, while others may involve several). Table 5 should be used to record the results.

48. Identify each activity being performed that comes within the guideline and any other considerations to take into account (it may be helpful to make a note of these). Then make a final judgement of whether the task needs a full risk assessment. Remember you should be able to do this quickly (within 10 minutes) if not, a full risk assessment is required.

Table 5 Application of guidelines

Task:			
Activity	For each activity does the task fall outside the guidelines Y/N	Are there any other considerations which indicate a problem? Y/N (indicate what the problem is, if desired.)	Is a more detailed assessment required? Y/N
Lifting and lowering			
Carrying			
Pushing and pulling			
Handling while seated			

Limitations of the filter

49. The use of the guidelines does not affect the duty to avoid or reduce the risk of injury where this is reasonably practicable. The guideline figures, therefore, should **not be regarded as weight limits or approved figures for safe lifting.** They are an aid to highlight where detailed risk assessments are most needed. Where doubt remains, a more detailed risk assessment should always be made.

Appendix 2

The in-depth assessment of hazardous manual handling activities

Section A – Preliminary

Task name:	Is an assessment needed? *(an assessment will be needed if there is a potential risk of injury, e.g. if the task falls outside the guidelines in the filter)* Yes/No
Task description:	
Load weight:	
Frequency of lift:	
Carry distance (if applicable)	
Are other manual handling tasks carried out by these operators?	
Assessment discussed with employees/ safety representatives	

50. If 'yes' continue. If 'no' the assessment need go no further

Operations covered by this assessment (detailed description)	Diagrams (other information including existing control measures)
Locations:	
Personnel involved:	

Date of assessment	

Section B

Questions to consider :	If yes tick appropriate level of risk			Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, e.g. changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes.
	Low	Med	High		
Do the tasks involve					
Holding loads away from trunk					
Twisting					
Stooping					
Reaching upwards					
Large vertical movement					
Long carrying distances					
Strenuous pulling or pushing					
Unpredictable movement of loads					
Repetitive handling					
Insufficient rest or recover					
A work rate imposed by a process					
Are the loads					
Heavy					
Bulky/unwieldy					
Difficult to grasp					
Unstable/unpredictable					
Intrinsically harmful (e.g. sharp/hot)					

Section B: Lifting and carrying – more detailed assessment, where necessary

Questions to consider :	If yes tick appropriate level of risk			Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, e.g. changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes.
	Low	Med	High		
Consider the **working environment** – are there					
Constraints on posture					
Poor floors					
Variations in levels					
Hot/cold/humid conditions					
Strong air movements					
Poor lighting conditions					
Consider i**ndividual capability** – does the job					
Require unusual capability					
Pose a risk to those with a health problem or a physical or learning difficulty					
Pose a risk to those who are pregnant					

Section B: Lifting and Carrying – more detailed assessment, where necessary

Questions to consider :	Yes/ No	Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, e.g. changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes.
Other factors to consider			
Protective clothing			
Is movement or posture hindered by clothing or personal protective clothing			
Is there an absence of suitable/ correct PPE being worn			
Work organisation (psychosocial factors)			
Do workers feel there has been a lack of consideration given to the planning and scheduling of tasks/ rest breaks			
Do workers feel that there is poor communication between managers and employees (e.g. not involved in risk assessments or decisions on changes in workstation design?)			
Are there sudden changes in workload, or seasonal changes in volume without mechanisms for dealing with the change			
Do workers feel they have been given enough training and information to carry out the task successfully			
Repetitive handling			

Section C – remedial action to be taken

Remedial steps that should be taken, in order of priority	Person responsible for implementing controls	Target implementation date	Complete Y/N
1			
2			
3			
4			
5			
6			
7			
8			
9			
Date by which actions should be completed:			
Date of review of assessment:			
Assessor's name:		Signature:	

Appendix 2 – example of manual handling assessment

Task: *Moving of table/ desk*			
Activity	For each activity does the task fall outside the guidelines Y/N	Are there any other considerations which indicate a problem? Y/N (indicate what the problem is, if desired.)	Is a more detailed assessment required? Y/N
Lifting and lowering	*Yes*	*Negotiating stairs and doorways*	*Yes*
Carrying	*Yes*		*Yes*
Pushing and pulling	*Yes*		*Yes*
Handling while seated	*N/A*		*Yes*

Limitations of the filter

51. The use of the guidelines does not affect the duty to avoid or reduce the risk of injury where this is reasonably practicable. The guideline figures therefore should **not be regarded as weight limits or approved figures for safe lifting.** They are an aid to highlight where detailed risk assessments are most needed. Where doubt remains, a more detailed risk assessment should always be made.

Appendix 2

The in-depth assessment of hazardous manual handling activities

Section A – Preliminary

Task name: *Office move*	Is an assessment needed? *(an assessment will be needed if there is a potential risk of injury, e.g. if the task falls outside the guidelines in the filter)* *Yes*
Task description: *moving 3 desks from offices on the second to the first floor.*	
Load weight: *30kg*	
Frequency of lift: *a one off task, moving 3 desks.*	
Carry distance (if applicable)*150 metres*	
Are other manual handling tasks carried out by these operators? *No*	
Assessment discussed with employees/ safety representatives *Discussed with employees. Not discussed with Safety Reps.*	

52. If 'yes' continue. If 'no' the assessment need go no further

Operations covered by this assessment (detailed description) *On the 22/05/09, 3 desks will be moved a distance of 150 metres along corridor and down one flight of stairs. There are double fire doors from the stairwell to the corridor on each floor.*	Diagrams (other information including existing control measures) *Two people will carry each table. One person will be nominated to give instructions. 1 person will be*

Locations: *E Block, Millbank; from first floor office to second floor office*	*assisting to open doors.*
Personnel involved: *Staff and students, two people per table* *One person to assist opening doors.*	
Date of assessment *14/05/09*	

Section B

Questions to consider :	If yes tick appropriate level of risk			Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, e.g. changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes.
	Low	Med	High		
Do the tasks involve					
Holding loads away from trunk	y				
Twisting			y	*While moving through doorways and down stairs.*	*Plan lift in advance including the negotiating of doorways and stairs to minimise twisting.*
Stooping	y				
Reaching upwards		y			
Large vertical movement		y			
Long carrying distances			y		*If possible use a trolley or sack truck to move the tables down the corridors.* *There are no real time constraints on completing the move. It is possible to take as many breaks as necessary to rest and recover during the move.*
Strenuous pulling or pushing	y				
Unpredictable movement of loads	y				*Drawers will be removed from desks before being moved to eliminate the unpredictable movement of*

					loads
Repetitive handling	*y*			*Only 3 tables to be moved.*	
Insufficient rest or recover	*y*				
A work rate imposed by a process	*y*				*No imposed work rate.*
Are the loads					
Heavy			*y*	*Drawers removed to reduce weight.*	
Bulky/unwieldy			*y*		
Difficult to grasp		*y*			
Unstable/unpredictable	*y*				*Drawers removed*
Intrinsically harmful (e.g. sharp/hot)	*y*				*Furniture checked for sharp edges before lifting and handling*

Section B: Lifting and carrying – more detailed assessment, where necessary

Questions to consider :	If yes tick appropriate level of risk			Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, e.g. changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes.
	Low	Med	High		
Consider the **working environment** – are there					
Constraints on posture			*y*	*Posture may be constrained when moving through doors and down the stairs*	
Poor floors		*y*			*Check route for uneven floor , trip hazards, torn carpet spillages before undertaking the manual handling. Ensure handlers have suitable footwear i.e. flat stable shoes that will not fall off, not flip flops or similar. Ensure lighting is sufficient along route.*
Variations in levels			*y*		*Ensure handlers have suitable footwear, see above. Ensure lighting is sufficient along route. One person to be*

					in charge and lead the lift.
Hot/cold/humid conditions	y				
Strong air movements	y				
Poor lighting conditions	y				
Consider i**ndividual capability** – does the job					
Require unusual capability		y			
Pose a risk to those with a health problem or a physical or learning difficulty			y		
Pose a risk to those who are pregnant			y		

Section B: Lifting and Carrying – more detailed assessment, where necessary

Questions to consider :	Yes/ No	Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, e.g. changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes.
Other factors to consider			
Protective clothing			
Is movement or posture hindered by clothing or personal protective clothing	*No*		*Suitable clothing and footwear, see above.*
Is there an absence of suitable/ correct PPE being worn	*No*		*Gloves with a gripping surface on the palm will be provided.*
Work organisation (psychosocial factors)			
Do workers feel there has been a lack of consideration given to the planning and scheduling of tasks/ rest breaks	*No*		
Do workers feel that there is poor communication between managers and employees (e.g. not involved in risk assessments or decisions on changes in workstation design?)	*No*		*Staff involved in the assessment and briefed on the safe system of work.*
Are there sudden changes in workload, or seasonal changes in volume without mechanisms for dealing with the change	*No*	*Assessment covers isolated office or studio move.*	
Do workers feel they have been given enough training and information to carry out the task successfully	*No*		*Staff require UAL manual handling training.*
Repetitive handling	*No*		

Section C – remedial action to be taken

Remedial steps that should be taken, in order of priority		Person responsible for implementing controls	Target implementation date	Complete Y/N
1	*Staff and students involved in lift to have manual handling instruction*	*Site manager*	*22nd May 2009, before the lift takes place*	
2	*Check route before lift*	*Site manager*	*22nd May 2009*	
3	*Remove drawers from the desk*	*Task manager*	*22nd May 2009*	
4	*One person to be appointed as lift coordinator.*		*22nd May 2009*	
5	*Grip gloves available*		*22nd May 2009*	
6	*Ensure staff are wearing suitable clothes*		*22nd May 2009*	
7	*Brief staff on safe system of work*		*22nd May 2009*	
Date by which actions should be completed: *on the day of the lift, before it takes place*				
Date of review of assessment: *After lift has taken place, if there were any problems*				
Assessor's name: *Geoff Moore and Abigail Dickinson*			Signature:	

Task: taking delivery of items into Back Hill to the workshops on the third floor			
Activity	For each activity does the task fall outside the guidelines Y/N	Are there any other considerations which indicate a problem? Y/N (indicate what the problem is, if desired.)	Is a more detailed assessment required? Y/N
Lifting and lowering	Yes		Y
Carrying	Yes	Items are carried up a short flight of stairs	Y
Pushing and pulling	Yes		Y
Handling while seated	n/a	-	-

Limitations of the filter

53. The use of the guidelines does not affect the duty to avoid or reduce the risk of injury where this is reasonably practicable. The guideline figures, therefore, should **not be regarded as weight limits or approved figures for safe lifting.** They are an aid to highlight where detailed risk assessments are most needed. Where doubt remains, a more detailed risk assessment should always be made.

Appendix 2

The in-depth assessment of hazardous manual handling activities

Section A – Preliminary

Task name: taking delivery of items into Back Hill to the workshops on the third floor	Is an assessment needed? *(an assessment will be needed if there is a potential risk of injury, e.g. if the task falls outside the guidelines in the filter)* Yes
Task description: Deliveries come in on pallets. The road outside the front entrance is sloped at about 20-25°. The deliveries should be bought into the building by those making the delivery but this does not always happen. Once inside the building deliveries are unpacked and carried up the short flight of stairs to the main ground floor corridor. They are then placed on a trolley and taken to the goods lift, taken to thethirdd floor and the workshops for storage. Items can be up to 25 kgs, some items are awkward shapes and some have shifting centres of gravity. This assessment deals with transportation to the workshops and not the subsequent storage.	
Load weight: up to 250kgs	
Frequency of lift: deliveries happen infrequently	
Carry distance (if applicable) approximately 50 metres	
Are other manual handling tasks carried out by these operators? yes	
Assessment discussed with employees/ safety representatives With staff but not Safety Representatives	

54. If 'yes' continue. If 'no' the assessment need go no further

Operations covered by this assessment (detailed description)	Diagrams and information including existing control measures
• Pushing/pulling loaded pallets using pump truck • Unloading items from the pallet and carrying up short flight of stairs. • Stacking items onto a trolley • Pushing/pulling trolley into lift. • Pushing trolley to workshop store rooms	• The deliveries should be off loaded from the vehicle to the lobby area of the building • The pace of work is not forced and deliveries are planned.
Locations: Back Hill	
Personnel involved: Technicians from Foundation 3d workshops	
Date of assessment 16th May 2009	

Section B

Questions to consider :	If yes tick appropriate level of risk			Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, e.g. changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes.
	Low	Med	High		
Do the tasks involve					
Holding loads away from trunk	X				
Twisting	X			It should not be necessary to twist as there are no constraints on posture, however staff do twist when unloading the pallet and loading the trolley	Staff to attend regular training updates and occasional supervision and reminders of good posture.
Stooping		X		Both the pallet and trolley are at a low level and staff do stoop when lifting and lowering items	
Reaching upwards	X				
Large vertical movement		X		Items are carried up the stairs from the lobby to the main corridor	
Long carrying distances		X		A trolley is used	

Strenuous pulling or pushing		X		It is up to the operator to load the trolley and they may put to much on, making it difficult to stop start and keep in motion.	Staff to attend regular training updates and occasional supervision and reminders of reasonable loads. If the problem persists smaller trolleys could be considered to limit the possible load. This control measure would have to be balanced against the increased number of loads it would generate.
Unpredictable movement of loads		X			
Repetitive handling	X				
Insufficient rest or recoverey	X				
A work rate imposed by a process	X				
Are the loads					
Heavy			X	Some items, such as clay are delivered in 25kg bags. This is an improvement on the past when bags weighed considerably more	Identify mechanical lifting equipment that would raise the whole pallet up the stairs without the need for excessive human effort.
Bulky/unwieldy			X	Some items can be bulky and unwieldy	Have two people carry out the lift.
Difficult to grasp		X			
Unstable/unpredictable	X				
Intrinsically harmful (e.g. sharp/hot)	X				

Section B: Lifting and carrying – more detailed assessment, where necessary

Questions to consider :	If yes tick appropriate level of risk			Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, e.g. changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes.
	Low	Med	High		
Consider the **working environment** – are there					
Constraints on posture	X				
Poor floors	X				

Variations in levels			X	There is a short flight of steps and at present deliveries have to be carried up the stairs without mechanical assistance	Mechanical assistance should be investigated. It may be possible to purchase a piece of equipment that will either reduce or eliminate the need for human effort.
Hot/cold/humid conditions	X				
Strong air movements	X				
Poor lighting conditions	X				
Consider **individual capability** – does the job					
Require unusual capability	YES			Some of the delivered items are heavy, bulky and can be unwieldy. Where possible smaller, lighter items have been ordered but this is not always possibly or practicable	Use manual handling aids wherever possible, see above. Design the lift so there are sufficient people involved to ensure loads can be lifted safely.
Pose a risk to those with a health problem or a physical or learning difficulty	YES			Some of the loads are bulky, unwieldy and may be heavy and this is likely to be a problem to people with a musculoskeletal, balance or back problem (this is not an exhaustive list)	Check with each person involved in this task that they are physically capable of undertaking all or part of the task and adapt their involvement appropriately
Pose a risk to those who are pregnant	YES			Some of the loads are bulky, unwieldy and may be heavy and this is likely to be a problem to people with a musculoskeletal, balance or back problem (this is not an exhaustive list)	Check with each person involved in this task that they are physically capable of undertaking all or part of the task and adapt their involvement appropriately

Section B: Lifting and Carrying – more detailed assessment, where necessary

Questions to consider :	Yes/ No	Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, e.g. changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes.
Protective clothing			
Is movement or posture hindered by clothing or personal protective clothing	No		
Is there an absence of suitable/ correct PPE being worn	Yes	Some staff do not wear appropriate footwear, choosing flip flops and open toed sandals.	Stable, closed footwear should be worn to protect the feet and minimise the risk of slipping, tripping or falling.
Work organisation (psychosocial factors)			
Do workers feel there has been a lack of consideration given to the planning and scheduling of tasks/ rest breaks	Yes	Staff are aware of the problems involved in this task and have bought it to the attention of the manager in the past	Complete this assessment and implement the recommended control measures.
Do workers feel that there is poor communication between managers and employees (e.g. not involved in risk assessments or decisions on changes in workstation design?)	No		
Are there sudden changes in workload, or seasonal changes in volume without mechanisms for dealing with the change	No		
Do workers feel they have been given enough training and information to carry out the task successfully	Yes		
Repetitive handling	No		

Section C – remedial action to be taken

Remedial steps that should be taken, in order of priority		Person responsible for implementing controls	Target implementation date	Complete Y/N
1	Investigate available mechanical manual handling aids that could eliminate or reduce the effort required to transport goods from the entrance to the building to the main corridor	Senior technician	Before the next scheduled delivery	N
2	All staff to have attended manual handling training at least once every 3 years	Senior technician	On going target	No end date.
	Write a safe system of work for this task. Consult with staff and take into account any mechanical lifting aids that are or will be made available	Senior technician and technical staff	Before the next scheduled delivery	N
3	Occasional monitoring of task to remind staff to use appropriate manual handling techniques	Senior technician	On going target	No end date
Date by which actions should be completed: all actions need to be completed before the next scheduled delivery, two of the targets are on going				
Date of review of assessment: September 2009				
Assessor's name: Leni Bjerg, Brookie Fraser Jenkins and Eleanor Pirie			**Signature:**	