

11 Establishment of a Work Area

Before commencing activities that introduce the potential for objects to fall from one height to another all personnel shall consider the job setup risks using 60 Seconds 4 Safety & JHA Procedure MAC-STE-PRO-024. Where the 60 Seconds 4 Safety process cannot adequately identify or control a hazard, a task specific risk assessment or Job Hazard Analysis (MAC-STE-FRM-004) shall be completed before commencing any work.

Where there is a potential for:

- The activity to introduce a potential dropped or falling object, or
- Where the activity may be affected by other falling objects, or
- The activity can affect other work groups (e.g. Exclusion Zones or Drop Zones),
- A Dropped Object Checklist (MAC-MTC-FRM-002) shall be completed to inform the JHA and area specific controls required for Secure, Encapsulate and Exclude. The checklist must also be completed at the end of the work activity when the area is returned to service.

A "Drop Zone" must be established below and adjacent to the elevated position to prevent personnel accessing an area where persons or objects can fall.

Refer to MAC-STE-STD-124 Barricading and Demarcation for more details on establishing a Drop Zone.

The extent of the Drop Zone should be determined by:

- The height of the work above the lower level, and
- The possible deflection of falling objects by structures, pipes or equipment in the area, not only to the lowest level of rest, but to adjacent lower levels as appropriate.
- As a minimum a 4:1 ratio should be applied.

The drop zone shall be cleared of all personnel, mobile or portable equipment and static equipment that requires protection from falling objects.

 Document Reference - MAC-STE-STD-230

6 Barricading and Barriers

6.1 General Requirements

Where a risk assessment identifies barricading as a control, the following must be considered;

- Type of barricade required in relation to risk from task being performed
- Location of barricade (considering multiple levels where applicable)
- Length of time barricade is required
- Potential for objects to fall from one level to another and the number of floor levels requiring protection
- Location and proximity of other workers in the area and
- The need for flashing light during hours of darkness

Barrier tape or chains should not be left lying on the ground – ideally store them in a bucket or other container when not in use, or hang or pile them neatly where they do not pose a hazard.

Immediately after the hazard has been rectified and there is no further risk to personnel, the barricade or barrier must be removed by the owner.

Unless the barricade is used directly on the hazard to highlight it, both danger and caution barriers must have an information tag / pyramid on the entry points.

6.2 Construction of Barricades and Barriers

Barricade and barrier boundaries must be:

- Far enough away from hazards to ensure personnel outside the demarcated zone are not exposed to the hazard
- Constructed to prevent inadvertent entry and where possible have a clearly defined entry and exit point
- Maintained in good condition via regular inspections by the barricade/barrier owner
- Supported in a manner that prevents the barrier material from excessively sagging.
- Constructed with either danger and caution colour coding and not a combination of both.

6.3 Information Tag

A completed information tag must be attached to each span of the barricade and will detail:

- Nature of the hazard
- Name of person responsible, who shall be the single point of contact, for the barricaded area
- Mobile phone number for the person responsible for the area
- Date the barricading was erected.

6.4 Caution Barrier

Yellow and black plastic tape or chain must be used to barrier minor hazards only (e.g. water leaks, trip and slip areas). Prior to entry into a caution barrier you must read the information tag and seek authorisation from barricade owner to enter. If barricade owner cannot be located complete at a minimum 60 seconds for safety prior to entry and take the appropriate precautions.

You must notify others in the work area of your presence.

6.5 Danger Barrier

Danger barrier (red and white plastic tape, cones or chain with information tag) must be used to barrier hazards that could potentially cause serious injury or a fatality (e.g. lift exclusion zone, drop zones, high pressure water, hazardous chemical leaks or exclusive control activities).

An area demarcated by a danger tape is not to be left unattended for extended periods of time where a potential for a serious injury or fatality exists. In these cases, the hazard should be removed, or a solid barricade is to be installed.

Floor penetrations or open edges (where risk of fall present) created through the removal of flooring or structure must always be barricaded using a solid barricade as per the requirements of Work at Heights MAC-STE-STD-155.

Approval for entry into an area demarcated by a danger barrier must only be given by the person nominated on the information / exclusive control tag / information pyramid (or the second line of contact on the tag if that person is not available) for essential work.

6.6 Barricading of Drop Zone

When setting up a drop zone a danger barrier shall be placed around the entire drop zone area at an appropriate distance determined with due consideration of the potential fall path of any object, this is additional to the work area barricading. See figure 1 for guidance.

No person shall enter this area unless authorised to do so by the person in control of the area.

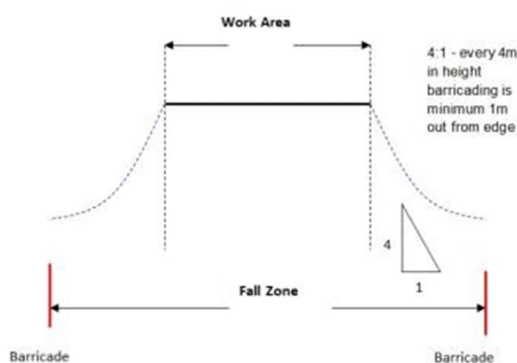


Figure 1: Drop zone guide

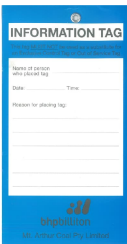
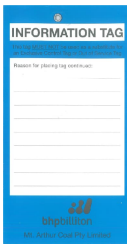
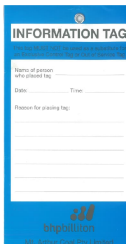
6.7 Use of Spotter

Where determined from the outcomes of a risk assessment it is not practical to erect a barrier around the entire work area (e.g. transporting a load from one side of a build pad to the other / preventing access down a roadway) a spotter may be used to control the area to prevent personnel from entering.

The spotter shall remain on the job until the hazard has been removed or a barrier is put in place.

Note: The spotter cannot be the person in control of the lift.

6.8 Barricading Table

Type	Danger	Exclusive Control	Caution
Use	To restrict entry to an area	Placed on or around plant or equipment where zero energy state cannot be obtained to restrict access	Warns of hazards in the immediate area.
Condition of entry	Authorisation required by barricade owner prior to entry	Authorisation required by the exclusive control officer	Risks must be understood before entering
Barricading as identified in risk assessment	Red and white danger control devices; tape, flags, signs, red/orange cones.	Red and white danger control devices; tape, flags, signs, red/orange cones.	Yellow and black caution control devices; tape, flags signs, yellow cones.
Tape			
Tag	Blue white information tag 	Blue white information tag 	Blue white information tag 
Witches hat / cones Optional – Supervisor Identification Collar	 		
Information pyramids (Examples). Used in addition to witches hats / tape where appropriate.			

Type	Danger	Exclusive Control	Caution
			
			
			
			
			
			
			

Type	Danger	Exclusive Control	Caution
			

 Document Reference - MAC-STE-STD-124