

SAFETY CHECKLIST & GUIDE FOR AMUSEMENT DEVICES OR STRUCTURES (INCLUDING INFLATABLE STRUCTURES)



These items of equipment are significant drawcards for special events held on campus such as Career Days, O Week or other celebrations held on campus. However, these rides or devices may be hazardous unless they are properly set up and maintained by owners or operators.



Whilst the event organiser may not be familiar with the WH & S legislation that governs this type of equipment, the organiser is responsible for ensuring the health and safety of University staff, students or general public that may be on site and should take all reasonable precautions to ensure that the amusement ride owner or operator is managing the risks appropriately and as per legal requirements in Qld.

The following checklist is to assist University event organisers to select and monitor amusement ride / device operators, during all phases of the installation, operation and dismantling of the equipment. The organiser should provide the intended owner/ operator of the device with a copy of this checklist and request that they complete the relevant sections prior to the organiser engaging the operator.

The event organiser is responsible for providing the operator with local knowledge about the site characteristics and facilities.

The amusement device owner or operator should be aware of the following issues and should address them appropriately.

If you have any particular concerns about the safety of the equipment , you may choose to discuss them with an inspector from the Workplace Health and Safety Qld office or phone -1300 369 915.

Hazard or Issue

Expected Outcome

| 1. Licencing | All Licencing details have been addressed <input type="checkbox"/> |
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| <p>□ <i>Amusement structures are not used or operated unless the supplier / owner can provide evidence that the device</i></p> <ul style="list-style-type: none"> a. Design meets Australian Standards ^(the Design Registration certificate number for the amusement device is permanently marked on the plant) and b. They hold a current certificate as “Registered Plant” in QLD and c. Testing or maintenance records can be viewed if requested. <p><i>(Registered Plant (b) is renewable from Feb 1 each yr and therefore the ride must display a current registration sticker.)</i></p> | |

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| 2. Amusement Device - Site Issues – | Site information has been provided <input type="checkbox"/> to supplier /owner by event organiser |
| <p><i>The event organiser should provide the following information/ documentation to the supplier/ owner.</i></p> <ul style="list-style-type: none"> ▫ Appropriate level space and suitable ground surface is allocated for each ride, including access and egress for patrons | |
| <ul style="list-style-type: none"> ▫ The site services plan layout has been consulted through QUT Facilities Management (showing underground power, gas and water service lines) - ▫ <i>A copy is provided to the amusement device supplier/owner.</i> | |
| <ul style="list-style-type: none"> ▫ Ground to be used has not been recently disturbed e.g.: trenches or fill | |
| <ul style="list-style-type: none"> ▫ If site has adverse history of flooding, poor drainage, or high winds. | |
| Supplier or person erecting the ride is responsible for the following site/location issues: | |
| <ul style="list-style-type: none"> ▫ Assessing the suitability of the ground to support the ride or device | |
| <ul style="list-style-type: none"> ▫ Consulting the site services layout plan prior to site digging or driving in stakes etc | |
| <ul style="list-style-type: none"> ▫ Providing safe passage around the rides’ perimeter fence for the public | |
| <ul style="list-style-type: none"> ▫ Ensuring safe passage is available for emergency vehicles | |
| <ul style="list-style-type: none"> ▫ Ensuring adequate essential services are available – electrical power and water | |
| <ul style="list-style-type: none"> ▫ There is appropriate fencing distances surrounding rides | |
| <ul style="list-style-type: none"> ▫ There is appropriate soft-fall area for inflatable structures (if applic) | |
| <ul style="list-style-type: none"> ▫ A thorough check of inflatable structures and accessories is carried out prior to use (if applic) | |
| <ul style="list-style-type: none"> ▫ All tie down ropes attached to inflatable structures are fastened to adequate anchorages (if applic) | |
| <ul style="list-style-type: none"> ▫ Operators of inflatable structures monitor prevailing wind conditions. (if applic) | |
| 3. Distance from Electrical Conductors | Distance from electrical conductors <input type="checkbox"/> is assessed as sufficient. |
| <p><i>Rides should not be erected within the following exclusion zones.</i></p> <ul style="list-style-type: none"> ▫ 6 metres from any overhead power cables supported by poles (street power poles) ▫ 8 metres from overhead power cables supported by pylons. | |
| <ul style="list-style-type: none"> ▫ The possibility of the ride toppling near electrical conductors should be considered especially for rides with base smaller than the height e.g.: Ferris wheels. ▫ The separation distance between the ride and the electrical conductors should at least equal the height | <p><i>Note: If separation distances are less than those stated above, safety guidance must be sought from the Code of Practice “Working near Exposed Live Parts” or the QLD Electrical Safety Office.</i></p> |

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| <p>of the ride plus the separation distance from those above. <i>E.g.: a ride with a 9 m height would require a separation distance to be maintained at all times of 6m , thus the setup separation distance would be 15 metres.</i></p> | |
| 4. Electrical Issues | All Electrical issues for the ride have <input type="checkbox"/> been addressed. |
| <ul style="list-style-type: none"> ▫ All inspection, testing and tagging of Specified Electrical Equipment including power leads, power boards, and RCDs have been done by a competent person as per QLD Electrical Safety Regulations. <i>(Double insulated – annually , not double insulated – every 6 months)</i> | |
| <ul style="list-style-type: none"> ▫ All power cables are well secured and protected to avoid slip/trip and fall hazards, including damage from vehicle or pedestrian traffic or liquids. | |
| <ul style="list-style-type: none"> ▫ Display lighting and associated cables are secured and are in good condition. | |
| <ul style="list-style-type: none"> ▫ Festoon lighting is secured and located properly so that it is not a hazard to riders. | |
| <ul style="list-style-type: none"> ▫ There are sufficient General Power Outlets (GPOs)to prevent the use of double adapters. | |
| <ul style="list-style-type: none"> ▫ An electrical inspection following set up on site, has been undertaken of the ride and power supply (By a Competent Person” -as per Electrical Safety legislation) | |
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| 5. Power Supplies (including internal combustion engines) | Engine safety precautions meet <input type="checkbox"/> safety requirements. |
| <ul style="list-style-type: none"> ▫ Suitable fire extinguishers is provided adjacent to the engine | |
| <ul style="list-style-type: none"> ▫ Access to hazardous areas of the generator is restricted | |
| <ul style="list-style-type: none"> ▫ Exhaust gas is vented to an open are, not affecting QUT air intakes for HVAC systems. | |
| <ul style="list-style-type: none"> ▫ Fencing or barricading restricts access to any power supplies (GPOs or specialized transformers) | |
| <ul style="list-style-type: none"> ▫ All electrical supply equipment is protected from adverse weather conditions <i>(Type 2 RCDs are used on all outlets.)</i> | |
| 6. Inspections and Maintenance | Inspection and Maintenance <input type="checkbox"/> Records meet legislative requirements |
| <p><i>Amusement devices should be inspected and maintained are regular intervals to ensure safe use. The ride owner or supplier should allow the event organiser to view records of the following, if requested.</i></p> | |
| <ul style="list-style-type: none"> ▫ A Competent person (including manufacturer) has identified /developed an inspection and maintenance program – including timeframes/schedules. ▫ A Competent person should have inspected the ride within these guidelines or schedules. | |
| <ul style="list-style-type: none"> ▫ Competent person/s have performed any repairs or periodic maintenance <i>(Note: in QLD – all electrical equipment repairs <u>must</u> be</i> | |

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| <i>done by a licenced electrician)</i> | |
| <ul style="list-style-type: none"> ▫ WH & S QLD regularly audits amusement devices and requires each amusement ride to have a separate log book, which shows any non compliances recorded by Inspectors as a result of audits. This should also be available for perusal if requested. | |
| <p>Competency means the ability to perform tasks or duties to the standard expected in employment (WH & S Regulation – Dictionary)</p> <p>Competent person means for performing an inspection or other task for a control measure, is a person who has acquired , through training, qualifications or experience, the knowledge and skills to the do the task in a safe way ; including knowledge of</p> <ul style="list-style-type: none"> i. Relevant Australian Standards ii. Relevant Codes of Practice iii. Other relevant legislation | |
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| 7. Competent Operators | The amusement device is controlled <input type="checkbox"/> by a Competent person to ensure safety. |
| <p><i>The person in control of the amusement device should be competent to ensure safe use. This applies to all items of plant, not just amusement rides – but includes related items such as fairy floss & popcorn makers.</i></p> <ul style="list-style-type: none"> ▫ Employees / staff have been instructed on safe operating procedures. ▫ Adequate supervision is provided to ensure safe practices are followed, ▫ The experience and skills of operators is considered | |
| <ul style="list-style-type: none"> ▫ Operators are able to clearly communicate and instruct patrons to follow safety instructions during the period of ride operation. | |
| <ul style="list-style-type: none"> ▫ The owner/ supplier ensures the competence of the operator(s) is maintained (amusement rides) | |
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| 8. Personnel Training | Training records have been sighted. <input type="checkbox"/> |
| <p><i>Records should be available to the event organiser indicating that the following training has been completed.</i></p> <ul style="list-style-type: none"> ▫ Those erecting or using the amusement device have received sufficient training and instruction to ensure safe assembly methods and, testing prior to and monitoring during operation. ▫ All staff have been trained in equipment emergency procedures e.g.: emergency shutdown for the amusement ride and they periodically practice these procedures. | |
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| 9. Assembly and Erection | All assembly and erection hazards <input type="checkbox"/> have been considered and controlled. |
| <p><i>Public safety must be a priority. Control measures are to be implemented by the supplier/operator to ensure public safety during the assembly and removal. A documented process should be available for the event organiser to view.</i></p> | |

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| <ul style="list-style-type: none"> ▫ Scaffolding (if used) is assembled and removed by a Competent person holding a current scaffolding certificate. | |
| <ul style="list-style-type: none"> ▫ Falls from heights during assembly and removal are considered and height safety controls are implemented by the owner/operator. | |
| <ul style="list-style-type: none"> ▫ Protective padding is placed over sharp edges or protruding structures. | |
| <ul style="list-style-type: none"> ▫ All nuts, bolts, pins and other critical safety components are checked and in good condition. | |
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| 10. Rider Restraint | Rider restraint is appropriate <input type="checkbox"/> |
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| <p><i>Where a risk of falling from an amusement device is possible, even as a result of unexpected or unusual behaviour such as panicking or skylarking, it must be eliminated or otherwise controlled.</i></p> <p><i>Event Organisers' selection of amusement ride types for on campus use, should consider the demographics of expected patrons including smaller size riders who may not be effectively restrained in some rides due to restraint design for standard sizes. Controls that should be considered and incorporated in devices by suppliers/owners and which event organisers should consider include:</i></p> | |
| <ul style="list-style-type: none"> ▫ Choosing totally enclosed carriages or gondolas where access/ egress mechanism cannot be accessed by the passenger/s. | |
| <ul style="list-style-type: none"> ▫ Provision of restraint devices that ensure that passengers remain seated for the total duration of the ride and where unlocking mechanisms cannot be activated until the ride stops completely, or accessed by the passenger or ▫ Provision of secondary locking mechanisms to supplement primary locking mechanisms which may be unlocked by riders. | |
| <ul style="list-style-type: none"> ▫ Where rides pass through enclosed spaces (e.g.: caves, tunnels etc; additional measures that allow for remote emergency release are provided. | |
| <ul style="list-style-type: none"> ▫ Patron screening procedures are implemented to ensure that only passengers who can effectively restrained are permitted to ride. | |
| <ul style="list-style-type: none"> ▫ Effective procedures are in place to ensure that the restraint of all passengers is checked by operators prior to commencing the ride. | |
| <ul style="list-style-type: none"> ▫ The risk of injury to riders' limbs or other body parts by contact with other parts of the ride or structure e.g.: legs dangling from carriage; arms striking against components etc is controlled effectively. <i>E.g.: use of carriage nose cones, mechanisms to prevent manoeuvring of legs up close to body where they could be thrown/ejected out of carriage.</i> | |
| <p><i>Note: If there are concerns about rider restraint during the event, the WHSQ inspectorate should be notified. The provision, inspection, maintenance and use of rider restraints are the responsibility of the designer; manufacturer; owner/operator and /or the competent persons associated with the ride.</i></p> | |

| 11. Crowd Control | Crowd control methods planned are appropriate for the event <input type="checkbox"/> |
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| <ul style="list-style-type: none"> ▫ Adequate perimeter fencing to be erected around the ride. | |
| <ul style="list-style-type: none"> ▫ Perimeter fencing is placed at a distance from any moving parts to prevent anyone reaching them – adequate clearance allowance = 2 metres | |
| <ul style="list-style-type: none"> ▫ Opening/s in perimeter fence are supervised and unauthorised entry is prevented | |
| <ul style="list-style-type: none"> ▫ Control stations are positioned to prevent interference by the public | |
| <ul style="list-style-type: none"> ▫ Control stations are positioned to provide the operator with unrestricted view of the ride in operation and all loading and unloading platforms. | |
| <ul style="list-style-type: none"> ▫ Signage for the control of passengers (e.g.: height restrictions, age or weight, loading charts) are prominently displayed and clearly legible or representative pictograms convey the required information. | |
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| 12. Emergency procedures for the ride | All Emergency procedures are in place . <input type="checkbox"/> for the ride. |
| <ul style="list-style-type: none"> ▫ The rides' emergency procedure in place deals with fire, explosion, bomb threats, structural failure or collapse or release of hazardous substances etc. | |
| <ul style="list-style-type: none"> ▫ The emergency procedure deals with assisting passengers who may be young, old or have disabilities, or who may suffer a medical emergency while ride is in operation. | |
| <ul style="list-style-type: none"> ▫ Emergency equipment is on hand, to enable the amusement ride to be moved or rotated as required to release passengers in the event of power failure of ride malfunction. | |
| <ul style="list-style-type: none"> ▫ The designer/manufacturers' recommended safety equipment for use in emergency is readily available . | |
| <ul style="list-style-type: none"> ▫ The emergency braking system (where required) works effectively and is tested periodically. | |
| <ul style="list-style-type: none"> ▫ Emergency lighting or illuminated exit signs are installed for rides that run through enclosed (unlit or dim) enclosures e.g.: ghost trains. | |
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| 13. Risk Assessments | Risk assessment records sighted. <input type="checkbox"/> |
| <p><i>The amusement device supplier or owner/operator should have completed risk assessments to ensure safe operation. The risk assessments for University events should consider similar risk scenarios as those of small festivals and dealing with the interaction between the rides, intended patrons of the ride; the campus and local facilities, etc.</i></p> <p><i>The ride owner/operator should allow the event organiser to view their risk assessment records, if requested.</i></p> | |

Authorisation

Owner /operator (Supplier)

Name: _____

Signature: _____

Date: _____

QUT Event Organiser (Hirer or Employer)

As event organiser, if you are satisfied that all of the safety issues outlined in this checklist have been addressed, you may choose to engage this operator and proceed with the hire or contract.

Signature of Event Organiser _____ Date: _____

Signature of Faculty or School
WHSO (as applic) _____ Date: _____

Signature of Division or Faculty
Director or Head of School
(as applic) _____ Date: _____

For more information on Amusement Device Safety-
Workplace Health and Safety Queensland - <http://www.deir.qld.gov.au/workplace/index.htm>
AS/NZ 3533 – Amusement Rides and Devices (Series)
Kind acknowledgement to Education QLD OHS Tool Kit (Contractors & Plant) – Creating Healthier Workplaces
<http://education.qld.gov.au/health/safety/index.html> .