

CYCLONE PREPAREDNESS

Loss prevention from a property perspective

You can minimise the risk of cyclone property damages by upgrading key areas where wind and rainwater can cause damage, and by identifying any potential hazards around the property.

Precautions might be taken, as per the following:

Table 1 – pre-season actions

Pre cyclone season activities	
Emergency power systems	Provide emergency power systems and fuel supplies in tropical cyclone-prone areas adequate to fully power both of the following: <ul style="list-style-type: none"> • All equipment required for refrigeration or climate control of valuable perishable items • All equipment important for vital operations
Storage	<ul style="list-style-type: none"> • Ensure storage locations of chemicals and hazardous materials is above ground level, or protected from internal flooding as soluble chemicals may be affected by flooding
Gutters and downpipes	<ul style="list-style-type: none"> • Make sure gutters are securely fastened – install extra gutter clips if necessary • Complete a thorough clean of gutters and downpipes;
Roof inspections	<ul style="list-style-type: none"> • Inspect and repair roof coverings and edges before the windstorm season
Bulk fuel and gas tanks	<ul style="list-style-type: none"> • Ensure the surrounding areas where the gas tanks are kept are free of debris and items that may be picked up and converted into "projectiles"; these may crack or rupture the tank if they impact.
Electrical	<ul style="list-style-type: none"> • For properties with step-down transformers, survey the areas where it/they are located and ensure potential hazards are mitigated. Cut down branches, clear and remove debris, etc. • If the property has Air Conditioning units or any other roof mounted equipment, check they are secured to their plinths at all mounting points.
Water	<ul style="list-style-type: none"> • For Booster pump stations that are outside of the main building, make sure the control boards are well protected from water and debris. • Ensure areas that have exposed piping are made clear of any debris or objects with potential to cause damage

Table 2 - immediate actions

Immediate actions before a cyclone strikes	
Emergency power systems	<ul style="list-style-type: none"> • Ensure fuel tanks are full and additional fuel is available on site if required.
Storage	<ul style="list-style-type: none"> • Check chemicals and hazardous materials are correctly stored above ground level. • Remove all unsecured objects from building, external areas • Remove any fixed objects that are not appropriately secured for a cyclone • Refuel and relocate any portable equipment, tools, vehicles, aircraft or boats if necessary • Remove as many goods as possible from the floor during a windstorm
Vehicles	<ul style="list-style-type: none"> • If the property has large vehicles such as cars or buses, verify that the vehicles handbrake is engaged and is in gear;

Immediate actions before a cyclone strikes	
	<ul style="list-style-type: none"> Find the most solid sheltered place possible (a garage, barn, an indoor parking, provided the structure is of adequate wind loading resistance design) to store them. Ensure parking location is not in an area subject to flash flooding, watercourse flooding or storm surge flooding. If parking cannot be done in a cyclone rated structure consider parking them in a wide open space away from trees, power lines and anything else that can pose a danger to the vehicle, with distance at minimum 1 and half times the distance of the height of tree/ powerline etc.
Gutters and downpipes	<ul style="list-style-type: none"> Complete another gutter clean to remove any material that has accumulated since the pre-season clean. Clean gutters allow rainfall to flow easily off the roof and down storm water pipes. This will stop the water from being trapped and running back inside the building.
Gas tanks	<ul style="list-style-type: none"> Ensure the surrounding areas where the gas tanks are kept are free of debris and items that may be picked up and converted into "projectiles"; these may crack or rupture the tank if they impact Consider isolating the main valve if practicable just before the cyclone is due to pass Shut off internal gas valves
Electrical	<ul style="list-style-type: none"> Make sure landscape pillar boxes have their covers secured Pool pumps - isolate the pumps at main pools and plunge pools. Remove the pumps and other sensitive running gear from enclosures that are below ground level or are in low lying areas that have the risk of getting flooded or becoming exposed to the elements Remove hanging objects from ceilings outside: ceiling fans, pendant or decorative items
Water	<ul style="list-style-type: none"> If the property is equipped with tanks or reservoirs for water storage, ensure they are topped up and as full as possible prior to the cyclone Immediately after the cyclone has passed, and if practicable, check water tanks and main supply water quality - look for any debris or contamination
Other	<ul style="list-style-type: none"> Disconnect the main electrical feeds to the facility Shut down all noncritical and nonessential electrical equipment If close to sea or in low lying areas consider using sand bags to block rain water from coming in under doors Tape up non-cyclone rated glass to reduce risk of shatter and sharding

Table 3- construction and maintenance procedures

Construction preparedness	
Roof	<ul style="list-style-type: none"> Do not use gravel surfacing of any type on installations in tropical cyclone regions
Exterior doors	<ul style="list-style-type: none"> Do not use sliding exterior doors in tropical cyclone-prone locations unless they have been satisfactorily tested for wind-driven rain in accordance with Section Install sliding door latch mechanisms to release in an upward direction. (Latches that release in a downward direction are prone to self-release from severe door vibrations during high wind pressure cyclic loading) Secure doors with shutters and metal screens.
Exterior windows	Use windows and related sealing systems for windows and wall penetrating air-conditioning units that meet the requirements of Australian standards (Including but

Construction preparedness	
	<p>not limited to AS2047:2014 Windows and external glazed doors in buildings, and AS1170.2:2002 Structural Design Wind Actions) for:</p> <ul style="list-style-type: none"> • Wind loading • Wind borne debris impact • Wind borne rain leak prevention <ul style="list-style-type: none"> • Consider fitting windows with shutters or metal screens for added protection during high winds.
Emergency power systems	<p>Provide emergency power systems and fuel supplies in tropical cyclone-prone areas adequate to fully power both of the following:</p> <ul style="list-style-type: none"> • All equipment required for refrigeration or climate control of valuable perishable items • All equipment important for vital operations
Other	<ul style="list-style-type: none"> • Install ground anchors beside sheds so that cables or slings can be fitted over the shed as part of the preparation for an approaching cyclone. • The base of any fence posts can be designed to ensure they remain attached to the footings, even if they fail.