



Control The Roll



Click to view information and explanation of these initiatives

Critical Risk

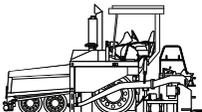
Cardinal Rules

Enviromental Principles

Vehicles & Mobile Plant

Click to view

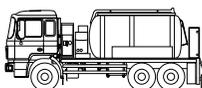
Asphalt Paver 



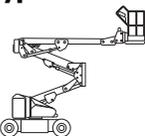
Backhoe 



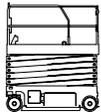
Bitumen/Emulsion Sprayer 



EWP Boom Type 



EWP Scissor Lift
Small Electric Only 



EWP Truck/Boom Mounted 



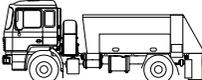
Excavator 



Float Truck 



Flocon 



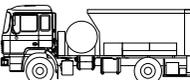
Forklift 



Grader 



Jet Patcher 



Loader 



Microsurfacing Paver 



Paveline 



Profiler 



Rollers 



Semi Tanker / Fixed Body Walking Floors 



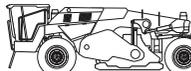
Shuttle Buggy 



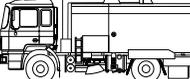
Skid Steer 



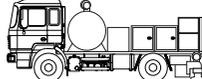
Stabiliser 



Sweeper 



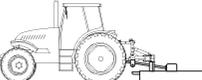
Tack Coater 



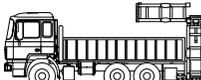
Tipper 



Tractor with slasher attachment 



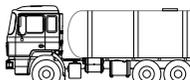
Truck Mounted Attenuator 



Ute/Light Vehicle 



Water Truck 



What is the **RED ZONE** ?

The **RED ZONE** is a no-go zone of 10m directly in front of and behind operational plant in the possible direction of travel.

The **RED ZONE** only applies when plant is operational.

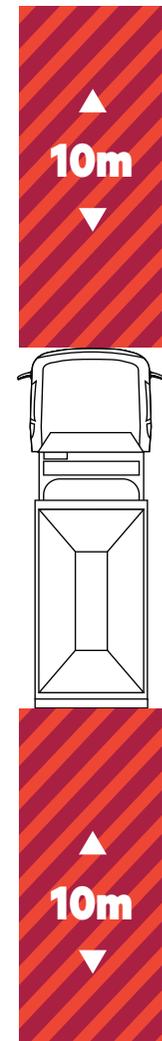
The **RED ZONE** MUST be adhered to at all times.

The **RED ZONE** is 10m separation between operating plant and person on foot.

The **RED ZONE** extends 3m to the sides of plant unless authorised.

The **RED ZONE** applies in one direction only if the plant can only move in one direction whilst in working mode.

Click to watch the **RED ZONE** video

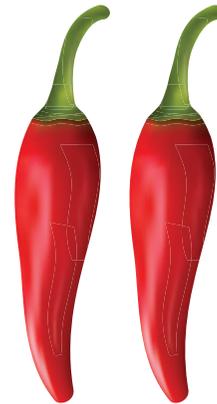


The Chilli Factor?

All mobile plant has risk associated with its use, some more than others. The higher the 'Chilli Factor' the higher the risk.



Hot



Very Hot



Extreme



REDZONE Tips...

Operator to ensure the REDZONE is always clear of persons on foot!

- Ask yourself, 'do I need a spotter?'
- Stop if a person on foot enters the REDZONE
- Stop if you lose sight or direct communication with your spotter
- Always check path of travel is clear

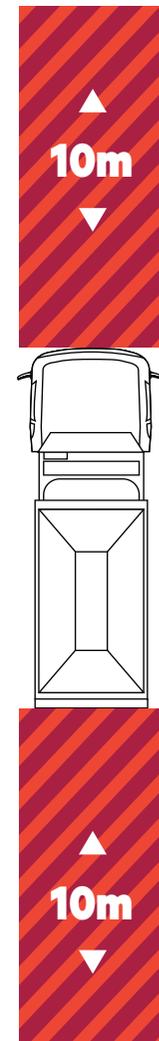
If you have to approach moving plant

- From outside the REDZONE, establish contact and get acknowledgement from the operator, e.g. a wave, nod, radio
- Wait, do not approach plant until it is stationary, stops operation, and the operator advises it is safe to approach

Never assume

- **Communicate** – ask the operator if you need to approach
- **Communicate** – tell the person on foot when it is safe to approach
- **Communicate** – agree when it is safe to resume work

Click to watch the REDZONE video



Control The Roll How it works...

Before exiting or leaving any vehicle or plant...



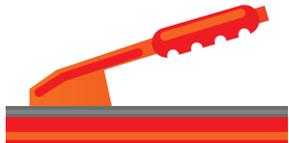
- **Assess** the location and environment, consider slope and incline, barriers, kerbs, and the possible direction of roll.
- **Control** choose and apply at least **2 forms of control** available to use on your vehicle or plant.
- **Exit** check that controls are in place and effective, before departing safely.

Click to watch the [Control The Roll](#) video

Control The Roll

Always apply at least 2 forms of control

Controls



APPLY BRAKE

- Apply park brakes fully
- Apply trailer brakes fully



PARK IN GEAR

- Leave in Gear – Manual
- Leave in Park - Automatic



WHEEL TO KERB

- Place wheels to kerb or other barrier



ATTACHMENT ON GROUND

- Place attachments on ground



ENGINE OFF

- Turn off engine
- Remove keys



CONSIDER CHOCKS

- Consider chocks, speed humps, temporary earth mounds or similar

Click to watch the [Control The Roll video](#)

Control The Roll

Good Practice



PARK ON FLAT

Good Practice 1 - Park on Flat

Assess the location and environment, consider slope and incline, barriers, kerbs, and the possible direction of roll.

- Assess your location and situation
- Park on flat, where possible
- Support with at least two controls



TEST OPERATION

Good Practice 2 - Test Operation

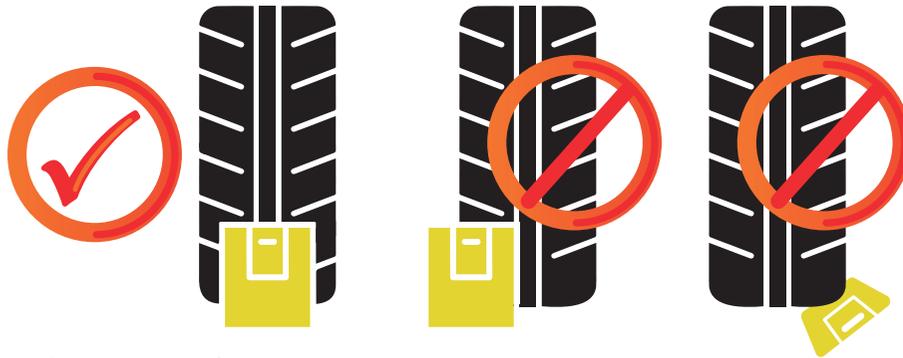
Exit: Take a moment to double check controls are in place, the vehicle/plant is secured and your keys are out of the ignition.

- Check controls are in place and effective
- Consider a trailer tug test

Click to watch the [Control The Roll](#) video

Control The Roll

Chocks



In the centre of the tyre, and square to the tyre, as shown above

- Required when parking up a trailer that is detached from the primary control vehicle
- Encouraged as a 2nd form of control for all vehicles and mobile plant

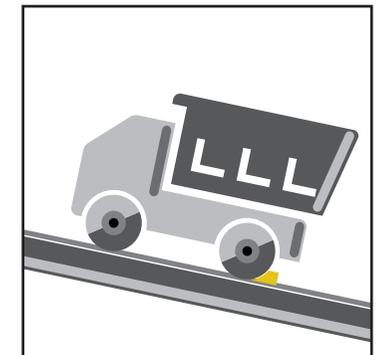
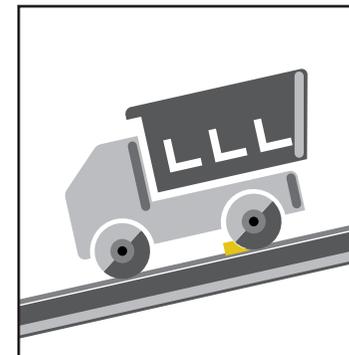
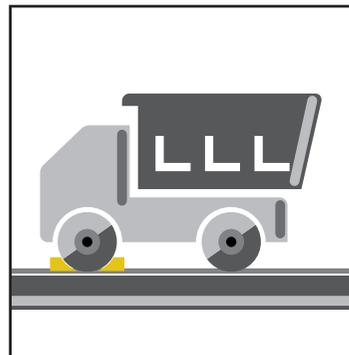
Using Chocks Position the chock with a slight gap, to indicate whether there has been movement since placing the chocks. If chock is against wheel, this suggests the vehicle has rolled. **YOU HAVE A PROBLEM.** **Do NOT** remove the chock.

Level Grade Always use wheel chocks in pairs. Chock both side of front tyres. Park on flat, where possible.

Downhill Grade Place one chock on the downhill side of each tyre on the centre axle.

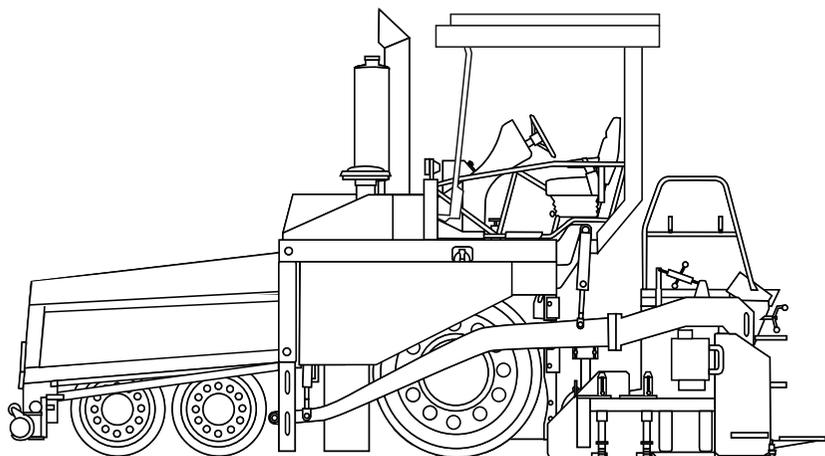
Uphill Grade Place one chock on the downhill side of each tyre on the furthest downhill axle.

Wheel chocks must be positioned downhill and below the vehicle's center of gravity.



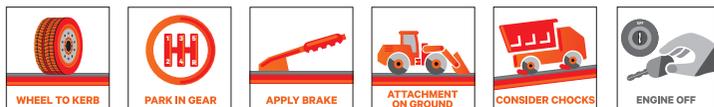
Click to watch the [Control The Roll video](#)

Asphalt Paver



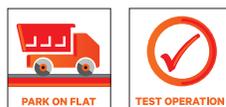
Control The Roll

CONTROLS

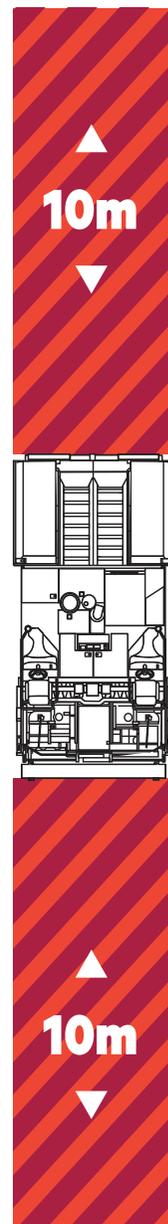


Turn engine off when possible

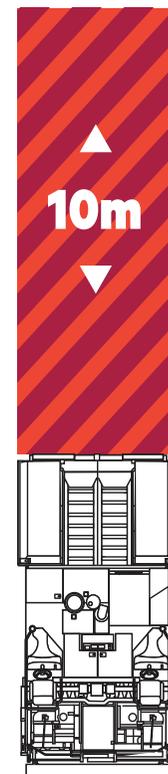
BEST PRACTICE



Travelling



Working



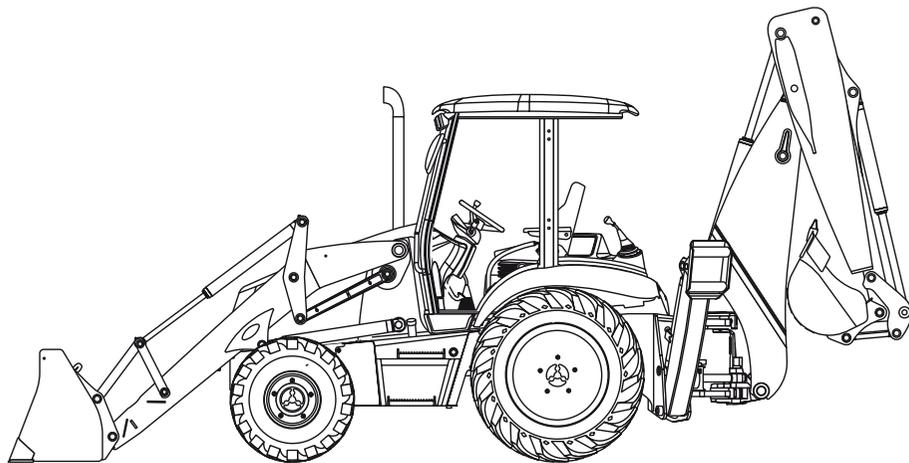
- 10m **RED ZONE** applies in the possible direction of travel
- When working, with screed down, the plant moves in a forward direction / the **RED ZONE** at the rear of the plant is not active
- Working mode is when paving has commenced and paver is moving forward, or the screed is on the ground and paving is about to commence

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



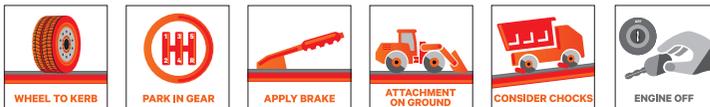
RED ZONE

Backhoe



Control The Roll

CONTROLS



Turn engine off when possible

BEST PRACTICE

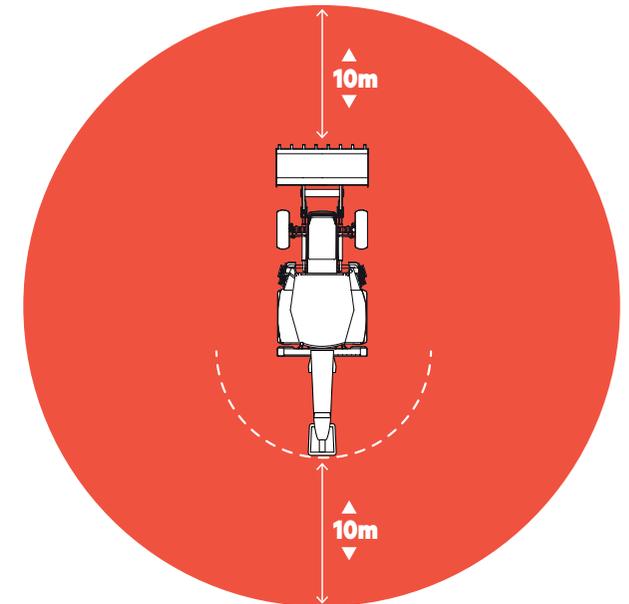


Travelling



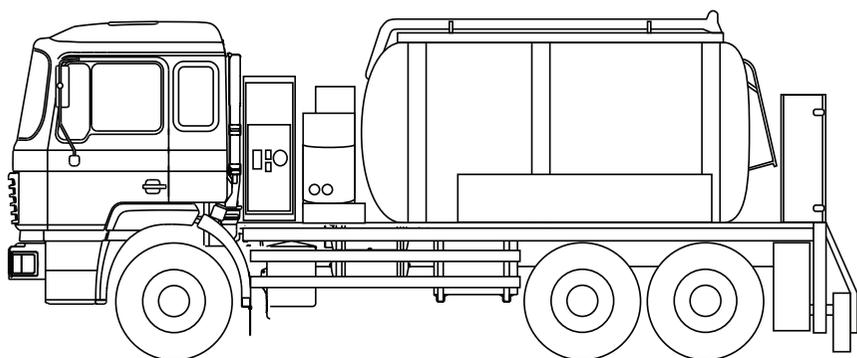
Working

- 10m RED ZONE applies in the possible direction of travel
- Traveling direction is forward and backward
- Working mode is when stabilisers are down, and backhoe bucket is moving in different directions as part of backhoe activities

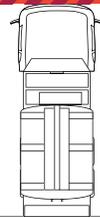


RED ZONE

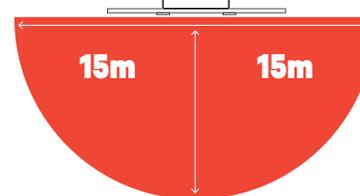
Bitumen/Emulsion Sprayer



Travelling



Working



- 10m **RED ZONE** applies in the possible direction of travel
- Traveling direction is forward and backward
- When working, the plant typically moves in a forward direction, however can also operate in reverse
- Hand bar work may only occur in a forward direction
- Hand bar must be stowed when plant is reversing
- A 15m **RED ZONE** applies in all directions to the side and behind when spray bar is operational

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised

Control The Roll

CONTROLS



Turn engine off when possible

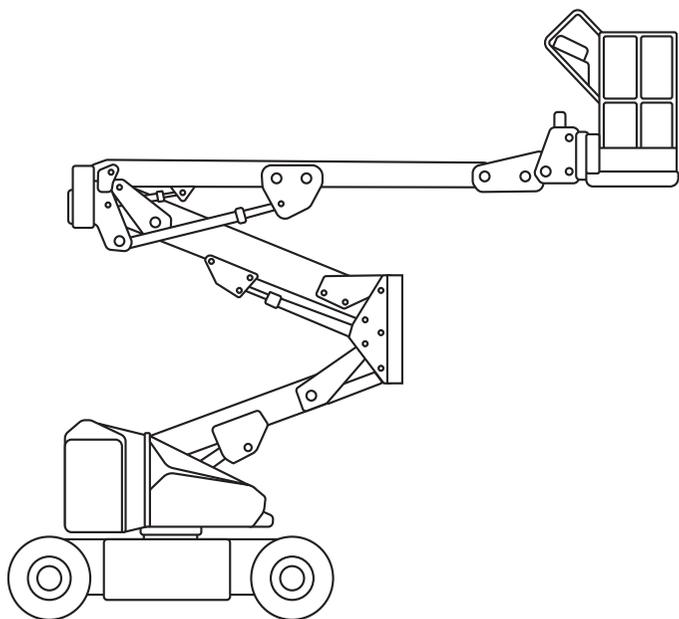
BEST PRACTICE



Downer

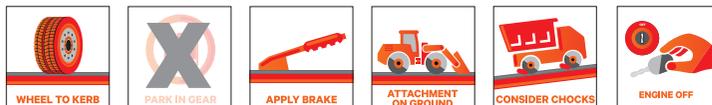
RED ZONE

EWP Boom Type



Control The Roll

CONTROLS

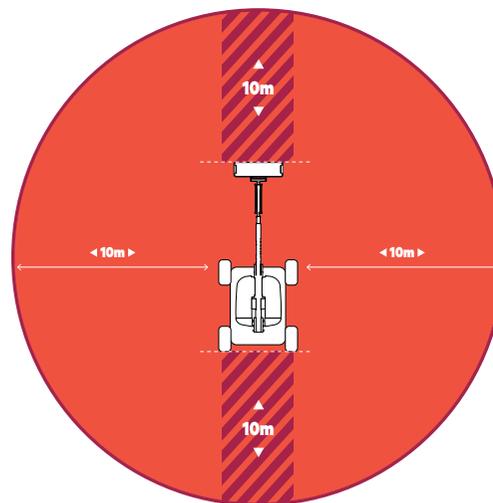


BEST PRACTICE



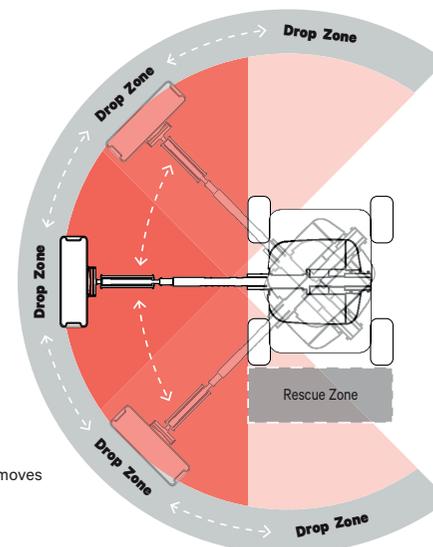
Travelling

- 10m **RED ZONE** applies in the possible direction of travel



Raised & Stationary

- The **RED ZONE** extends to the **working reach of the boom + Drop Zone**
- Never work under a suspended load
- Working mode is when it is predominately stationary, and the boom is in operation
- A **qualified spotter** is required when the boom is in use
- A **Drop Zone** applies when operating and is to be set based on working height and risk profile, refer to Working at Heights procedure

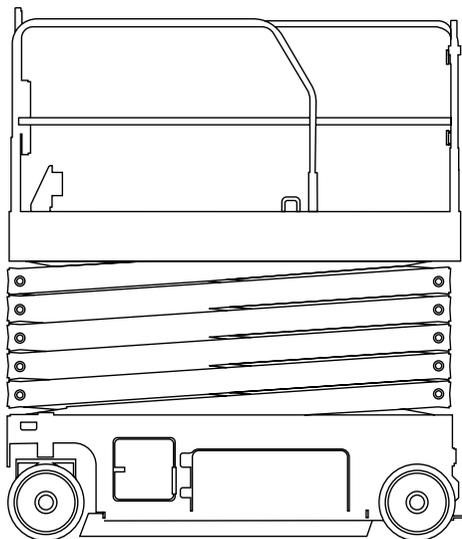


Note: Rescue Zone moves with the equipment



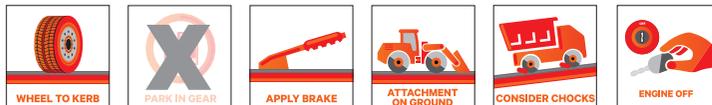
RED ZONE

EWP Scissor Lift Small Electric Only



Control The Roll

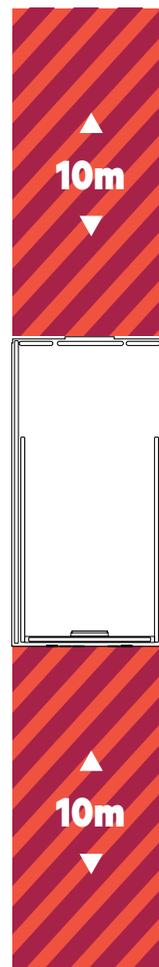
CONTROLS



BEST PRACTICE



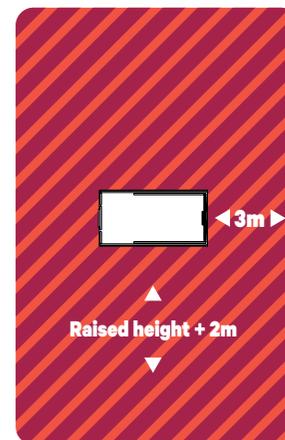
Travelling



During Raising

- A qualified spotter is required when the EWP is in use
- The **RED ZONE** extends to the raised height of the EWP + 2 meters at the sides of the EWP

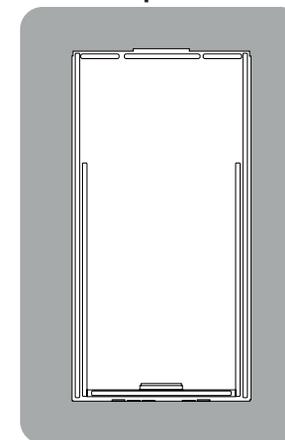
* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



Raised & Stationary

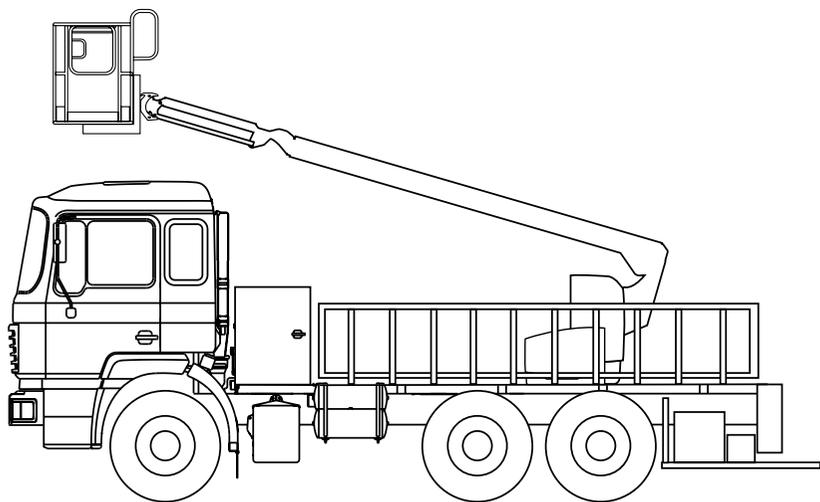
- A qualified spotter is required when the EWP is in use
- Never work under a suspended load
- A **Drop Zone** applies on all sides, and is to be set based on working height and risk profile, refer to Working at Heights procedure

Drop Zone



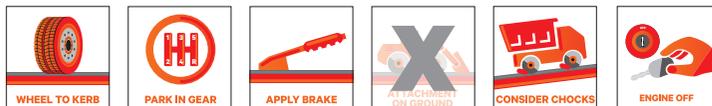
RED ZONE

EWP Truck/ Boom Mounted



Control The Roll

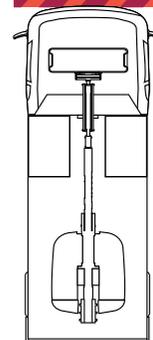
CONTROLS



BEST PRACTICE



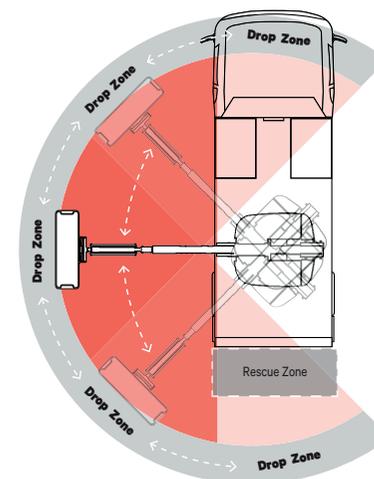
Travelling



Raised & Stationary

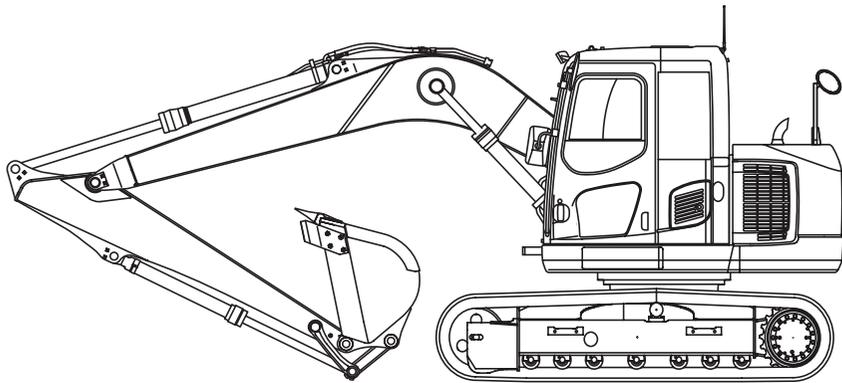
- The **RED ZONE** extends to the working reach of the boom + **Drop Zone**
- The **RED ZONE** moves with the boom
- A qualified spotter is required when the boom is in use
- Working mode is when truck is stationary, stabilisers are down, and boom EWP is in operation
- Never work under a suspended load
- A **Drop Zone** applies when operating and is to be set based on working height and risk profile, refer to Working at Heights procedure

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



RED ZONE

Excavator



Control The Roll

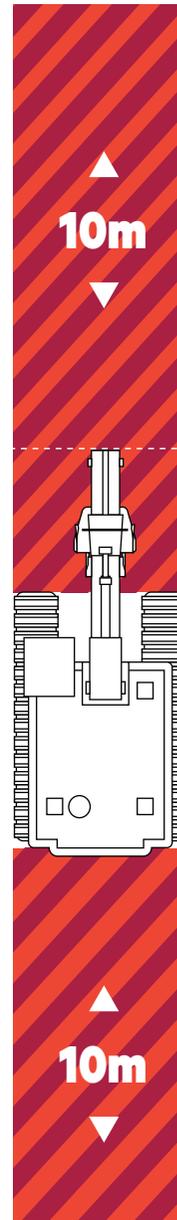
CONTROLS



BEST PRACTICE

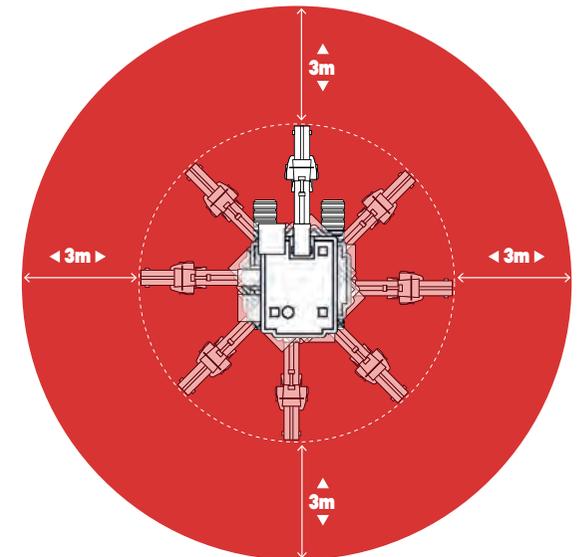


Travelling

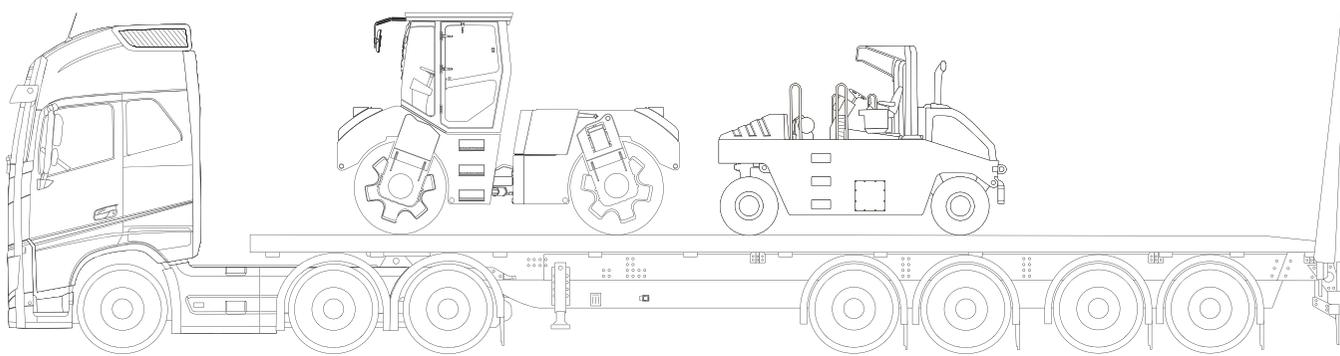


Working

- 10m **RED ZONE** applies in the possible direction of travel
- Working direction is forward and backward
- Working mode is when Excavator is predominately in a set area and excavation activities have commenced

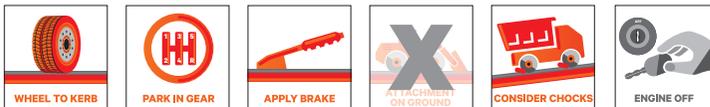


Float Truck



Control The Roll

CONTROLS



Turn engine off when possible

BEST PRACTICE



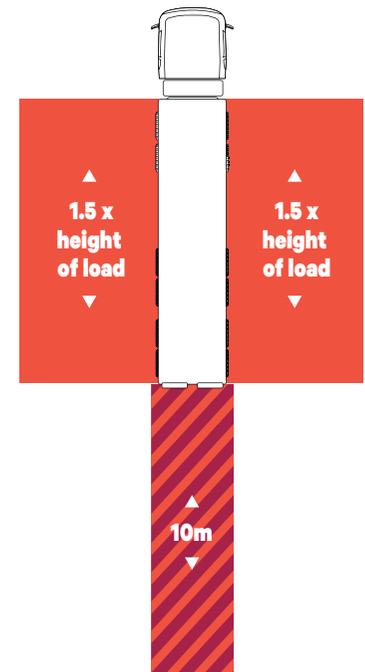
Travelling



Working

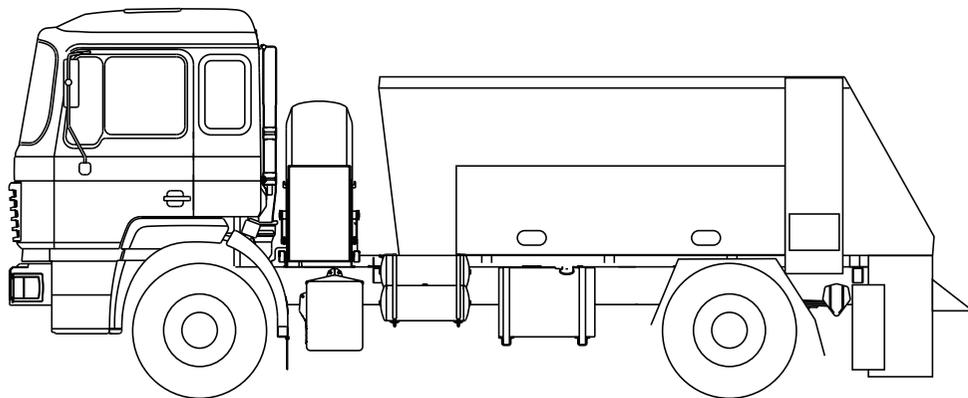
- When loading and unloading plant and equipment from float trucks, The **RED ZONE** applies at the sides and back of the truck in case of plant and equipment slipping from float deck

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



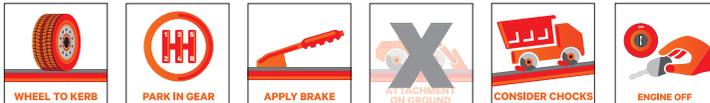
RED ZONE

Flocon



Control The Roll

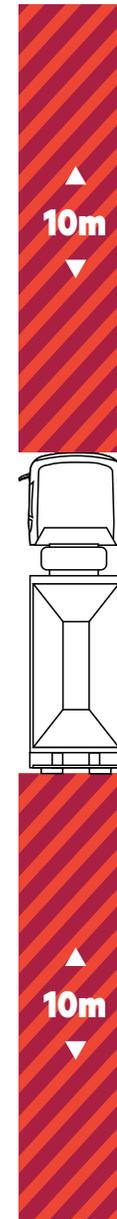
CONTROLS



BEST PRACTICE



Travelling & Working



- 10m **RED ZONE** applies in the possible direction of travel
- Working direction is forward and backward
- **Before entering area at the rear of the flocon:**
 - Establish communication with operator
 - Operator to confirm plant is secured (**stopped**)
 - Operator to authorise access to the rear of the flocon
 - Persons on foot must confirm authorisation of operator

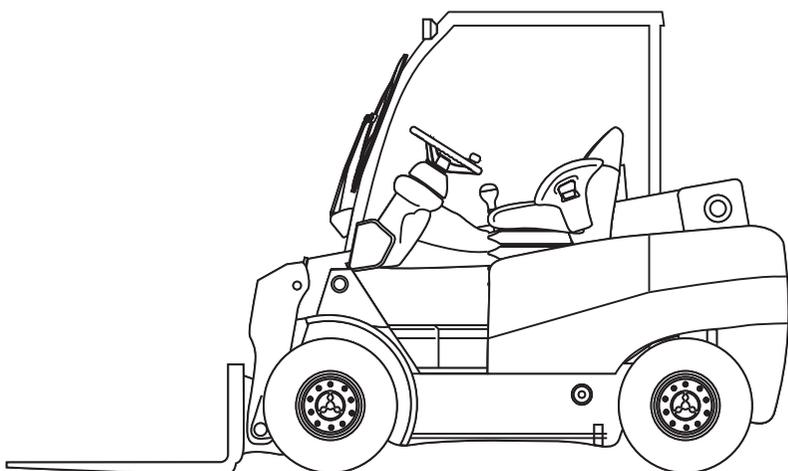
* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



Downer

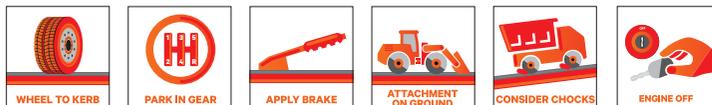
RED ZONE

Forklift



Control The Roll

CONTROLS



BEST PRACTICE

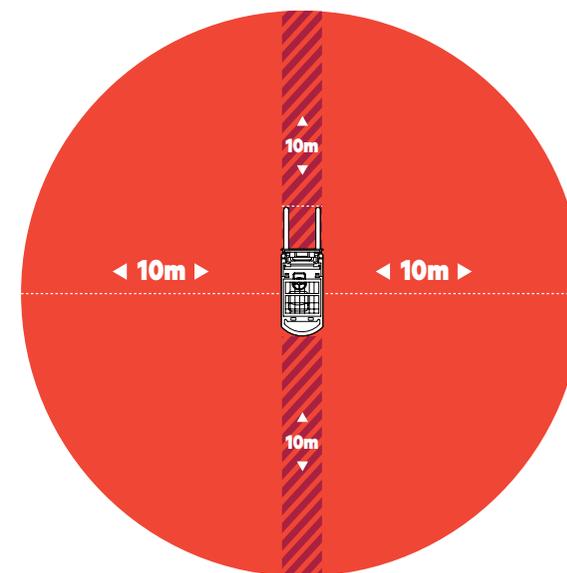


Travelling

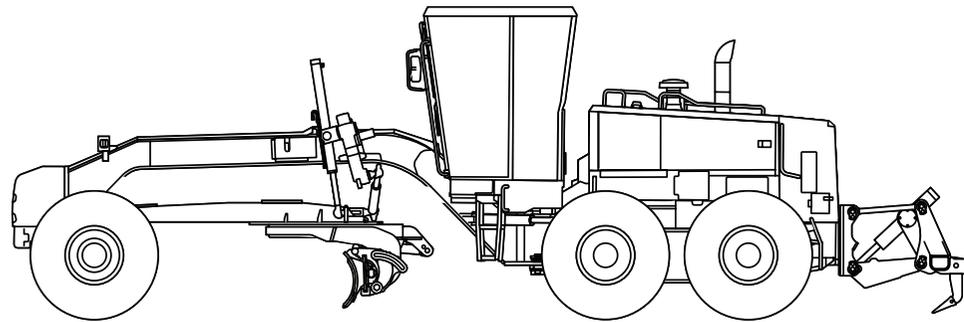


Working

- 10m **RED ZONE** applies in the possible direction of travel
- 10m **RED ZONE** applies in all directions when working
 - Working mode is when forklift is moving in different directions as part of forklifting activities
 - If a 10m **RED ZONE** is not possible, workers on foot must stand behind a physical barrier

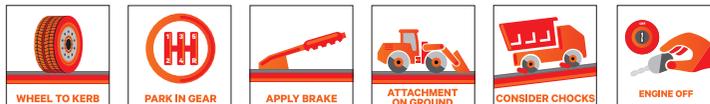


Grader



Control The Roll

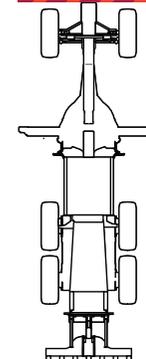
CONTROLS



BEST PRACTICE



Travelling & Working



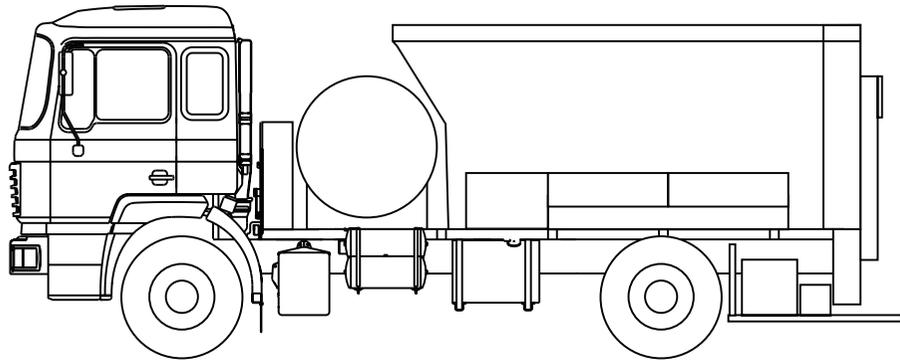
- 10m **RED ZONE** applies in the possible direction of travel
- Working direction is forward and backward

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



RED ZONE

Jet Patcher



Control The Roll

CONTROLS

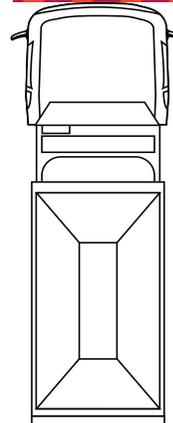


Turn engine off when possible

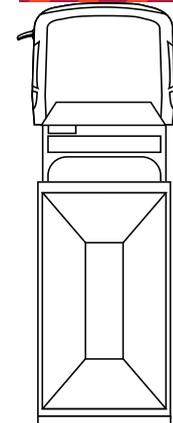
BEST PRACTICE



Travelling



Working



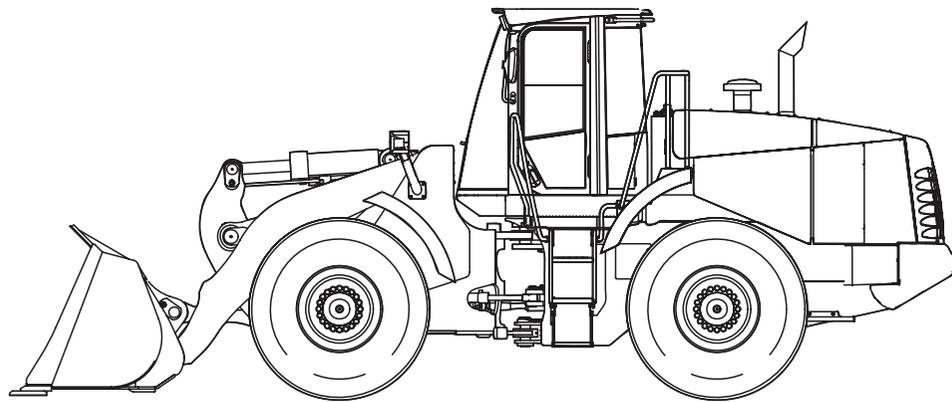
- 10m RED ZONE applies in the possible direction of travel
- When working, the plant moves in a forward direction and the RED ZONE at the rear of the plant is not active
- Working mode is when Jet Patcher is moving forward as part of patching activities

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



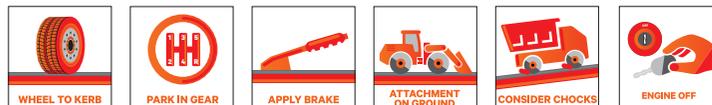
RED ZONE

Loader



Control The Roll

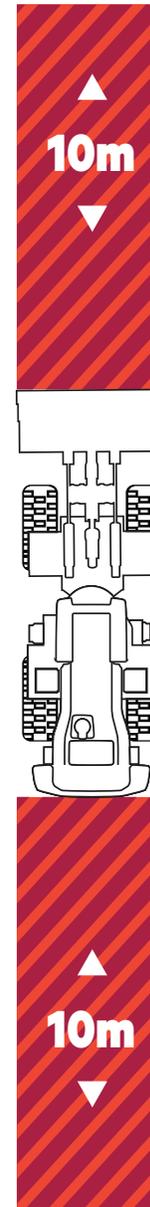
CONTROLS



BEST PRACTICE



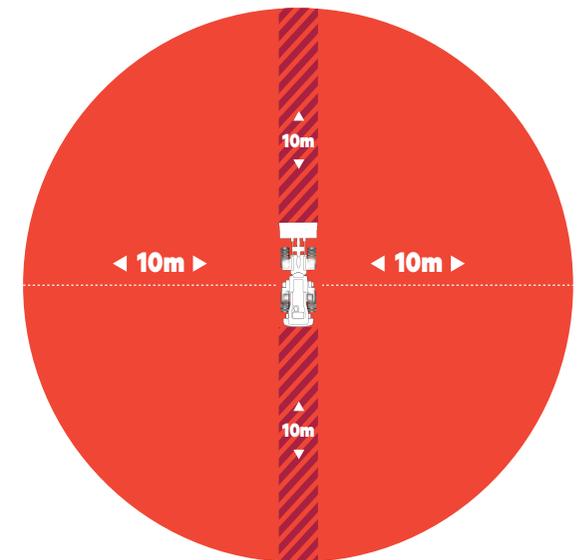
Travelling



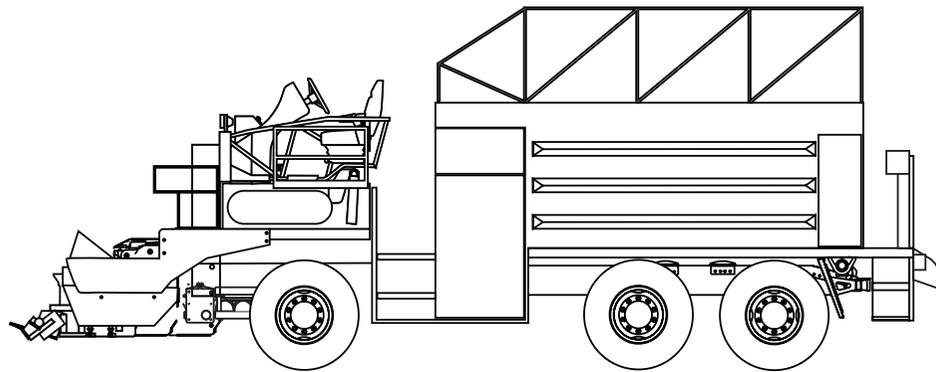
Working

- 10m **RED ZONE** applies in the possible direction of travel
- Working mode is when Loader is moving in different directions as part of loading activities

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised

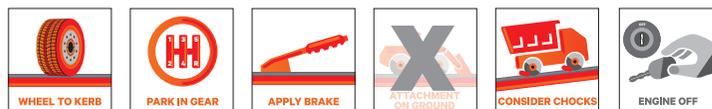


Microsurfacing Paver



Control The Roll

CONTROLS

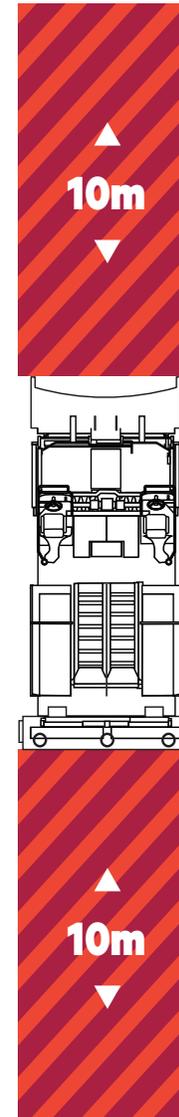


Turn engine off when possible

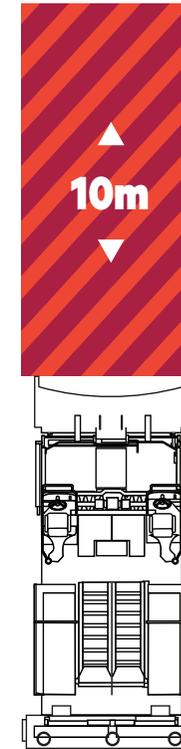
BEST PRACTICE



Travelling



Working

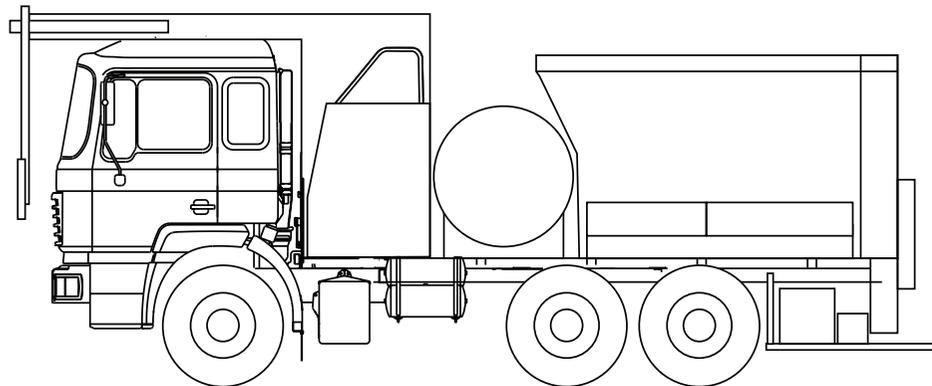


- 10m **RED ZONE** applies in the possible direction of travel
- When working, the plant moves in a forward direction and the **RED ZONE** at the rear of the plant is not active
- Working mode is when the spreader box is on the ground

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



Paveline



Control The Roll

CONTROLS

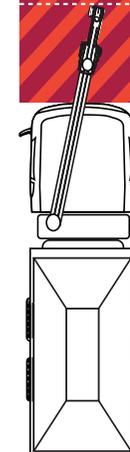


Turn engine off when possible

BEST PRACTICE



Travelling & Working

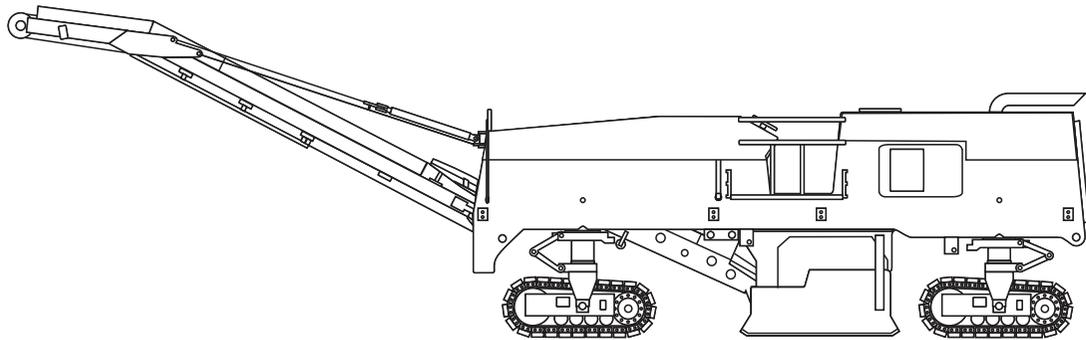


- 10m **RED ZONE** applies in the possible direction of travel
- Working direction is forward and backward

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised

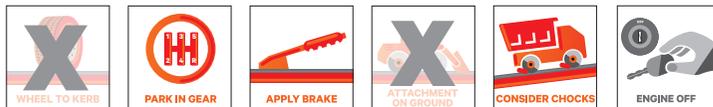


Profiler



Control The Roll

CONTROLS

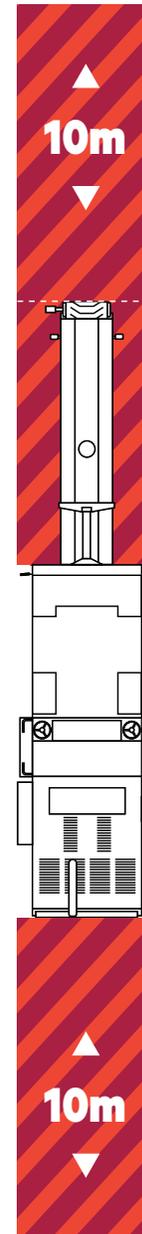


Turn engine off when possible

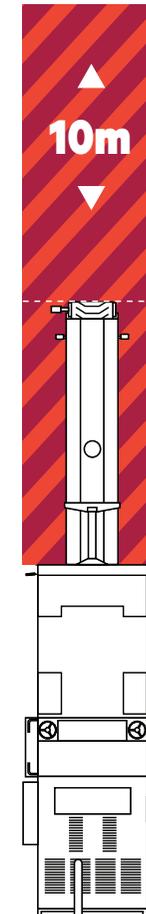
BEST PRACTICE



Travelling



Working

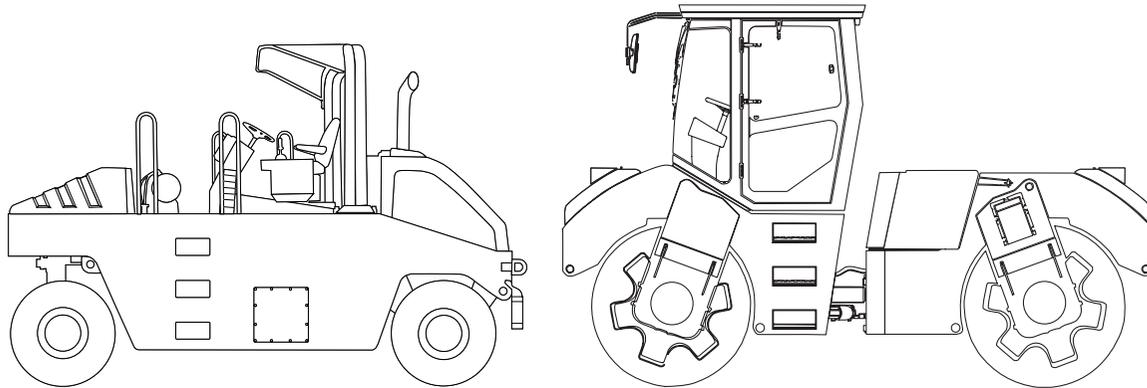


- 10m **RED ZONE** applies in the possible direction of travel
- Working mode is when Profiler is moving forward as part of profiling activities
- When working, the plant moves in a forward direction the **RED ZONE** at the rear of the plant is not active
- **NO** person on foot to be under the boom. This is a suspended load
- 10m **RED ZONE** applies from the end of the boom
- Depth Checking permitted to be performed **ONLY** when positive communication is established and maintained with the operator. The machine is moving forward and cutting

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



Rollers



Control The Roll

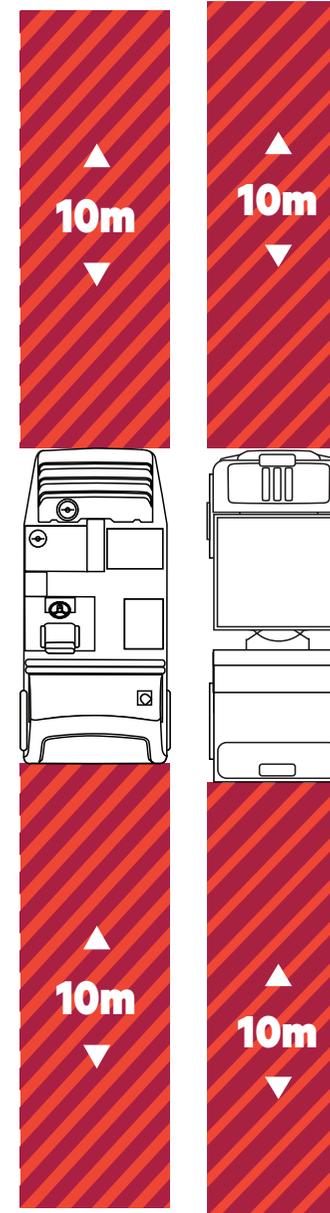
CONTROLS



BEST PRACTICE



Travelling & Working

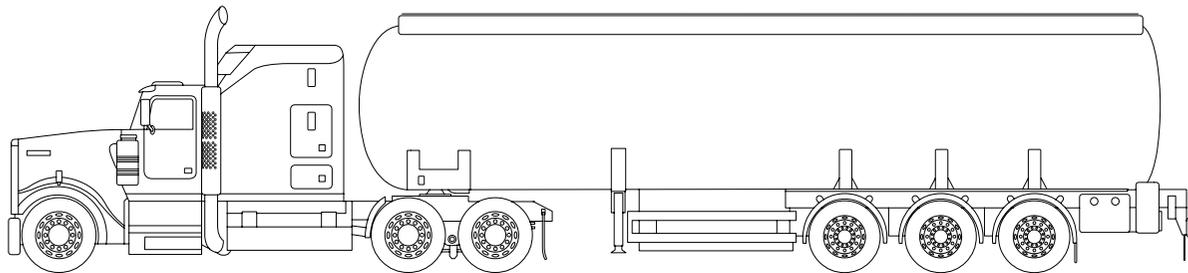


- 10m RED ZONE applies in the possible direction of travel
- Working direction is forward and backward

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised

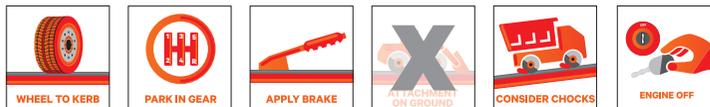


Semi Tanker / Fixed Body Walking Floors



Control The Roll

CONTROLS

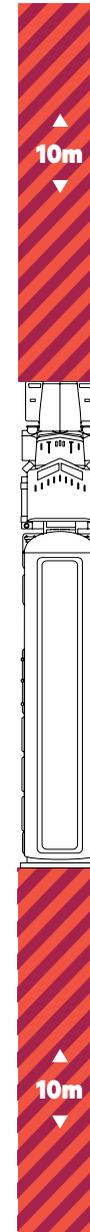


must be used if trailer is detached

BEST PRACTICE



Travelling & Working

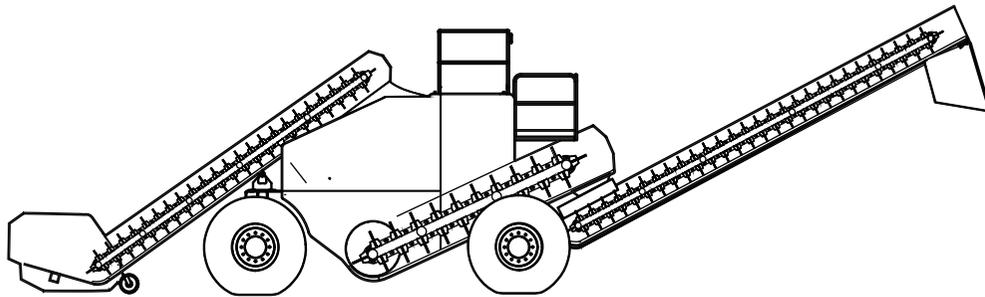


- 10m **RED ZONE** applies in the possible direction of travel
- Working direction is forward and backward
- * Stay out of 3m Exclusion Zone to the sides of plant unless authorised



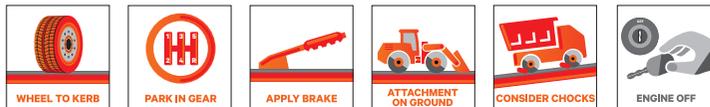
RED ZONE

Shuttle Buggy



Control The Roll

CONTROLS

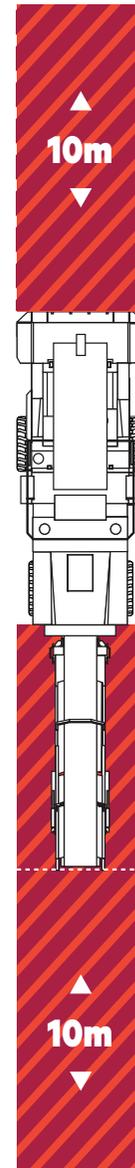


Turn engine off when possible

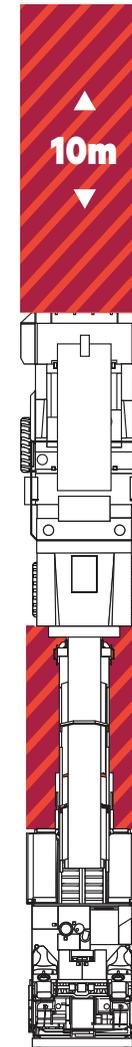
BEST PRACTICE



Travelling



Working



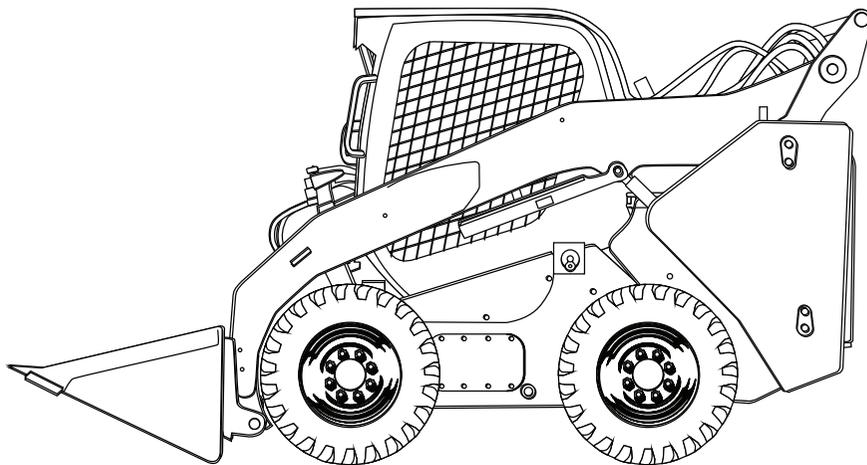
- 10m **RED ZONE** applies in the possible direction of travel
- Working mode is when shuttle buggy is moving forward as part of transferring material between truck and paver
- When working, the plant moves in a forward direction and the **RED ZONE** at the rear of the plant is not active
- **NO** person on foot to be under the boom
This is a suspended load
- 10m **RED ZONE** applies from the end of the boom

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



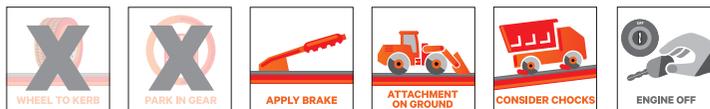
RED ZONE

Skid Steer



Control The Roll

CONTROLS

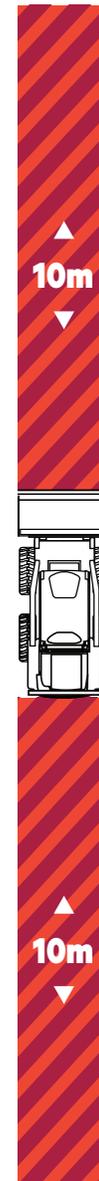


Turn engine off when possible

BEST PRACTICE

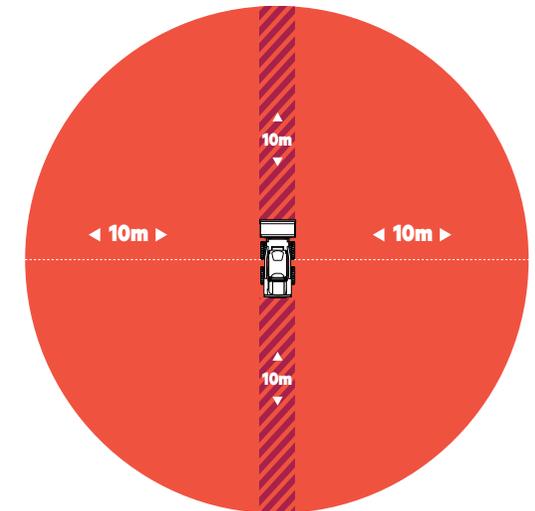


Travelling

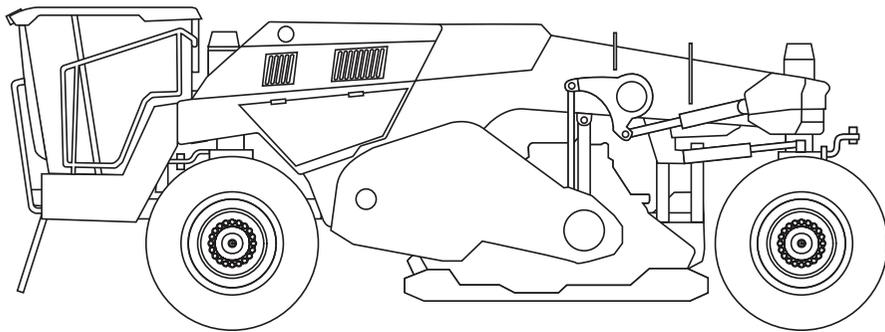


Working

- 10m RED ZONE applies in the possible direction of travel
- 10m RED ZONE applies in all directions when working
- Working mode is when skid steer is moving in different directions as part of skid steer activities
- If a 10m RED ZONE is not possible, workers on foot to stand at a safe distance behind a physical barrier. i.e. channel or jersey barrier

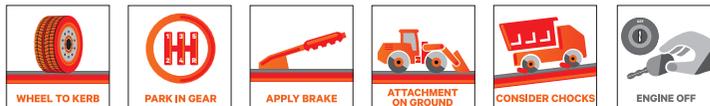


Stabiliser



Control The Roll

CONTROLS

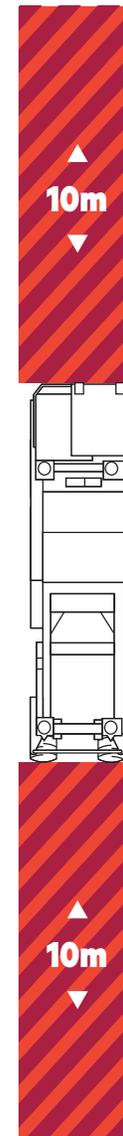


Turn engine off when possible

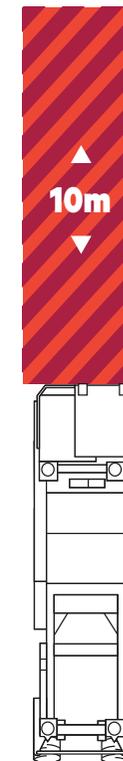
BEST PRACTICE



Travelling



Working

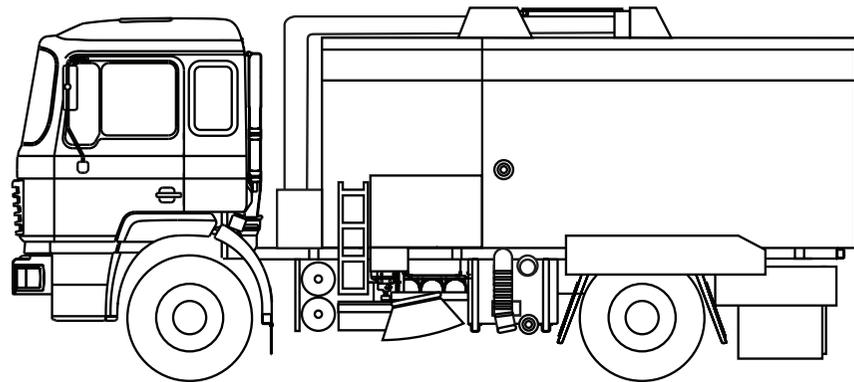


- 10m **RED ZONE** applies in the possible direction of travel
- When working with the stabiliser down the plant moves in a forward direction and the **RED ZONE** at the rear of the plant is not active
- Moisture Checking permitted to be performed **ONLY** when positive communication is established and maintained with operator

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised

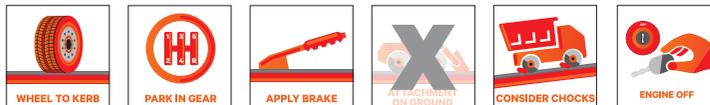


Sweeper



Control The Roll

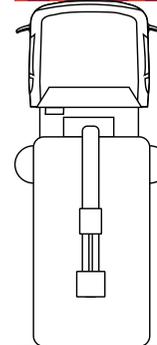
CONTROLS



BEST PRACTICE



Travelling & Working

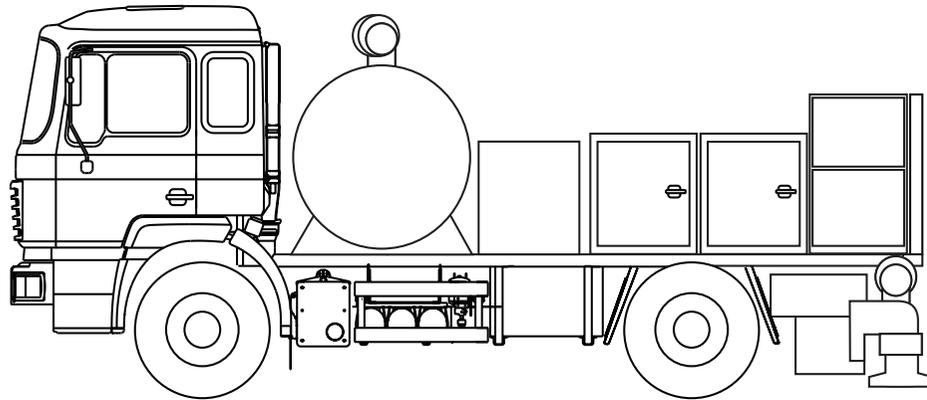


- 10m RED ZONE applies in the possible direction of travel
- Working direction is forward and backward
- * Stay out of 3m Exclusion Zone to the sides of plant unless authorised



RED ZONE

Tack Coater



Control The Roll

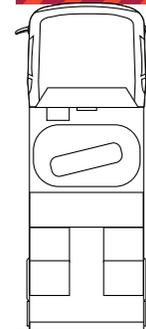
CONTROLS



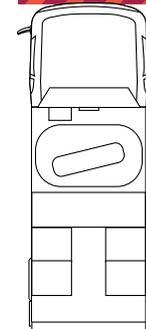
BEST PRACTICE



Travelling



Working



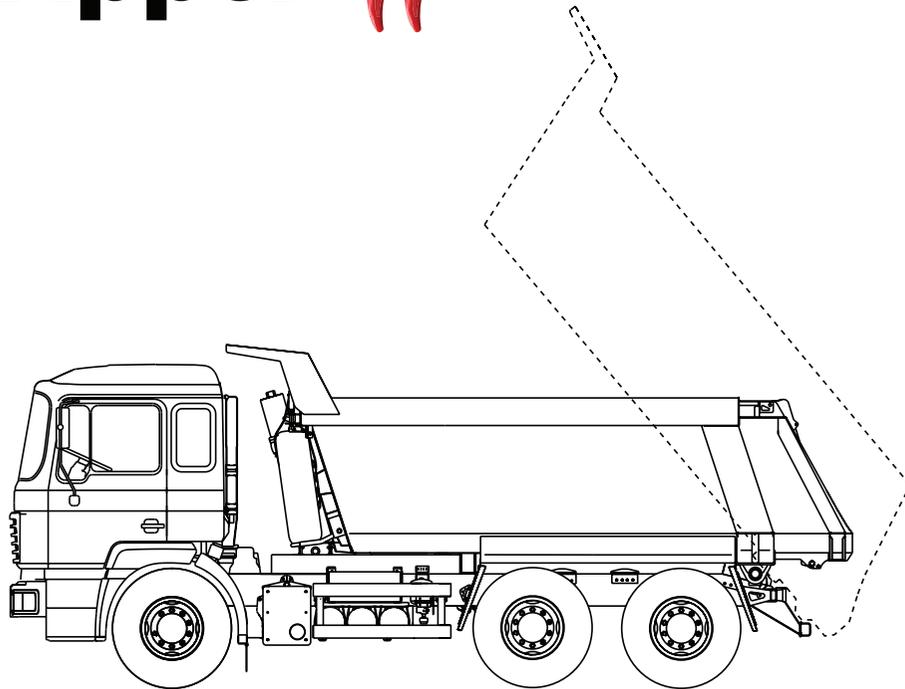
- 10m **RED ZONE** applies in the possible direction of travel
- When working, the plant moves in a forward direction and the **RED ZONE** at the rear of the plant is not active
- Hand bar work may only occur in a forward direction
- Hand bar must be stowed when plant is reversing

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



RED ZONE

Tipper



Control The Roll

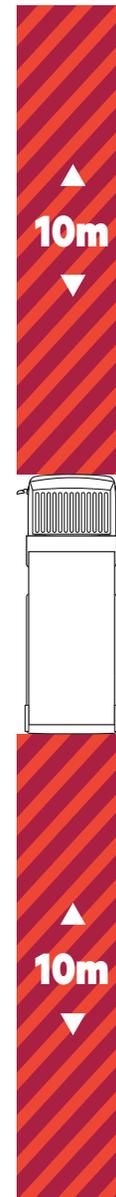
CONTROLS



BEST PRACTICE

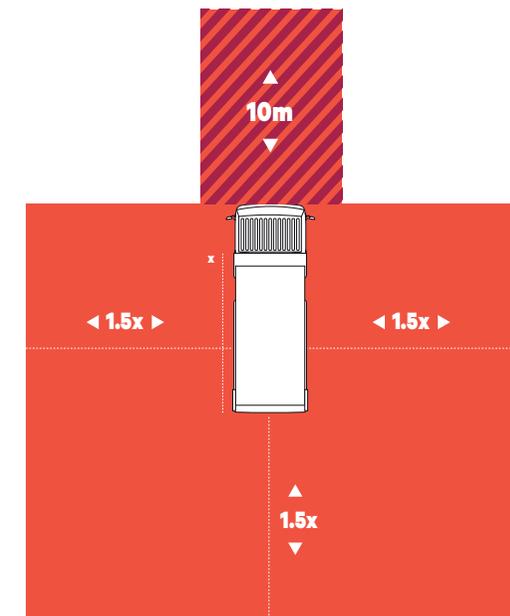


Travelling



Hoist Up & Working

- 10m **RED ZONE** applies in the possible direction of travel
- Working direction is forward and backward
- When tipping, a Tipping Zone **RED ZONE** applies to the sides of the truck in case of roll over
- Tipping Zone is 1.5 x the height of the raised tipper tray

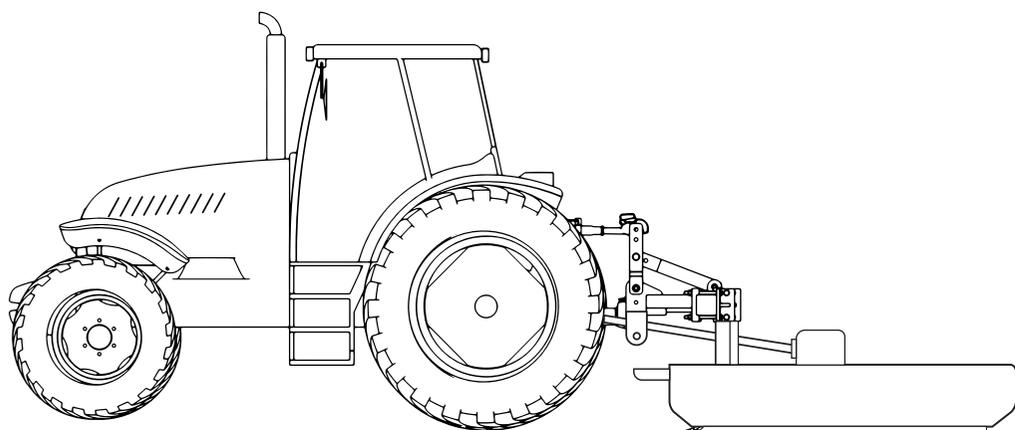


RED ZONE

Tractor

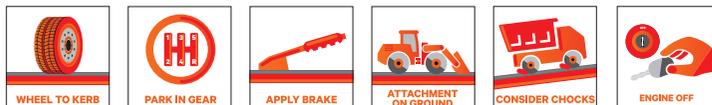


with slasher attachment



Control The Roll

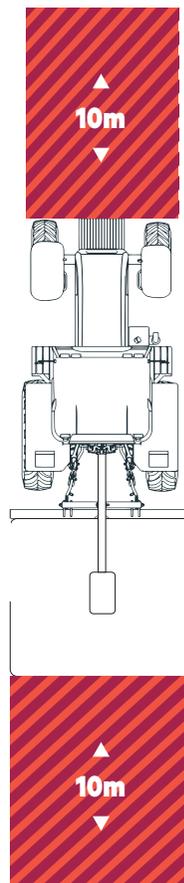
CONTROLS



BEST PRACTICE

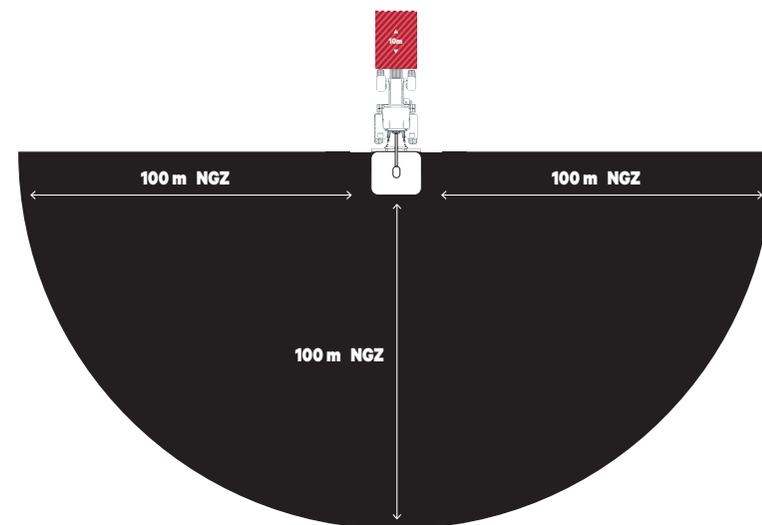


Travelling

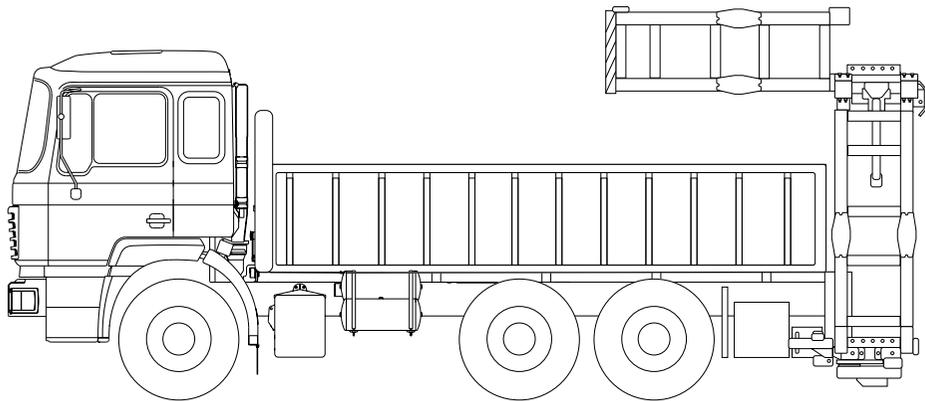


Working

- When the slasher attachment is in use, The **RED ZONE** extends in every possible direction of travel
- A **MINIMUM 100m No Go Zone (NGZ)** is in place behind and to the sides of the operating attachment



Truck Mounted Attenuator (TMA)

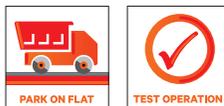


Control The Roll

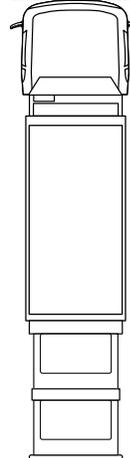
CONTROLS



BEST PRACTICE



Travelling



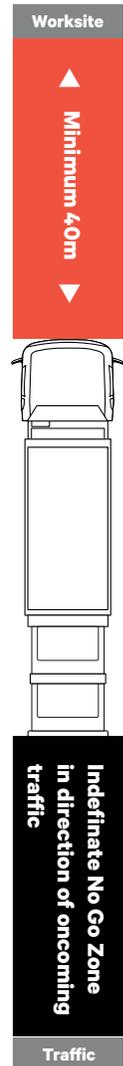
Deployed

TMAs have a specific set of requirements that apply when they are in use and deployed on a worksite

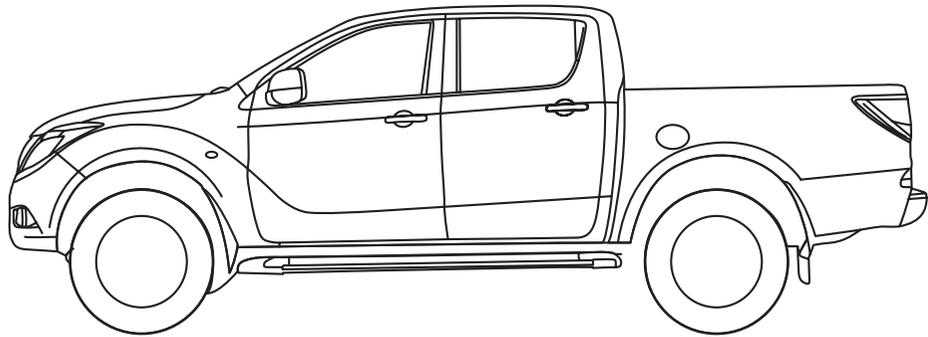
- A **MINIMUM** 40m **RED ZONE** in front of the TMA applies
- An Indefinite No Go Zone is in place behind the TMA, no person on foot or vehicles are to be in this area at any time

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised

Worksite



Ute/Light Vehicle



Control The Roll

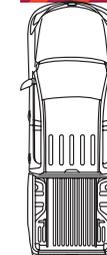
CONTROLS



BEST PRACTICE



Travelling & Working



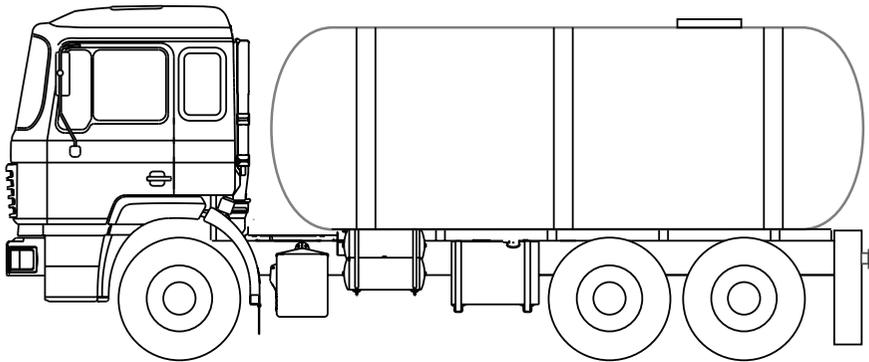
- 10m **RED ZONE** applies in the possible direction of travel
- Working direction is forward and backward

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



RED ZONE

Water Truck



Control The Roll

CONTROLS



WHEEL TO KERB



PARK IN GEAR



APPLY BRAKE



ATTACHMENT ON GROUND



CONSIDER CHOCKS



ENGINE OFF

BEST PRACTICE

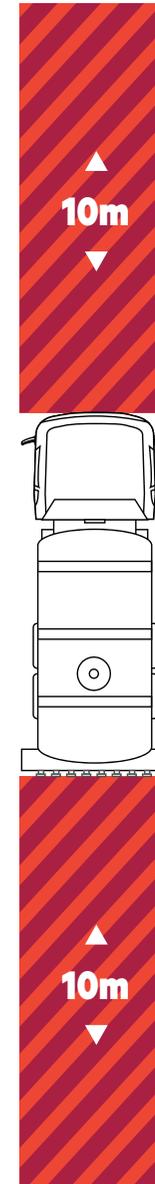


PARK ON FLAT



TEST OPERATION

Travelling & Working



- 10m **RED ZONE** applies in the possible direction of travel
- Working direction is forward and backward

* Stay out of 3m Exclusion Zone to the sides of plant unless authorised



Downer

10 CARDINAL RULES

WORKPLACE RULES THAT WILL SAVE YOUR LIFE. ALL WORKERS HAVE AN OBLIGATION TO STOP AND REPORT UNSAFE WORK.

Breaches of these rules will put your life in imminent danger, will be investigated and may result in disciplinary action or dismissal.



10 CARDINAL RULES

WORKPLACE RULES THAT WILL SAVE YOUR LIFE. ALL WORKERS HAVE AN OBLIGATION TO STOP AND REPORT UNSAFE WORK.

- 1**  **NEVER** WALK DIRECTLY BEHIND OR IN THE PATH OF A REVERSING VEHICLE
- 2**  **NEVER** WORK AT A HEIGHT WITHOUT FALL PROTECTION
- 3**  **NEVER** ENTER A DESIGNATED CONFINED SPACE WITHOUT TRAINING AND A PERMIT
- 4**  **NEVER** BE UNDER A SUSPENDED LOAD
- 5**  **NEVER** ENTER A DESIGNATED EXCLUSION ZONE WITHOUT AUTHORISATION
- 6**  **NEVER** WORK ON PLANT AND EQUIPMENT WITHOUT VERIFYING ISOLATION, TAGGING AND TESTING
- 7**  **NEVER** TAMPER WITH, REMOVE OR BYPASS ANY SAFETY DEVICE
- 8**  **NEVER** OPERATE PLANT OR MOBILE EQUIPMENT UNLESS LICENSED/COMPETENT OR UNDER SUPERVISED TRAINING
- 9**  **NEVER** OPERATE A VEHICLE WHILE USING A HANDHELD MOBILE PHONE OR WITHOUT WEARING A SEATBELT, WHERE FITTED
- 10**  **NEVER** CONSUME OR BE UNDER THE INFLUENCE OF ALCOHOL OR NON-APPROVED DRUGS IN THE WORKPLACE

BREACHES OF THESE RULES WILL PUT YOUR LIFE IN IMMINENT DANGER, WILL BE INVESTIGATED AND MAY RESULT IN DISCIPLINARY ACTION OR DISMISSAL.

Downer
Relationships creating success



Downer

[Back to contents](#)

10 Environmental Principles

Following these principles will enable us to protect the surrounding environment and maintain positive relationships with our community and customers, whilst fulfilling our obligations and commitments.



10 Environmental Principles

Following these principles will enable us to protect the surrounding environment and maintain positive relationships with our community and customers, whilst fulfilling our obligations and commitments.

	1	Check approvals and permits are in place before starting work.		6	Manage noise, vibration, dust, odour and fume to minimise impact on the community.
	2	Protect waterways and be prepared for spill events.		7	Protect flora and fauna and prevent the spread of weeds and pests.
	3	Use effective erosion and sediment controls.		8	Protect and report cultural, heritage and other finds.
	4	Store and secure chemical substances in a bunded area.		9	Report all environmental hazards and incidents.
	5	Reduce, reuse, recycle to minimise waste.		10	Keep every site secure, tidy and housekeeping maintained.

