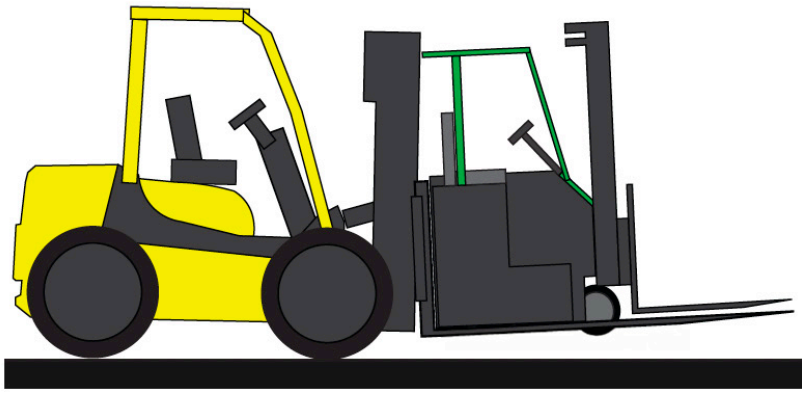
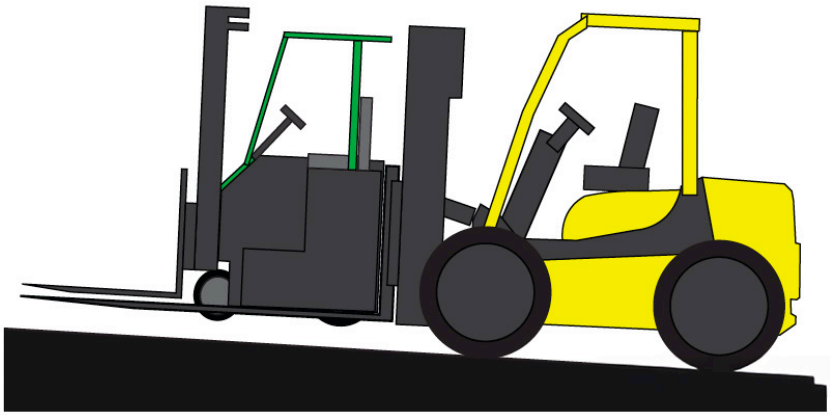
adaptalift GROUP

Appendix 2

Engineered Lifting Plans





This Engineered Lifting Plan Applies to:

- Electric Combilift Combi-CB Forklifts with a mass of up to 6,800kg.
- Electric Aisle Master Forklifts with a mass of up to 7,100kg.
- Electric Hyster J1.5-2.0XNT and J2.2-3.5XN Counterbalanced Lift Trucks with a mass of up to 5,400kg.
- Electric Hyster R1.4-2.0 Reach Trucks with a mass of up to 5,000kg.
- Electric Hyster P2.0UTE and P2.0U Walkie Pallet Jacks with a mass of up to 250kg.
- Electric Yale MSL15WUX Walkie Stacker with a mass of up to 1,350kg.

Key Elements

⚠ Lifting a forklift with another forklift is a high risk task and should only be performed when other methods of lifting/moving are not practicable (i.e. the forklift is disabled).

✓ The forklift used to perform the lifting task must be compliant with all Industrial Lift Truck Standards including AS2359.

✓ Forklift operators must follow the safe working procedures in place at the site in which the lifting tasks are being completed.

✓ Train forklift operators for this lifting task and evaluate for competence.

✓ Forklifts must be in good condition and up to date with scheduled maintenance and any required non-destructive testing (NDT).

✓ The forklift must be operatored in a manner which reduces the chance of load shift or instability. This means adhering to the following:

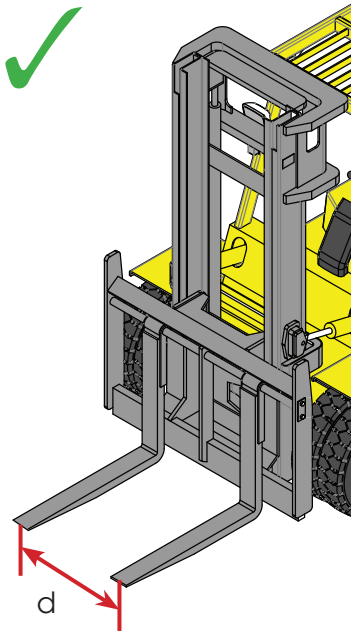
- Completing a pre-start checklist.
- Maintaining a low speed.
- Minimising acceleration and deacceleration.
- Avoiding short radius turns.

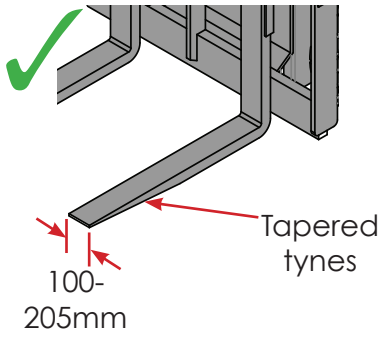
Lifting Forklift Tyne Requirements

- ✓ The tynes on the forklift used to perform the lifting task must be tapered and have a lifting capacity equal to or greater than to forklift capacity.
- ✓ Where available, and where clearance allows, Adaptalift encourages the use of rubber tine covers for all lifts.
- ✓ The forklift used to perform the lifting task must have a minimum lifting capacity as nominated below:

Plant	*Lifting Forklift Min. Capacity (kg)*
Combilift Combi-CB Forklifts up to 6,800kg	9,000
Aisle Master Forklifts up to 7,100kg	9,000
Hyster J1.5-2.0XNT Forklifts up to 5,400kg	9,000
Hyster R1.4-1.6 Reach Trucks up to 5,000kg	9,000
Hyster J1.5-2.0XNT Forklifts up to 3,300kg	5,000
Hyster R1.4-1.6 Forklifts up to 3,300kg	5,000
Hyster P2.0UTE and P2.0U Electric Pallet Jacks up to 250kg	2,000
Yale MSL15WUX Walkie Stackers up to 1,350kg	2,000

*Capacities assume a load centre of no less than 600mm and a lifting height of no less than 2,000mm.



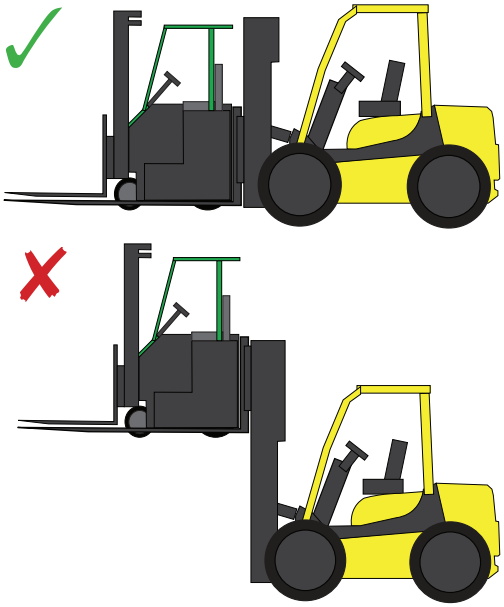


The tynes on the lifting forklift should be between 100 and 205mm in width

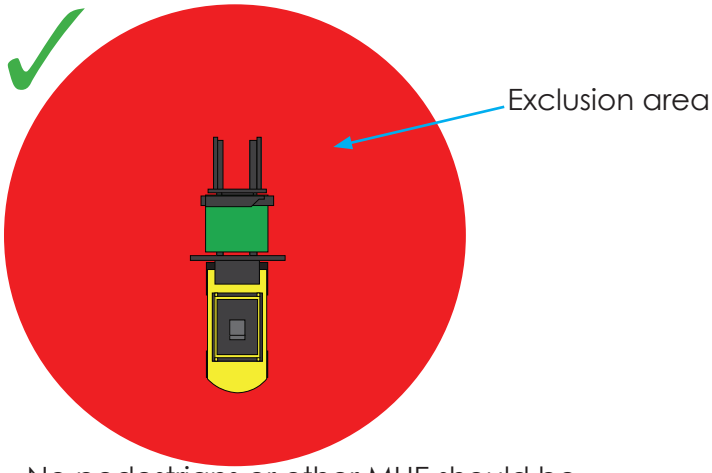
Required distance between the tynes, d:

- When lifting the Combi-CB, d = 1000mm approx
- When lifting the Aisle Master, d = 1800mm approx
- When lifting the Counter Balance Forklifts, d = 1000 to 1600mm approx
- When lifting the Reach Forklifts, d = 1100 to 1300mm approx
- When lifting the Electric Pallet Jacks, d = 1000mm approx
- When lifting the Walkie Stackers, d = 800mm approx

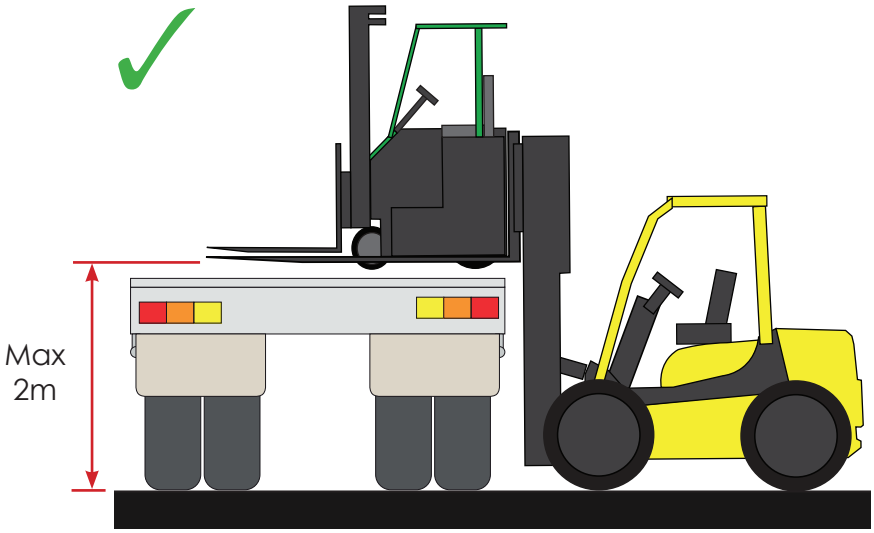
Key Elements (continued)



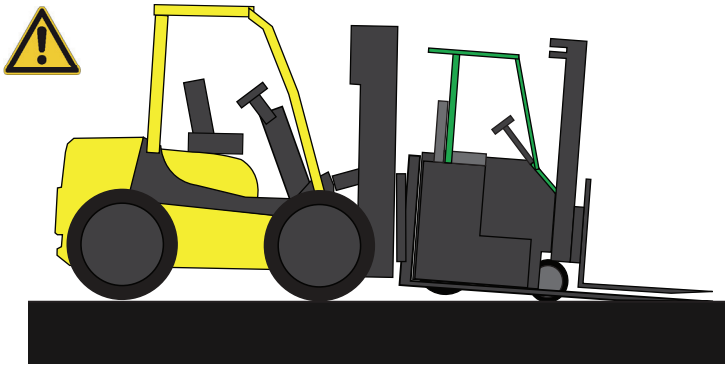
Keep the load as low as reasonably practicable during travel.



No pedestrians or other MHE should be within a radius of 5m of the load when the lifting task is taking place.

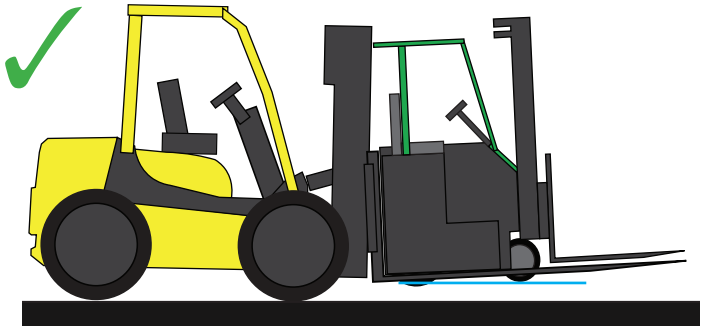


Only lift the load when required and limit the maximum lifting height to 2m.

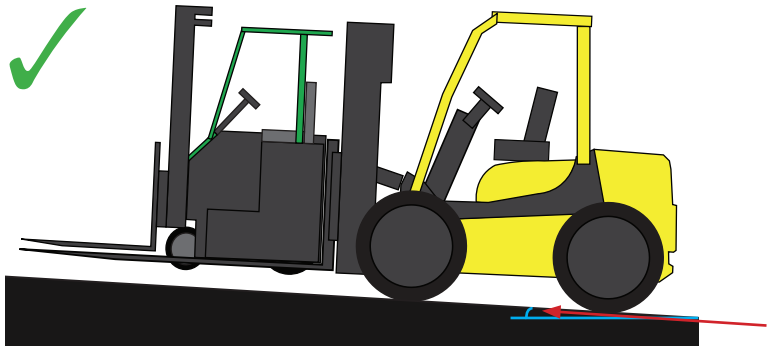


Only tilt the load forward when unloading **and** part of the load is in contact with the ground or loading surface (i.e. trailer deck). Do not tilt the load forward during travel.

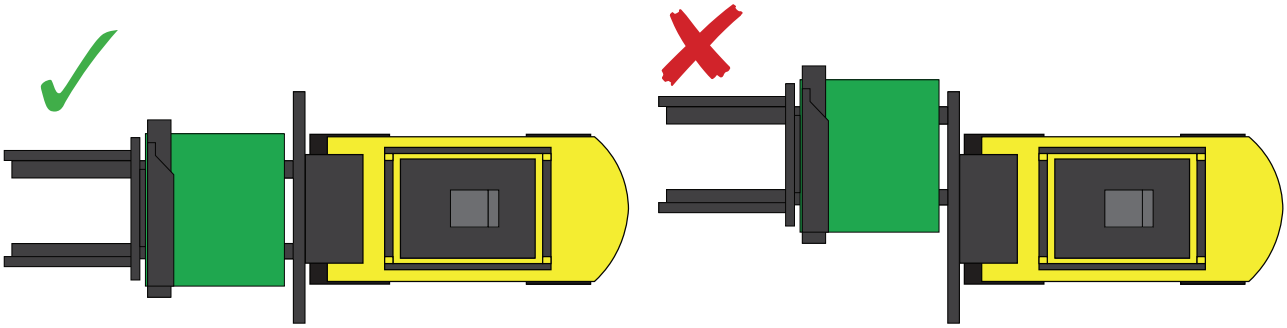
Key Elements (continued)



Tilt the load slightly rearwards during travel.



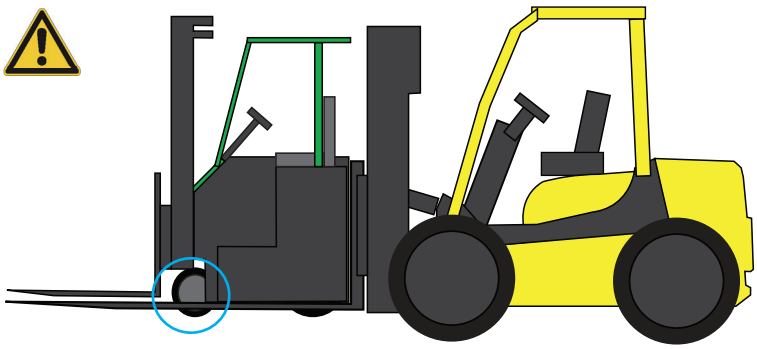
Ensure lifting tasks and all travel paths occur on sealed flat surfaces with suitable capacity to withstand the axle weights of the loaded forklift. Surface grade must not exceed 2°.



Ensure forklift tynes are opened evenly. No more than 50mm variance between the tynes when measured from the centre.

Lifting Procedure - Combilift Combi-CB

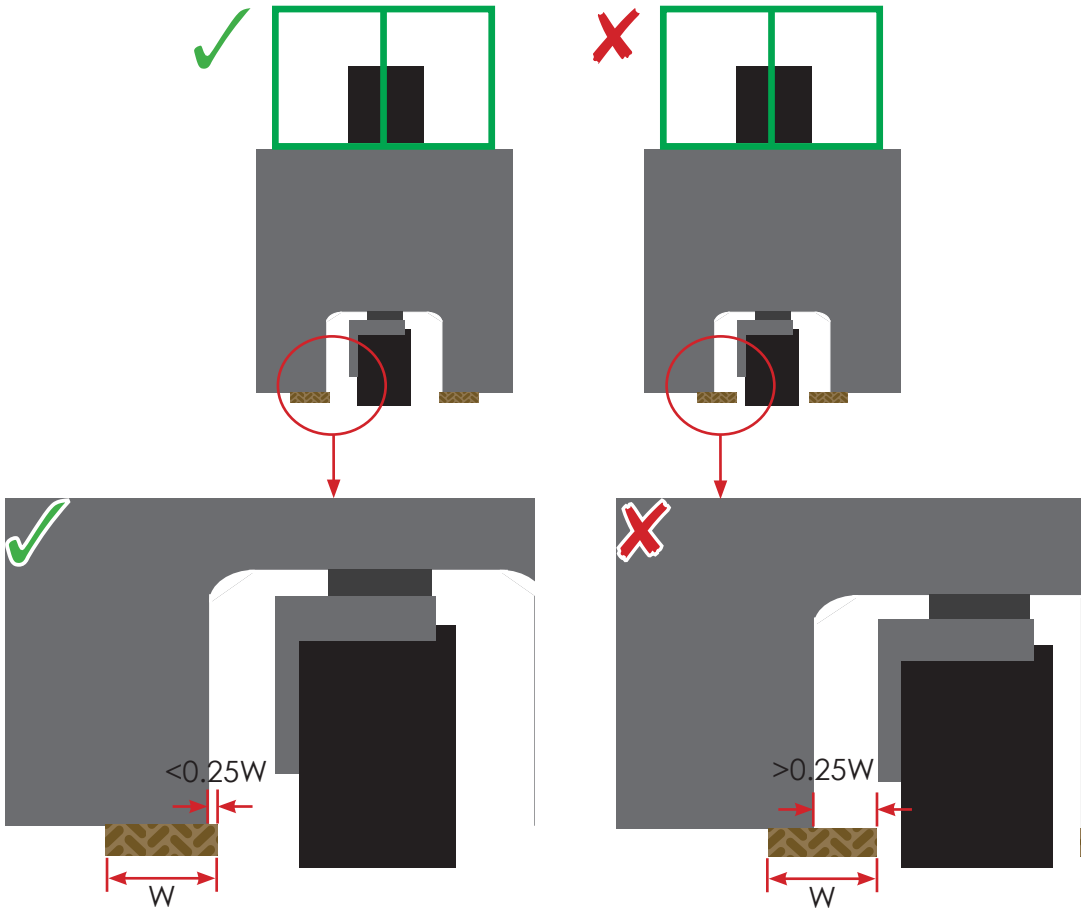
The following constraints must be met when lifting the Combi-CB forklift:



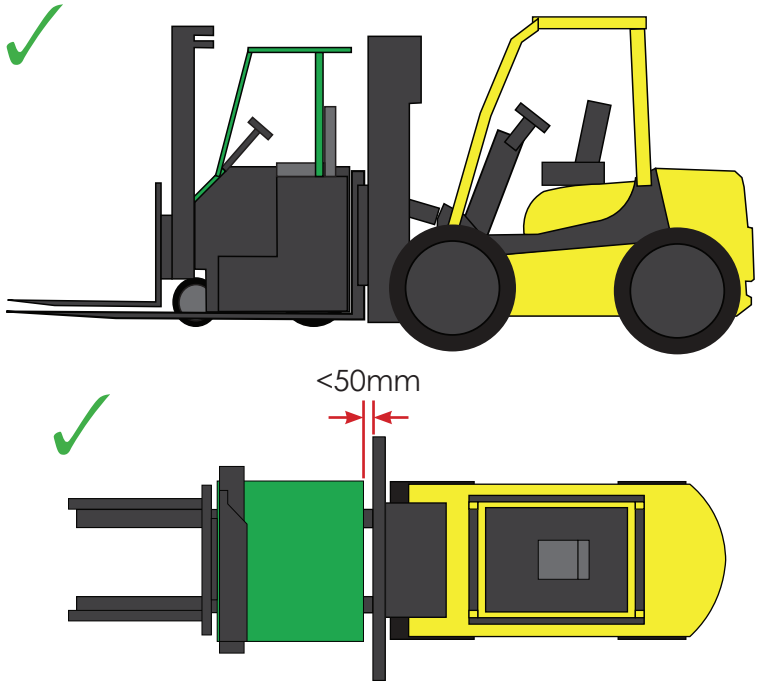
Ensure the forklift tynes of the lifting forklift clear the front wheels of the Combi-CB.

Lifting Procedure - Combilift Combi-CB (continued)

The following constraints must be met when lifting the Combi-CB forklift:



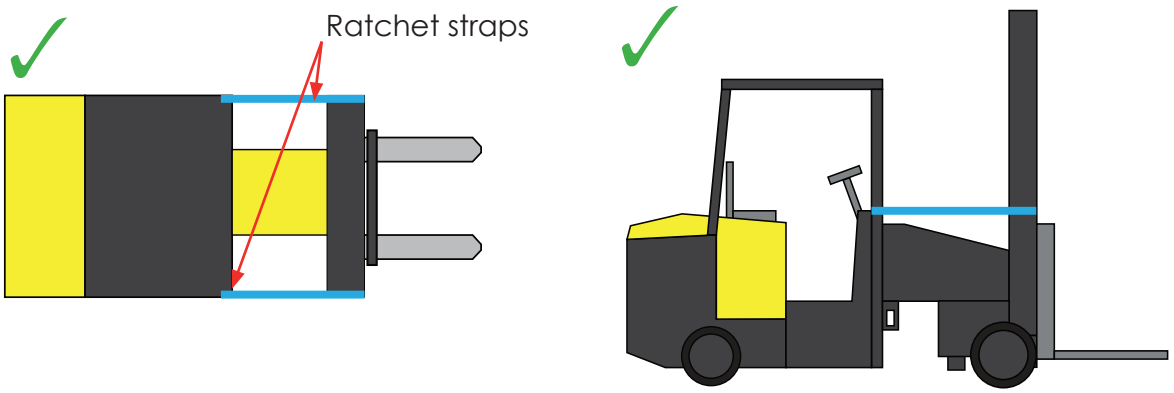
Ensure the forklift tynes of the lifting forklift do not have more than a quarter of their width extending into the wheel void of the Combi-CB.



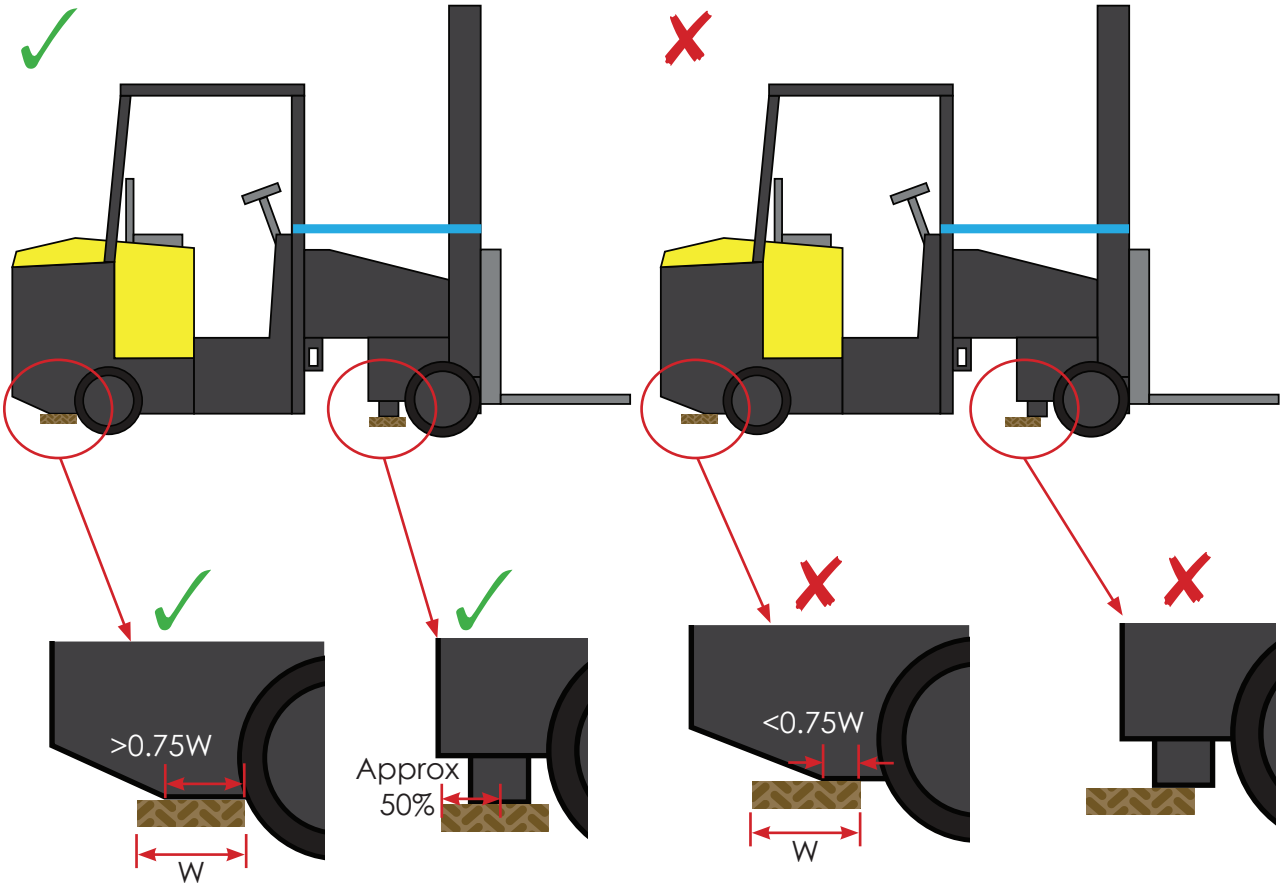
The load must be centralised and within 50mm of the lifting forklift's load backrest.

Lifting Procedure - Electric Aisle-Master

The following constraints must be met when lifting the Electric Aisle Master forklift:



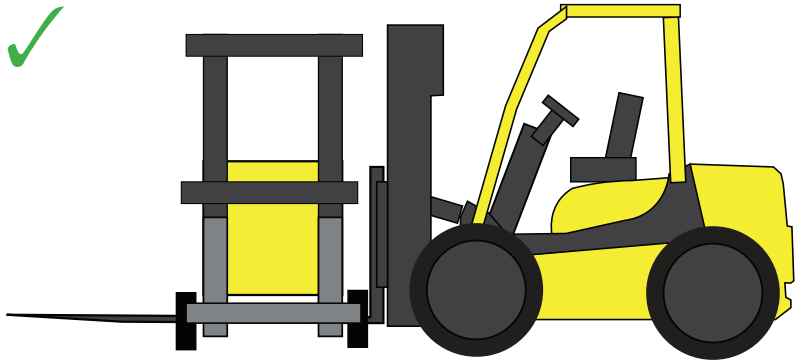
The mast of the aisle-master must be strapped to the overhead guard using 2,500kg lashing capacity 50mm ratchet straps prior to lifting to stop articulation.

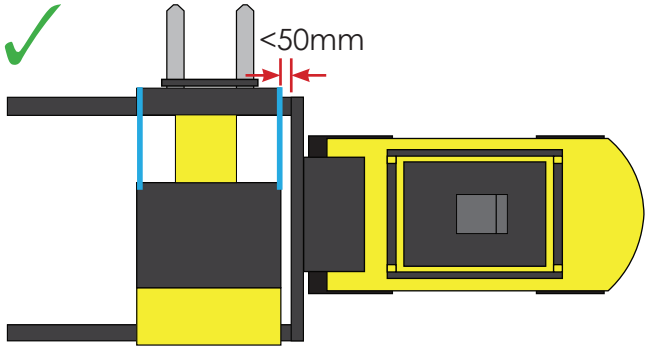


Ensure the Aisle Master is stable when being lifted.

Lifting Procedure - Electric Aisle Master (continued)

The following constraints must be met when lifting an Electric Aisle Master forklift:

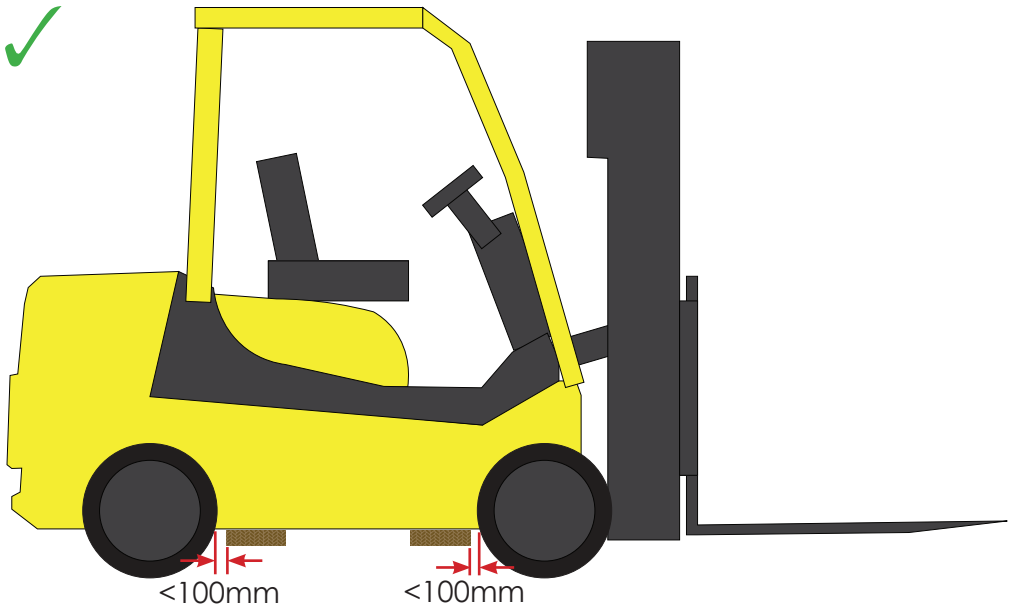




The load must be centralised and within 50mm of the lifting forklift's load backrest.

Lifting Procedure - Counterbalance Forklifts

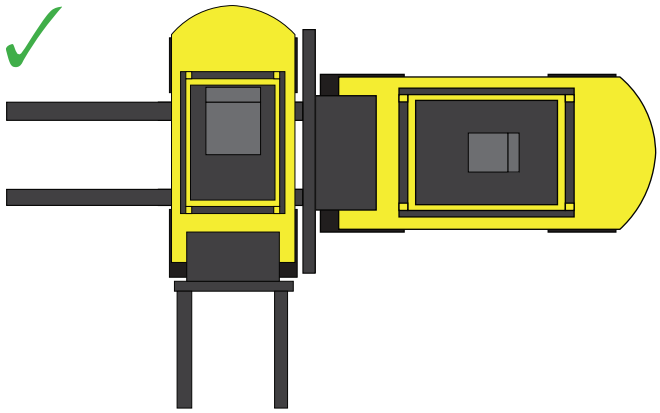
The following constraints must be met when lifting a Counterbalance Forklift:

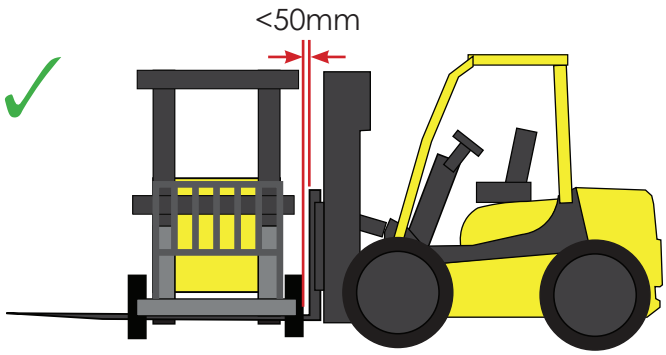


Ensure the forklift tynes of the lifting forklift are in contact with a flat stable area on the underbody, close to the wheel arches, of the forklift being lifted.

Lifting Procedure - Counterbalance Forklifts (continued)

The following constraints must be met when lifting a Counterbalance Forklift:

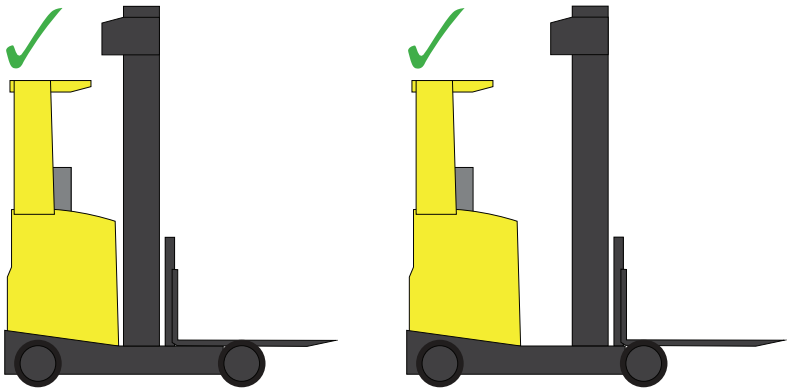




The load must be centralised and within 50mm of the lifting forklift's load backrest.

Lifting Procedure - Reach Trucks

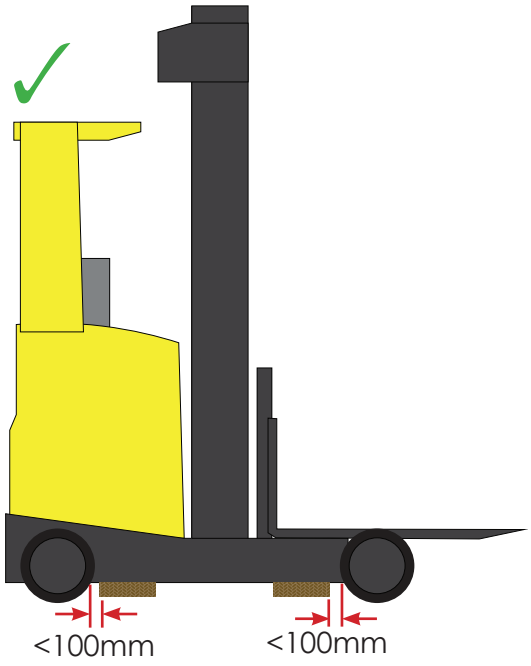
The following constraints must be met when lifting an Electric Reach Truck:



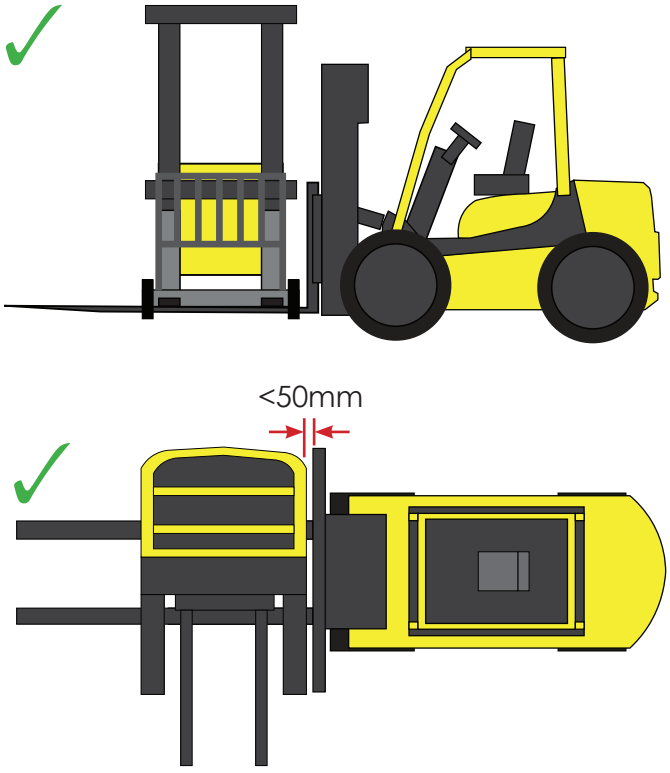
Reach forklifts can be lifted with the fork in either the advanced or retracted position.

Lifting Procedure - Reach Trucks (continued)

The following constraints must be met when lifting an Electric Reach Truck:



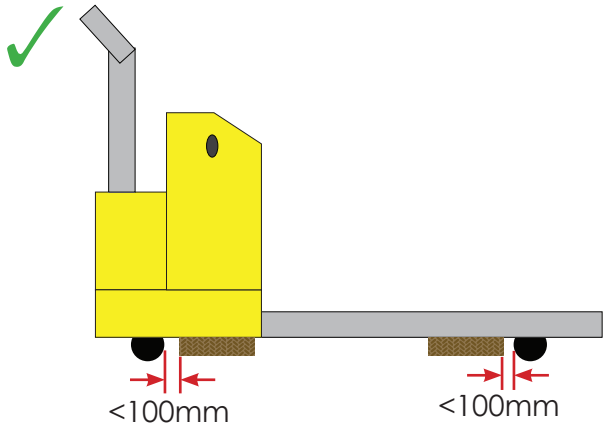
Ensure the forklift tynes of the lifting forklift are in contact with a flat stable area on the underbody, close to the wheel arches, of the reach truck being lifted.



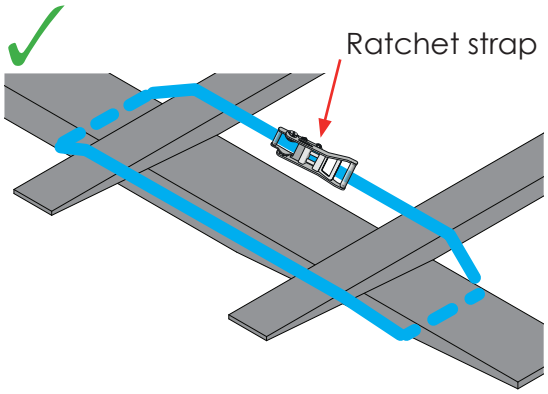
The load must be centralised and within 50mm of the lifting forklift's load backrest.

Lifting Procedure - Electric Pallet Jacks

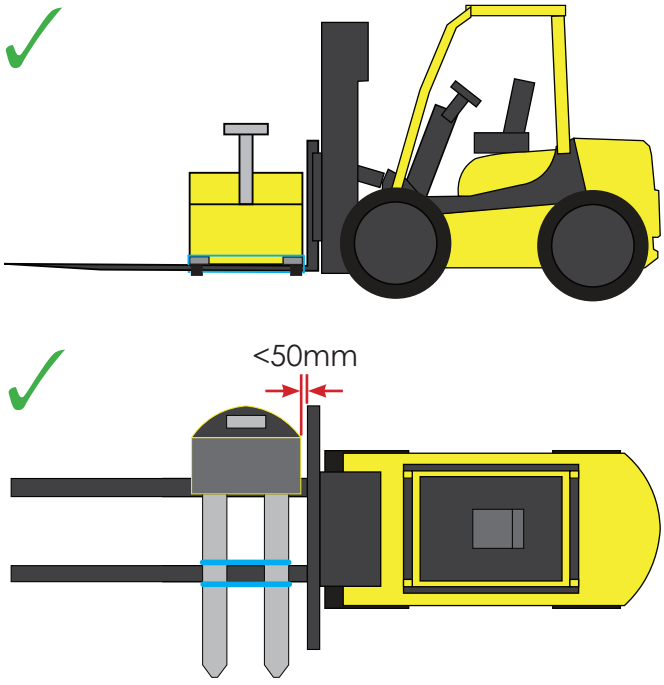
The following constraints must be met when lifting an Electric Pallet Jack:



Ensure the forklift tynes of the lifting forklift are in contact with a flat stable area on the underbody, close to the wheels, of the electric pallet jack.



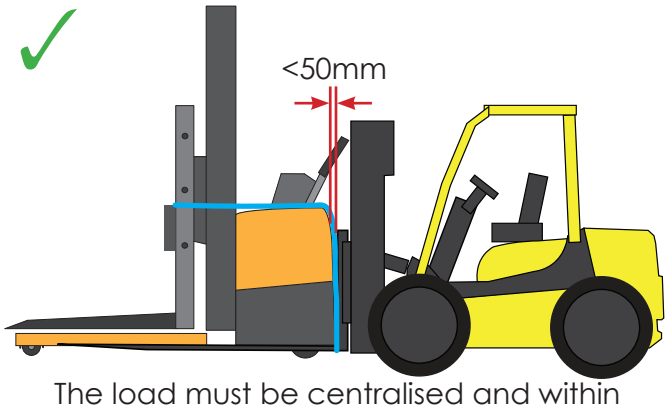
Use a ratchet strap to secure the tynes of the electric pallet jack to the tynes of the lifting forklift.



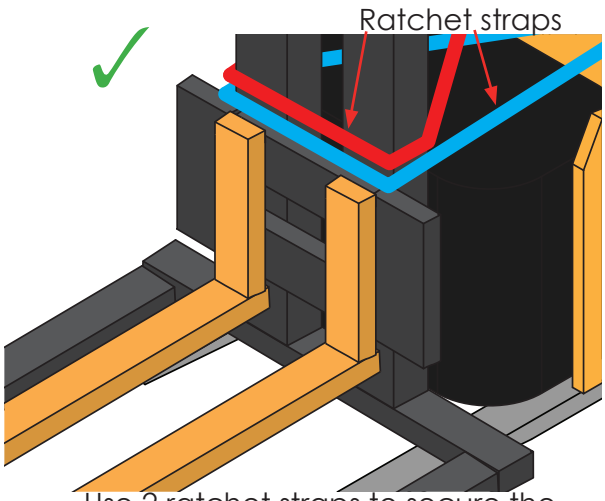
The load must be centralised and within 50mm of the lifting forklift's load backrest.

Lifting Procedure - Walkie Stackers

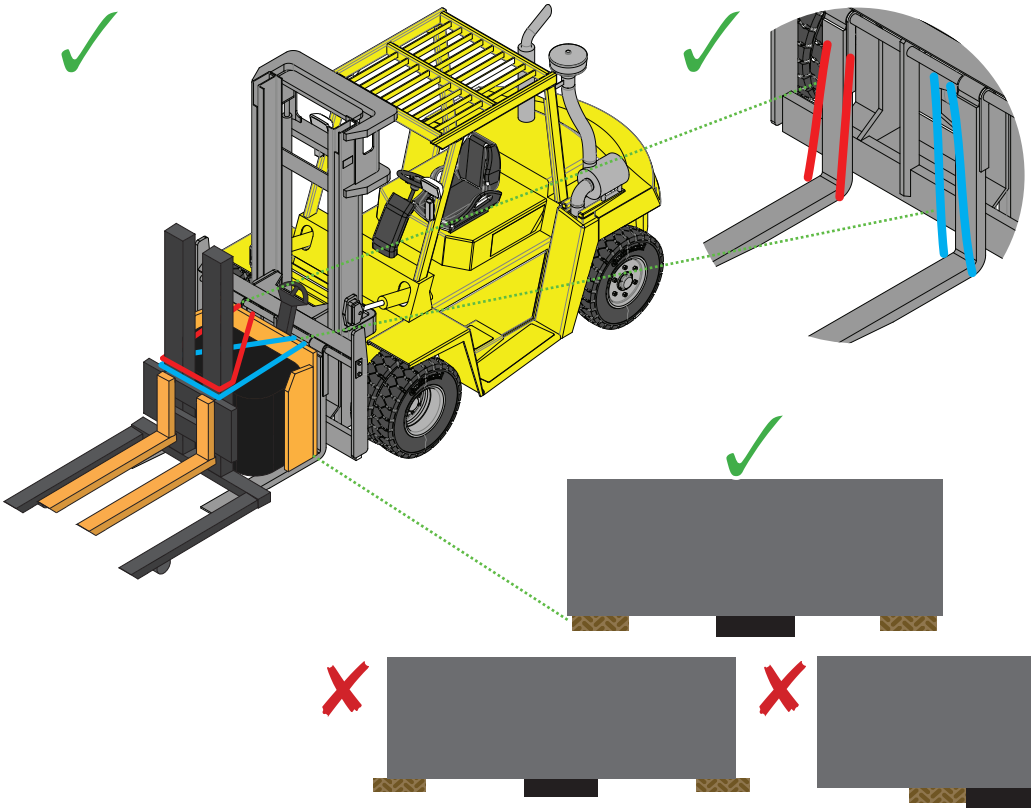
The following constraints must be met when lifting a Yale Electric Walkie Stacker:



The load must be centralised and within 50mm of the lifting forklift's load backrest.



Use 2 ratchet straps to secure the walkie stacker to the lifting forklifts tynes in a position that cannot slip.



Ensure the forklift tynes of the lifting forklift are spread as wide as possible and in contact with a flat stable area (away from the drive wheel) on the underbody of the walkie stacker.