

Aluminium Towers AGR - Advanced Guardrail 3T - Through The Trapdoor

**Instruction Manual** 

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### Introduction

Read this instruction manual carefully.

Note that diagrams are for illustrative purposes only.

# Instruction manuals are also available to download from our website at Youngmanaccess.com.

PAXTower mobile aluminium towers are light-weight scaffold towers used throughout the building and construction industry for both indoor and outdoor access solutions where a stable and secure platform is required. Ideal for maintenance and installation work or short-term access, the highly versatile towers provide a strong working platform for a variety of heights.

This instruction manual provides you with step by step instructions to ensure your system is erected easily and safely, using the AGR (Advanced Guardrail) or 3T (Through The Trapdoor) method. The law requires that personnel erecting, dismantling or altering towers must be competent. Any person erecting a mobile tower must have a copy of this instruction manual. For further information on the use of mobile access and working towers consult the PASMA operators code of practice.

If you need further information, design advice, additional instruction manuals or any other help with this product, please contact the manufacturer on +44 (0)1621 745900 or email uk.customercare@wernerco.com.

## Compliances

The PAXTower AGR / 3T aluminium towers have been tested and certified to EN 1004.



## Preparation and inspection

Inspect the equipment before use to ensure that it is not damaged and that it functions properly. Damaged or incorrect components should not be used.

#### Safe use

- Check that all components are onsite, undamaged and that they are functioning correctly - (refer to Quantity Schedules, page 13). Damaged or incorrect components should not be used.
- Check if the ground on which the mobile access tower is to be erected and moved is capable of supporting the tower.
- The safe working load is 208 kg for the one working platform level, uniformly distributed.
- Any platform used as a working platform must be fitted with toeboards.
- Towers must always be climbed from the inside during assembly and use.
- Adjustable legs should only be used for levelling.
- This tower may be assembled by a single person, but it is recommended that for 5.6 m PH a second person is used to pass up components.

## Lifting of equipment

- Tower components should be lifted using a reliable lifting material (e.g. strong rope) employing a reliable knot (e.g. clove hitch) to ensure safe fastening and always lift within the footprint of the tower.
- Assembled mobile towers should not be lifted with a crane or other lifting devices.

#### Stabilisers

 Stabilisers or outriggers should always be fitted when specified. The Quantity Schedules show the recommended stabilisation. In circumstances where there is restricted ground clearance for stabilisers, contact the manufacturer.

#### Movement

The tower should only be moved by manual effort, and only from the base.

- Beware of live electrical apparatus when moving the tower (particularly overhead), plus wires or moving parts of machinery.
- No person or materials should be on the tower during movement.
- Caution should be exercised when wheeling a tower over rough, uneven or sloping ground, taking care to unlock and lock castors. If stabilisers are fitted, they should only be lifted a maximum of 25 mm above the ground to clear ground obstructions.
- Before use, check that the tower is still correct and complete.
- After every movement of the tower, use a spirit level to check that it is vertical and level and set the adjustable legs as required.

#### During use

- Effect of wind conditions on site must be considered before assembly and during use.
- This structure has been assessed for windloads equating to 27 mph (43 kph,12 m/s).
- If greater windspeeds are forecast the tower must be dismantled while still safe to do so.

Wind description	Beaufort scale	Beaufort No.	Speed in mph	Speed in m/sec
Medium Breeze	Raises dust and loose paper, twigs snap off	4	8-12	4-6
Strong Breeze	Large branches in motion, telegraph wires whistle	6	25-31	11-14
Gale Force	Walking is difficult	8	39-46	17-21

• Beware of open ended buildings, which can cause a funnelling effect.

- Do not abuse equipment. Damaged or incorrect components should not be used.
- Raising and lowering components, tools, and/or materials by rope should be conducted within the lower base. Ensure that the safe working load of the supporting decks and the tower structure is not exceeded.
- The assembled tower is a working platform and should not be used as a means of access or egress to other structures.
- Beware of horizontal forces (e.g. power tools) which could generate instability. Maximum horizontal force: 30 kg.
- Do not use boxes or stepladders or other objects on the platform to gain extra height.
- After assembly the tower should be regularly inspected by a competent person to ensure that no environmental changes have occurred that may affect safe use.

#### Maintenance - storage - transport

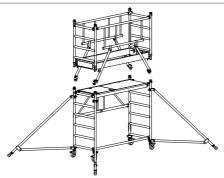
- All components and their parts should be regularly inspected to identify damage; particularly to joints. Lost or broken parts should be replaced, and any tubing with indentation greater than 5 mm should not be used and put to one side for manufacture repair. Adjustable leg threads should be cleaned and lightly lubricated to keep them free running.
- Brace claws, frame interlock clips, trapdoor latches and platform windlocks should be regularly checked to ensure they lock correctly.
- Components should be stored with due care to prevent damage.
- Ensure components are not damaged by excessive strapping forces when transported.
- Danger of falling due to slippery tread surfaces! Lubricating oil on tread surfaces causes falls and injuries. Remove superfluous oil.

# Assembly overview PAXTower AGR / 3T

#### PAXTower Base Unit , 0.6 m PH



#### PAXTower AGR, 1.6 m PH



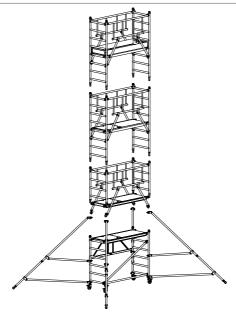
#### PAXTower AGR, 3.6 m PH



PAXTower AGR / 3T Instruction Manual

# Assembly overview PAXTower AGR / 3T

#### PAXTower AGR, 5.6 m PH



#### PAXTower 3T, 1.6 m PH

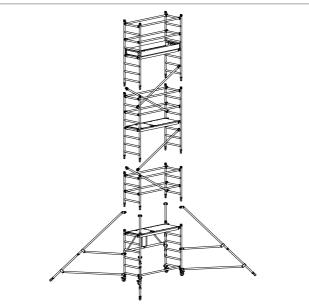


# Assembly overview PAXTower AGR / 3T

# PAXTower 3T, 3.6 m PH



#### PAXTower 3T, 5.6 m PH



# Technical Data PAXTower AGR / 3T

#### PAXTower Base Unit, 0.6 m PH

Weight	28.31 kg
Working height	2.6 m
Scaffold height	1.6 m
Platform height	0.6 m

### PAXTower EN1004 Base Tower, 0.6 m PH

Weight	58.07 kg
Working height	2.6 m
Scaffold height	1.6 m
Platform height	0.6 m

#### PAXTower AGR, 1.6 m PH

Weight	76.15 kg	
Working height	3.6 m	
Scaffold height	2.6 m	
Platform height	1.6 m	

## PAXTower AGR, 3.6 m PH

Weight	112.77 kg	
Working height	5.6 m	
Scaffold height	4.6 m	
Platform height	3.6 m	

# PAXTower AGR, 5.6 m PH

Weight	159.15 kg
Working height	7.6 m
Scaffold height	6.6 m
Platform height	5.6 m

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# Technical Data PAXTower AGR / 3T

### PAXTower 3T, 1.6 m PH

Weight	70.4 kg
Working height	3.6 m
Scaffold height	2.6 m
Platform height	1.6 m

### PAXTower 3T, 3.6 m PH

Weight	104.24 kg	
Working height	5.6 m	
Scaffold height	4.6 m	
Platform height	3.6 m	

# PAXTower 3T, 5.6 m PH

Weight	115.92 kg
Working height	7.6 m
Scaffold height	6.6 m
Platform height	5.6 m

# Quantity Schedule PAXTower AGR / 3T

### **PAXTower AGR**

## List of scaffold units with packages

		38020600	38031600	38033600	38035600
Product code	Product description	0.6 m PH	1.6 m PH	3.6 m PH	5.6 m PH
		2.6 m WH	3.6 m WH	5.6 m WH	7.6 m WH
37042000	Base Pack	1	1	1	1
37042100	EN1004 Pack	1	1	1	1
37042500	1m Extension Pack AGR	-	1	1	1
37042600	2m Extension Pack 1 AGR	-	-	1	1
37042700	2m Extension Pack 2 AGR	-	-	-	1
37042800	Adjustable Leg Pack *	1	1	1	1

\* Adjustable legs only required if ground is uneven or sloping

# List of packages with individual parts

Product Code	Product Description	Base Pack 37042000	EN1004 Pack 37042100	1m Extension Pack AGR 37042500	2m Extension Pack 1 AGR 37042600	2m Extension Pack 2 AGR 37042700	Adjustable Leg Pack 37042800
42780	Folding Frame	1	-	-	-	-	-
42784	Platform	1	-	-	1	1	-
42781	4 Rung Frame	-	-	2	-	-	-
42782	8 Rung Frame	-	-	-	2	2	-
42788	Horizontal Brace	-	2	-	-	-	-
42787	Diagonal brace	-	-	-	1	-	-
42783	AGR	-	-	2	2	2	-
42789	Base stabiliser	-	4	-	-	-	-
42793	Stabiliser Extensions	-	-	-	-	4	-
42795	End Toeboard	-	2	-	-	-	-
42786	Side Toeboard	-	2	-	-	-	-
42794	Adjustable Leg	-	-	-	-	-	4

# Quantity Schedule PAXTower AGR / 3T

#### PAXTower 3T

#### List of scaffold units with packages

		38020600	38021600	38023600	38025600
Product code	Product description	0.6 m PH	1.6 m PH	3.6 m PH	5.6 m PH
		2.6 m WH	3.6 m WH	5.6 m WH	7.6 m WH
37042000	Base Pack	1	1	1	1
37042100	EN1004 Pack	1	1	1	1
37042200	1m Extension Pack 3T	-	1	1	1
37042300	2m Extension Pack 3T	-	-	1	2
37042400	Stabiliser Extension Pack 3T	-	-	-	1
37042800	Adjustable Leg Pack *	1	1	1	1

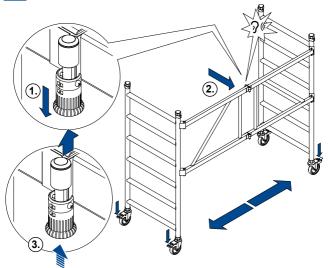
\* Adjustable legs only required if ground is uneven or sloping

#### List of packages with individual parts

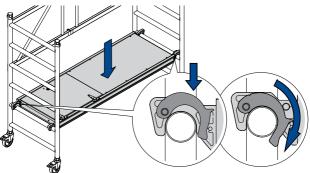
Product Code	Product Description	Base Pack 37042000	EN1004 Pack 37042100	1m Extension Pack 3T 37042200	2m Extension Pack 3T 37042300	Stabiliser Extension Pack 3T 37042400	Adjustable Leg Pack 37042800
42780	Folding Frame	1	-	-	-	-	-
42784	Platform	1	-	-	1	-	-
42781	4 Rung Frame	-	-	2	-	-	-
42782	8 Rung Frame	-	-	-	2	-	-
42788	Horizontal Brace	-	2	3	4	-	-
42787	Diagonal brace	-	-	-	2	-	-
42789	Base stabiliser	-	4	-	-	-	-
42793	Stabiliser Extensions	-	-	-	-	4	-
42795	End Toeboard	-	2	-	-	-	-
42786	Side Toeboard	-	2	-	-	-	-
42794	Adjustable Leg	-	-	-	-	-	4

#### Assembling the base unit, 0.6 m PH

Move the base unit into the required position.



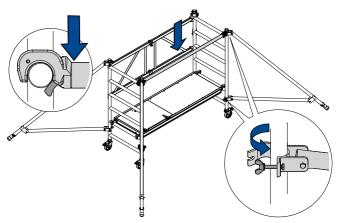
- 2 Push out the central folding frames until the locking hinge snaps into position and the lock is engaged.
- 3 Apply the brakes on all castors. Ensure the castors are facing outwards from the base unit and apply the brakes on all castors.



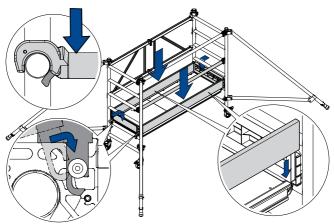
4 Place the platform on the 2<sup>nd</sup> rung and engage the wind locks at both ends, as shown.

Check that the ground is flat, and all four castors are touching the ground. Use a spirit level to check the base is level within 6°.

If the tower is not level within  $6^{\circ}$ , adjustable legs must be used (see page 27).



- 5 Insert one horizontal brace on to the top rung of the base unit.
- 6 Fit stabilisers to all four corners. For the position of the stabilisers, see page 29.



Fit both end toeboards so that the guide pins of the platform engage in the grooves of the end toeboards.
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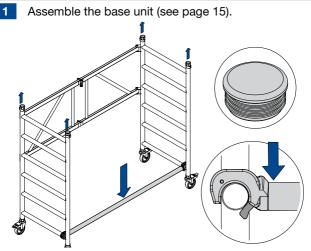
Fit one side toeboard on the folding frame side.

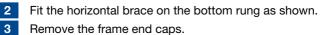
From a seated position fit one horizontal brace on the lower guardrail.

Fit the remaining side toeboard.

The tower is now complete at 0.6 m platform height.

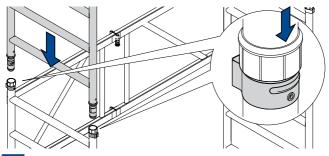
# Assembling the AGR mobile towers 1.6 m, 3.6 m, and 5.6 m PH





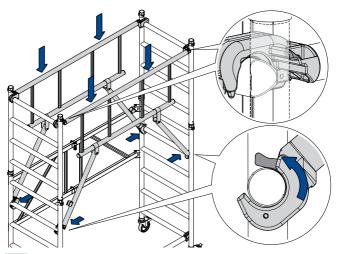
Check that the ground is flat, and all four castors are touching the ground. Use a spirit level to check the base unit is level within 6°.

If the tower is not level within  $6^{\circ}$ , adjustable legs must be used (see page 29).

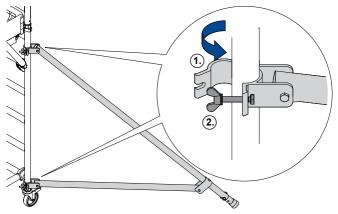


Fit a 4 rung frame on each side of the base unit. Ensure the interlock clips are engaged.

4



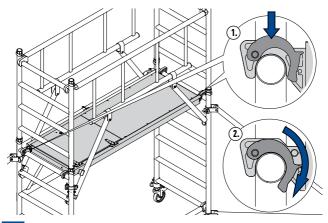
- 5 Fit an advanced guardrail at the top rung of the 4 rung frame on the folding frame side and lock in position.
- 6 Fit an advanced guardrail at the top rung, on the opposite side of the folding frame and lock in position. For further guidance on fitting AGR, see Youngmanaccess.com.



Attach one stabiliser to each corner of the tower ensuring all four stabilisers touch the ground. For the position of the stabilisers, see page 29.

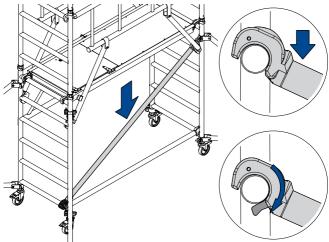
If building to 5.6 m PH the stabiliser extensions must be used. For guidance on how to fit, see page 28.

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8 Fit the platform on the 6<sup>th</sup> rung and ensure the windlocks are engaged at both ends.

The tower now has a platform height of 1.6 m. If finishing at this height, move on to step 14. If a greater platform height is required, continue with the next steps.





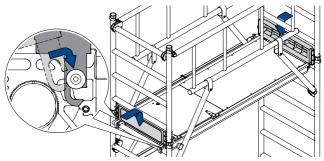
Fit a diagonal brace on the bottom rung.

Fit an 8 rung frame on each side of the tower unit. Ensure the interlock clips are engaged.

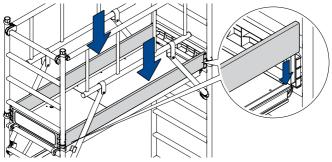
- **11** Fit an advanced guardrail at the top rung of the 8 rung frame, on the folding frame side and lock in position. For further guidance on fitting AGR, see youngmanaccess.com.
- 12 Fit an advanced guardrail at the top rung of the 8 rung frame, on the opposite side of the folding frame and lock in position.
- 13 Fit a platform on the 14<sup>th</sup> rung. Ensure the windlocks are engaged at both ends.

The tower now has a platform height of 3.6 m. If finishing at this height, continue with the following step 14.

If a greater platform height of 5.6 m is required, repeat steps 10 to 13, using the  $22^{nd}$  rung to fit the platform.

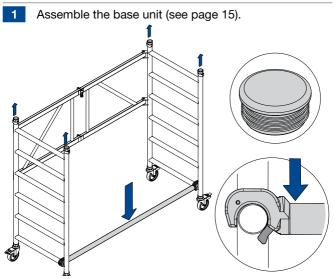


14 Insert both end toeboards so that the guide pins of the platform engage in the grooves of the end toeboards.



15 Slide the side toeboards in on both sides. The tower is now complete.

Assembling the 3T mobile towers 1.6 m, 3.6 m and 5.6 m PH

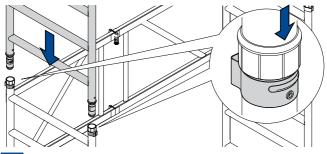


2 3 Fit the horizontal brace on the bottom rung as shown.

Remove the frame end caps.

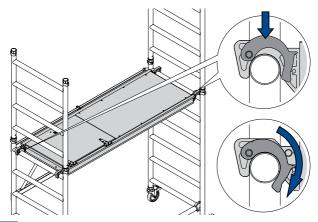
Check that the ground is flat, and all four castors are touching the ground. Use a spirit level to check the base unit is level within 6°.

If the tower is not level within  $6^{\circ}$ , adjustable legs must be used (see page 30).

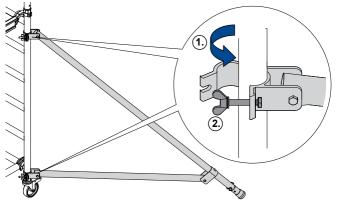


Fit a 4 rung end frame on each side of the base unit. Ensure the interlock clips are engaged.

Δ



5 Fit the platform on to the 6<sup>th</sup> rung of the base unit. Ensure the windlocks are engaged.



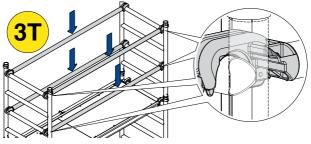
6 Attach one stabiliser to each corner of the tower ensuring all four stabilisers touch the ground. For the position of the stabilisers, see page 29.

If building to 5.6 m PH the stabiliser extensions must be used. For guidance on how to fit, see page 28.



The following procedure must be followed when fitting a guardrail ("Through the Trapdoor"):

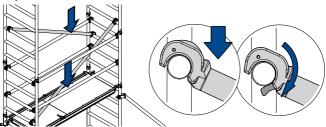
- 1. Sit on the platform and insert the railing braces.
- 2. Place your feet on the platform and stand up.

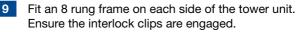


- 7 Fit two lower level guardrails on to 8<sup>th</sup> rungs using the 3T method.
- 8 Fit two top level guardrails as shown using the 3T method.

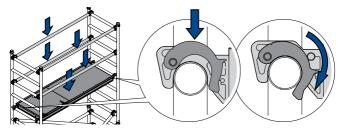
The tower now has a platform height of 1.6 m. If finishing at this height move on to step 14.

If a greater platform height is required, continue with the next steps.





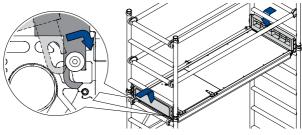
10 Fit two diagonal braces as shown. One from the 7<sup>th</sup> rung and one from the 9<sup>th</sup> rung on the opposite side.



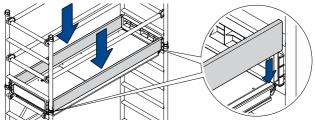
- 11 Fit the platform to 14<sup>th</sup> rung, ensure the windlocks are engaged.
- 12 Fit two lower level guardrails as shown using the 3T method.
- **13** Fit two top level guardrails as shown using the using the 3T method.

The tower now has a platform height of 3.6 m. If finishing at this height move on to step 14.

If a greater platform height of 5.6 m is required, repeat steps 10 to 13, using the 15<sup>th</sup> and 19<sup>th</sup> rungs for diagonals and fitting the platform on the 22<sup>nd</sup> rung.



14 Insert both end toeboards so that the guide pins of the platform engage in the grooves of the end toeboards.



**15** Slide the side toeboards in on both sides. The tower is now complete.

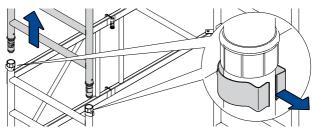
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# Notes on dismantling PAXTower AGR / 3T

#### General notes

To dismantle the assembled tower unit, follow the steps for assembly in reverse order.

No part of the tower unit (braces, platforms etc.) may be removed before the levels above it have been completely dismantled.





Release the spring clips of the push-on end frames.

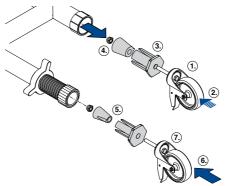
Pull the push-on end frames out in upward direction.

# Additional fitting PAXTower AGR / 3T

## Fitting adjustable legs to swivel castors

On uneven surfaces, the base unit must be equipped with adjustable legs to ensure the stability of the tower unit.

Only use the adjustable legs to level out uneven surfaces.

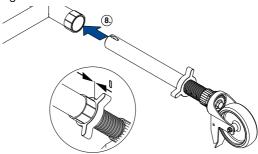


1 2 3

Release the screw of the swivel castor.

Pull the swivel castor out of the tubing.

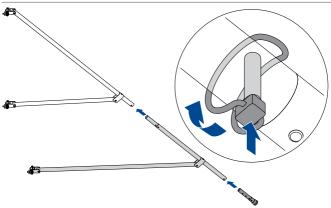
- Release the nut and remove the two-part plastic spacer.
- 4 Fit the smaller plastic spacer for the castor adapter and screw the nut on loosely.
- 5 Insert the swivel castor into the adjustable leg as far as the stop.
  - 6 Tighten the screw.



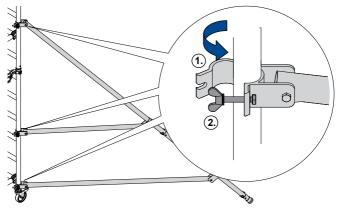
7 Push the adjustable leg with swivel castors into the tube of the base unit as far as the stop.

# Additional fitting PAXTower AGR / 3T

## Fitting stabiliser extensions



- 1 Remove the end tube from the base stabiliser.
- 2 Insert the stabiliser extension into the base stabiliser and lock.
- 3 Insert the end tube into the stabiliser extension and lock.

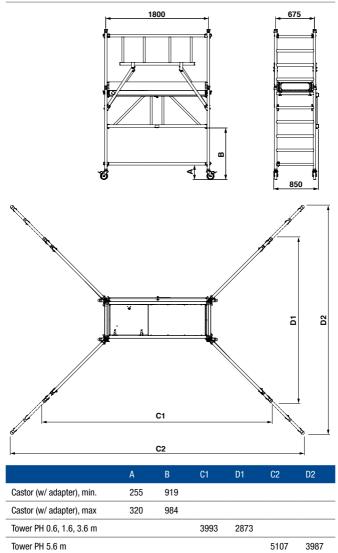


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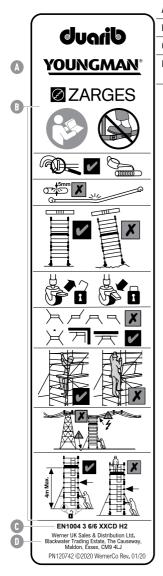
Attach one stabiliser to each corner of the tower ensuring all four stabilisers touch the ground. For the position of the stabilisers, see page 29.

# Dimensions

# Dimensions PAXTower AGR / 3T



# Identification PAXTower AGR / 3T



A	Brand
В	Safety pictograms
С	Tower designation
D	Manufacturer and manufacturer's address

PAXTower AGR / 3T Instruction Manual

# Structural safety PAXTower AGR / 3T

### Cleaning

The tower unit can be cleaned using water with a little household cleaning agent added. Paint spots can be removed using turpentine.

# Cleaning agents must not be allowed to seep into the soil.

• Dispose of used cleaning fluids in accordance with the applicable environmental regulations.

#### Inspecting the tower unit components

# If defects are ascertained, the affected components must not be used again.

#### Push-on end frame

- Check for warping, crushing and cracks.
- Check the presence of interlock clips.

#### Braces (diagonal / guardrails)

• Check for warping, crushing, cracks and correct functioning of the fastening elements.

#### Platform

- Check for warping, crushing, cracks and correct functioning of the fastening elements.
- Check the condition of the wood.
- Check the trapdoors for correct functioning.

#### Toeboards

- Check the condition of the wood and plastic.
- Check the toeboards for cracking.

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#### Swivel castors

- Check the castor for smooth running and check that the brake stops the castor rolling or twisting.
- In the case of swivel castors with adjustable legs, also check that the adjustable legs move easily.
- Check the drop-out protection (wing bolt, securing plug) on the chassis beams and base frame.

### Interlock clips

• Check for warping, crushing, cracks and correct seating.

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For further information about this product or any other products and services, please contact:

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