SAFETY FIRST

This document is to be used in conjunction with the full user guide available from the manufacturer or to download at bosscranes.com/ manuals.

Safe use
Please read this guide carefully. Please note that diagrams are for illustrative purposes only.

- Check that all components are correct, undamaged and that they are functioning correctly (e.g. by checking and quantifying Scheduled in the user guide). Damaged or incorrect components should not be used.
- Check ground on which tower is to be erected and moved is capable of supporting the tower.
- The safe working load is a 325kg (700lbs), per platform level, uniformly distributed up to a maximum of 720kg (1600lbs), per tower (including self-weight).
- Ensure all horizontal braces (e.g. power rods) which could generate instability are fit and correct.
- Maximum base span equals 2.5m.
- Towers must only ever be climbed from the inside and using the rungs directly below the feet of the climber.
- It is recommended that towers should be tied to a solid structure if left unattended.
- Only use the adjustable legs to level the tower and not to gain extra height.
- Adjustable legs only ever be extended to minimum amount required to level the tower.

Lifting of equipment
Towers should only be lifted using a mobile lifting material (e.g. strong rope), employing a reliable knot (e.g. clove hitch), to ensure safe lifting and always lift within the footprint of the tower.
- Assembled mobile towers should not be lifted with a crane or other lifting device.
- Ensure the safe working load of the supporting deck and the tower structure is not exceeded.

Movement
- The tower should only be moved by manual effort, and only from the base.
- No person or materials should be on the tower during movement.
- Caution should be exercised when reallocating a tower over rough, uneven or slidding ground, taking care to unlock and lock castors. If stabilisers are fitted, they should only be lifted if a minimum of 25mm allows the ground to clear ground obstructions.
- The overall height of the tower when being moved, should not exceed 2.5 times the minimum base dimension, or 4 metres overall height with stabilizers fitted in the correct position (whichever is the smaller). If stabilizers are not fitted in the standard position, the overall height of the tower should not exceed 3m.
- Before use, check the tower is still correct and complete.
- After every movement of the tower see a spirit level to check that it is vertical and level within 10mm or set the adjustable legs as required.
- Do not move the tower in wind speeds over 7.7m per second (17 mph)
- Mobile access towers are not designed to be filled or suspended.

TIPS
- For further information on using a tower please contact your supplier or the manufacturer.

Maintenance - storage - transport
- All components and their parts should be regularly inspected to identify damage, particularly on joints. Lost or broken parts should be replaced, and any tubing with indentation greater than 5mm must not be used.

PRE-USE SAFETY CHECKLIST

Ensure horizontal braces and guardrails are fixed correctly.
Check environmental changes have not affected the tower, and the effective support of the stabilisers. Always fit as shown. Refer to this checklist before using each time.

Ensure interlock clips on frame members are in the locked position.
Ensure vee-locks are engaged before moving onto the deck levels.

ZONE:1
Mobile Fibreglass Tower 850/1450 Ladderspan

3T • Through The Trapdoor Method

QUANTITY SCHEDULE 850 WIDTH TOWERS

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QUANTITY SCHEDULE 1450 WIDTH TOWERS

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<td>4.0m</td>
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COMPONENTS

End Toe Board
Horizontal Brace
4 Rung Ladder Frame
4 Rung Spun Frame
Platform (Fixed and Trapdoor Decks)
Diagonal Brace
**ASSEMBLY PROCEDURE**

**Assembly for 850 towers**

1. Insert adjustable leg/tower assemblies into end frames and lock the castors (see step 1 of the H40 assembly). Base plates can be fitted to the adjustable legs if it is not necessary to move the tower. Fix two horizontal braces (red) to the 850 end frames as shown in Steps 2 and 3 for the 1450 tower procedure.

2. Fit a trapdoor deck on the 2nd rung. Fix the horizontal braces (red) as guardrails on the 3rd and 4th rungs (2 and 4 rungs above the platform) on both sides of the tower.

3. Fit two diagonal braces (blue) in opposing directions between the 1st and 2nd rungs. Ensure that the frames are vertical and level by checking with a spirit level and setting the adjustable legs as necessary. Fit stabilisers. Fit the next pair of end frames and check the frame interlock clips are engaged. IMPORTANT: Only use the adjustment on the legs to level the tower and not to gain extra height.

4. Fit a single diagonal at the top of the tower as shown. Fix the toe boards - see the component section for guidance on how to fit. The tower is now complete.

**ASSEMBLY PROCEDURE**

**Assembly for 1450 towers**

1. Push castors into adjustable legs. Push castors/adjustable leg assemblies into 2 rung open frame. Lock castors. Repeat procedure with 2 rung ladder frame. Note: Base plates can be fitted to adjustable leg in lieu of castors if it is not necessary to move the tower.

2. Fit two diagonal braces (blue) into the vertical of a span and, from the protected trapdoor position, fit guardrails on the 5th and 7th rungs. Locate a trapdoor deck on the 6th rung, with the trapdoor next to the ladder.

3. Position the ladder frame as shown and fit the other end of the horizontal brace on to the vertical. Fit a second horizontal brace on to the other side of the frame to square the tower.

4. Fit two additional end frames, ensuring the frame interlock clips are engaged. Fit two diagonal braces (blue) in opposing directions, between the 1st and 3rd rungs. Ensure the frames are vertical and level by checking with a spirit level and setting the adjustable legs as required.

5. Fix a temporary deck on the lowest rungs. Fit stabilisers. IMPORTANT: Only use the adjustable legs to level the tower and not to gain extra height.

**ASSEMBLY PROCEDURE**

**When building beyond a 4.2m platform height**

1. Continue to add pairs of end frames, diagonal braces and a trapdoor deck as shown in the previous steps. Add guardrails at 0.5m and 1.5m (in that order), above the platform from the protected trapdoor position.

2. Do not climb onto the deck until all guardrails are in place.

3. Continue until the required height is reached. Re-position the fixed deck to the required platform height and fit a trapdoor deck alongside it as shown in Step 7. Fix a single diagonal at the top of the tower as shown in Step 7. Fix the final guardrails as shown in Step 7.

**DISMANTLING PROCEDURE**

To take down the tower reverse the building sequence. When removing guardrails, unlock the four claws /teeth from the trapdoor and then return immediately to the protected position within the trapdoor. You may then unlock the claws at the other ends of the guardrails to remove them from the tower.

**ASSEMBLY PRINCIPLES**

Where all three frame heights are used in a tower, start with 2 rung frames at the base, with the 3 rung frames next and the 4 rung frames on the top. Refer to the Quantity Procedure for detail. The procedure illustrated shows a 1450 tower starting with a 2 rung frame and a platform height of 6.2m. If building an 850 tower, the following method can be used with single decks at all levels.

**Beaufort scale**

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<thead>
<tr>
<th>Wind description</th>
<th>Beaufort scale</th>
<th>Beaufort no</th>
<th>Speed in mph</th>
<th>Speed in m/s</th>
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</thead>
<tbody>
<tr>
<td>Forceful gale</td>
<td>11 - 14</td>
<td>11 - 14</td>
<td>17 - 21</td>
<td>7 - 9</td>
</tr>
<tr>
<td>Strong breeze</td>
<td>6</td>
<td>2 - 3</td>
<td>11 - 14</td>
<td>6 - 8</td>
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<tr>
<td>Moderate breeze</td>
<td>8</td>
<td>4 - 5</td>
<td>17 - 21</td>
<td>8 - 10</td>
</tr>
<tr>
<td>Fresh breeze</td>
<td>10 - 11</td>
<td>6 - 7</td>
<td>22 - 33</td>
<td>10 - 13</td>
</tr>
<tr>
<td>Light breeze</td>
<td>11</td>
<td>7 - 8</td>
<td>33 - 44</td>
<td>13 - 16</td>
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<tr>
<td>Light air</td>
<td>12</td>
<td>8 - 9</td>
<td>38 - 46</td>
<td>16 - 20</td>
</tr>
</tbody>
</table>

**Wind description**

- Beaufort of high winds in exposed, gusty or medium breeze conditions. We recommend that in wind speeds over 7.7 metres per second (17mph) cease working on the tower and do not attempt to move it. If the wind becomes a strong breeze, (expected to reach 11.3 metres per second - 25 mph) the tower should be dismantled.
- Beaufort >11 or gale force, (expected to reach 18 metres per second - 40 mph) the tower should be dismantled.
- Beware of open-ended buildings, which can cause a funnelling effect.
- Raising and lowering components, tools, and/or materials by rope should be conducted within the tower 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 15kg.
- The stairway towers, featuring an inclined staircase access, are for frequent use by personnel carrying tools and/or materials.
- Do not use boxes or Stephanie's or other objects on the platform to gain extra height.
- Do not climb onto the deck until all guardrails are in place.
- When horizontal braces are fitted as guardrails, they should be installed on all levels.
- Beware of open-ended buildings, which can cause a funnelling effect.
- Do not use boxes or step stools or other objects on the platform to gain extra height.
- During use

- Do not climb onto the deck until all guardrails are in place.
- Do not use boxes or step stools or other objects on the platform to gain extra height.
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