

Revised: 28<sup>th</sup> September 2017

## Installation Manual

# Supreme (Wooden & Steel Hatch Box)

Reference Number: **INST 001-2017**

## Description

Supreme stairways are manufactured from high strength die-cast aluminium alloy components and have a load bearing of 200kgs. For full product details, please refer to our technical drawings, visit our web site or contact us directly.

The Supreme is supplied within either a wooden or steel hatch box/casing. The installation method is different for each type, which is detailed on the following pages.

## Installing the Stairway



*Please read these instructions carefully before commencing installation of the ladder!*

- Any modification of the product, failure to adhere to or improper use contrary to these instructions, will invalidate the manufacturer's warranty.
- Prior to installation, the ladder unit must be horizontally stored in dry conditions.
- The ladder must be installed in dry conditions and not be installed outside.
- The ladder should only be used once the casing installation is complete, the cover is completely open, the spring arms are in their fully open position and the feet of the ladder are safely resting on the floor.
- To increase the life of the ladder unit, protect the untreated wooden parts with a suitable surface treatment.
- Original parts must be used for any repairs.

Fixing screws are included with the stairway, but the suitability of the supplied fixings will depend upon the actual surface that the stairway is being fitted to. Ensure the hatch box is fixed to solid structural material.

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## 1. Stairways with a wooden hatch box

- 1.1 The preferred method for installation is to lower the hatch box (item 1) from above the opening, but if this is not possible e.g. where a roof hatch is already installed, it may be necessary to raise the hatch box from below. If the method of installation is from below, use a suitable lift and adjustable props to support the hatch box until the installation is complete. Omit points 1.2 and 1.3 if space or access does not allow. Raise the unit into position, ensuring that the hatch box is level, positioned correctly (as point 1.4) within the opening and aligned with the face of the ceiling. If access from above the opening is possible, secure the hatch box (as 1.5) from above. If access from above is not possible, the hatch box trapdoor will need to be opened to allow access from below.

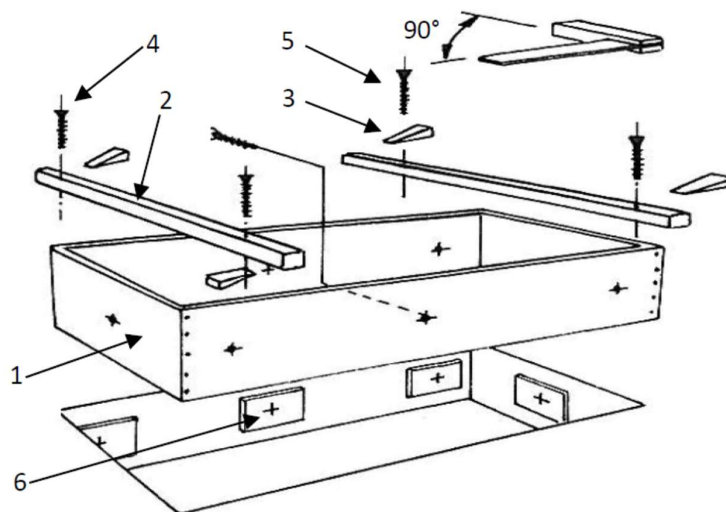


**Please Note:** To enable opening of the trapdoor, ensure that the hatch box is adequately supported with carefully positioned adjustable props before removing the lifting machinery!

Once adequately supported, open the trapdoor to complete the installation, following points 1.5-1.7.

**Use a suitable ladder for access, not the stairway ladder! The stairway ladder should not be used until the hatch box is fully secured!**

- 1.2 If lowering the hatch box from above, use timber supports (item 2) (approx. 30x30mm), securely fixed to the top edge of the hatch box using suitable plywood screws (item 4) (min. Ø4.5x70mm).
- 1.3 Place wooden wedges (item 3) under the supports and adjust until the hatch box is level and the underside aligns with the face of the ceiling.
- 1.4 Ensure that the hatch box (item 1) is installed centrally within the opening, with an equally dimensioned and parallel gap on each side. Place suitable wooden 'packers' (item 6), within the gap, at the positions where the fixing screws are intended.
- 1.5 Secure the hatch box (item 1) to the opening, with screws (item 5) (min. Ø8x80mm) quantity suitable for the size and weight of the hatch box (min. x8).



- |                     |                                  |
|---------------------|----------------------------------|
| 1. Wooden hatch box | 4. Plywood screws min. Ø4.5x70mm |
| 2. Timber supports  | 5. Screws min. Ø8x80mm           |
| 3. Wooden wedges    | 6. Packers                       |

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1.6 Fill the gap between the hatch box and the ceiling with insulation material and seal the underside to protect against damp.

If installing a Supreme F30 with fire rated wooden hatch box, fill the gap with a suitable intumescent material to ensure fire resistance. It is recommended that you use a fire resistant mortar to DIN 18580, to a depth of at least 180mm.

1.7 Fix architrave/beading over the (filled) gap and also at the top of the hatch box, below the hatch curb.

## 2. Stairways with a steel casing – raising from above

2.1 Before commencing installation, please check the following:

- a) Length and width of the opening.
- b) Depth/thickness of the ceiling.
- c) Length and width of the steel casing.
- d) Height of the steel casing.



**Please Note:** The preferred method of installation is by lifting the unit from above, but if that is not possible e.g. where a roof hatch is already installed and the clearance is insufficient then it may be necessary to raise the unit from below. In these circumstances, please replace points 2.2 and 2.3 with points 3.1 to 3.4, which can be found on the following page!

2.2 Position the casing on the floor, directly below the opening. Install the lifting assembly, as shown in the diagram, to the installation points at each corner of the casing. Ensure all bolts are safely and securely installed, however do not overtighten bolts (item 4) as the brackets (item 2) will need to be rotated over the edge of the casing and support surface after the hatch has been lifted into position.

2.3 Fix a suitable cable to each of the lifting assembly lifting points (item 2) using shackles (item 5) (as per DIN 82101).



**Please Note:** Extreme care must be taken when lifting the casing into position! Ensure that all Health and Safety precautions and Safe Working Practices are followed! Use adjustable props to support the steel casing from below! Do not remove the props until the unit is completely installed and adjusted!

2.4 Carefully lift the casing into position. Ensure that the trapdoor can be opened for adjustments.

2.5 Subject to installation type and if space allows, rotate the brackets (item 2) at each corner until they rest on the support surface, if necessary use packers to achieve the correct height. The surface that the brackets sit on must be solid and capable of supporting in excess of the weight of the stairway and its maximum recommended weight limit. Ensure the casing is completely level.

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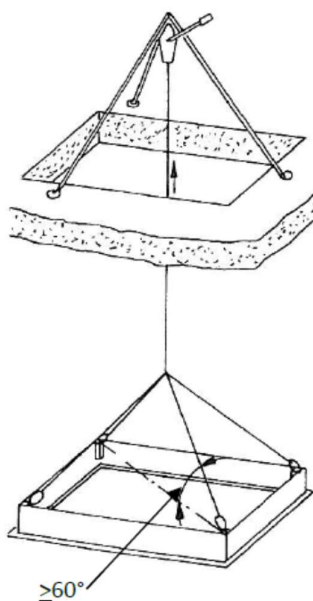
**Please Note:** Ensure the bolts do not become loose or are not accidentally turned while rotating the brackets, as the casing could fall!

2.6 Ensure that the casing (item 1) is installed centrally within the opening, with an equally dimensioned (min. 5mm) and parallel gap on each side. Check the function of the stairway by opening the trapdoor (the trapdoor must not twist or tilt sideways).

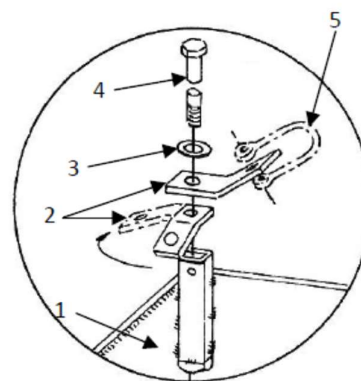
2.7 Secure the casing to the opening with a suitable quantity of screws (min. Ø8x80mm). Quantity depending on the size of the casing (min. x8).

2.8 After the casing has been installed, fill the gap between the casing and the opening with a suitable intumescent material to ensure fire resistance. It is recommended that you use a fire resistant mortar to DIN 18580, to a depth of at least 180mm.

2.9 Only after the casing has been suitably secured, remove the lifting assembly and props. The square section in the corners (used for the lifting assembly) become the fixing points for guard rails.



1. Steel casing
2. Brackets
3. Washer
4. Bolt
5. Shackle



### 3. Stairways with a steel casing – raising from below

3.1 In circumstances where a roof hatch is already installed above the opening, it may be necessary to install the casing by raising it into position from below using lifting equipment (e.g. Genie lift or similar). If this is the intended method for installation, install spacers with predrilled holes at each fixing point prior to raising the stairway casing. Ensure the lifting machinery is capable of supporting in excess of the weight of the stairway.

3.2 Once raised, if space and access allows, rotate and position the securing brackets as point 2.5. Check the position of the casing within the opening, as point 2.6. If access from above is possible, through the open roof hatch, install the securing screws (point 2.7) and complete the installation (points 2.7 to 2.9). If the casing securing screw positions cannot be reached safely from above, installation should be completed from below.



**Please Note:** Ensure that the casing is adequately supported with carefully positioned adjustable props before removing the lifting machinery!

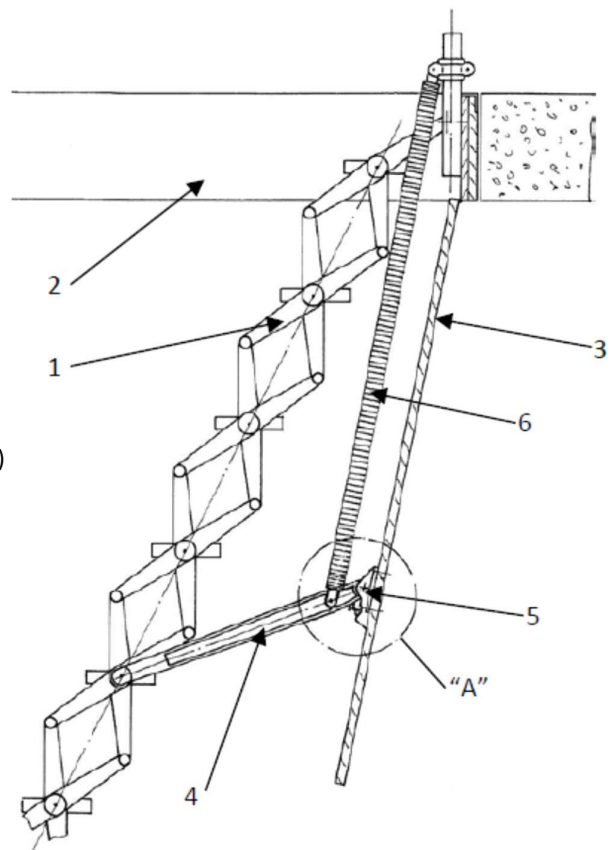
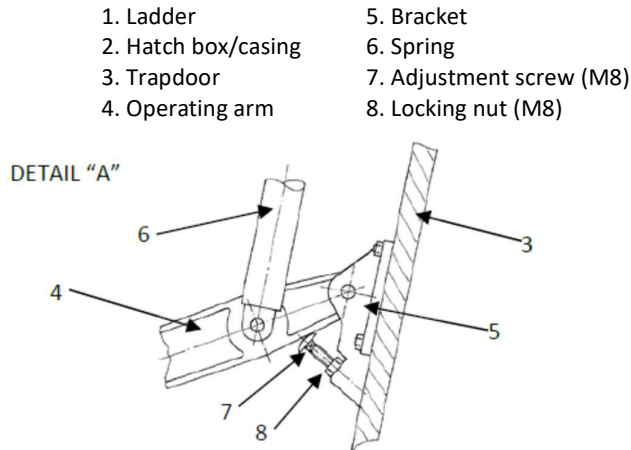
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3.3 To complete the installation from below, the lifting machinery will have to be removed to allow access to the trapdoor. Before removing the lifting machinery, install suitable props (as warning above), open the trapdoor and lower the ladder to gain access to complete the installation (points 2.7 to 2.9).

Use a suitable ladder for access, not the stairway ladder! The stairway ladder should not be used until the casing is fully secured!

## 4. Operating arm stop adjustment

- 4.1 Open the stair unit and place the foot of the ladder on the floor.
- 4.2 Loosen the locking nuts (item 8) on both sides
- 4.3 Turn the adjustment screws (item 7) until the heads of the screws are in contact with the operating arms (item 4).
- 4.4 Tighten the locking nuts on both sides.

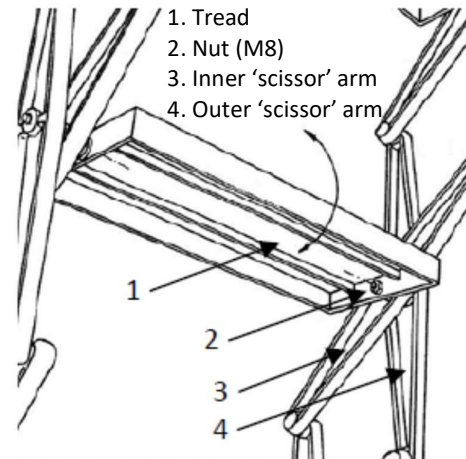




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## 5. Tread adjustment

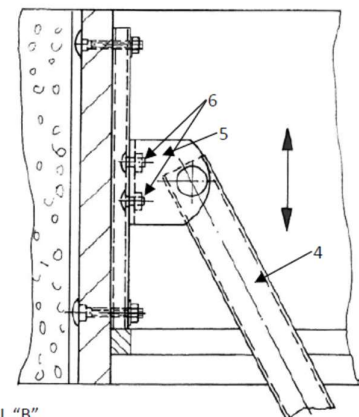
- 5.1 Open the stair unit and place the foot of the ladder on the floor.
- 5.2 Loosen the nuts on the inner faces of the tread until the tread can be rotated.
- 5.3 **Do not use the stairway in this condition!**
- 5.4 Rotate the tread until horizontal, tighten the nuts.
- 5.5 Repeat for all treads.



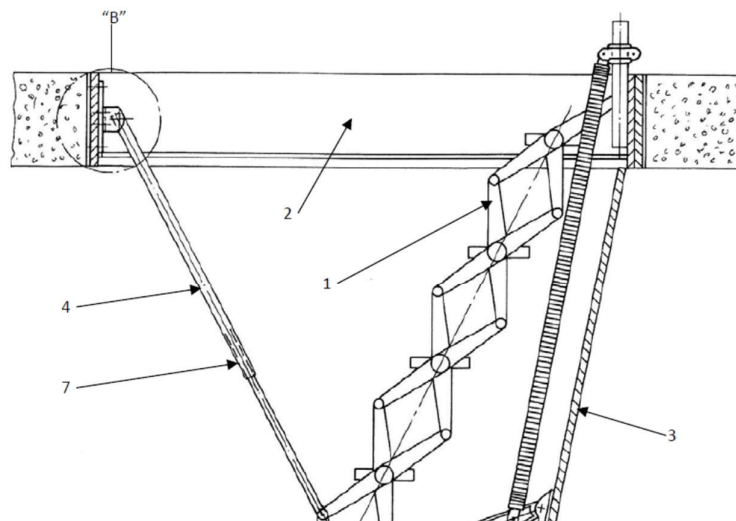
## 6. Adjustment of additional support

*Not standard equipment, only for ladders with 13 treads and over 3.3m floor to ceiling height*

- 6.1 Open the trapdoor (item 3) completely and extend the ladder up to the stop-bolt (item 7), if possible resting on the floor. If this is not possible, allow the foot of the ladder to hover above the floor. Do not force or strain the mechanism.
- 6.2 Loosen the nuts (item 6) on the support bracket (item 5) while there is no weight on the stairs.
- 6.3 Move the bracket vertically (item 5) until the foot of the ladder touches the floor and the stop bolt (item 7) is fully engaged.
- 6.4 Tighten the support bracket nuts (item 6)
- 6.5 The stairs can now be used.



DETAIL "B"



1. Ladder
2. Hatch box/casing
3. Trapdoor
4. Additional support
5. Bracket
6. Nuts
7. Stop bolt