

MIDLIFT SL *plus*
VERTICAL LIFTING PLATFORM WITH CABIN
CERTIFICATE OF TEST AND EXAMINATION
AFTER INSTALLATION

Site Address:

Lift Number:

Contract Electrical Supply: V Phase Hz

Travel: m Number of levels served:

Rated Load: kg Rated Speed: m/s

No. of Persons:

Results from testing: The YES or NO answer check boxes that are shaded are the expected correct result unless both are not applicable. If the results from any of the following tests are not satisfactory, (except where stated in a specific exemption) then remedial works must be undertaken and the test reapplied until the correct result is attained.

EXAMINATION AND TEST (Ensure lift is properly isolated before conducting these earth bonding & insulation resistance tests)

1. Earthing Arrangements (the size of the earth protective conductor must be equal in size to the supply phase conductor)

- a. **Equipotential bonding:** Is all metalwork that encloses live electrical conductors bonded to the main earthing terminal by earth protective conductors? YES NO
 (this includes the electrical component enclosure, the pump enclosure, trailer connection pcb mounting plate, any call station & call button face plates, Ditec power operated door enclosure)

Note: ensure all designated earth conductors in multicore are connected to appropriate earth terminals, and NOT left floating.

- Supplementary bonding:** Is all extraneous (metal work that is not normally associated with the electrical installation) metal work connected to earth? YES NO
 (this includes all lift framework and associated conductive mechanical parts of the lift)

- b. Is the cabin roof bonded to earth by a separate protective conductor? YES NO

- c. Is the resistance of all earth bonding conductors, identified in the previous visual inspection, to the main earth terminal (sited in the pump enclosure) **not greater than 0.5Ω**? (remember to discount the value of the meter leads when taking this reading, that is short the meter leads together, take reading, then deduct this value from your measured test reading)
- YES NO

2. Insulation Resistance to Earth

Ensure that lift supply is isolated. Remove **all** connectors from the following PCBs;
Multi stop lifts – 9300/61 (main controller) & 9300/88 (external serial controller)
Also disconnect PM, L & N wires from inside the pump unit before test.

- a. Power circuits (select 500v test on meter). Disconnect wires PM, L & N from inside the pump unit and in turn, test insulation to earth on each of them. **Value greater than 5MΩ?**
- YES NO
- b. Safety circuits (select 500V test on meter) Test from G4 on trailer pcb to earth. **Value greater than 5MΩ?**
- YES NO

3. Electrical Tests and Checks

- a. Record the mains voltage, at time of test V (min =216Vac, max=253Vac)
- b. Visually check that the polarity of mains L and N connections are correct. YES NO
- c. Record the control circuit voltage, at full load *i.e* lift running in down direction. V (min=22Vdc, max=30Vdc)
- d. Wiring Manual Issue number
- e. Controller software version
- f. What is the measured running current on the mains supply with the lift travelling in the up direction with 400Kg in the cabin? Amps (max 15 amps)
- g. Is a 15A motor thermal overload circuit breaker fitted in the pump unit? YES NO
- h. Is the dedicated lift supply in accordance with general arrangement drawing note B1 (lockable isolator, MCB rating/type etc)? YES NO
- i. Record MCB rating (i.e. type 'D') and trip current (see note B1 on general arrangement drawing). Rating
 Trip Current (Amps)

j. **Third party UPS only:** Is the **output** of the UPS protected by the MCB referred to in Table 3 i)?

N/A YES NO

k. **Third party UPS only:** Does the **output** of the UPS terminate in the isolator referred to in Table 3 h)?

N/A YES NO

4. Sensitive Edges

a. Do the protective light curtains on the cabin entrance(s) stop lift movement?

YES NO

b. Do the upper and lower mechanical safety edges on the cabin entrance(s) correctly stop lift movement?

YES NO

5. Isolation Keyswitch

a. Does the isolation keyswitch at the lower landing disable the lift?

YES NO

b. Do the landing isolation keyswitches (where fitted) disable the appropriate call button?

YES NO N/A

6. Levelling Accuracy

a. With the rated load on the platform (400Kg), does it level to within $\pm 10\text{mm}$ of the landings served?

YES NO

7. Safety Contacts and Circuits

a. Have stop switches been fitted in the following locations?

i. Inside the cabin on the COP YES NO

ii. Above the cabin ceiling YES NO

iii. In the pit within 1m of the lowest entrance:
(1m distance cannot be achieved if the lowest landing entrance is on side C but an activation rod must be provided in the pit. If this is the case then answer N/A).

YES NO N/A

b. Does each stop switch prevent movement of the cabin when operated?

YES NO

c. Does the safety switch on the hinged cabin ceiling prevent movement of the lift when operated?

YES NO

d. Does the safety switch on the pit prop prevent movement of the lift when operated?

YES NO

8. Doors and Interlocks

a. Are all enclosure doors fitted with safety interlocks?

YES NO

b. Do they operate correctly?

YES NO

c. With the platform between floors (out of door zones) are the doors/gates prevented from opening via the normal platform and landing controls?

YES NO

d. With any door of the lift open, is lift travel prevented? YES NO

e. Is the door lock bolt engaged by at least 7mm into the door when de-energised? YES NO

f. With the cabin at each floor level confirm that only the door at that level unlocks.

With the cabin positioned at the **bottom floor**:

i. Confirm that the **top floor** door(s) cannot be opened

ii. Confirm that all **intermediate floor** door(s) cannot be opened

| N/A | Yes | No |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

With the cabin positioned at all **intermediate floors** (N/A if none):

iii. Confirm that the **top floor** door(s) cannot be opened

iv. Confirm that all other **intermediate floor** door(s) cannot be opened

v. Confirm that the **bottom floor** door(s) cannot be opened

| N/A | Yes | No |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

With the cabin positioned at the **top floor**:

vi. Confirm that the **bottom floor** door(s) cannot be opened

vii. Confirm that all **intermediate floor** door(s) cannot be opened

| N/A | Yes | No |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

g. Are all upper landings fitted with chamfered lock bolts?
(Check that all upper landing doors can be closed and locked without the use of a key after emergency opening). YES NO

h. Are all fixings present in the door hinge assemblies? YES NO

i. **Fire door option only:**

i. Has the intumescent fire seal, located around the periphery of each landing door, been cut and fitted as per the Installation Guide?

ii. Is the gap between the top of each landing door and the underside of the header $\leq 5\text{mm}$?
(A 3mm thick spacer strip is provided for each landing entrance to reduce the gap if necessary)

| N/A | Yes | No |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

9. Clearances

a. Is the running clearance between the shaft and the cabin entrance safety edge less than 20mm? YES NO

10. Notices

a. Is the pictogram fitted to the outside of the hydraulic pump enclosure?
(Part no.6100381)



YES NO

b. Is the 'emergency lowering' notice fitted inside the lid of the hydraulic pump enclosure?
(Part no.6100677)

YES NO

c. Is the following notice fitted inside the pump enclosure?
"DANGER - Emergency Lowering Valve"
(Part no.6100150 x 2)

YES NO

d. Is the following notice fitted adjacent to the mains isolator?
"LIFT MAIN ELECTRICAL SUPPLY - EXCEPT DURING....."
(Part no.6100380)

YES NO

- | | | | | | |
|----|--|-----|--------------------------|----|--------------------------|
| e. | Is the emergency release warning notice fitted to <i>each</i> cabin entrance sill? "HAZARD OF FALLING....." (Part no.6201123) | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| f. | Is the warning notice "Position prop before entering" clearly displayed in the pit at the lowest entrance? (Part no.6203210) | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| g. | Is the rated load of 400Kg displayed in the cabin? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| h. | Is the pictogram forbidding standing on the ceiling prominently displayed on the top of the ceiling? (Part no.6201189) | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |



11. Observations

- | | | | | | |
|----|---|-----|--------------------------|-----------|--|
| a. | Do all digital display units operate correctly? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| b. | With lift doors closed and the lift ready to run, do the cabin lights switch off after 3 minutes of no lift operation? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| c. | If the lift is to be connected to the building fire alarm, does it home correctly and ignore all user inputs on activation? N.B: This option is not a mandatory requirement. If this option is included but the customers fire alarm shutdown connection is not available at the time of commissioning, then this does not prevent the lift from being put into service. Instead tick "NO" but this must be recorded on the Outstanding Items Sheet. | YES | <input type="checkbox"/> | NO N/A | <input type="checkbox"/> <input type="checkbox"/> |
| d. | Has the cabin floor panel been fixed down from underneath using the 5-off No.6 x 10mm self-tapping screws? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| e. | Have the locking plates been secured in position to retain the Binx nuts on the bottom of the 4 cabin uprights? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |

12. Safety Devices

- | | | | | | |
|----|---|-----|--------------------------|----|--------------------------|
| a. | Is the pit prop fitted and operating correctly? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| b. | Has the activation rod been left in the pit accessible to a lift engineer from the entrance. | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| c. | Are the mechanical end stops fitted to the top of the guides to provide a physical upper limit of travel for the cabin? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |

13. Emergency Back-up Supply

- | | | | | | |
|----|---|-----|--------------------------|----|--------------------------|
| a. | Does the battery backup supply lower the lift, power the cabin emergency lights and unlock the doors for emergency release? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| b. | Does the emergency alarm device in the cabin operate correctly and provide two-way communication? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |

14. Ultimate Limit Switch

- | | | | | | |
|----|---|-----|--------------------------|----|--------------------------|
| a. | Does the ultimate limit switch stop the lifting platform 50mm (± 10mm) above the upper floor level when operated? | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
|----|---|-----|--------------------------|----|--------------------------|

15. Hydraulic Drive Unit Tests

a. With rated load in the car (400Kg) and at highest floor level, state the static hydraulic fluid pressure (30-45 bar): bar

b. Provide the following details of the pump unit (as stated on data plate):

(1) Manufacturer:

(2) Serial or reference number:

(3) Electrical Details:

Kw

Vac

c. Measure and record the following normal running operational data:

| Platform loading condition | Hydraulic Pressure * Bar | Journey Time seconds | Lift Speed m/s (travel (m)/time(s)) |
|----------------------------|------------------------------------|--------------------------------|---|
| Empty, down | (nom 5-10bar) | | |
| Empty, up | (nom 20-30bar) | | |
| Rated load, down | (nom 15-35bar) | | |
| Rated load, up | (Nom 40-55bar) | | |

* Take pressure readings between check valve or down direction valve and the supply line to the ram.
Nominal bar pressures are for indication only and vary depending on the size of ram.

d. Confirm the journey time setting, 30 or 60 seconds? secs

e. The pressure at which the relief valve operated (*Rated load up + 5 bar*)? bar

f. Is the integrity of the pipework acceptable? YES NO

g. Is the relief valve secured against unauthorised interference? YES NO

h. Gap of rupture valve fitted? 3.8m rams mm (Nom 1.6mm)
3 stage ram 1/2" BSP mm (Nominal 1.25mm)

i. Is the down speed less than 0.15m/s with rated load YES NO

j. Does the manual lowering valve function correctly and lower the car at a speed not exceeding 0.15m/s? YES NO

k. When held stationary over a period of 10 mins under full load conditions at the upper level, does the platform creep more than 5mm per metre of lift travel? YES NO

Protection against unintended cabin movement:

l. While the lift is travelling down, temporarily remove the **front** solenoid from the block. Does the lift stop? YES NO
While the lift is travelling down, temporarily remove the **rear** solenoid from the block. Does the lift stop? YES NO

- m. With the lift starting at the upper floor level, lower it down to below floor level. Does it anti-creep correctly in the up direction? *(Use the manual lowering valve to perform the above test)* YES NO
- n. Place 475Kg on the platform and ensure that the platform overload device operates correctly i.e load cell switch operates. *(note: ensure that the platform is not resting on the pit floor)* YES NO
- o. Place 500Kg on the static platform and ensure that there is no permanent deformation to the platform after removal of load. YES NO

16. Emergency Operation and Communication Option

- a. Which communication option is installed on the lift?
 - i. Intercom.
 - ii. Telephone.
 - iii. Autodialler.
 - iv. Other. *(Please specify.....)*
- b. **Autodialler Information (if applicable):**
 - i. Does the Autodialler have an inductive loop? YES NO
 - ii. Does the inductive loop operate correctly? N/A YES NO
 - iii. Is the Autodialler connected to a GSM? N/A YES NO
 - iv. Has the Autodialler been programmed and tested? YES NO
 - v. Please record the incoming phone number for the autodialler: _____
 - vi. Please record and verify the programmed 'out going' phone numbers ensuring one is reserved for the nearest Stannah Service Branch.
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.

- c. **Emergency Communication:**

Is two-way communication achieved and clear, both within the car and at the remote location? YES NO

- d. **Emergency / manual operation:**

Does the emergency/manual operation function correctly? YES NO

17. On Site Documentation

- a. Has a copy of the wiring manual and any associated additional drawings been left on site? **YES** **NO**

18. Exemptions

List any known non-compliances, showing (in all cases) the authority for such exemptions.

Name of authority for this exemption: Printed: _____ Signature: _____

19. Site

- a. Are there any irregularities/special revisions on site? **YES** **NO**
 (If Yes please record below)

20. Product Variation / Modifications

- a. Record any agreed contract specific modifications undertaken on this contract during the installation process. i.e any agreed design changes during the installation phase;

21. Handover

- a. Has the user manual been handed over to the user/owner **YES** **NO**

- b. Has the customer approved the pump unit location? **YES** **NO**

- c. Lift operation demonstrated and handed over to:

Name: _____ Position: _____

Representing: _____ Tel No: _____

- d. Name and telephone number of end user (if known):

Name: _____ Telephone number: _____

Lift No AV _____

e. Does the lift name plate contain the correct product name? (i.e. Midilift SL+) (part no.6104117-2)



YES

NO

f. Have the Lift Number and Year of Installation been marked on the name plate using an indelible pen?

YES

NO

g. If the installation is fully compliant with all requirements above has the name plate with CE & UKCA mark been applied to the product on the cabin operating panel?

YES

NO

h. Is the User/Owner satisfied with the product?

YES

NO

Unavailable

i. Are there any outstanding items?

YES*

NO

** If yes, items must be recorded on relevant 'outstanding items' form.*

This lift was thoroughly examined and found to be free from obvious defects and the foregoing is a correct report of the result.

Tested By

Name: _____

Signed: _____

Company: Stannah Lifts (01264 339090)

Date: _____

| Issue No. | Issue Date | Name | Revision detail |
|-----------|------------|----------------|--|
| V2 | 11-02-20 | Paul Clifton | Questions 7c and d added Item added to confirm correct emergency operation. Users name and telephone section added |
| V3 | 19-01-21 | Mike Hood | Individual checks added to ensure only the landing door of the floor at which the platform is positioned will open. |
| V4 | 21-04-21 | Pete Jeffery | Test sheet modified to suit new notices (introduced on Export Project): Ref 10a to 10h Rated no. of persons added to page 1. Note added for pit stop switch if lowest entrance is adjacent (side C) ref 7a(iii) Tolerance of $\pm 10\text{mm}$ added for ultimate limit ref.14a Compliance with b/w drawing removed – was ref 19a Testing of inductive loop option added ref 16b(ii) |
| V5 | 14-10-21 | James Nicholls | New tests added for third party UPS contracts. Tests check to confirm that UPS has been incorporated in lift supply chain correctly and that output is protected by MCB and can be isolated and locked off. Ref Table 3j) and 3k). |
| V6 | 04-07-22 | Pete Jeffery | Items 8i(i) and 8i(ii) added to Table 8 for fire door option |
| V7 | 03-01-23 | Pete Jeffery | Items 21e), f) and g) amended/added for name plate with UKCA mark. Exemption note added to 11c) for fire alarm shutdown. Item 11d) re-worded for clarity Item 11e) added for Binx nut locking plates |
| V8 | 03/01/24 | Pete Jeffery | Item 8g: Note added to check that upper landing doors with chamfered lock bolt can be closed and locked without the use of a key after emergency opening. |
| | | | |