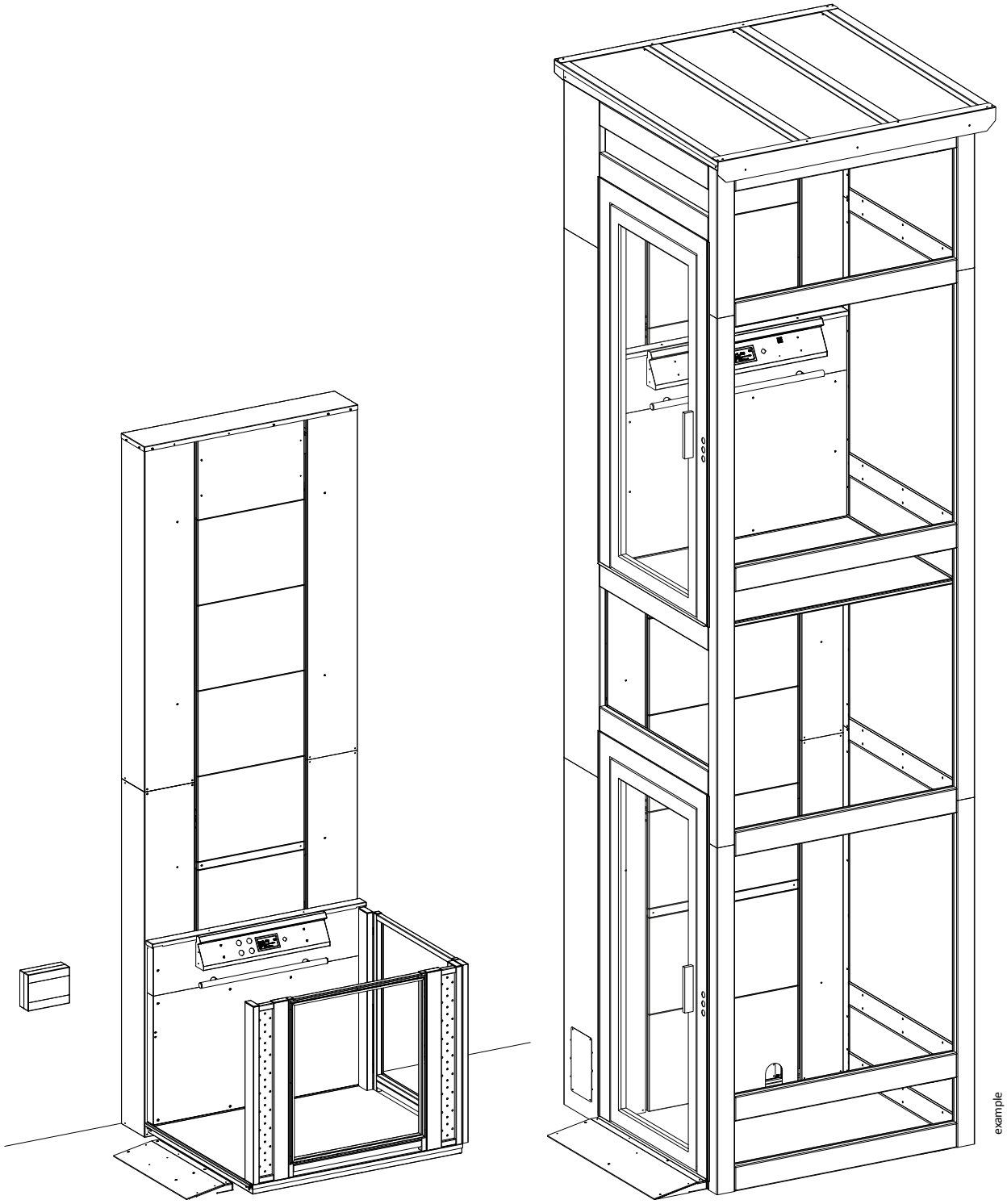
LIFTING ITALIA S.r.l.
Via Caduti del Lavoro, 16 - 43058 Bogolese, Sorbolo (PR) - Italy
Phone +39 0521.695311 - Fax +39 0521.695313

domoFLEX

Screw-driven lifting platform



FINAL TESTS

As far as the following items are concerned : general instructions, safety instructions, responsibility and warranty, material receiving and storage on site, packing, waste disposal, cleaning and maintenance, please consult the manual "**SAFETY AND MATERIAL HANDLING ON SITE**".

INDEX

2	Logo replacement, update for electric panel	06.09.2017
1	General update	10.03.2017
Rev.	*Descrizione*	*Data*

0 MANUAL READING GUIDE

0.1 CHAPTER SYMBOLS

	General information		Positioning
	Box content		Installation
	Preliminary advice		Commissioning
	Read carefully		Electrical Wiring

0.2 IMPORTANT ITEMS

	General safety warning		Important notice		Read carefully
	Risk of electric shock		Risk of bodily injury (e.g. due to sharp angles or protruding parts)		Risk of damage to mechanical parts (e.g. during incorrect installation)
	Fire hazard		Hanging load		Risk of skin injury
	Risk of falling		No entry		Materials to be protected against bad weather conditions

0.3 INDIVIDUAL SAFETY DEVICES

	Hard hat		Ear protection		Safety harness and other accessories
	Overalls		Safety steel-toe boots with ankle protection		Safety glasses
	Dust masks		Work gloves Rubber gloves		First aid kit

The words **WARNING** and **CAUTION** are used to highlight the following risks of injury and damage:

WARNING	Serious danger to safety
CAUTION	Risk of damage to materials which may lead to safety risks

1 COMMISSIONING AND HANDOVER

This manual contains the list of final tests needed for lift commissioning by the installer. Upon the commissioning completed, the installer will sign the protocol, indicating the exact date and the data of the installation company and special notes, if any.
The manual must be signed by the owner of the lift, to confirm the final commissioning and handover of the lift and the ownership of all the related documentation.
This manual must be filled in, following the instructions stated in the below paragraphs: the manual must be kept nearby the lift as part of the conformity documents; the last page form must be sent to the Supplier within 15 days from the date stated on the form itself, so that the warranty period can start in due time.
Should the form not be sent as per the above instructions, the warranty will start on the date of shipment and will not exceed the standard term.

2 CONFORMITY TESTS

The single tests described below are to verify the correct assembly: each of them contains the requirements to be matched and the way to check them.

The operations described in this paragraph, can be carried out by adequately qualified personnel.

The below listed operations are to support standard test procedures required by project and electrical drawings.
Should any of these operations lead to negative results, the related assembly operation must be repeated in accordance with installation instructions.

Before accessing the pit, open the main driving forse switch and activate the safe pit device.

Some of the operations require that the control cabinet be open and under power.

The tests are to be effected with the empty car, except those cases when the load is required.

NOTE 1: When the tests are to be effected “with the maximum static load”, the car must be evenly loaded.

NOTE 2: When the tests are to be effected “with the maximum load”, the car must be evenly loaded with the weight equal to the nominal load (indicated on the car plate).

NOTE 3: When the instructions recommend to “Refresh”, go backwards through the steps described, to bring the lift back to the starting conditions.

2.1 TESTS TO BE EFFECTED DURING THE INSTALLATION

Check the positive outcome of the tests effected as per paragraphs **6.2**, **8**, **14** of the installation manual.

2.2 ORIGINAL MATERIALS FROM LIFTINGITALIA

The lift must match the LIFTINGITALIA project requirements. Therefore, the installer has to confirm the exclusive use of materials supplied by LIFTINGITALIA.

MAXIMUM STATIC LOAD

2.3 STRUCTURAL TEST

After loading the car with the maximum static load, verify absence of **permanent deformities** of the lift. ☐

MAXIMUM LOAD

2.4 SAFETY SPACE IN PIT

Check the safety space in the pit and the mechanical resistance of the safe-pit with a fully loaded car::

i. bring the car to the upper stop;
ii. open the landing door and insert the safe-pit device;
iii. close the door and send the lift to the lowest floor;
iv. open the lowest landing door and (without accessing the pit) make sure the car is propped correctly, **the minimum free height being 500 mm**; ☐
v. bring the car to the upper floor and make sure **the pit prop and the fixing nave not been damaged**; ☐
vi. refresh.

2.5 ASCENT AND DESCENT SPEED

Check the car speed with a fully loaded car:

i. measure the distance between two floors (meters);
ii. from the landing, send the car to the upper floor and notice the travel time (seconds);
iii. repeat the same downwards;
iv. calculate the value “distance (m) / time (s)”;
v. **the speed cannot exceed 0,15 m/s**; ☐
vi. refresh.

FOR EITHER FULLY LOADED OR EMPTY CAR

2.6 STOP PRECISION

Check the stop precision (either fully loaded or empty car):

i. use the landing operation panel for commands;
ii. with a loaded car, command an upwards travel, letting the lift stop by itself;
iii. open the landing door and (without entering the car) measure the vertical gap between the car doorstep and the landing level;
iv. repeat the same procedure in case of any other stops (upwards);
v. repeat the same procedure fo all the stops (downwards);
vi. repeat upwards and downards with an empty car; ☐

vii.	**maximum acceptable gap in each case: 10 mm under or above the landing**.	☐

EMPTY CAR

2.7 "STOP" AND ALARM BUTTONS

Check if the STOP button actually stops the lift and the alarm button activates the acoustic signal:

i.	stop the can between two stops, using the STOP button;	
ii.	try to move the car upwards and downwards: **the lift will not respond**;	☐
iii.	repeat the commands from the landing operation panels: **the busy signal is on and the car does not respond**	☐
iv.	push the alarm button: **the alarm signal will be activated**;	☐
v.	refresh.	

2.8 EMERGENCY POWER SUPPLY

Check the efficiency of the emergency power circuit:

i.	bring the car to the upper floor;	
ii.	close the power supply by means of opening the main switch of the lift (not that of the Driving Force), in order to simulate a black-out;	
iii.	**the car emergency lighting will be activated**;	☐
iv.	push the alarm button: **the alarm acoustic signal will be heard**;	☐
v.	press and hold any operation button, **the car will descend to the lowest floor, so the door can be open**;	☐
vi.	refresh.	

2.9 SHAFT CLOSURE

The shaft must be closed completely.

2.10 COMMANDS

Check the correct execution of the following commands:

i. a person in car will try to send the lift to each of the stops (upwards and downwards), checking if the car stops automatically;

ii. upon an early release of the button, the lift will stop immediately;

iii. test the call from each of the stops, to check the regular automatic stops and the function of busy/present signals.

2.11 COP CONTACT

Check if the COP opening activates the safety chain:

i.	unscrew the fixings of the removable part of the COP;	
ii.	press any of the car buttons: **the car will not move**.	☐
iii.	refresh.	

2.12 OVERRUN CONTACT AND HEADROOM SPACER

Check the efficiency of the overrun contact / headroom spacer:

i. send the car to the upper floor;

ii. from the electrical control panel, use the UP button to control the car ascent, until **the overrun contact activation** (the contact is to be considered enabled if the lift does not respond to outer commands); ☐

iii. from the car, measure the distance between the outer surface of the ceiling and the lowest surface of the shaft in the headroom: ☐
a) only persons standing allowed in the car: 2000 mm;
b) with only one person in a wheelchair allowed in the car (indicated on the car plate): 1600 mm.

iv. repeat the overrun contact activation with the car at the lowest stop.

2.13 LANDING DOOR LOCKS

Check the landing door locks.

a) the lock mut block the landing door; this state can be verified by means of the following conditions b) and c).

b) **the locks must allow an unblocking area of max 50mm**, above and under each landing level; ☐
to check this:

i. standing inside the car, go first to the upper floor and then downwards to the lowest floor;

ii. as a stop approaches, slightly push the landing door;

iii. when the door opens, the car must stop, even if it has not yet come to the level;

iv. measure the gap between the landing level and the car doorstep; **maximum distance 50 mm**; ☐

v. repeat the same operations for each of the stops, either above or under the landing level;

c) when out of the levelling zone, the lift will function only if the doors are closed and blocked. The movement is controlled by means of the latch bridge removable contact, as well as of the bridge removable contact of the preliminary closing. To check the efficiency and the independent function of these two contacts:

i. go to the lowest floor and open the door;

ii. originate a short circuit of the latch contact;

iii. try to send the car upwards: the lift will not respond;

iv. remove the short, do the same with the preliminary contact and make sure tha latch contact remains open;

v. send the car upwards: the lift starts moving, then it stops;

vi. remove the short, then measure the gap between the car doorstep and the landing level; **max. distance 50 mm**; ☐

vii. repeat the same operations for all the stops, both upwards and downwards.

d) the lock cannot be open, when standing in car; to check it:

i. bring the car 30 cm above or under the landing;

ii. press STOP;

iii. check if the related safety cover is applied beside each locking lever;

iv. **check if the lever can be moved by means of fingers**; ☐

v. re-instate the operation and repeat for each of the stops.

2.14 DISTANCES FROM THE ENTRANCE

Verify the maximum didtance between the shaft and the car entrances:

i. measure the distance between the loading platform, the door and the shaft wall in front of the entrance, **the distance between the compartment and the loading platform must be a maximum of 20 mm at any point along the run**.

2.15 GUIDE BRACKETS CENTER TO CENTER DISTANCE

Make sure that the vertical distance between the guide fixing brackets **does not exceed the distance indicated in the project drawing**. ☐

2.16 GROUNDING CONNECTION

Check the electrical continuity:

i. with the lift moving, generate a short circuit between the last point of the safety chain and the grounding;

ii. check the platform stops and the protective device triggers (switching power supply); ☐

iii. eliminate the short circuit. The system is automatically restored.

2.17 ELECTRICAL COMPONENTS INSULATION

Check the insulation related to the grounding **(the minimum value must be 0,5 MΩ)** following the electrical panel manual. ☐

2.18 SHAFT LIGHTING AND SOCKET (if any)

i. with the help of the switch, check the switching on and off of the shaft lighting (if present);

ii. check the power in the socket (230 V).

2.19 EDGE SENSORS

To check these devices proceed as follows:

With the car moving, press the edge sensors downwards; **the lift will stop and remain stationary until the removal of the obstacle**. Then send the car upwards. ☐

2.20 BUTTON ENABLING KEY (optional)

To test the key proceed as follows:

i. in the car, without commuting to the enabling key, try to send the car upwards and downwards: the lift will not respond;

ii. press the alarm button to activate the siren;

iii. commute to the key and repeat the same operations: the lift will start moving regularly;

iv. commute to the landing key and repeat from each floor.

2.21 ELECTRICAL PANEL

Check the following conditions:

i. the control cabinet is located in a suitable room, protected from bad weather conditions and humidity, and can keep the constant temperature comprised between 5 and 40 °C; ☐

ii. the area in front of the cabinet door is clean, and its width and height are suffucient for a safe access to electrical panel; ☐

iii. a relevant lighting is available, to ensure a perfect visibility and component identification inside the cabinet; ☐

iv. the electrical wires connected to the cabinet are adequately protected from damages, and inspectable. ☐

2.22 SIGNAGE	
Check the correct application of the following plates and signs:	

i. in the pit (access might be dangerous without safety devices);
ii. on the electrical panel that indicates the electric hazard and the manual emergency manoeuvring instructions;
iii. beside the main supply switch (operation mode);
iv. in the car (duty load, capacity, name of manufacturer, emergency instructions for the COP in case of power cuts);
v. close to the outer alarm system of the lift (to explain its function) .

List of installed components:

Safety components	**Component type**
Landing door lock	

LIFT N° _____		YEAR OF MANUFACTURE: _____
LOAD: _____ kg		TRAVEL: _____ m
N° STOPS: _____	N° SERVICES: _____	N° CAR ACCESSES: _____
Manufacturer: LIFTINGITALIA S.r.l. Address: V. Caduti del Lavoro, 16 - 43058 Bogolese di Sorbolo (PR) - ITALY ph. +39 0521.695311 - fax. +39 0521.695313		Supplier: LIFTINGITALIA S.r.l. Address: V. Caduti del Lavoro, 16 - 43058 Bogolese di Sorbolo (PR) - ITALY ph. +39 0521.695311 - fax. +39 0521.695313
Owner: _____ Address: _____ _____ Ph. _____ - Fax. _____		Installation site: _____ Address: _____ _____ Ph. _____ - Fax. _____
Installer: _____ Address: _____ _____ Ph. _____ - Fax. _____		Tests effected (date) : _____ by _____ as installer's representative
Special notes : _____ _____ _____		

Final commissioning confirmation for lift N° _____

The tests have been carried out with positive results ☐ **YES** ☐ **NO**

in case of positive results, the lift can be considered compliant with the Italian law D.Lgs. 27.01.2010, n° 17.

Special notes : _____
_____
_____
_____
_____

Date _____ Installer's / verifier's signature: _____

The installer certifies to have carried out the installation properly, because all the tests have given positive results.

The manufacturer will compile the related EC declaration of conformity, and the installer will be able to apply the EC mark in the car.

The lift can be put into operation after the fulfilment of the requirements as per par. 5 of the President's Decree n. 214 (Amendments to the art. 12 of the President's Decree n. 162 dated 30.04.1999), dated 05.10.2010.

COPY FOR THE SUPPLIER

Final commissioning confirmation for lift N° _____

The tests have been carried out with positive results ☐ **YES** ☐ **NO**

in case of positive results, the lift can be considered compliant with the Italian law D.Lgs. 27.01.2010, n° 17.

Special notes : _____
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_____
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Date _____ Installer's / verifier's signature: _____

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