

## X12 VERTICAL LIFT SYSTEMS - Rafael with telescopic sliding doors

### GENERAL

- 110 VERTICAL LIFT SYSTEM – Axess 2, Rafael Hydraulic
- Maximum vertical travel distance: 15000mm.
  - Number of levels served (including lowest): 8 maximum.
  - Arrangement: Support required to one side or self supporting structure.
  - Lubrication: Automatic.
  - Capacity: 500Kg
  - Speed: 0.15m/s to Machinery Directive, 0.3m/s lift directive.
  - Secondary Power: Battery back up for 24v system.
  - Drive type: Hydraulic 2:1 with Start elevator 2 speed pump unit with immersed motor and Bucher valve.
  - Machine room: Within 15mts of lift shaft.
  - Pit: 200mm standard, 100mm option available. Ramp optional
  - Lighting: In lift shaft and on lift car. -Emergency: Yes – on car.
  - Controls:
  - Operational: One touch controls.
  - Emergency: lowering and system from pump unit, hand pump

### SYSTEM PERFORMANCE

- 210 DESIGN
- Design: Vertical lift system.
  - User group: Ambulant and wheelchair users, general.
  - Environment: Internal
- 220 SYSTEM PERFORMANCE
- General: To BS 6440, BS8300 and ISO 9386-1.
  - CE Marked in accordance with the Revised Machinery Directive (2006/42/EC).
  - Building Regulations approval evidence: Part M.
  - Rated load: 400KG
  - Rated speed (maximum): 0.15m/s or 0.3m/s according to regulations.
  - Duty cycle (maximum): 30/hour.
  - Dwell time: 5 seconds.
  - Lighting to landings and enclosed liftways (minimum): To BS 6440 and ISO 9386-1.
  - Liftway fire rating: 2 Hour fire rated doors telescopic.

### PRODUCTS

- 350 Lift Cabin
- Manufacturer: Nova Cabina.
  - Platform floor dimensions:
  - Width: 1100 mm. (600,700,800,900 & 1000 mm available)
  - Depth: 1400 mm. (600,700,800,900, and1000 mm available)
  - Height: 2050 mm Full lift cabin enclosed. Full range of finishes available.
  - Handrail: Brushed stainless steel to 3 sides optional.
  - Floor: Standard Anti slip vinyl – light grey (10 colours available as standard, granite or aluminium finishes available or own floor up to 65kg).
  - Automatic cabin doors telescopic in skinplate (Stainless steel, glass optional) Prisma range with Drive fox.
  - Steel skirting rail optional at floor mid and upper cabin
  - Lift cabin in skinplate with integrated COP, removable for servicing, (stainless steel, glass or bespoke cabin available) ½ Mirror to cabin wall
  - Removable ceiling with safety contacts for maintenance
  - Lighting: Controls illuminated including battery backup min 90 lux at controls.

- 351 LIFTING ENCLOSURE
- Width: 1550 mm (other sizes available)
  - Depth: 1820 mm (other sizes available)
  - Height: 2700 mm above FFL on top floor.
  - Construction: Blockwork shaft in accordance with loadings or self supporting steel frame.
  - Lighting: Shaft lighting to regulations.
  - Fire rating: 2 Hour fire rated doors at landings.
- 370 DOORS TO LANDINGS
- Manufacturer: Prisma telescopic 2AT.
  - Arrangement: 3 entrance sides available.
  - Clear opening width opening: 900mm
  - Height: 2000 mm.
  - Frame: Steel with skinplate covering (stainless steel, or Ral painted available)
  - Finishes: Door and frames stainless steel (Optional RAL painted, glass or skinplate from range)
  - Door operation: Automatic opening and closing, electrically and mechanically interlocked. Drive fox microprocessor to alter dwell time and security settings.
  - Door fire rating: 2 hour fire doors available as option.
- 400 POWER
- Supply: 240V, 1ph, 30A, 50Hz
  - Type and location: Lockable isolator within 2 metres and in view of electrical cabinet located at the designated area.
  - Motor: 2.0kW.
  - Motor Voltage: 240V, 1ph, 50Hz.
  - Starting current: 18 Amps.
  - Running current: 6 Amps.
  - Emergency lowering: Manual lowering/raising facility accessed from electrical cabinet.
  - Initiation: Soft start/stop controlled from Bucher valve.
- 410 SECONDARY POWER
- Type: Battery backup source forming component part of lift assembly.
- 420 LIGHTING
- General lighting requirements: Ceiling with LED light fittings for low power consumption
  - Emergency lighting requirements: 24v Battery.
- 430 OPERATIONAL CONTROLS
- Control system: Microprocessor based CMUH with service memory facility with GSM 'dial in' diagnostics (optional).
  - Operation: Automatic from landings and cabin
  - Audible indication: Arrival sounder. On site programmable voice synthesizer with acknowledgments for direction, floor level, overload, emergency alarm, doors opening/closing.
  - Face plate: Stainless steel with LCD display floor level, scrolling arrow, out of service, overload indication.
  - Push buttons: Flush and tactile with Braille 50mm diameter.
  - COP: Destinations, alarm, door re-open, overload indication, 6 inch LCD display with floor level indication, scrolling arrow, out of order, overload, autodialler acknowledgment.
  - Landing controls: Call buttons with red halos to indicate lift at landing, fault/security circuit broken or lift in use. (key switches, key pad, swipe card) optional.
  - Pit prop: Manual with electric interlock.
  - Fire alarm interface: Volt free contacts – automatic homing to programmed floor on activation
  - Alarm: External audible sounder with battery backup.
  - Communication: Falt Com Autodialler integrated into COP with remote programming.
- 440 EMERGENCY CONTROLS
- Emergency lowering: Accessed from electrical cabinet at designated area with battery back up.

450 ACCESS CONTROLS  
- Type: Self locking key locks.

460 SIGNS AND NOTICES  
- As per regulations.

## **EXECUTION**

620 INSTALLATION GENERALLY:  
- By installation team of 2.

## **COMPLETION**

910 TESTING AND COMMISSIONING  
- Standards: Machinery Directive  
- Operational tests: Weight/load test  
- Test certificate: 1 hard copy & 1 electronic copy on CD

920 ELECTRICAL INSPECTION AND TESTING  
- Electrical inspection and testing: Machinery Directive & EN81-41 & manufacturers recommendations

930 NOTICES AND INSTRUCTIONS  
- Standard: As per regulations.  
- Emergency lift evacuation procedure: In user's Manual  
- Single line diagrams: In user's Manual  
- Maintenance instructions: To Machinery Directive.

935 EQUIPMENT LABELLING  
- Switches, controls, enclosures and terminations: Clearly and indelibly label describing their purpose. Identify the off position.

970 DOCUMENTATION  
- Operation and maintenance instructions: Yes.  
- Record drawings: Yes.  
- Certificates: Yes.  
    - Number of copies: 2.  
- Instruction manual: Yes.  
    - Number of copies: 2.  
- Content: Drawings and diagrams necessary for normal use of the lift, emergency use, rescue, maintenance, repair and periodic checking.  
- Log book: Individual for each lift.

975 TRAINING  
- Timing: On completion.  
- Scope to include: -Daily lift operation. -User routine and general maintenance. -Emergency passenger release procedure.

980 MAINTENANCE  
- Servicing and maintenance: Included. -Duration: 2 per annum  
- LOLER inspection and certificates included with first 2 maintenance visits.