

TECHNICAL SPECIFICATION OF FULLY AUTOMATIC 20 PASSANGER CUM BED**SCOPE OF WORK: DESIGN, ENGINEERING, MANUFACTURE, FABRICATION, ASSEMBLY, TESTING AND COMMISSIONING OF FULLY AUTOMATIC 20 PASSANGER CUM BED LIFT****I) PRODUCT DETAILS**

Building Type	Existing and Newly Constructed Hospital Building
Number of Units	2
Lift Designation	New OPD Building Lift-1& 2
Lift Type	Passenger cum Bed Lift
Rated Capacity Persons / Kgs / Class of Loading	20 Persons / 1360 Kgs / Passengers cum Bed Hospital Lift
Rated Speed m/s	1
Number of stops / openings	2/2
Floor Designation	2 (Ground + 1 upper floors)
Access Sides Inline/Thru Type	1 (One), In Front Only
Floor Display Character (Entrance Position)	O(F),1(F)

II) MACHINE AND CONTROLLER DETAILS

Machine Location / Type	Machine Room less
Drive System	Micro Processor Based VVVF Regenerative - Closed Loop
Control system	Microprocessor Based Simplex Selective /Full Collective Control With / Without Attendant
Main Power Supply	AC 3 Phase, 50 Cycles, 400/415 Volts (+- 10%)
Light Power Supply	220 Volts 50Hz LNE
Traction Media	Flat Coated Steel Belt

III) SHAFT DETAILS


Shaft Type	RCC - Reinforced Cement Concrete
Hoist way dimensions: Shaft Width mm X Shaft Depth mm	2200mm W X 3000 mm D
Overhead mm	4500 mm
Pit Depth mm	1600 mm or as per design
Travel Height (in Meters)	4.1 Meter
Shaft Reduction Channel	As per installation site condition
Shaft Reduction Channel Weight (in Kgs)	As per installation site condition
Pit Ladder	Yes

IV) CABIN DETAILS**A) SIZES**

Car Width mm X Car Depth mm	1450 mm W x 2400 mm D
Car Clear Height mm	2400 mm H
Car Door Type Centre/Side	DC Door Opertor, Central Opening Doors (CLD)
No Of Door Panels	2 Panel
Type of Door Drive	Linear Door Drive System
Car Door (W X H) mm	1450 mm W x 2100 mm H

B) FINISHES -

Rear Mid panel	Stainless Steel # 4 finish # SS-304
Rear Corner panels	Stainless Steel # 4 finish # SS-304


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Side Mid panel	Stainless Steel # 4 finish # SS-304
Side Corner panels	Stainless Steel # 4 finish # SS-304
Front panels	Stainless Steel # 4 finish # SS-304
False ceiling type	CD-41
False ceiling finish	Stainless Steel # 4 finish # SS-304
Hand drills	Stainless Steel # 4 (hairline) Handrails on Rear/All car panels (side LH, side RH & Rear) (Accessible by Handicapped People)
Flooring	20mm Recess- Granite Flooring
Car Door Sill	Aluminium
Extra Allowance for Cabin Interior (Kgs)	68
Ventilation	Cross Flow fan (03 Nos.)
V) LANDING DOORS DETAILS	
A) SIZES	
Landing Door finish	Stainless Steel # 4 finish # SS-304
Door Type	Centre Opening Sliding Door
Door Operator	DC Door Operator
Door Size (W x H) mm	1450 mm W x 2100 mm H
Door Sill	Aluminium
B) FINISHES	
Landing Door Finish*	Stainless Steel # 4 finish # SS-304
Landing Door Frame / Finish*	Stainless Steel # 4 finish # SS-304
Fire Rated doors	Fire Rating- 120 minutes
Main Landing Floor	0 (Ground floor)
Other Landing Floors	1 (Upper floor)
Jamb Type	Slim Frame
VI) SIGNALIZATION / FIXTURES DETAILS	
A) CABIN OPERATING PANEL	
Car Operating Panel Type	Car Operating Panel for stops <= 16 (950 mm) in stainless steel # 4 (Hairline) (Accessible by Handicapped People)
Number of Car Operating Panel	1
COP Faceplate Finish	Stainless Steel - Hairline Finish
Button Model	Attractive Buttons as per manufacturers design
Car Display	Monochrome LCD BLUE/Orange Background and white font Square Dot-Matrix Scrolling Display-Vertical
others	Battery operated alarm bell & emergency light
Car Display Location	Car Operating Panel
Handicapped Requirements	Yes
Call Register Signal	Yes
Floor Annunciator	Yes
Hall fixtures	Yes
Hall Button Arrangement	Hall Button with HPI
B) LANDINGS INDICATORS	
Landing Operating Panel Type	Landing Operating Panel - JLLPO1


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LOP Location	Landing Display on Wall
LOP Mounting Type	Grouting
LOP Faceplate Material	Stainless Steel - Hairline Finish
Landing Display	1-2-OSDM-V
Landing Display Location	1-2-LOP
Call Register Signal	Yes
Stainless Steel Braille Button	Yes
VII) RESCUE DEVICE	Lift to be fitted with "automatic rescue device" having necessary battery bank for backup.
VIII) SAFETY AND OTHER DETAILS	
Over Speed Governor	Yes
Door Protection	Infra-Red Door Screen
Counterweight Screen	Inbuilt
Over Load Indicator	Yes
Emergency Fireman Switch at main lobby	Yes
Battery Operated Emergency Alarm Light	Yes
Two Way Intercom with Press & Speak in COP	Yes
Voice Synthesizer	Yes
Automated Voice Announcement System	Yes
Lift Inter Communication System	Yes
Smooth deceleration	Yes
CCTV Camera	Yes
Mechanical Brake release system as per RDSO	Yes
Monitoring System for lift through IR-NIYANTRAC	Yes
Safety Instructions (General + Format given by Rly Bd) using Florescent Stickers	Yes
Standard Check list for lift maintenance display	Yes
Retro fitment of Escape Door	Yes
Anti-nuisance Car Call Protection	Yes
Independent service (for Duplex only)	Yes
Nudging	Yes
Emergency Car Light and call bell with battery backup	Yes
Infrared curtain Door protection	Yes
Door Time Protection	Yes
Extra door Time of Lobby and Parking	Yes
Door opening and closing button	Yes
Manual rescue operation	Yes
Belt Inspection device	Yes
Auto Light and Fan cut Off	Yes
Load weighing device with Auto over load protection	Yes
Pre-recorded Voce Announcement System for floor position only	Yes
Car Chime	Yes
Protection against forced prevention of closing of door	Yes
Fire Extinguishers	Yes
Spring/Hydraulic Buffers	Yes
SS Brail buttons	Yes

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VIII: - ADDITIONALFEATURES

1. DOOR OPEN AND DOOR CLOSE BUTTON
2. AUTO LIGHT & FAN SWITCH OFF (POD)
3. DOOR NUDGING / DOOR HOLD OPERATION
4. SAFE LANDING OPERATION
5. NEXT LANDING OPERATION
6. FIRE RATING OF LANDING DOORS - ONE HOUR
7. SCAF-FOLDING
8. FREE SERVICE FOR ONE YEAR FROM DATE OF COMMISSIONING
9. UNLOADING AT SITE
10. LIFT LICENSE
11. MINOR BUILDERS WORK

12. Vide Rly Bd's letter no. 2013/Elect(g)/150/13/Pt.II, New Delhi, dtd. 15.05.2024, the specification for procurement of lifts over Indian Railways against CPWD specification was discontinued, and it has been decided that all lifts/elevators on Indian Railways shall be procured based on the specification developed by RDSO: -

"TECHNICAL SPECIFICATION FOR PASSENGER ELEVATOR FOR INDIAN RAILWAYS-
"SPEC NO. RDSO/2013/EM/SPEC/0016 (Rev '2')-2025"

13. PROVISION FOR CCTV CAMERA - IP (CAT6 FLAT TRAVELLING CABLE)
14. BMS COMPATIBILITY- RS 485 PORT WITH MODBUS
15. BRAILLE BUTTONS
16. IE4/IE5 (PREFERRED) MOTOR SPECIFICATION
17. LOOKING GLASS
18. AUTOMATIC RESCUE DEVICE IN CASE OF POWER FAILURE.
19. PHASE FAILURE AND PHASE REVERSAL PROTECTION.
20. OTHER SAFETY DEVICES & FEATURES AS PER CAMTECH MANNUAL 3.2 "Booklet on Lifts" CAMTECH/E/2024-25/EP-02/Lifts/1.0; IF APPLICABLE
21. Make - Kone, Mitsubishi, OTIS, Schindler, Johnson, L T ELEVATOR, Bharat Elevators & Engineers Pvt. Ltd.



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