



(একই তারিখ ও স্মারকে প্রতিস্থাপিত)
পাওয়ার গ্রিড বাংলাদেশ পিএলসি
কর্পোরেট অফিস ভবন ব্যবস্থাপনা অনুশাখা
প্রধান কার্যালয়ঃ এভিনিউ-৩, জহুরুল ইসলাম সিটি,
আফতাবনগর, বাড্ডা, ঢাকা-১২১২।



নম্বর: ২৭.২১.০০০০.০০০.৬০০.৯৯.০০০১.২৬.১৪

তারিখ: ২২ আশ্বিন ১৪৩৩
৭ অক্টোবর ২০২৬

অফিস আদেশ

পাওয়ার গ্রিড বাংলাদেশ পিএলসি এর আওতাধীন নতুন ও পুরাতন GIS ভবন এবং অন্যান্য স্থাপনায় Lift স্থাপনের নিমিত্ত দরপত্র প্রক্রিয়াকরণের ক্ষেত্রে সংশ্লিষ্ট দপ্তর প্রধানগণকে Lift এর নিম্নোক্ত Standard Technical Specification (PWD Schedule of Rates 2026(E/M), Subhead-8, Lift & Escalator অনুসারে) অনুসরণের জন্য নির্দেশক্রমে অনুরোধ করা হলোঃ

ক) Type of lift: Item no. 8.1 (Brand & Country of Origin (Type C), Sub Item no. 8.1.5), Passenger lift for 8 persons of capacity 630kg and speed 1.5m/s (Sub Item no. 8.1.5.1.2), Page no. 20.

খ) Detailed Specification of Lift: Page No. 22 to 25.

গ) Terms and Conditions for Tender Document: Page No. 32 to 33.

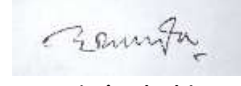
ঘ) Hoistway & Power Configurations for Passenger Lift According to Various Speed and Capacity: Annexure-8, Table 8.1 এর চিহ্নিত অংশ (person 8, Rated capacity 630 Kg, Rated Speed 1.5 m/s, Net size of car: W 1200 X D 1400 mm, Net size of Door W800X H 2100 mm, Hoistway size :W1800xD1900 mm, overhead height 4600mm, pit head 1600 mm, Motor Capacity 6.4KW, Machine Room Dimension 1900x3700mm, Maximum Current 23.7/13.8 Amp) এবং Table 8.8 (Lift Brands).

PWD Schedule of Rates (E/M) 2026 এর Subhead-8: Lift & Escalator অংশে বর্ণিত Standard Technical Specification সমূহ (মার্কিংকৃত অংশ) অত্র আদেশের সাথে সংযুক্ত করা হলো।

যথাযথ কর্তৃপক্ষের অনুমোদনক্রমে অত্রাদেশ জারী করা হলো।

সংযুক্তিসমূহঃ

- (১) Type of Lift
- (২) Detailed specifications of lift
- (৩) Annexure
- (৪) Terms and conditions for tender document



০৮-১০-২০২৬

রায়হান মাহমুদ

উপ-মহাব্যবস্থাপক

ইমেইল : dgm.service@pgcb.gov.bd

নম্বর: ২৭.২১.০০০০.০০০.৬০০.৯৯.০০০১.২৬.১৪/১ (৯)

তারিখ: ২২ আশ্বিন ১৪৩৩
৭ অক্টোবর ২০২৬

অবগতি ও প্রয়োজনীয় (প্রযোজ্য ক্ষেত্রে) ব্যবস্থা গ্রহণের জন্য অনুলিপি প্রেরণ করা হইল (জ্যেষ্ঠতার ক্রমানুসারে নয়):

- ১। ব্যবস্থাপনা পরিচালক, ব্যবস্থাপনা পরিচালক- এর দপ্তর, পাওয়ার গ্রিড।
- ২। নির্বাহী পরিচালক (এইচআরএম/অর্থ/ওএন্ডএম/পিএন্ডডি), পাওয়ার গ্রিড।
- ৩। সকল প্রধান প্রকৌশলী ওএন্ডএম (সঞ্চালন-০১/সঞ্চালন-০২/সিস্টেম অপারেশন/ওএফসিএল), পাওয়ার গ্রিড।
- ৪। সকল তত্ত্বাবধায়ক প্রকৌশলী (ওএন্ডএম), পাওয়ার গ্রিড।
- ৫। সকল নির্বাহী প্রকৌশলী (জিএমিডি ও ৪০০ কেভি উপকেন্দ্র), পাওয়ার গ্রিড।
- ৬। সকল নির্বাহী প্রকৌশলী (টিআরটিইউডি), পাওয়ার গ্রিড।
- ৭। সকল নির্বাহী প্রকৌশলী (এসপিএমডি), পাওয়ার গ্রিড।
- ৮। নির্বাহী প্রকৌশলী/সিএসও, ব্যবস্থাপনা পরিচালক- এর দপ্তর, পাওয়ার গ্রিড।
- ৯। নির্বাহী প্রকৌশলী, আইসিটি অনুশাখা, পাওয়ার গ্রিড (ওয়েবসাইটে আপলোড করণ)।



০৮-১০-২০২৬

মোঃ রবিউল ইসলাম মোল্লা

ব্যবস্থাপক

8.1.4.5 Car Lift

The Car Lift lift shall have the following features -

i) Designed and manufactured in accordance with requirements of Lifts Directive 95/16/CE, throughout the accomplishment of Harmonized Norm EN 81-2 and the Directive of Electromagnetic Compatibility 89/336/CEE.

ii) Test Certificate CE Type AT/LD-VB/M012/99 (institution registered 0053), as MODEL LIFT

8.1.4.5 Car Lift				
Capacity (Kg)(Minimum)		Speed (m/sec)	Unit Price (Tk) for All Zones	
			Car Lift	
			Upto 3-stop Price	Next per stop
8.1.4.5.1	3000 kg	0.5	1,48,81,013.00	6,66,314.00
8.1.4.5.2	4000 kg	0.5	1,71,02,059.00	6,66,314.00
8.1.4.5.3	5000 kg	0.5	1,92,12,054.00	7,77,366.00

8.1.5 Type C

Lift manufactured and tested in Bangladesh in accordance with latest BNBC and EN-81, EN-81/20, EN-81/50 certified by TUV/DNV or equivalent internationally recognized organization and the lift manufacturing company shall have minimum 4 years of manufacturing experience & lift manufacturing capability for speed 3 m / sec (minimum).

The proposed lift manufacturing company shall have its own testing tower at factory premises suitable for testing elevator of speed 3 m / sec (minimum) and R&D(Research and development) wing/centre. Besides components like motor, brake, speed governor, buffer, limit switches, controller, inverter, progressive safety gear, steel ropes, motherboard & all PCBs (Printed Circuit Boards) must be manufactured and tested in USA/UK/EU/Japan provided that any of the those components registered under own brand, certified by international accredited body & approved by competent authority of PWD, will be exempted from the requirement of country of manufacture. It should have a certificate for its complete lift which is comprised of all certified (by TUV/SUD/Liftinstituut/Intertek / UL / Eurocert S A /IMQ/ DEKRA/CSA group/Kayra Certification) major parts such as PMS type gearless Traction machine, Motor brake unit, Control Panel, Overspeed governor, Progressive Safety gear, Car and landing door, all door drive, ARD, Hydraulic buffer, Steel wire rope, Guide rails and complying all other terms and conditions as per detailed technical specification.

8.1.5.1 Passenger Lift

8.1.5.1 Passenger Lift				
Capacity (Kg)(Minimum)		Speed (m/sec)	Unit Price (Tk) for All Zones	
			Passenger Lift	
			Upto 3-stop Price	Next per stop
8.1.5.1.1	630 kg	1	33,94,409.00	1,19,793.00
8.1.5.1.2		1.5	35,73,063.00	1,26,098.00
8.1.5.1.3		2	38,23,177.00	1,34,926.00
8.1.5.1.4	800kg	1	41,21,784.00	1,19,793.00
8.1.5.1.5		1.5	43,38,720.00	1,26,098.00
8.1.5.1.6		2	46,42,432.00	1,34,926.00
8.1.5.1.7	1000kg	1	46,19,163.00	1,19,793.00
8.1.5.1.8		1.5	48,62,275.00	1,26,098.00
8.1.5.1.9		2	52,02,636.00	1,34,926.00
8.1.5.1.10	1250kg	1	50,99,145.00	1,26,839.00
8.1.5.1.11		1.5	53,67,521.00	1,33,515.00
8.1.5.1.12		2	57,43,247.00	1,42,860.00
8.1.5.1.13	1600kg	1	57,36,501.00	1,26,839.00
8.1.5.1.14		1.5	60,38,422.00	1,33,515.00
8.1.5.1.15		2	64,61,113.00	1,42,860.00

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মোহাম্মদ আজাদ হোসেন
অতিরিক্ত সচিব
অর্থ বিভাগ, অর্থ মন্ত্রণালয়
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

Estimation guideline for glass door Lift

For the Lift consists of 10 mm thick tempered glass doors, price per stop will be increased according to the table below :

Door Width (mm)	Lift Type	Price Increment per stop (Tk)
800-1000	A1 & B1	Tk. 37,000
	A2, B2 & C	Tk. 22,000
1100-1300	A1 & B1	Tk. 95,000
	A2, B2 & C	Tk. 45,000

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Detailed Specification of Lift (Passenger/ Bed/ Capsule/ Fire Fighters) :

- I. Type : Gearless, oil free, permanent magnet synchronous motor driven type passenger/ Bed
- II. Capacity : 630 kg. (8 Passenger) (To be inserted)
- III. No of stops : 1.5 Stops. (To be inserted) As per requirement.
- IV. Travelling speed : 1.5 m / sec (To be selected)
- V. Car Travel height : Meters (approximate) (To be inserted) As per requirement.
- VI. Floor Designation : (G, 1, 2, 3.....) (to be mentioned) As per requirement.
- VII. Power rating : Compatible with the capacity of the lift as mentioned above with 240 starts per hour minimum.
(180 starts per hour in case of speed up to 1.0 m/sec)
- VIII. Number of entrances : 1/2 nos. arranged in the same line
- IX. (a) Shaft size : mm (Width) x mm (Depth), [the Dimensions to be inserted as per As per requirement,
requirement mentioned in the standard chart given below or as per built-in shaft size].
- IX. (b) Overhead Height : 4600 mm [to be selected from Chart]
- X. Pit Depth : 1600 mm [to be selected from Chart]
- XI. Machine Room Location : Directly above hoist way ; MR (Machine room) / MRL (Machine Room Less) type As per requirement.
- XII. Power Source : 400 Volt. (+10%), 3-Phase, 50Hz.
- XIII. Light mains : 230 Volt. (+10%), single-phase 50Hz.
- XIV. Signal Source : 24 volt. D.C or as designed.
- XV. Operation System : Simplex / Duplex / Triplex / Quad duplex / DDS (Destination Dispatch System) As per requirement.
- XVI. Control System : Collective selective, fully programmable microprocessor-based elevator control system with AC-VVVF IGBT inverter drive, designed for safe, smooth and energy-efficient operation, BMS compatible, compliant with EN 81-20:2020 (Clauses 5.9, 5.11, 5.12) and EN 81-50. Closed-loop control with encoder feedback shall ensure speed variation within $\pm 10\%$ from no-load to full-load and accurate stopping and self-leveilling independent of load, temperature or suspension elongation.

The system shall incorporate overspeed protection, unintended car movement protection (UCM) and ascending car overspeed protection in accordance with EN 81-20:2014+A1:2020 (Clause 5.6.7), and shall automatically stop the car if speed exceeds 120% of rated speed. Audible and visual alarm devices shall be provided in the car, machine room/control cabinet and other locations as directed. The controller and drive shall be OEM-designed and manufactured as an integrated system, and type test certificates as per EN 81-50 shall be submitted during execution.

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গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

XVII. Additional controls & accessories :

Overload and full-load control with visual and audible indication; attendant operation facility; fireman's control switch at ground floor (where applicable); two-way intercommunication system between car, machine room/control cabinet and designated location; door open/close buttons in car; automatic control of car light and ventilation fan via sensor; forced ventilation fan integrated in car ceiling; lift pit water detection system, all in compliance with EN 81-20 (Clauses 5.12 & 5.13).

XVIII. Maintenance / Inspection Control : Car-top inspection and maintenance control station comprising inspection initiation switch, directional (up/down) buttons and emergency stop button, fully compliant with EN 81-20 (Clauses 5.7.1 & 5.7.2).**XIX. Traction Machine :** Gearless, oil-free permanent magnet synchronous motor (PMSM), insulation class F or higher, OEM-designed and manufactured, with minimum efficiency of 90%, low vibration and low acoustic noise characteristics, compliant with EN 81-20 and EN 81-50.**XX. Machine Brake System**

The traction machine shall be provided with a normally-closed, spring-applied, electro-mechanically released fail-safe brake acting directly on the motor shaft or traction sheave, independent of the drive system, capable of stopping and holding the car with rated load, in compliance with EN 81-20 (Clause 5.9.2).

The brake shall automatically apply upon power failure or fault, be electrically monitored, and ensure smooth, jerk-free stopping suitable for bed and hospital lift operation.

The brake shall be type-tested and certified as a safety component in accordance with EN 81-50 by an internationally recognized body (TÜV / DNV or equivalent), and valid certificates shall be submitted.

XXI. Drive system : AC-VVVF inverter drive with IGBT technology providing closed-loop speed and torque control with encoder feedback for smooth acceleration, deceleration and accurate floor approach, compliant with EN 81-20 (Clauses 5.9, 5.11) and EN 81-50.

The drive shall ensure low jerk, minimal vibration and stable stopping performance suitable for passenger and bed/hospital lifts, under all load and supply conditions.

XXII. Smooth leveling : Automatic self-levelling system maintaining car-to-floor alignment within ± 5 mm under normal loading and unloading conditions, independent of load variation, temperature and suspension elongation; system shall ensure minimal stopping shock and stable horizontal transfer of beds and stretchers, compliant with EN 81-20 (Clause 5.12.1).**XXIII. Ride Quality Requirement:** The lift shall be designed to achieve smooth ride quality with controlled jerk, vibration and noise levels suitable for hospital operation, and shall meet the acceptance criteria of ISO 18738 (Ride Comfort Measurement) or equivalent internationally recognized standard.**XXIV. CAR :** Car size mm (width) x mm (depth), the dimensions to be inserted from the standard chart given below or as per customised condition of the built-in shaft. Car height shall be 2400 mm.**XXV.****(a) Car Structure & Mechanical Integrity :**

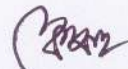
Frame & Safety: Passenger-type car body constructed from structural sheet steel (SS 304/441 grade).

Isolation: Assembly must include elastic isolators between metal components to minimize vibration and noise during travel.

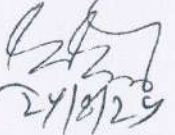
Load Bearing: The car roof must support a minimum of two persons or a 150Kg load without compromise.

Platform: Securely fastened sheet steel platform featuring fire-resistant, sound-absorbing synthetic materials (Classification M3 / EN 13501-1 Class Cf1, S2).

(b) Car frame & safety : Car body Passenger type made of entirely structural sheet steel (304/441 grade) assembly to safely support the rated load of the cabin & accessories with elastic isolators between metal parts to ensure low vibration & low noise during car travel with natural ventilation arrangement in ceiling & floor.**Cabin Interior & Aesthetics**


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- (c) Walls: Constructed from 1.5 mm thick sheet steel with 0.7 mm stainless steel finishes (Hairline, Mirror, or Digital Print). Fire Safety: Materials must meet French Classification M2 (EN 13501-1 Class Cs2), d1\$).
Ceiling: Anodized metal frame with decorative stainless steel and LED luminous panels.
Normal Mode: Minimum 100 Lux at 1 m above the floor.
Emergency Mode: Minimum 5 Lux for 1 hour near emergency controls.
Handrails: Three stainless steel handrails (minimum 100 mm width or 30 mm diameter).
Additional Features: Full-rear-wall mirror and concealed ventilation fans providing 20 air changes per hour.

(d) **Entrance & Door Systems :**

Door Type: Fully automatic heavy-duty horizontal sliding doors (Center or Side opening).
Standard Dimensions: Clear height of 2100 mm.
Structural Integrity: Doors and panels must withstand a 300 N force with 1mm permanent deformation and a 1000 N force without disengaging from guides.
Sills: Extruded aluminum with anti-slip grooving and integrated guiding slots.
Safety Sensors: Non-contact electronic full-height infrared light curtains and retractable safety shoes.

(e) **Control Interfaces (LOP & COP) :**

Design: Metallic structures with LED-backlit call buttons and digital position indicators.
Arrival Notification: Integrated arrival gongs and direction arrows at all landings and inside the car.
Functionality: Car Operating Panel (COP) includes a manual call cancellation system.
Ergonomics: Hall call buttons centered at a nominal height of 1 m above floor level.

(f) **Technical Safety & Shaft Requirements:**

Emergency Access: Car roof must feature an emergency trap door (minimum 0.4 m X 0.5 m clear opening) accessible from both sides.
Maintenance Safety: Top-of-shaft safety refuge spaces must be at least 2.0 m x 0.4 m x 0.5 m.
Braking System: Must include self-checking arrangements to ensure operational reliability.
Illumination: Machine Room: Minimum 200 Lux.
Shaft/Pit: Minimum 50 Lux at 1 m above the pit floor and car roof.
Operational Protection: Features auto-phase reversal correction and door reversal upon obstruction.

XXV: **Guide Rails :** Guide rails shall be continuous throughout the entire length right from the bottom of the pit floor to the top most floor served, plus additional length as may be required for smooth operation or equivalent fixing devices shall be provided which are of such design & spacing that rails shall not deflect more than 4mm under normal condition. The relevant fixing devices such as brackets, clamps etc shall be of such design & spacing that rails shall not deflect more than 4mm under normal working condition. The dimension of the guide rails (both main and counter weight guide rails) shall be as per latest version of EN-81 standards.

XXVI: **Suspension Rope :** Main rope shall be of bright steel wires minimum 8mm dia or as per manufacturer's design with fiber/har core having a safety factor at least 14 or Polyurethane coated steel belt / Ultra rope

* The rope suspension is to be constructed to shut the lift down if one or more suspension ropes become slack.

* The over Speed Governor rope shall be of bright steel wires minimum 6mm dia or as per manufacturer's design having a safety factor at least 8.

XXVII: **Speed governor & safety gear :** Gradual type safety gear actuated by the speed governor to be installed in the machine room above the hoist way/inside the head room in order to stop the car quickly & safely in case of exceeding 20% of designed speed during down/up both wards travel for any reasons (i.e. breakage of all suspension elements).

-Suitable means will be supplied to cut off power from the motor and apply brake on application of the safety.

XXVIII: **Counter weight condition :** Car and counter weight guide rails shall be made as per International Standard and shall have working surface machined & smooth. There shall be counterweight safety gear in case of floating.

i. **Buffer :** Energy absorbing oil buffer for speed more than 1m/sec, oil/spring buffer for speed less than 1m/sec shall be mounted in pit beneath the car & counter weight with suitable concrete foundation.

ii. **Pre & final limit switch :** To disconnect the controller from electric power supply if the car over travels higher at the top or lower at the bottom terminal landing.

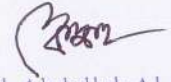
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- XXIX: Traveling cable, wiring** : Traveling cables having conductors adequate in size & number.
- All electrical cables shall be fire retardant and shall go through PVC conduits in machine room & shaft. The circuit, wiring cable of the motor shall not run through any pipe used in connection with the wiring for the control and safety devices.
- XXX: Automatic Rescue Device (ARD)** : Built-in Automatic Rescue Device set (ARD) set as per capacity of lift set with following specification travel height : 3.5 m to 7.0 m. Drive system : min 3 times/h and starting time after min 20 sec & max 180 sec that can be set manually. Direction : up or down which side is heavier
Battery: Maintenance free Sealed Gelled / AGM battery or equivalent suitable for minimum three rescue operations without recharging and complete as per direction of the Engineer-in-Charge .
- XXXI. Painting** : All exposed ferrous metal parts of machine, car, doors and other materials in the hoistway including guide rail fixation brackets (except guide rails) will have one coat of factory rust protecting paint.
- XXII. Operation and Maintenance** : 4 (Four) sets of detail operation & maintenance manuals , catalogues, spare parts catalogues with part number, control wiring diagrams and soft copy etc. shall be included to the supply of lift & the language shall be in English.
- XXXIII. Standard / conformity** : The entire lift shall be designed & manufactured as per latest version of EN-81 standards, EN-81-20, EN 81-50. Permanent Magnet Synchronous (PMS) type gearless motor and the safety components, such as, progressive safety gear, door locking devices, buffers, over speed governor, car over travel protection system, door inter-locking device, pre and final limit switches of the proposed lift shall be in conformity with latest version of BNBC, BS EN-81/EN-81(Lift Directive 95/16/EC) / DIN / VDE / ANSI/ASME A17.1 / JIS standards & safety codes. Installation, testing and Commissioning of the lift shall also be in conformity with the above standards & codes.
Certificates issued by internationally recognized authorities like TUV / DNV for the product(s) (At least Permanent Magnet Synchronous (PMS) type gearless motor, controller and the safety components such as, progressive safety gear, door locking devices, buffers, over speed governor, car over travel protection system, door inter-locking device, pre and final limit switches) of the manufacturer(s) as per above mentioned relevant valid regulations, codes and standards shall have to be submitted by the bidder.
The above certificates shall have to be authenticated by the Chamber of Commerce / Ministry of Commerce / Foreign Ministry of the manufacturing Country. Relevant ISO certificate(s) of the manufacturer including lift ride quality measurement ISO 18738/5 shall also have to be submitted by the bidder.

End of Lift specification

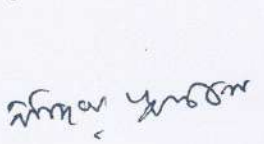
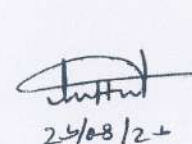
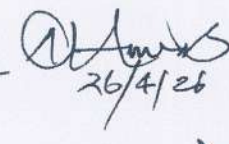
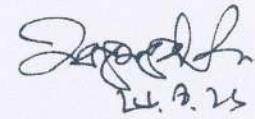


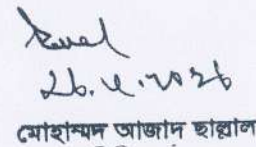
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Annexure-8

Table 8.1

Hoistway & Power Configurations for Passenger Lift According to Various Speed and Capacity										
Persons	Rated Capacity (Kg)	Rated Speed (m/s)	Net size of Car	Net size of Door	Hoistway Size			Motor Capacity (KW)	Machine Room Dimension (mm)	Maximum Current & [Running current] (Amp)
			(Width x Depth) (mm)	(Width x Height) (mm)	(Width x Depth) (mm)	Overhead Height (mm)	Pit Head (mm)			
8	630	1.0	1200x1400	800x2100	1800x1900	4500	1500	4.0	1900x3700	14.8/9.2
		1.5/1.6				4600	1600	6.4		23.7/13.8
		2.0				4850	1800	8.3		30.9/17.1
		2.5				5100	1900	12.3		48.2/28.4
		3.0				5250	2100	14.1		57.3/32.8
		3.5				5400	2200	18.3		71/39
		4.0				5500	2300	24.0		96/52
10	800	1.0	1350x1450	900x2100	2000x2000	4500	1500	5.0	2100x3800	15.7/10.4
		1.5/1.6				4600	1600	8.1		25.8/16.2
		2.0				4850	1800	10.5		34.3/20.5
		2.5				5100	1900	15.0		55.7/34.4
		3.0				5250	2100	17.1		65.8/39.5
		3.5				5400	2200	22.7		86.4/46.3
		4.0				5500	2300	29.5		115.2/63
13	1000	1.0	1500x1600	1000x2100	2200x2300	4500	1500	6.3	2300x4000	20/13
		1.5/1.6				4600	1600	10.2		32.9/20.3
		2.0				4850	1800	13.1		43.7/25.6
		2.5				5100	1900	18.6		68.9/42.4
		3.0				5250	2100	21.2		81.1/48.7
		3.5				5400	2200	27.6		106.4/59.2
		4.0				5500	2300	36.0		135/77.5
16	1250	1.0	1650x1750	1100x2100	2400x2300	4500	1500	8.0	2600x4200	28.7/19.4
		1.5/1.6				4600	1600	13.0		46.8/30.2
		2.0				4850	1800	16.7		61.1/37.7
		2.5				5100	1900	23.8		63.6/40.2
		3.0				5250	2100	27.2		74.4/46.2
		3.5				5400	2200	35.0		123.8/67
		4.0				5500	2300	45.0		158.2/85
21	1600	1.0	1750x2000	1100x2100	2400x2600	4500	1500	10.1	2600x4300	35.5/24.4
		1.5/1.6				4600	1600	16.2		57.9/37.8
		2.0				4850	1800	20.8		75.1/46.9
		2.5				5100	1900	28.9		77.2/49
		3.0				5250	2100	32.9		90.4/56.2
		3.5				5400	2200	42.5		125/72
		4.0				5500	2300	53.0		140/92
24	1800	1.0	1800x2100	1200x2100	2600x2750	4500	1500	11.3	2800x4400	37.6/27.5
		1.5/1.6				4600	1600	18.2		60.7/42.6
		2.0				4850	1800	23.3		77.7/52.8
		2.5				5100	1900	32.0		80/54.6
		3.0				5250	2100	36.4		92.8/62.4
		3.5				5400	2200	47.0		130/76
		4.0				5500	2300	58.0		150/100
26	2000	1.0	1900x2200	1300x2100	2800x2850	4500	1500	12.6	3000x4500	38.9/28.8
		1.5/1.6				4600	1600	20.2		62.7/44.7
		2.0				4850	1800	25.8		81.4/55.9
		2.5				5100	1900	35.2		82.4/56.7
		3.0				5250	2100	44.7		126/70
		3.5				5400	2200	57.0		148/96
		4.0				5500	2300	69.8		200/140
33	2500	1.0	2000x2500	1400x2100	3000x3150	4500	1500	15.7	3400x4600	46.9/35.7
		1.5/1.6				4600	1600	25.3		75.5/55.3
		2.0				4850	1800	32.3		71.8/50.8
		2.5				5100	1900	44.0		98.6/69.8
		3.0				5250	2100	57.0		148/96
		3.5				5400	2200	70.7		205/145
		4.0				5500	2300	86.0		250/165

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মোহাম্মদ আজাদ হাছান
অতিরিক্ত সচিব
অর্থ বিভাগ, অর্থ মন্ত্রণালয়
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

Table 8.7

Maximum Available Car Area As Per EN 81			
Rated Load Mass Kg	Maximum Available Car Area m ²	Rated Load Mass Kg	Maximum Available Car Area m ²
100	0.37	900	2.20
180	0.58	975	2.35
225	0.70	1000	2.40
300	0.90	1050	2.50
375	1.10	1125	2.65
400	1.17	1200	2.80
450	1.30	1250	2.90
525	1.45	1275	2.95
600	1.60	1350	3.10
630	1.66	1425	3.25
675	1.75	1500	3.40
750	1.90	1600	3.56
800	2.00	2000	4.20
825	2.05	2500	5.00

*Beyond 2500kg add 0.16m² for each extra 100 Kg. For intermediate loads the area is determined by linear interpolation.

*Lift speed may be determined according to the traffic analysis

Lift Installation Guideline

- 1) For all types of lifts except Firefighters lifts, the front wall of the shaft shall be a solid brick wall (Hollow brick is not permitted).
- 2) For Firefighter lifts, the shaft shall be 2 hours fire rated and preferable made of concrete.

Table 8.8
Lift Brands

Type of Lift	Brands
A1	KONE (Finland), MITSUBISHI (Japan), OTIS (USA / Japan / France), Schindler (Switzerland), TKE (Germany), FUJITEC (Japan), HITACHI (Japan) or equivalent product.
A2	KONE (China), MITSUBISHI (Thailand/China), OTIS (China/ South Korea), Schindler (China), TKE (China/ South Korea), HITACHI (China), or equivalent product.
B1	Wittur (Germany), Orona (Spain), MacPursa (Spain), Movi (Italy) or equivalent product.
B2	SRH(China) / XIZI Unite (China)/ Fuji HD (China) / Mashiba (Malaysia)/ Toshiba (Thailand)/ Nidec (China)/ Sigma (China)/ Schneider (China)/ Auxe (China)/ Japan Sanyo (China)/ Bester (China)/ Schindler (India)/ KONE (India) / Mitsubishi(India)/ OTIS (India) / Hitachi (India) / Fujitec (India)/ TKE (India) or equivalent product.
C	Walton / Property or equivalent product.

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মোহাম্মদ আজাদ হায়াল
অতিরিক্ত সচিব
অর্থ বিভাগ, অর্থ মন্ত্রণালয়
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

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8.2.2.12	1000	30°	3050(10')	93,57,104.00
8.2.2.13			3660(12')	95,20,547.00
8.2.2.14			4270(14')	1,00,10,875.00
8.2.2.15			4880(16')	1,08,28,089.00
8.2.2.16			5490(18')	1,16,45,304.00
8.2.2.17	1000	35°	6100(20')	1,24,62,518.00
8.2.2.18			3050(10')	88,83,119.00
8.2.2.19			3660(12')	90,46,562.00
8.2.2.20			4270(14')	95,36,891.00
8.2.2.21			4880(16')	1,03,54,105.00
8.2.2.22			5490(18')	1,11,71,319.00

TERMS AND CONDITIONS OF LIFT (Part and parcel of tender document)

- The bidder shall submit the technical proposal of Lift items with sealed & signed by manufacturing company on their Letterhead pad and main catalogue (marked) including mentioning brand, model & country of origin of the proposed lift.
- The bidder shall submit a certificate issued by manufacturing Company stating the time span of Lift manufacturing experience of the manufacturer. The certificate must be authenticated by chamber of commerce/Ministry of Commerce/Ministry of foreign Affairs of Lift manufacturing Company. The bidder shall submit the detail address of the factory, telephone no., website address, e-mail address and company profile of the lift manufacturing company.
- The proposed lift manufacturing company shall have its own testing tower and R&D(Research and development) wing/centre, related document to be submitted with tender.
- The bidder shall submit a certificate by manufacturing company stating that minimum 1000 Nos. of the proposed brand of lift have been used in minimum 10 (ten) countries of the world including the manufacturing country for equal to or more than ten years. The certificate must be authenticated by Chamber of Commerce/ Ministry of Commerce/ Ministry of Foreign Affairs of the lift manufacturing company.

In the case of lift manufactured in Bangladesh (Type-C) , the above mentioned terms & condition is not applicable . Instead , the bidder shall submit a certificate by manufacturing company stating that minimum 100 Nos. of the proposed brand of lift have been used with a detail list specifying locations .

- EN 81 related certificates (EN 81-20 & EN 81-50, EN-81-77 for all types of lifts, EN 81-72:2015 for firefighter's lift, EN-81-31:2010 for Cargo lift) or its latest edition and Standard test certificates, Certified Test Certificates and Type Test reports (not older than 5 years), ISO certificates for management, occupational health and safety standard certificates, Environmental safety certificates obtained by lift manufacturer shall be submitted by Tenderer.
- Each bidder must be the Sole agent /Representative / Distributor of the lift brand proposed in the tender and the bidder must submit its all valid supporting documents issued by original manufacturing company. Manufacturer's certificate stating that the bidder has sufficient trained and experienced manpower to install, test and commission the lift as per EN 81-21 code and relevant standard and conformities.
- The bidder shall have B, C class contractor license provided by the electric licensing board. After completion of the work, the bidder and the manufacturing company shall provide the certification about installation, testing and commissioning of the lift and as built drawing of hoistway and machine room.
- The bidder shall have one year's experience of maintenance of minimum 20 nos of lift and a detailed list of that experience shall be certified in a prescribed form and attested by the concerned Executive Engineer of PWD . authority.
- The bidder shall give the assurance from the manufacturing company to supply of spare parts for minimum 20 years and this assurance must be authenticated by the Chamber of Commerce/ Ministry of Commerce/ Ministry of foreign affairs of the concerned manufacturing company.
- The bidder shall submit a certificate by manufacturing company stating that they manufacture PMS (Permanent Magnet Synchronous) type gearless motor , Polyurethane coated steel belt & Regenerative drive (in required cases) , controller , inverter , motherboard , Door Inverter & all PCBs (Printed Circuit Boards) in their own factory . The certificate must be authenticated by Chamber of Commerce / Ministry of Commerce / Ministry of Foreign Affairs of the Lift Manufacturing Company.
- The block diagram of the complete lift system including all control system with ACVVVF, power components, Regen drive (in required case) on manufacturer's letterhead pad must be submitted with the contract.
- The bidder shall submit a work program to complete the Lift supply and installation work and submit a statement that before opening LC, they shall get selection of Lift items from Procuring entity prior to manufacturing.

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26/08/2024

মোহাম্মদ আজাদ হায়াল
সিনিয়র ইঞ্জিনিয়ার
অর্থ বিভাগ, অর্থ মন্ত্রণালয়
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

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- 13 The successful bidder must submit the detail packing list with sealed and signed by the lift manufacturing company to the concerned Executive Engineer minimum 15 days before shipment and Lift equipment shall be listed packet wise in detail. That packing list must comply the items described in the agreement and as per selection. The manufacturing company must certify that all parts/items are supplied in the packing list. The name of the project and LC no. shall be marked clearly in the packets. Equipment of one contract cannot be packetized together with other equipment/ other contracts.
- 14 Before shipment, Factory Acceptance Test (performance test of safety devices of lift and Quality assurance tests of the products as per standards) shall have to be carried out by the manufacturer in presence of nominated engineers of ~~PWD~~ ^{power grid} at the lift manufacturing factory premises. One engineer will be nominated for one lift. For two lifts in a single tender minimum one engineer will accomplish this inspection and testing.

For more than two lifts in a single tender, the number of nominated engineers will be increased by one per two lifts. All cost related to engineers' travel, food, accommodation, etc. will be borne by awarded organization/Manufacturer. The expenditure for this will be incorporated by the bidder at the time of participation. For special reasons if inspection is not performed by the engineers of the ~~PWD~~ ^{power grid}, taking prior approval of the procuring entity quality assurance tests will be carried out by Internationally accepted inspection agencies(home and abroad).

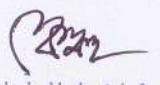
In the case of lift manufactured in Bangladesh (Type-C) and major components like motor, brake, steel ropes, speed governor, controller, inverter, door drive, progressive safety gear, motherboard & all PCBs (Printed Circuit Boards) directly imported from USA/UK/EU/Japan, the above mentioned Factory Acceptance Test (performance test of safety devices of lift and Quality assurance tests of the products as per standards) will be conducted in the factories of major components manufacturers.

- 15 Post landing inspection for imported lift(s) shall be done by representatives of Procuring Entity according to the packing list and the expenditure for it will be carried out by Contractor /Supplier. After post landing inspection from the port, the imported equipment shall be reached directly to the project site according to the condition of the contract.
- 16 The bidder shall certify that all given certificates/ documents/ drawings are complete and correct. If any error is found, the contract will be cancelled and the bidder will be disqualified from future participation of any tender.
- 17 Maintenance engineers of the tenderer must receive service level 1-2-3 certification, employees of them must receive quarterly training
- 18 Yearly Confirmation of Periodic Safety Inspection (CPSI) must be done on full portfolio of the tenderer organisation and yearly technical clarification audit must be done with mother company/Principal
- 19 The Tenderer shall submit a certificate/document issued by the competent authority, ~~of the Public Works Department (PWD)~~, upon the recommendation of the PWD Schedule of Rates Committee for electromechanical work, stating that the technical specifications and certifications of the proposed brand comply with the requirements mentioned in the PWD Schedule of Rates, Part B: Electro-Mechanical Works.
- 20 Despite satisfying the above mentioned terms & condition as well as technical specification, a tender shall not be considered as a responsive one if the proposed brand of elevator has a history of poor performance, limited durability, frequent spare part failures, recurring incidents or the local agent has a history of negligence in lift operation and maintenance, including failure to resolve complaints timely and delays in replacing necessary spare parts. This must be officially verified and certified by the competent authority ~~of PWD~~.

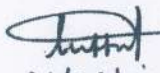
****N.B.** Above mentioned 16 T&C alongwith Checklist for time duration for various steps of Lift import & installation, Checklist asking name and address of manufacturer of major parts of proposed Lift must be mapped in e-GP tender process by concerned Procuring Entity

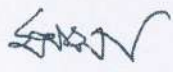
TERMS AND CONDITIONS OF ESCALATOR
(Part and parcel of tender document)

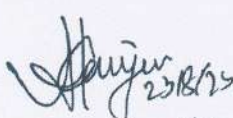
- 1 The bidder shall submit the technical proposal of Escalator with sealed & signed by manufacturing company on it's Letterhead pad and main catalogue (marked) including mentioning brand, model & country of origin of the proposed escalator.
- 2 The bidder shall submit a certificate issued by manufacturing Company stating the time span of Escalator manufacturing experience of the manufacturer. The certificate must be authenticated by chamber of commerce/Ministry of Commerce/ Ministry of foreign Affairs of escalator manufacturing Company. The bidder shall submit the detail address of the factory, telephone no., website address, e-mail address and company profile of the escalator manufacturing company.

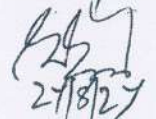

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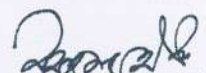

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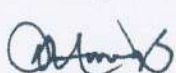

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মোহাম্মদ আজিজুল হক
অতিরিক্ত সচিব
অর্থ বিভাগ, অর্থ মন্ত্রণালয়
গণপ্রজাতন্ত্রী বাংলাদেশ, ঢাকা


24/9/25


26/4/21