

## SCHEDULE OF TECHNICAL DATA FOR EQUIPMENT OFFERED

The tenderer must complete this section as set out below. All information asked for must be given correctly and supported by copies of manufacturer's published technical data for the equipment being offered.

### 1.1 SCHEDULE OF TECHNICAL DATA - KERJA-KERJA PENGANTIAN 2 UNIT LIF DAN KERJA-KERJA BERKAITAN DI BLOK ANGERIK, PANGSAPURI SRI TANJUNG USJ 16, SUBANG JAYA, SELANGOR DARUL EHSAN.

ITEM	DESCRIPTION	MBSJ REQUIREMENTS	TENDERER'S OFFER
<b>1.1.1</b>	<b>General</b>		
(a)	Name of Manufacturer:	TOSHIBA, HITACHI, KONE, MITSUBISHI, SCHINDLER or its equivalent	
(b)	Country of Origin	To state by Tenderer	
(c)	Type of Lift	Passanger Lift/Fireman Lift	
(d)	Model Number of Lift	To state by Tenderer	
(e)	Number of Lifts	1	
<b>1.1.2</b>	<b>Lift Capacity</b>		
(a)	Load Capacity (kg)	1360	
(b)	Load Capacity (person)	20	
<b>1.1.3</b>	<b>Lift Performance</b>		
(a)	Contract Speed (mps)	1.75	
(b)	Total Travel of each Lift (m)	Specified by designer	
<b>1.1.4</b>	<b>Lift Well, Entrances, Pit &amp; Machine Room</b>		
(a)	Minimum headroom (O/H Travel)(mm)	Specified by designer	
(b)	Pit depth (mm)	Specified by designer	
(c)	Clear internal size of lift well required (W)mm x (D)mm	Specified by designer	
(d)	Number of floors served per lift	12	
(e)	Number of entrances served per lift	12	
(f)	Position of machine room	Top	
<b>1.1.5</b>	<b>Operation &amp; Control System</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Grouping System	To state by Tenderer	
(e)	Catalogue included?	Yes	
<b>1.1.6</b>	<b>Automatic Levelling Device</b>		
(a)	Type of Leveling Device	To state by Tenderer	
(b)	Leveling Accuracy (mm)	To state by Tenderer	
<b>1.1.7</b>	<b>Door Operating System Control</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Type of Drive System	ACVVVF	
(e)	Premature Opening	Specified by designer	
(f)	Technical Literature Provided	Yes	

ITEM	DESCRIPTION	MBSJ REQUIREMENTS	TENDERER'S OFFER
<b>1.1.8</b>	<b>Lift Car</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Catalogue provided?	Yes	
(e)	Description of Material	Stainless Steel	
(i)	Roof	To state by Tenderer	
(ii)	Ceiling	To state by Tenderer	
(iii)	Lighting		
	Make	To state by Tenderer	
	Model Number	To state by Tenderer	
	Intensity	> 100 lux	
	Type	LED	
(iv)	Fan	To state by Tenderer	
	Make	To state by Tenderer	
	Model Number	To state by Tenderer	
	Diameter	To state by Tenderer	
	Speed	To state by Tenderer	
	Air delivery at free air delivery of each fan (cfm)	To state by Tenderer	
	Power rating	To state by Tenderer	
	Electric characteristics (volt/frequency/phase)	To state by Tenderer	
(v)	Car front return panel	Embossed Stainless Steel	
(vi)	Car side and back enclosure covering	Embossed Stainless Steel	
(vii)	Sill	Entruded Aliminium	
(viii)	Kickplate	Hairline Stainless Steel	
(ix)	Car Platform/Flooring	Cheker Plate Stainless steel > 2.3mm thick	
(x)	Clear internal size of car	Specified by designer	
(xi)	Clear internal area of car platform	Specified by designer	
(xii)	Clear internal height (mm)	Specified by designer	
<b>1.1.9</b>	<b>Sound Level</b>		
(a)	Testing Method	To state by Tenderer	
(b)	Testing equipment	To state by Tenderer	
(c)	Inside the lift car [dB(A)]	< 58 ± 2	
(d)	Lift lobby [dB(A)]	< 58 ± 2	
(e)	Inside the lift motor room [dB(A)]	< 75 ± 2	
(f)	Inside lift shaft [dB(A)]	< 70 ± 2	
<b>1.1.10</b>	<b>Vibration</b>		
(a)	Testing Method	To state by Tenderer	
(b)	Testing equipment	To state by Tenderer	
(c)	Acceleration rate (m/s <sup>2</sup> )	< 1.2	
(d)	Deceleration rate (m/s <sup>2</sup> )	< 1.2	
(e)	Sustained Jerk rate (m/s <sup>3</sup> )	< 1.4	
(f)	Vibration [milli(g)] on average]	< 12	
<b>1.1.11</b>	<b>Car Position Indicator</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Catalogue or type no	To state by Tenderer	
(e)	Material of panel	Hairline Stainless Steel	
(f)	Type of Indication	To state by Tenderer	

ITEM	DESCRIPTION	MBSJ REQUIREMENTS	TENDERER'S OFFER
<b>1.1.12</b>	<b>Car Operating Panel</b>		
(a)	Type no (based on catalogue)	To state by Tenderer	
(b)	Material of panel	Hairline Stainless Steel	
(c)	No. of operating panels per car	Specified by designer	
(d)	Highest button of COP from car floor (mm)	Specified by designer	
(e)	Override Cancelled features for Car Control Panel Button	To state by Tenderer	
<b>1.1.13</b>	<b>Hall Call Button</b>		
(a)	Brand	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Type no (based on catalogue)	To state by Tenderer	
(e)	Material of panel	Hairline Stainless Steel	
(f)	Type of Button	Specified by designer	
<b>1.1.14</b>	<b>Hall Lantern</b>		
(a)	Type no (based on catalogue)	To state by Tenderer	
(b)	Material of panel	To state by Tenderer	
(c)	Type of Indication	Specified by designer	
<b>1.1.15</b>	<b>Hall Position Indicator</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Type no (based on catalogue)	To state by Tenderer	
(e)	Material of panel	To state by Tenderer	
(f)	Type of Indication	To state by Tenderer	
<b>1.1.16</b>	<b>Car Door</b>		
(a)	Material and construction of car door	Embossed Stainless Steel	
(b)	Type of door	Side Opening	
(c)	Clear door opening width and height(mm)	Specified by designer	
(d)	Type of car door motor	ACVVVF	
(e)	Country of manufacture	To state by Tenderer	
(f)	Door steel plate thickness	Minimum 1.2 mm	
(g)	Type of door sensor	To state by Tenderer	
<b>1.1.17</b>	<b>Landing Doors</b>		
(a)	Material and construction of landing door	To state by Tenderer	
(b)	Type of door	Side Opening - 2 Hour Fire Rated Without Insulation	
(c)	Clear door opening width and height (mm)	To state by Tenderer	
(d)	Country of manufacture	To state by Tenderer	
(e)	Landing door fire rating (SIRIM or equivalent certificate to be enclosed)		
	- Protected lobby	2 hour	
	- Unprotected lobby	2 hour	

ITEM	DESCRIPTION	MBSJ REQUIREMENTS	TENDERER'S OFFER
<b>1.1.18</b>	<b>Traction Motor</b>		
(a)	Model No.	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Type of motor	AC / DC	
(e)	Type of traction	To state by Tenderer	
(f)	Type of mounting of machine and type of vibration damper	To state by Tenderer	
(g)	R.P.M. (For Geared Machine Only)	To state by Tenderer	
(h)	Diameter of sheave	To state by Tenderer	
(i)	Material of sheave	To state by Tenderer	
(j)	Type of brake	To state by Tenderer	
(k)	Material of brake	To state by Tenderer	
(l)	Electric characteristics (volt/frequency/phase)	To state by Tenderer	
(m)	Motor Power (kW)	To state by Tenderer	
(n)	Power Factor	To state by Tenderer	
(o)	Machine calculation	To be enclosed	
(p)	Certificate	Yes	
(q)	Catalogue included	Yes	
(r)	Type of cooling	To state by Tenderer	
(s)	If motor is fan cooled, please specified fan data as below		
	- Name of Manufacturer	To state by Tenderer	
	- Model No.	To state by Tenderer	
	- Flow (CFM)	To state by Tenderer	
	- Motor Insulation Class	To state by Tenderer	
(t)	Motor Efficiency (complied to MS1525)	Eff 1 / Eff 2	

Machine calculations shall be submitted with this tender document. All of the above calculations shall be endorsed by Lift Competent Person. Failure to do so may result in the tender to be disqualified.

<b>1.1.19</b>	<b>Traction Rope</b>		
(a)	Number of ropes per car	> 3 nos each car	
(b)	Diameter of ropes	> 10mm	
(c)	Construction and material	To state by Tenderer	
(d)	Method of terminating	Bulldog grip / Swaged / Socket end	
(e)	Name of Manufacturer	To state by Tenderer	
(f)	Certificate Of Approval (relevant authority)	Yes	

. Failure to do so may result in the tender to be disqualified.

<b>1.1.20</b>	<b>Safety Gear</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Type	To state by Tenderer	
(e)	Means of actuating safety gear	To state by Tenderer	
(f)	Certificate	Yes	
(g)	Catalogue included	Yes	

ITEM	DESCRIPTION	MBSJ REQUIREMENTS	TENDERER'S OFFER
<b>1.1.21</b>	<b>Speed Governor</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Type	To state by Tenderer	
(e)	Tripping speed	To state by Tenderer	
(f)	Diameter of governor rope	> 3mm	
(g)	Certificate	Yes	
(h)	Catalogue included	Yes	
<b>1.1.22</b>	<b>Compensation</b>		
(a)	Provided	Yes	
(b)	Type chain/rope	Interwoven with sash cord	
<b>1.1.23</b>	<b>Car Lift's Guide Rails</b>		
(a)	Manufacturer	To state by Tenderer	
(b)	Material	Solid steel	
(c)	Type	Solid 'T' section	
(d)	Section dimension of car guide (mm)	To state by Tenderer	
(e)	Type of joint	Tongue & groove	
(f)	Type of fastening	Bolt & nut	
(g)	Guide rail size (kg/m)	> 8	
(h)	Spacing of bracket (mm)	To state by Tenderer	
(i)	Certificate	Yes	
<b>1.1.24</b>	<b>Car's Guide Shoe</b>		
(a)	Material	To state by Tenderer	
(b)	Type	To state by Tenderer	
(c)	Make	To state by Tenderer	
<b>1.1.25</b>	<b>Car Buffers</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Type	To state by Tenderer	
(e)	Stroke (mm)	To state by Tenderer	
(f)	Max. retardation rate (m/s <sup>2</sup> )	To state by Tenderer	
(g)	No. of car buffer per lift	To state by Tenderer	
<b>1.1.26</b>	<b>Counterweight</b>		
(a)	Material	Cast iron	
(b)	Make	To state by Tenderer	
(c)	Weight per piece (kg)	To state by Tenderer	
(d)	Certificate	Yes	
<b>1.1.27</b>	<b>Counterweight's Guide Rails</b>		
(a)	Manufacturer	To state by Tenderer	
(b)	Material	Solid steel	
(c)	Type	Solid 'T' section	
(d)	Section dimension of counter weight guide (mm)	To state by Tenderer	
(e)	Type of joint	Tongue & groove	
(f)	Type of fastening	Bolt & nut	
(g)	Guide rail size (kg/m)	> 8	
(h)	Spacing of bracket (mm)	To state by Tenderer	
(i)	Certificate	Yes	

ITEM	DESCRIPTION	MBSJ REQUIREMENTS	TENDERER'S OFFER
<b>1.1.28</b>	<b>Counterweight Guide Shoe</b>		
(a)	Material	To state by Tenderer	
(b)	Type	Specified by designer	
(c)	Make	To state by Tenderer	
<b>1.1.29</b>	<b>Counterweight Buffers</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Type	Specified by designer	
(e)	Max. retardation rate (m/s <sup>2</sup> )	To state by Tenderer	
(f)	No. of counter weight buffer per lift	Specified by designer	
<b>1.1.30</b>	<b>Architraves</b>		
(a)	Section dim. of door frame (mm)	To state by Tenderer	
(b)	BSW gauge of door frame	To state by Tenderer	
<b>1.1.31</b>	<b>Fireman's Service</b>		
(a)	Number of lifts with fireman's service	Specified by designer	
<b>1.1.32</b>	<b>Electrical Installation Work</b>		
(a)	Lift starting current full load up	To state by Tenderer	
(b)	Incoming power rating required	To state by Tenderer	
(c)	Lift power rating required	To state by Tenderer	
(d)	Lift Switchboard		
	Manufacturer	To state by Tenderer	
	Fuse switch (for motor) – 3phase	To state by Tenderer	
	Switch Fuse (for car lighting, fan – 3 phase)	To state by Tenderer	
	Voltmeter	To state by Tenderer	
	Ammeter	To state by Tenderer	
	Indicating Light	To state by Tenderer	
	HRC fuses	To state by Tenderer	
	Cables PVC (non armoured)	To state by Tenderer	
<b>1.1.33</b>	<b>Battery For Emergency Lighting And Fan</b>		
(a)	Manufacturer	To state by Tenderer	
(b)	Model	To state by Tenderer	
(c)	Battery type	To state by Tenderer	
(d)	Voltage and no. of plates	To state by Tenderer	
(e)	Battery Rating	To state by Tenderer	
	<u>Battery Charger</u>		
(a)	Manufacturer	To state by Tenderer	
(b)	Model name and type	To state by Tenderer	
(c)	Certificate	Yes	

ITEM	DESCRIPTION	MBSJ REQUIREMENTS	TENDERER'S OFFER
<b>1.1.34</b>	<b>Emergency Power Operation</b>		
(a)	Is emergency power operation as specified?	To state by Tenderer	
(b)	Give details	To state by Tenderer	
<b>1.1.35</b>	<b>Automatic Rescue Device</b>		
(a)	Model	To state by Tenderer	
(b)	Name of Manufacturer	To state by Tenderer	
(c)	Country of Origin	To state by Tenderer	
(d)	Operation details	To state by Tenderer	
(e)	Certificate	Yes	
	<u>Battery</u>		
(a)	Manufacturer	To state by Tenderer	
(b)	Model name	To state by Tenderer	
(c)	Type	Nickel Cadmium	
(d)	Voltage and no. of plates	To state by Tenderer	
(e)	Battery Rating	To state by Tenderer	
(f)	Certificate	Yes	
	<u>Battery Charger</u>		
(a)	Manufacturer	To state by Tenderer	
(b)	Model name and type	To state by Tenderer	
(c)	Certificate	Yes	

1.2 LIST OF CATALOGUES SUPPLIED

No.	Description
(a)	
(b)	
(c)	
(d)	
(e)	
(f)	
(g)	
(h)	
(i)	
(j)	
(k)	

Tandatangan pentender: \_\_\_\_\_

Nama dan alamat:  
(dengan cap) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Tarikh: \_\_\_\_\_  
\_\_\_\_\_

Tandatangan saksi: \_\_\_\_\_  
\_\_\_\_\_

Nama dan alamat:  
(dengan cap) \_\_\_\_\_  
\_\_\_\_\_

Tarikh: \_\_\_\_\_

----- END OF SECTION 7 -----