

# SCHEDULE OF RATES FOR ELECTRICAL INSTALLATION WORKS IN SARAWAK 2018



*JKR Sarawak  
December 2018*

Notes to tenderers:

1. This is only a cover page for this document. Please obtain the full set from the JKR Sarawak webpage.
2. The “Location Factor From Base at Kuching City” for this tender is \_\_\_\_ % and is the percentage over all the items and rates as listed in this Schedule of Rates to be used for the purposes as stated in the tender documents.
3. **Any attempt to amend / change / correct etc. this percentage by the tenderer shall cause the tender to be disqualified.**

## LOCATION FACTOR FROM BASE AT KUCHING CITY

(To be read together with the Rules of Determining the Location Factor)

<b>Kuching</b>	City	0%
	Padawan	2%
	Santubong	3%
	Siburan	3%
	Bau	5%
	Lundu	8%
	Sematan	9%

<b>Serian</b>	District	5%
	Tebedu	8%

<b>Samarahan</b>	District	2%
	Simunjan	12%
	Sebuyau	15%
	Asajaya	10%
	Sadong Jaya	12%
	Tebakang	8%
	Balai Ringin	8%

<b>Sri Aman</b>	District	15%
	Lubok Antu	20%
	Lingga	20%
	Pantu	20%
	Engkilili	18%
	Skrang	20%

<b>Betong</b>	District	20%
	Spaoh	20%
	Debak	20%
	Pusa	21%
	Beladin	20%
	Maludam	22%
	Saratok	20%
	Roban	20%
	Kabong	20%

<b>Sarikei</b>	District	18%
	Bintangor	18%
	Pakan	20%
	Selalang	20%
	Julau	20%
	Meluan	22%
	Ulu Entabai	40%
	Engkamop	25%
	Nanga Wak	15%
Nanga Entabai	14%	

<b>Sibu</b>	District	12%
	Kem Bt. 10 & 14	13%
	Durin	15%
	Bawang Assan	13%
	Sungai Assan	13%
	Kanowit	16%
	Machan	16%
	Nibong Tada	15%
	Nanga Tada	17%
	Nanga Dap	20%
	Nanga Ngemah	20%
	Nanga Ngungun	20%
	Nanga Poi	22%
	Nanga Jagau	40%
	Selangau	18%
	Ulu Balingian	20%
	Arip	22%
Stapang	16%	
Rassau	22%	

## LOCATION FACTOR FROM BASE AT KUCHING CITY

(To be read together with the Rules of Determining the Location Factor)

<b>Mukah</b>	District	20%
	Dalat	20%
	Oya	20%
	Igan	18%
	Balingian	23%
	Kuala Balingian	23%
	Semop	30%
	Matu	25%
	Betanak	30%
	Daro	25%
	Bruit	30%
	Tanjung Manis	18%

<b>Bintulu</b>	District	15%
	Tatau	20%
	Sebauh	23%

<b>Miri</b>	City	15%
	Subis	20%
	Bekenu	15%
	Marudi	25%
	Long Lama	40%
	Beluru	22%

<b>Limbang</b>	District	30%
	Lawas	28%

<b>Kapit</b>	District	30%
	Song	25%
	Belaga	70%
	Sungai Asap	25%
	Bukit Mabong	40%

## **RULES OF DETERMINING THE LOCATION FACTOR**

1. The percentage (%) factors as stated are for those projects accessible by motorized vehicles within fifteen (15) km radius from the location shown.
2. Where the project site is beyond fifteen (15) km radius of the above stated locations, these additional percentage (%) factors shall be added on to those percentages stated above:

### **% addition**

( i )	> 15km	< 45km	5%
( ii )	> 45km	< 90km	10%
( iii )	> 90km	< 135km	15%
( iv )	> 135km	< 180km	20%
( v )	> 180km	< 220km	25%

3. Where the project sites are accessible only by waterway

( i )	areas within 15 km radius	0%
( ii )	areas within 30 km radius	5%
( iii )	areas within 60 km radius	10%
( iv )	areas within 90 km radius	15%
( v )	areas within 120 km radius	20%
( vi )	areas within 150 km radius	25%
4. Where the project sites can only be accessible by air, the location factor shall be doubled over the value obtained from that by motorized vehicles.
5. Where the project sites can only be accessible by foot, the location factor shall be fifty percent (50%) over the value obtained from that by motorized vehicles.
6. Where in determining the locations factor and two or more factors and radial distances are equally applicable, the lower in each case shall be used.
7. Where in determining the location factor and two or more factors and radial distances by the rules above whereby there can be a combination due to accessibility, say partly land and partly waterway or partly waterway and partly by foot, there shall be a combination of the rules according to the radial distance from the nearest locations stated above.
8. Where in determining the location factor and the site for the project lies within two radial distances, the additional percentage (%) for the radial distance within which more than fifty percent (50%) of the Site lies shall be used.

## **PREAMBLES**

1. All rates given shall include supply, delivery, installation, testing and commissioning and shall include associated accessories and fitting.
2. Rate per point applies for the stated route length. For longer route length, the rate per metre, derived from the rate per point shall be used.
3. All rates shall be used and read together with the “Location Factor From Base at Kuching City”.
4. All descriptions are to be read with reference to the Standard Electrical Installation Specification (Latest Version) and the following :
  - a) All rates herein shall be held to include for supply and delivery to site, wastage on materials, carriage and cartage, carrying in and return of empties, hoisting, setting, fitting and fixing in position, making good and all other labours and everything else necessary (including any custom duties, etc.) for the proper completion of each item and for establishment charges and profit.
  - b) Rates for each item of paving shall be held to include for all rounded angles, arises and making good and any other sundry items of alike nature.
  - c) Rates for mild steel tubing are to include for short running lengths, sockets, backnuts, elbows and bends.

A GENERAL WIRING

Item No.	Description	Unit	Rate (RM)
	<b><u>GS Concealed conduit wiring c/w metal clad switch and socket plates and accessories</u></b> : Wiring shall be run concealed, in Class "B" galvanised steel conduits and complete with GS conduit boxes let into cement or timber wall, or partition, together with all necessary metal clad lighting switch plates, switched socket plates, isolators and accessories. Wiring shall be 1.5 mm <sup>2</sup> PVC for fan and lighting points, 2.5 mm <sup>2</sup> PVC for 13A and 15A switched sockets. 13A 3-pin switched socket points shall be wired in ring circuit(s). Lighting & Fan Points shall be terminated to ceiling rose. Accepted brands – Clipsal, PDL, MEM & JMAL approved brands.		
1	<b><u>Lighting Point</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to 20 metres route length).		
(i)	6A 1 way lighting point c/w switch.	per point	107.00
(ii)	6A 2 way lighting point c/w switch.	per point	146.00
(iii)	6A immediate lighting point c/w switch.	per point	169.00
2	<b><u>Lighting Point</u></b> : wired from nearest lighting point (sharing same switch) (up to 4 metres route length).		
(i)	6A 1 way lighting point.	per point	56.00
3	<b><u>Fan Points</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to 10 metres route length).		
(i)	Ceiling fan point c/w 6A switch.	per fan point	107.00
(ii)	Extractor fan point c/w 6A switch. Cost excludes hard-wood frame and opening for fan.	per fan point	107.00
4	<b><u>13A 3-pin : Switched Socket Outlets</u></b> :		
(i)	13A 3-pin switched socket point in ring circuit : 1 – gang (up to 10 metres route length).	per 1-gang socket outlet pt.	146.00
(ii)	13A 3-pin switched socket point in ring circuit : 2 – gang (up to 10 metres route length).	per 2-gang socket outlet pt.	197.00
(iii)	15A 3-pin switched socket point (up to 15 metres route length).	per point	247.00
5	<b><u>Isolator and Water Heater Points</u></b> : (up to 15 metres route length).		
(i)	Water heater point c/w 20A double pole switch with neon light indicator (4mm <sup>2</sup> PVC cable).	per point	281.00
(ii)	20A single phase isolator point c/w 4 mm <sup>2</sup> PVC cable.	per isolator point	326.00
(iii)	30A single phase isolator point c/w 6 mm <sup>2</sup> PVC cable.	per isolator point	449.00
(iv)	20A TPN isolator point c/w 4 mm <sup>2</sup> PVC cable.	per isolator point	472.00
(v)	30A TPN isolator point c/w 6 mm <sup>2</sup> PVC cable.	per isolator point	640.00
6	<b><u>TV / Telephone Point</u></b> : (up to 15 metres route length)		
(i)	1-pair c/w socket and 2 x 0.63 mm <sup>2</sup> cable.	per point	101.00

A GENERAL WIRING

Item No.	Description	Unit	Rate (RM)
(ii)	2-pairs c/w socket and 4 x 0.63 mm <sup>2</sup> cable.	per point	124.00
(iii)	TV antennae point c/w 5c / 2v cable and TV socket.	per point	101.00
7	<b><u>Miscellaneous Wiring Point</u></b> : (up to 15 metres route length).		
(i)	Single phase power supply to fire protection control panel c/w 2.5 mm <sup>2</sup> PVC cable.	per point	242.00
(ii)	Lighting point for "Emergency Lighting" or "Keluar Light" sign c/w 2.5 mm <sup>2</sup> PVC cable.	per point	101.00
	<b><u>GS Surface conduit wiring c/w metal clad switch and socket plates and accessories</u></b> : Wiring shall be run concealed, in Class "B" galvanised steel conduits and complete with GS conduit boxes, together with all necessary metal clad lighting switch plates, switched socket plates, isolators and accessories. Wiring shall be 1.5 mm <sup>2</sup> PVC for fan and lighting points, 2.5 mm <sup>2</sup> PVC for 13A and 15A switched sockets. 13A 3-pin switched socket points shall be wired in ring circuit(s). Lighting & Fan Points shall be terminated to ceiling rose. Accepted brands – Clipsal, PDL, MEM & JMAL approved brands.		
8	<b><u>Lighting Point</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to of 10 metres route length).		
(i)	6A 1-way lighting point c/w switch.	per point	96.00
(ii)	6A 2-way lighting point c/w switch.	per point	131.00
(iii)	6A intermediate lighting point c/w switch.	per point	152.00
9	<b><u>Lighting Point</u></b> : wired from nearest lighting point (sharing same switch) (up to 4 metres route length).		
(i)	6A 1-way lighting point.	per point	51.00
10	<b><u>Fan Points</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to of 10 metres route length).		
(i)	Ceiling fan point c/w 6A switch.	per fan point	96.00
(ii)	Extractor fan point c/w 6A switch. Cost excludes hard-wood frame and opening for fan.	per fan point	96.00
11	<b><u>13A 3-pin : Switched Socket Outlets</u></b> :		
(i)	13A 3-pin switched socket point in ring circuit : 1 – gang (up to 10 metres route length).	per 1-gang socket point	131.00
(ii)	13A 3-pin switched socket point in ring circuit : 2 – gang (up to 10 metres route length).	per 2-gang socket point	177.00
(iii)	15A 3-pin switched socket point : (up to 15 metres route length).	per point	222.00
12	<b><u>Isolator and Water Heater Points</u></b> : (up to 15 metres route length).		
(i)	Water heater point c/w 20A double pole switch with neon light indicator (4mm <sup>2</sup> PVC cable).	per point	253.00

A GENERAL WIRING

Item No.	Description	Unit	Rate (RM)
12	<b><u>Isolator and Water Heater Points</u></b> : (up to 15 metres route length) (cont'd)		
(ii)	20A single phase isolator point c/w 4 mm <sup>2</sup> PVC cable.	per isolator point	293.00
(iii)	30A single phase isolator point c/w 6 mm <sup>2</sup> PVC cable.	per isolator point	404.00
(iv)	20A TPN isolator point c/w 4 mm <sup>2</sup> PVC cable.	per isolator point	425.00
(v)	30A TPN isolator point c/w 6 mm <sup>2</sup> PVC cable.	per isolator point	576.00
13	<b><u>TV / Telephone Point</u></b> : (up to 15 metres route length).		
(i)	1 – pair c/w socket and 2 x 0.63 mm <sup>2</sup> cable.	per point	91.00
(ii)	2 – pairs c/w socket and 4 x 0.63 mm <sup>2</sup> cable.	per point	111.00
(iii)	TV antennae point c/w 5c / 2v cable and TV socket.	per point	91.00
14	<b><u>Miscellaneous Wiring Point</u></b> : (up to 15 metres route length).		
(i)	Single phase power supply to fire protection control panel c/w 2.5 mm <sup>2</sup> PVC cable.	per point	217.00
(ii)	Lighting point for “Emergency Lighting” or “Keluar Light” sign c/w 2.5 mm <sup>2</sup> PVC cable.	per point	91.00
	<b><u>GS Concealed conduit wiring c/w plastic moulded switch and socket plates and accessories</u></b> : Wiring shall be run concealed, in Class ‘B’ galvanized steel conduits and complete with GS conduit boxes let into cement or timber wall, or partition, together with all necessary PVC moulded lighting switch plates, switched socket plates and accessories. Wiring shall be 1.5 mm <sup>2</sup> PVC for fan and lighting points, 2.5 mm <sup>2</sup> PVC for 13A and 15A switched sockets. 13A 3-pin switched socket points shall be wired in ring circuit/s. Lighting & Fan Points shall be terminated to ceiling rose. Accepted brands – Clipsal, PDL, MEM & JMAL approved brands.		
15	<b><u>Lighting Point</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to 10 metres route length).		
(i)	6A 1 way lighting point c/w switch.	per point	101.00
(ii)	6A 2 way lighting point c/w switch.	per point	139.00
(iii)	6A intermediate lighting point c/w switch.	per point	160.00
16	<b><u>Lighting Point</u></b> : wired from nearest lighting point (sharing same switch) (up to 4 metres route length).		
(i)	6A 1 way lighting point.	per point	53.00
17	<b><u>Fan Points</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to of 10 metres route length).		
(i)	Ceiling fan point c/w 6A switch.	per fan point	101.00
(ii)	Extractor fan point c/w 6A switch. Cost excludes hard-wood frame and opening for fan.	per fan point	101.00



A GENERAL WIRING

Item No.	Description	Unit	Rate (RM)
18	<b><u>13A 3-pin : Switched Soked Outlets and Water Heater Point</u></b>		
(i)	13A 3-pin switched socket point in ring circuit : 1-gang (up to 10 metre route length)	per 1-gang socket outlet point	139.00
(ii)	13A 3-pin switched socket point in ring circuit : 2-gang (up to 10 metre route length)	per 2-gang socket outlet point	187.00
(iii)	15A 3-pin switched socket point (up to 15 metre route length)	per point	235.00
19	<b><u>Isolator and Water Heater Point</u></b> : (up to 15 metres route length).		
(i)	Water heater point c/w 20A double pole switch with neon light indicator (4 mm <sup>2</sup> PVC cable).	per point	267.00
(ii)	20A single phase isolator point c/w 4 mm <sup>2</sup> PVC cable.	per isolator point	309.00
(iii)	30A single phase isolator point c/w 6 mm <sup>2</sup> PVC cable.	per isolator point	427.00
(iv)	20A TPN isolator point c/w 4 mm <sup>2</sup> PVC cable.	per isolator point	448.00
(v)	30A TPN isolator point c/w 6 mm <sup>2</sup> PVC cable.	per isolator point	608.00
20	<b><u>TV / Telephone Point</u></b> : (up to 15 metres route length).		
(i)	1 – pair c/w socket and 2 x 0.63 mm <sup>2</sup> cable.	per point	96.00
(ii)	2 – pairs c/w socket and 4 x 0.63 mm <sup>2</sup> cable.	per point	117.00
(iii)	TV antennae point c/w 5c / 2v cable and TV socket.	per point	96.00
21	<b><u>Miscellaneous wiring point</u></b> : (up to 15 metres route length)		
(i)	Single phase power supply to fire protection control panel c/w 2.5 mm <sup>2</sup> PVC cable.	per point	229.00
(ii)	Lighting point for “Emergency Lighting” or “Keluar Light” sign c/w 2.5 mm <sup>2</sup> PVC cable.	per point	96.00
	<b><u>uPVC Concealed conduit wiring c/w plastic moulded switch and socket plates and accessories</u></b> : Wiring shall be run surface in High Impact / uPVC conduit and complete with PVC conduit boxes together with all necessary PVC lighting switch plates, switched socket plates, isolator and accessories. Wiring shall be 1.5 mm <sup>2</sup> PC for fan and lighting points, 2.5 mm <sup>2</sup> PVC for 13A and 15A Switched sockets. Lighting & Fan Points shall be terminated to ceiling rose. Accepted brands – Clipsal, PDL, MEM & JMAL approved brands.		
22	<b><u>Lighting Point</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to 10 metres route length)		
(i)	6A 1 way lighting point c/w switch	per point	95.00
(ii)	6A 2 way lighting point c/w switch	per point	130.00
(iii)	6A intermediate lighting point c/w switch	per point	150.00

A GENERAL WIRING

Item No.	Description	Unit	Rate (RM)
23	<b>Lighting Point</b> : wired from nearest lighting point (sharing same switch) (up to 4 metres route length)		
(i)	6A 1 way lighting point	per point	50.00
24	<b>Fan Points</b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to 10 metres route length)		
(i)	Ceiling fan point c/w 6A switch	per fan point	95.00
(ii)	Extractor fan point c/w 6A switch. Cost exclude hard-wood frame and opening for fan.	per fan point	95.00
25	<b>13A 3-pin : Switched Socket Outlets</b>		
(i)	13A 3 – pin switched socket point in ring circuit : 1 – gang (up to 10 metres route length)	per 1-gang socket outlet point	130.00
(ii)	13A 3 – pin switched socket point in ring circuit : 2 – gang (up to 10 metres route length)	per 2-gang socket outlet point	175.00
(iii)	15A 3 – pin switched socket point (up to 15 metres route length)	per point	219.00
26	<b>Isolator and Water Heater points</b> : (up to 15 metres route length).		
(i)	Water heater point c/w 20A double pole switch with neon light indicator. (4 mm <sup>2</sup> PVC cable)	per point	249.00
(ii)	20A single phase isolator point c/w 4 mm <sup>2</sup> PVC cable	per isolator point	289.00
(iii)	30A single phase isolator point c/w 6 mm <sup>2</sup> PVC cable	per isolator point	399.00
(iv)	20A TPN isolator point c/w 4 mm <sup>2</sup> PVC cable	per isolator point	419.00
(v)	30A TPN isolator point c/w 6 mm <sup>2</sup> PVC cable	per isolator point	569.00
27	<b>TV / Telephone Point</b> : (up to 15 metres route length).		
(i)	1 – pair c/w socket and 2 x 0.63 mm <sup>2</sup> cable.	per point	90.00
(ii)	2 – pairs c/w socket and 4 x 0.63 mm <sup>2</sup> cable.	per point	110.00
(iii)	TV antennae point c/w 5c / 2v cable and TV socket.	per point	90.00
28	<b>Miscellaneous wiring point</b> : (up to 15 metres route length)		
(i)	Single phase power supply to fire protection control panel c/w 2.5 mm <sup>2</sup> PVC Cable	per point	215.00
(ii)	Lighting point for “Emergency Lighting” or “Keluar Light” c/w 2.5 mm <sup>2</sup> PVC Cable	per point	90.00

A GENERAL WIRING

Item No.	Description	Unit	Rate (RM)
	<b><u>uPVC Surface conduit wiring c/w plastic moulded switch and socket plates and accessories</u></b> : Wiring shall be run surface in High Impact / uPVC conduits and complete with PVC conduit boxes together with all necessary PVC lighting switch plates, switched socket plates, isolator and accessories. Wiring shall be 1.5 mm <sup>2</sup> PVC for fan and lighting points, 2.5 mm <sup>2</sup> PVC for 13A and 15A Switched sockets. Lighting & Fan Points shall be terminated to ceiling rose. Accepted brands – Clipsal, PDL, MEM & JMAL approved brands.		
29	<b><u>Lighting Point</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to 10 metres route length)		
(i)	6A 1 way lighting point c/w switch	per point	85.00
(ii)	6A 2 way lighting point c/w switch	per point	117.00
(iii)	6A intermediate lighting point c/w switch	per point	135.00
30	<b><u>Lighting Points</u></b> : wired from nearest lighting point (sharing same switch) (up to 4 metres route length)		
(i)	6A 1 way lighting point	per point	45.00
31	<b><u>Fan Points</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to 10 metres route length)		
(i)	Ceiling fan point c/w 6A switch	per fan point	85.00
(ii)	Extractor fan point c/w 6A switch. Cost excluded hard-wood frame and opening for fan.	per fan point	85.00
32	<b><u>13A 3-pin : Switched Socket Outlets</u></b>		
(i)	13A 3-pin switched socket point in ring circuit : 1 – gang (up to 10 metres route length)	per 1-gang socket outlet point	117.00
(ii)	13A 3-pin switched socket point in ring circuit : 2 – gang (up to 10 metres route length)	per 2-gang socket outlet point	157.00
(iii)	15A 3-pin switched socket point (up to 15 metres route length)	per point	198.00
33	<b><u>Isolator and Water Heater points</u></b> : (up to 15 metres route length).		
(i)	Water heater point c/w 20A double pole switch with neon light indicator (4 mm <sup>2</sup> PVC cable)	per point	224.00
(ii)	20A single phase isolator point c/w 4 mm <sup>2</sup> PVC cable	per isolator point	260.00
(iii)	30A single phase isolator point c/w 6 mm <sup>2</sup> PVC cable	per isolator point	359.00
(iv)	20A TPN isolator point c/w 4 mm <sup>2</sup> PVC cable	per isolator point	377.00
(v)	30A TPN isolator point c/w 6 mm <sup>2</sup> PVC cable	per isolator point	512.00
34	<b><u>TV/Telephone Point : (up to 15 metres route length)</u></b>		
(i)	1 – pair c/w socket and 2 x 0.63mm <sup>2</sup> cable	per point	81.00
(ii)	2 – pair c/w socket and 4 x 0.63mm <sup>2</sup> cable	per point	99.00

A GENERAL WIRING

Item No.	Description	Unit	Rate (RM)
34	<b><u>TV/Telephone Point : (up to 15 metres route length) (cont'd)</u></b>		
(iii)	TV antennae point c/w 5c / 2v cable and TV socket	per point	81.00
35	<b><u>Miscellaneous wiring point</u></b> : (up to 15 metres route length)		
(i)	Single phase power supply to fire protection control panel c/w 2.5 mm <sup>2</sup> PVC Cable	per point	193.00
(ii)	Lighting point for "Emergency Lighting" or "Keluar Light" c/w 2.5 mm <sup>2</sup> PVC Cable	per point	81.00
	<b><u>Surface Wiring</u></b> : Wiring shall be run surface on batten wood complete with all necessary PVC moulded conduit boxes, lighting switch plates, 13A or 15A switched socket plates and accessories. Wiring shall be 1.5 mm <sup>2</sup> PVC/PVC for fan and lighting points, 2.5 mm <sup>2</sup> PVC/PVC for 13A and 15A switched sockets. 13A 3-pin switched socket points shall be wired in ring circuit/s. Lighting & Fan Points shall be terminated to ceiling rose. Accepted brands – Clipsal, PDL, MEM & JMAL approved brands.		
36	<b><u>Lighting Point</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to 10 metres route length)		
(i)	6A 1 way lighting point c/w switch	per point	81.00
(ii)	6A 2 way lighting point c/w switch	per point	111.00
(iii)	6A intermediate lighting point c/w switch	per point	128.00
37	<b><u>Lighting Points</u></b> : wired from nearest lighting point (sharing same switch) (up to 4 metres route length)		
(i)	6A 1 way lighting point	per point	43.00
38	<b><u>Fan Points</u></b> : wired from nearest switch c/w 1.5 mm <sup>2</sup> PVC cable (up to 10 metres route length)		
(i)	Ceiling fan point c/w 6A switch	per fan point	81.00
(ii)	Extractor fan point c/w 6A switch. Cost excluded hard-wood frame and opening for fan.	per fan point	81.00
39	<b><u>13A 3-pin : Switched Socket Outlets</u></b>		
(i)	13A 3-pin switched socket point in ring circuit : 1 – gang (up to 10 metres route length)	per 1-gang socket outlet point	111.00
(ii)	13A 3-pin switched socket point in ring circuit : 2 – gang (up to 10 metres route length)	per 2-gang socket outlet point	149.00
(iii)	15A 3-pin switched socket point (up to 15 metres route length)	per point	188.00
40	<b><u>Isolator and Water Heater points</u></b> : (up to 15 metres route length).		
(i)	Water heater point c/w 20A double pole switch with neon light indicator (4 mm <sup>2</sup> PVC cable)	per point	213.00
(ii)	20A single phase isolator point c/w 4 mm <sup>2</sup> PVC cable	per isolator point	247.00
(iii)	30A single phase isolator point c/w 6 mm <sup>2</sup> PVC cable	per isolator point	341.00

A GENERAL WIRING

Item No.	Description	Unit	Rate (RM)
	<b><u>Isolator and Water Heater points</u></b> : (up to 15 metres route length) (cont'd).		
(iv)	20A TPN isolator point c/w 4 mm <sup>2</sup> PVC cable	per isolator point	358.00
(v)	30A TPN isolator point c/w 6 mm <sup>2</sup> PVC cable	per isolator point	486.00
41	<b><u>TV / Telephone Point</u></b> : (up to 15 metres route length)		
(i)	1 – pair c/w socket and 2 x 0.63 mm <sup>2</sup> cable.	per point	77.00
(ii)	2 – pairs c/w socket and 4 x 0.63 mm <sup>2</sup> cable.	per point	94.00
(iii)	TV antennae point c/w 5c / 2v cable and TV socket.	per point	77.00
42	<b><u>Miscellaneous wiring point</u></b> : (up to 15 metres route length)		
(i)	Single phase power supply to fire protection control panel c/w 2.5 mm <sup>2</sup> PVC Cable	per point	183.00
(ii)	Lighting point for “Emergency Lighting” or “Keluar Light” c/w 2.5 mm <sup>2</sup> PVC Cable	per point	77.00
43	<b><u>Main and Sub-mains Wiring</u></b> : from SESCO supply intake to distribution boards / consumer units, through meter and cut-outs, using surface wiring.		
(i)	1-phase 2 x 16 mm <sup>2</sup> 1-core PVC insulated and sheathed cables.	per meter	34.00
(ii)	1-phase 2 x 25 mm <sup>2</sup> 1-core PVC insulated and sheathed cables.	per meter	45.00
(iii)	3-phase 4 x 16 mm <sup>2</sup> 1-core PVC insulated and sheathed cables.	per meter	56.00
(iv)	3-phase 4 x 25 mm <sup>2</sup> 1-core PVC insulated and sheathed cables.	per meter	79.00
44	<b><u>Earthing Leads</u></b> : from distribution board to earth electrode-green PVC insulated copper cable protected by class ‘B’ galvanised steel conduits to be installed below surface of hard-standing, cement floor, corridor, apron, etc. (up to 10 metres route length).		
(i)	16 mm <sup>2</sup> PVC insulated.	per lot	281.00
(ii)	25 mm <sup>2</sup> PVC insulated.	per lot	359.00

B LIGHTING FITTINGS, FANS AND ACCESSORIES

Item No.	Description	Unit	Rate (RM)
	<b>Accessories</b> : Cost for extractor fan hole openings in brick or wooden walls shall include cost of making the hole together with 2" x 4" hardwood frame. Size of opening shall be appropriate for the diameter of fans indicated.		
1	Installation of fan hook from cement floor slab.	per unit	36.00
2	Installation of fan hook from timber floor joist.	per unit	29.00
3	Extractor fan hole opening in brick wall for extractor fan of diameter from 400mm to 500mm (16" to 20").	per no.	219.00
4	Extractor fan hole opening in brick wall for extractor fan of diameter from 200mm to 350mm (8" to 14").	per no.	180.00
5	Extractor fan hole opening in brick wall for extractor fan of diameter from 400mm to 500mm (16" to 20").	per no.	148.00
6	Extractor fan hole opening in brick wall for extractor fan of diameter from 200mm to 350mm (8" to 14").	per no.	129.00
7	Extractor fan hole opening in glass panel for extractor fan of diameter from 200mm to 350mm (8" to 14").	per no.	165.00
	<b>Fans</b> : Cost includes supply and installation of fittings. Ceiling fans and oscillating fans shall have individual 3-speed (low/medium/high) regulators. Wall fans shall feature pull cord oscillation control and 3-speed (low/medium/high) regulators. Ceiling fans shall have safety steel suspension wire and safe power disconnection feature. Cost of making fan hole opening is priced separately. Accepted brands – Khind, National, KDK, Sanyo & JMAL approved brands.		
8	Ceiling fan 1,520 mm (60") diameter sweep.	per unit	183.00
9	Ceiling mount oscillating fan – 500 mm (20") dia.	per unit	365.00
10	Ceiling mount oscillating fan – 400 mm (16") dia.	per unit	292.00
11	Wall mount fan – 500 mm (20") diameter.	per unit	292.00
12	Wall mount fan – 400 mm (16") diameter.	per unit	258.00
13	Extractor fan – 500 mm (20") diameter.	per unit	292.00
14	Extractor fan – 400 mm (16") diameter.	per unit	247.00
15	Extractor fan – 350 mm (14") diameter.	per unit	213.00
16	Extractor fan – 300 mm (12") diameter.	per unit	191.00
17	Extractor fan – 200 mm (8") diameter.	per unit	165.00

B LIGHTING FITTINGS, FANS AND ACCESSORIES

Item No.	Description	Unit	Rate (RM)
	<b><u>Fluorescent Fittings</u></b> : All fluorescent fittings shall be complete with low loss polyester resin impregnated ballast of loss not exceeding 6.5 watts, power factor correction capacitor to correct to power factor of not less than 0.85, starter, fluorescent tubes and holders. Cost includes supply and installation. Acceptable brands – LHL, Britelite, Davis, Jetlite, National, GEC, Philip, Thorn & JMAL approved brands. (T8 Fluorescent)		
18	<b><u>Channel Fluorescent Fitting – 1 x 18W / 36 W Surface Mount</u></b>		
(i)	1 x 18 watt bare channel fluorescent fitting.	per unit	35.00
(ii)	1 x 18 watt channel fluorescent fitting c/w wire guard.	per unit	64.00
(iii)	1 x 36 watt bare channel fluorescent fitting.	per unit	41.00
(iv)	1 x 36 watt bare channel fluorescent fitting c/w metal angle reflector.	per unit	76.00
(v)	1 x 36 watt bare channel fluorescent fitting c/w suspension rod.	per unit	82.00
(vi)	1 x 36 watt channel fluorescent fitting c/w wire guard.	per unit	71.00
(vii)	1 x 36 watt channel fluorescent fitting c/w wire guard and suspension rod.	per unit	101.00
19	<b><u>Channel Fluorescent Fitting – 2 x 36 W Surface Mount</u></b>		
(i)	2 x 36 watt bare channel fluorescent fitting.	per unit	71.00
(ii)	2 x 36 watt channel fluorescent fitting c/w suspension rod.	per unit	94.00
(iii)	2 x 36 watt bare channel fluorescent fitting c/w diakon diffuser.	per unit	106.00
(iv)	2 x 36 watt bare channel fluorescent fitting c/w diakon diffuser and suspension rod.	per unit	129.00
(v)	2 x 36 watt bare channel fluorescent fitting c/w metal trough reflectors.	per unit	100.00
(vi)	2 x 36 watt channel fluorescent fitting c/w metal trough reflectors and suspension rod.	per unit	135.00
20	<b><u>Modular type Fluorescent Fittings – Recessed Fittings</u></b>		
(i)	2 x 18 watt modular recessed (2' x 2') fluorescent fitting c/w aluminium parabolic reflector and baffles.	per unit	165.00
(ii)	2 x 36 watt modular recessed (2' x 4') fluorescent fitting c/w aluminium parabolic reflector and baffles.	per unit	200.00
(iii)	3 x 36 watt modular recessed (2' x 4') fluorescent fitting c/w aluminium parabolic reflector and louvers.	per unit	242.00
21	<b><u>Modular type Fluorescent Fittings – Surface Fittings</u></b>		
(i)	2 x 18 watt modular recessed (2' x 2') fluorescent fitting c/w aluminium parabolic reflector and baffles.	per unit	165.00
(ii)	2 x 36 watt modular recessed (2' x 4') fluorescent fitting c/w aluminium parabolic reflector and baffles.	per unit	200.00
(iii)	3 x 36 watt modular recessed (2' x 4') fluorescent fitting c/w aluminium parabolic reflector and louvers.	per unit	229.00

B LIGHTING FITTINGS, FANS AND ACCESSORIES

Item No.	Description	Unit	Rate (RM)
22	<b><u>Self-contained Modular type Fluorescent Fittings c/w Battery &amp; Charger</u></b>		
(i)	2 x 18 watt modular recessed (2' x 2') fluorescent fitting c/w aluminium parabolic reflector and baffles, 3-hr maintenance free sealed lead-acid battery, charger and control unit.	per unit	343.00
(ii)	2 x 36 watt modular recessed (2' x 4') fluorescent fitting c/w aluminium parabolic reflector and baffles, 3-hr maintenance free sealed lead-acid battery, charger and control unit.	per unit	425.00
(iii)	2 x 18 watt modular surface (2' x 2') fluorescent fitting c/w aluminium parabolic reflector and baffles, 3-hr maintenance free sealed lead-acid battery, charger and control unit.	per unit	342.00
(iv)	2 x 18 watt modular recessed (2' x 4') fluorescent fitting c/w aluminium parabolic reflector and baffles, 3-hr maintenance free sealed lead-acid battery, charger and control unit.	per unit	425.00
	<b><u>Fluorescent Fittings</u></b> : All fluorescent fittings shall be complete with low loss polyester resin impregnated ballast of loss not exceeding 6.5 watts, power factor correction capacitor to correct to power factor of not less than 0.85, starter, fluorescent tubes and holders. Cost includes supply and installation. Acceptable brands – LHL, Philip & JMAL approved brands. (T5 Fluorescent)		
23	<b><u>Channel Fluorescent Fitting – 14W / 28W Surface Mount</u></b>		
(i)	1 x 14 watt	per unit	65.00
(ii)	2 x 14 watt	per unit	85.00
(iii)	1 x 28 watt	per unit	82.00
(iv)	2 x 28 watt	per unit	108.00
24	<b><u>Channel Fluorescent Fitting – 14W / 28W Surface Mount c/w Metal trough reflector</u></b>		
(i)	1 x 14 watt	per unit	85.00
(ii)	2 x 14 watt	per unit	120.00
(iii)	1 x 28 watt	per unit	95.00
(iv)	2 x 28 watt	per unit	135.00
25	<b><u>Modular type Fluorescent Fitting c/w aluminium Parabolic reflector and baffles</u></b>		
(i)	2 x 14 watt (modular : 600mm x 600mm)	per unit	200.00
(ii)	3 x 14 watt (modular : 600mm x 600mm)	per unit	266.00
(iii)	4 x 14 watt (modular : 600mm x 600mm)	per unit	294.00
(iv)	2 x 28 watt (modular : 300mm x 1200mm)	per unit	228.00
(v)	2 x 28 watt (modular : 600mm x 1200mm)	per unit	244.00



B LIGHTING FITTINGS, FANS AND ACCESSORIES

Item No.	Description	Unit	Rate (RM)
	<b><u>Modular type Fluorescent Fitting c/w aluminium Parabolic reflector and baffles (cont'd)</u></b>		
(vi)	3 x 28 watt (modular : 600mm x 1200mm)	per unit	324.00
(vii)	4 x 28 watt (modular : 600mm x 1200mm)	per unit	358.00
	<b><u>Miscellaneous Lighting Fittings</u></b> : Cost includes supply and installation of fittings. Installation for floodlight fittings is in reference to standard installation on walls accessible by ladder. Accepted brands – for flood lights (Nikkon, Thorn, Philips & JMAL approved brands) & for others (JMAL approved brands)		
26	<b><u>Emergency Light / KELUAR Sign Fittings</u></b> : self contained c/w sealed 3-hr maintenance free sealed lead-acid battery, charger and control unit c/w trickle charging & over-charge protection.		
(i)	Self contained 2 x 8 watts emergency lighting fitting.	per unit	129.00
(ii)	'KELUAR' sign – fluorescent type, single sided.	per unit	189.00
(iii)	'KELUAR' sign – fluorescent type, double sided.	per unit	234.00
(iv)	'KELUAR' c/w direction signage – single sided fluorescent type.	per unit	194.00
(v)	'KELUAR' c/w direction signage – double sided fluorescent type.	per unit	247.00
(vi)	'KELUAR' sign – LED type, single sided.	per unit	194.00
(vii)	'KELUAR' sign – LED type, double sided.	per unit	206.00
(viii)	'KELUAR' c/w direction signage – single sided LED type.	per unit	212.00
(ix)	'KELUAR' c/w direction signage – double sided LED type.	per unit	225.00
27	<b><u>Lamp-shade c/w incandescent lamp</u></b>		
(i)	Coolicon lamp shade, lamp holder c/w 40W, 60W or 100W incandescent lamp.	per unit	18.00
28	<b><u>Flood-light / Spot-light Fittings</u></b>		
(i)	Outdoor type spot lighting c/w metal lamp holder and PAR 38 150 W lamp of various colours.	per unit	71.00
(ii)	Outdoor type metal halide floodlight fittings c/w 400 W lamp, control gear and power factor correction capacitor.	per unit	543.00
(iii)	Outdoor type metal halide floodlight fittings c/w 250W lamp, control gear and power factor correction capacitor	per unit	472.00
(iv)	Outdoor type high pressure sodium floodlight fittings c/w 400W lamp, control gear and power factor correction capacitor.	per unit	566.00
(v)	Outdoor type high pressure sodium floodlight fittings c/w 250W lamp, control gear and power factor correction capacitor.	per unit	483.00

B LIGHTING FITTINGS, FANS AND ACCESSORIES

Item No.	Description	Unit	Rate (RM)
29	<b><u>Bulkhead Fittings</u></b>		
(i)	Bulkhead fitting – pressure die-cast aluminium alloy type c/w 40W, 60W or 100W incandescent lamp, glass cover and wire guard.	per unit	94.00
(ii)	Bulkhead fitting – plastic die-cast type c/w 40W, 60W or 100W incandescent lamp, plastic cover and wire guard.	per unit	47.00

C DISTRIBUTION BOARDS & CONSUMER UNITS

Item No.	Description	Unit	Rate (RM)
	<b><u>Distribution Boards &amp; Consumer Units</u></b> : Distribution boards and consumer units shall be metal clad type c/w insulator, residual current circuit breaker (RCCB) ad assortment of miniature circuit breakers (MCB). Isolators and RBBC shall be double pole and four pole respectively for single phase and three phase units. Isolators shall be rated at 60A min. Miniature circuit breakers shall be single pole 6A, 15A or 32A as required, of minimum breaking capacity 5 kA, and tripping curve Type B. Comb-type busbars are not accepted. Units shall feature DIN rail mounting for plug-in, wired-out mcb. Accepted brands – MEM, Hager, L&T, LKH & JMAL approved brands.		
1	<b><u>Single Phase Consumer Units</u></b>		
(i)	4 – way (RCCB : 40A, 100 mA sensitivity).	per set	303.00
(ii)	4 – way (RCCB : 60A, 100 mA sensitivity).	per set	354.00
(iii)	6 – way (RCCB : 40A, 100 mA sensitivity).	per set	388.00
(iv)	6 – way (RCCB : 60A, 100 mA sensitivity).	per set	461.00
(v)	8 – way (RCCB : 40A, 100 mA sensitivity).	per set	461.00
(vi)	8 – way (RCCB : 60A, 100 mA sensitivity).	per set	517.00
2	<b><u>Three Phase Distribution Boards c/w RCCB 100mA sensitivity</u></b>		
(i)	4 – way (RCCB : 40A, 100 mA sensitivity).	per set	1,022.00
(ii)	4 – way (RCCB : 60A, 100 mA sensitivity).	per set	1,078.00
(iii)	6 – way (RCCB : 40A, 100 mA sensitivity).	per set	1,123.00
(iv)	6 – way (RCCB : 60A, 100 mA sensitivity).	per set	1,157.00
(v)	8 – way (RCCB : 40A, 100 mA sensitivity).	per set	1,308.00
(vi)	8 – way (RCCB : 60A, 100 mA sensitivity).	per set	1,438.00
3	<b><u>Three Phase Distribution Boards c/w RCCB 300mA sensitivity</u></b>		
(i)	4 – way (RCCB : 40A, 300 mA sensitivity).	per set	977.00
(ii)	4 – way (RCCB : 60A, 300 mA sensitivity).	per set	1,022.00
(iii)	6 – way (RCCB : 40A, 300 mA sensitivity).	per set	1,061.00
(iv)	6 – way (RCCB : 60A, 300 mA sensitivity).	per set	1,112.00
(v)	8 – way (RCCB : 40A, 300 mA sensitivity).	per set	1,269.00
(vi)	8 – way (RCCB : 60A, 300 mA sensitivity).	per set	1,359.00