

POWER SUPPLY CONNECTION / CS3 APPLICATION

PROCEDURES & GUIDELINES

FOR NON-CONTESTABLE CONSUMER INSTALLATION

NOTE:

This application guide is suitable for applying supply connection CS3 for temporary supply and permanent supply (below and above 45KVA) for non-contestable consumer type. Applicant shall read through all sections of this application guide and follow the instructions provided.

LC ENGINEERING SERVICES PTE LTD CONSULTANCY AND ENGINEERING EMA ELECTRICAL LICENSING TESTING, MAINTENANCE & PROJECT MANAGEMENT



(Rev: 29-Sep-2019)

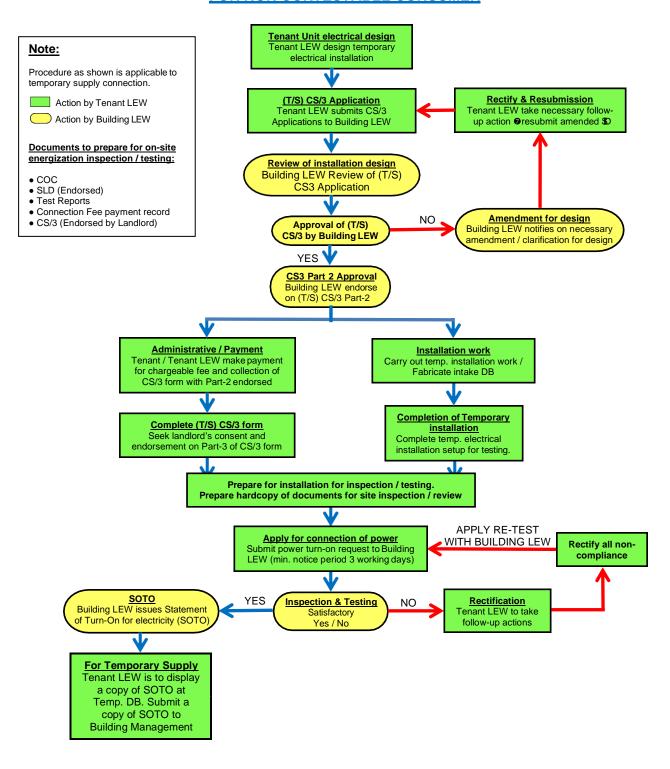
Cont	tent	Page No.
1.	Procedure (Flow-chart) for application of electricity connection for temporary supply usage for construction / renovation work for non-contestable consumer	3
2.	Procedure (Flow-chart) for application of electricity connection for permanent Supply for non-contestable consumer (Below 45KVA)	4
3.	Procedure (Flow-chart) for application of electricity connection for permanent Supply for non-contestable consumer (Above 45KVA)	5
4.	Guidelines for Application for Connection of Electricity Supply by Tenants (For Contestable consumers)	6
5.	Form-A: CS3 Application Information	11
6.	Form-B: CS3 Form - Request of electricity by Tenants (For temporary supply application use)	13
7.	Appendixes	14
	Appendix-1: Compliance guidelines for SLD Submission Sample of 63A DB / suitable guide for up to 100A DB	
	Appendix-2: Compliance guidelines for SLD Submission Sample of 150A DB / suitable guide for DB > 100A	

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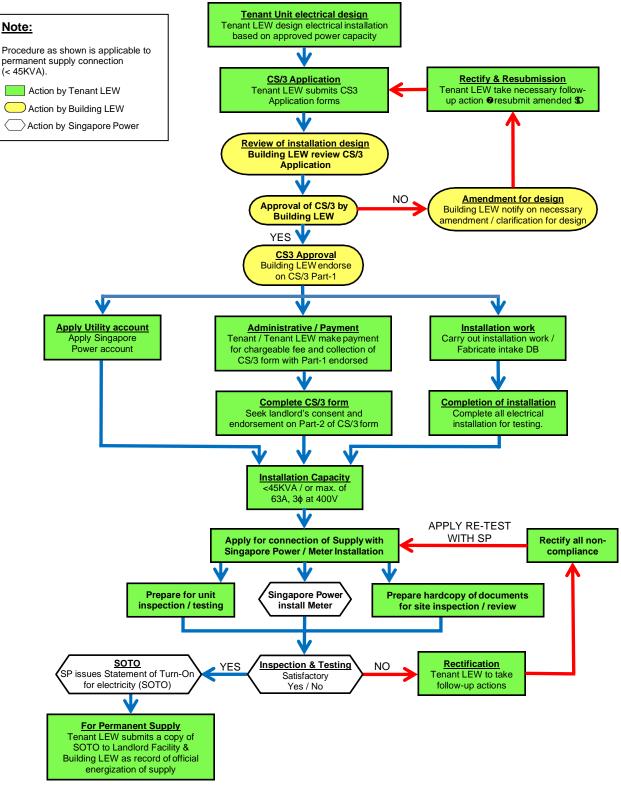
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(Rev: 29-Sep-2019)

PROCEDURE (FLOW-CHART) FOR APPLICATION OF ELECTRICITY CONNECTION FOR <u>TEMPORARY SUPPLY USAGE FOR CONSTRUCTION / RENOVATION WORK</u> FOR NON CONTESTABLE CONSUMER



PROCEDURE (FLOW-CHART) FOR APPLICATION OF ELECTRICITY CONNECTION FOR PERMANENT SUPPLY FOR NON-CONTESTABLE CONSUMER (BELOW 45KVA)



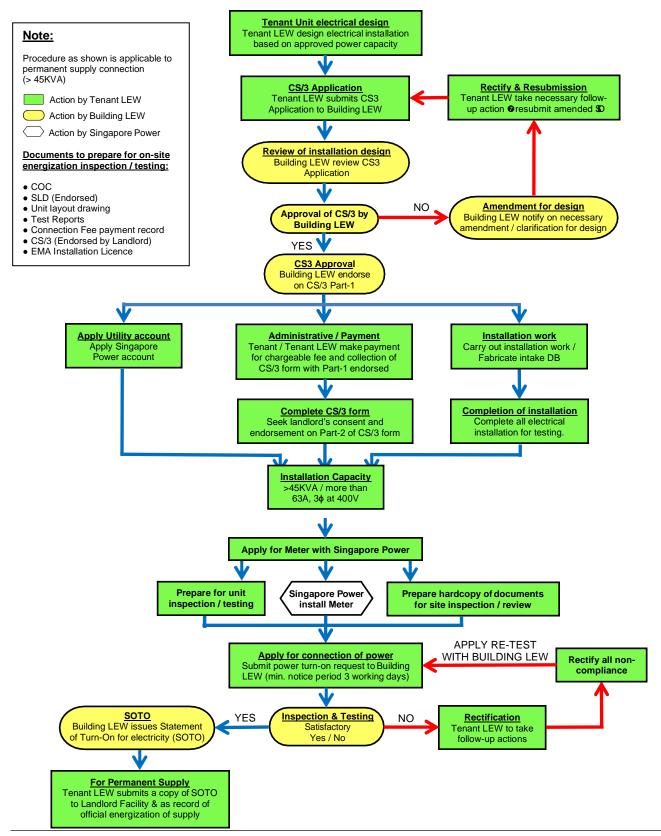
NOTE: Building LEW may conduct inspection for Non-contestable installation that is below 45KVA when necessary.

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(Rev: 29-Sep-2019)

PROCEDURE (FLOW-CHART) FOR APPLICATION OF ELECTRICITY CONNECTION FOR PERMANENT SUPPLY FOR NON-CONTESTABLE CONSUMER (ABOVE 45KVA)



1 Bukit Batok Street 22, #04-01, Singapore 659592 Tel: 65674032 Fax: 65697507 Email: admin@Lces.com.sg Website: www.LCES.com.sg



<u>Guidelines for Application for Connection of Electricity Supply by Tenants</u> (For Non-Contestable consumers)

- 1. The Tenant / consumer of electricity shall engage LEW (licensed electrical worker) to submit this application. If the installation project is appointed a M&E company, the contractor (M&E company) shall engage LEW to submit this application.
- 2. The responsibility of the Contractor LEW:
 - a) Review all documents, ensure documents comply with guidelines stated in this handbook before making submission.
 - b) Supervise the electrical work
 - c) Liaise with Building LEW for inspection / turn on of supply (fee chargeable)
 - d) Submit the following documents to Building LEW for review and approval prior to turn on / site inspection and testing:
 - i. Electrical Single-Line Diagram (complete with title block with information of installation)
 - ii. Electrical Layout Diagram (power / lighting / emergency or exit lightings)
 - iii. Certificate of Compliance
 - iv. Electrical Installation Test Reports
 - v. EMA Installation Licence (only for installations with supply capacity of >45kVA)

Refer to page-11 and 12 of this application handbook for the document submission requirements.

- 3. The approval of application is subjected to the following:
 - a) Supply shall be obtained from Landlord switchboard/ Riser approved by Building LEW.
 - b) Tenant's Load shall be balanced if supply is 3 phase.
 - c) Tapping of supply from Landlord's emergency supply is not allowed, unless approval obtain from Landlord.
 - d) Earth Fault Protection such as RCCB / Earth Fault Relay must be installed at incoming breaker.
 - e) Temporary power supply application requires private KwH meter to be installed at Temporary DB by contractor for the purpose of recording electricity consumption. Private Kwh meter is not required if landlord deems as not necessary and charges for usage of electricity is based on daily rate.
 - f) Temporary supply for renovation / temporary installation for events site set-up shall comply with SS:650 (formerly CP-88).
 - g) Settings of protective devices are subjected to changes, if needed. This is to ensure that discrimination of protection is achieved between tenant's installation and landlord's electrical distribution system.



<u>Guidelines for Application for Connection of Electricity Supply by Tenants</u> (For Non-Contestable consumers)

- h) The tenant must undertake to reduce the approval load on demand by the landlord if the approval load is not fully utilized.
- i) This approval is given on the basis that the electrical loading is within the limits acceptable for use in Landlord's premises. It is not an endorsement of safety, reliability or suitability of the equipment used. The approval shall not be taken to override any statutory requirements.
- j) Tenant's LEW shall carry out testing and witnessed by Building LEW (for all temporary supply connection and permanent installation that is above 45kVA).
- 4. Requirement for Single Line Diagram (SLD):
 - a) State all current rating / type of circuit breakers, RCCB types (AF/AT, Short-circuit Rating, I_{ΔN})
 - b) State all incoming and outgoing circuit cable sizes, type of cables and method of installation (If lay on tray, use only double insulated protected cables)
 - c) Title block with full detail (Full installation address, name of tenant unit, Owner of Installation, Design by, Build By, Date, Drawing No.)
 - d) Information of Tenant's appointed LEW (Endorsement, Name of LEW, EMA Licence No. Contact number)
 - e) State the following design load information:
 - i. Approved Load agreed by Landlord (comply with contracted power density)
 - ii. Total connected load
 - iii. Maximum Demand
 - f) Indicate information of Landlord source (Source from which landlord Riser, Switchboard/ circuit number)
 - g) All outgoing circuits description must be provided with the location of the circuit fittings (example: L1P1 3 no. of 13A twin SSO located in Room-1)
 - h) SLD shall show details of meter board for installations taking supply from Landlord Meter Board.

Refer to the attached Appendix for sample of SLD requirements. Non-compliance to the guidelines for SLD submission may result in longer process time for CS3 application.

- Appendix-1: Compliance guidelines for SLD Submission (sample of 63A DB / suitable guide for up to 100A DB)
- Appendix-2: Compliance guidelines for SLD Submission (sample of 150A DB / suitable guide for DB > 100A)



<u>Guidelines for Application for Connection of Electricity Supply by Tenants</u> (For Non-Contestable consumers)

5. Fees and payment matters

- a) CS3 Applicant will be notified once the application for supply connection has been approved. The CS3 form will be prepared and endorsed by Building LEW. Applicant will be notified on the fee chargeable for CS3 application.
- b) Applicant shall make payment of CS3 application fees by cheque, make payable to <u>LC</u> <u>Engineering Services Pte Ltd.</u> The cheque shall be submitted to the office of LC Engineering Services Pte Ltd and at the same time collect the CS3 form.
- c) Fees paid are not refundable. A reappointment fee shall be imposed for any reappointment (<u>applicable to all for temporary supply and permanent supply above 45KVA</u>) for Inspection / testing / turn-On due to non-compliance of the tenant installations or tenant's contractor or LEW failure to turn up at site.
- d) 3 working days' notice (does not include Sat / Sun / Public holiday) is required for booking of appointment (<u>applicable to all for temporary supply and permanent supply above 45KVA</u>) for site Inspection / Turn-On of supply. Additional surcharge fee is chargeable for request of express Turn-On with notice period of less than 3 days upon approval of CS3.
- e) Test appointment that is fixed on weekdays after office hours (6:00pm onwards) or dates that fall on public holidays or weekend shall be subjected to additional surcharge fee.
- f) A re-test or re-inspection fee is chargeable for additional attendance made by Building LEW. Conditions that may be subjected to re-test or re-inspection as follow:
 - i. Absence of Contractor / Tenant LEW
 - ii. Unsatisfactory test results
 - iii. Incomplete installation / Installation not ready for testing
 - iv. Unsafe condition / non-compliance of electrical safety
 - v. Payment for CS3 application fee not made prior to energization / testing appointment
- g) When surcharge fee is chargeable due to conditions mentioned in item-5(e), 5(f) and 5(g), a standard fee of S\$200.00 (GST chargeable) will be applicable to a single application. If more than one application is affected by item-5(e), (f) and (g), each application will be charged with surcharge fee.
- 6. All electricity supply usage shall be notified (including short term set up for events / road-show booths or exhibitions) to both the Building Management and appointed Building LEW. Tenant that are doing fit-out or minor renovation work shall apply for temporary usage of electricity with proper consent obtained from both Building Management and the appointed Building LEW. Application procedures for temporary supply usage and connection shall comply with the procedures given in the flowchart (refer to page-3 to 5 for respective types of application).



Guidelines for Application for Connection of Electricity Supply by Tenants (For Non-Contestable consumers)

- 7. Note that under the Electrical ACT, it is an offence to carry out electrical rewiring work without the approval and supervision of Licensed Electrical Worker. As such, the <u>Building Management reserves</u> the right to disconnect the electricity supply in the event of non-compliance or unauthorized connection and usage of power supply, including temporary supply for renovation, events / road-show booths or <u>exhibitions.</u>
- 8. Contractors who are engaged by tenants to carry out reinstatement work for moving out and handingover of units shall reinstate all the unit's electrical installations accordingly to landlord's as-built drawing (electrical) / clauses stated in the tenant's agreement. The final installation that is ready after reinstatement work is completed shall be inspected and tested by the appointed Building LEW. The contractor shall submit CS3 to Building LEW for request of inspection and testing of the completed reinstatement installations.
- 9. Tenants who are on short term lease (6months or less) of tenanted unit space shall also submit CS3 application to obtain the approval for the connection to the landlord distribution and usage of power supply. If installation is above 45KVA (more than 63A, three phase), tenant shall obtain EMA Licence for operate of electricity.
- 10. Methods for booking of inspection / testing and energization appointment, contact us at:
 - a) Call our office (6567-4032) during office hours (Weekdays, 8.30am ~ 1.00pm / 2.30pm ~ 5.00pm)
 - b) Email to: <u>CS3@Lces.com.sg</u>

Applicants shall obtain the approval of CS3 and make payment for the CS3 fee before booking of appointment date for the inspection / testing and energization appointment.

Energization appointment booking is for Temporary supply connection & Permanent supply connection (> 45kVA only). Installation below 45KVA shall be inspected, tested and energized by Singapore Power Testing Department.



Guidelines for Application for Connection of Electricity Supply by Tenants (For Non-Contestable consumers)

- 11. The following documents shall be prepared for inspection and energization of installation and handover a set the Testing LEW without fail <u>(for installation above 45KVA)</u>:
 - a) Single Line Diagram (as-built) endorsed
 - b) Certificate of compliance (COC) endorsed and dated
 - c) Electrical layout drawings (power / lighting / emergency lighting) endorsed
 - d) Test reports (insulation resistance test reports / protection relay test reports)
 - e) CS3 (completed with endorsement by Landlord)
 - f) Payment record of CS3 fees (comprises of testing fee) for verification by Testing LEW
 - g) EMA Licence copy (for permanent supply above 45kVA)
 - h) Letter of Authorization for appointing stand-in LEW (if Design / Contractor LEW is not attending)

Note that installation that is below 45KVA will be tested by SP Testing Officer. Documents submission for energization and testing shall comply with SP requirement for installation that is below 45KVA.

- 12. Post-energization:
 - a) Submit copy of Statement of turn-on document:

Tenant installation that is below 45KVA will be tested and energized by SP Testing Team. The Tenant's LEW shall submit a copy of the Statement-of-turn-on issued by SP to building LEW and the Management of Landlord for record keeping purposes.

For tenant installation that is above 45KVA, the testing and energization will be conducted by the building LEW and the Statement of turn on will be issued as well. The Tenant's LEW shall submit a copy of the Statement-of-turn-on issued by building LEW to the Management of Landlord for record keeping purposes.

b) Display of temporary supply Statement of turn-on document:

Fit-out / renovation contractors shall display a copy of the temporary supply Statement-of-turnon (SOTO for temporary supply) at the temporary supply intake DB for the duration of the work.

c) Display of EMA Licence (for installation above 45KVA) and SLD

The EMA Licence (only for installation above 45KVA) and SLD shall be displayed at the main supply intake DB of the tenanted premise. The Tenant LEW shall submit the latest updated asbuilt SLD to building LEW / Management of landlord if there is any change of installation / design.

13. The Building Management and LEW will not be liable to any party for any losses, cost, expenses and damages arising therefrom.



FORM A – CS3 APPLICATION INFORMATION (To be completed by Tenant's LEW / Elect. Contractor)

Instructions to applicant:

- 1. Form-A comprises of 5 parts (2-pages). Tenant LEW or electrical contractor shall fill up the required information accordingly.
- 2. Write in a clear and legible manner when filling up the forms.
- 3. All boxes are required to be filled. Incomplete forms will be subjected to longer processing time. Where required information is not applicable at all, write 'N.A'.
- 4. Refer to Part-5 for the compulsory documents to be submitted together with Form-A and Form-B (CS3 Form).
- 5. All single-line diagrams that are to be submitted must be checked by Tenant / Contractor / Applicant's LEWfor compliance to the SLD submission guidelines (refer to Appendix).
- All documents shall be submitted in the form of softcopy format (PDF File). Merge all documents and drawings into 1 single file. Arrange your documents in the sequence as shown on the right.
- Single line diagrams that are not endorsed by LEW / documents that are incomplete or does not comply with the SLD submission guideline will be rejected or subjected to longer application processing time.
- 8. Submit completed application forms together with all relevant drawings to: (email) CS3@Lces.com.sg
 - (Office) 6567-4032 For enquiry Processing will take approximately 3 working days.

9. Processing will take approximately 3 working days.

Part-1: IENANI'S INFORMATION:					
Tenant Company Name:					
Transf December 6 ll address	Block:	Unit No: #	Building	Name:	
Tenant Premise full address:	Street:			Postal Code:	
Tenant Contact Person:	Name:			Designation:	
Tenant's Email address:					
Tenant Contact number:	HP:		Office:	Fax:	

Part-2: BILLING INFO	ORMATIO	N:		
Company Name (For invoice of Inspection fees):				
Full Address	Block:	Unit No: #	Building Name:	
(For invoice of Inspection fees):	Street:			Postal Code:

Part-3: SITE PERSO	NNEL CONTACT INFORMATION:	
Tenant's LEW Name and Mobile No:	Name:	HP:
Contractor Supervisor Name and Mobile No:	Name:	HP:

ENGINEERING SERVICES PTE LTD

ISO 9001

(Rev: 29-Sep-2010)

FORM A - CS3 APPLICATION INFORMATION (To be completed by Tenant's LEW / Elect. Contractor)

ARRANGEMENT FOR INSPECTION / TURN ON OF INCOMING SUPPLY: Part-4:

(✓ Tick to select the type of supply connection)

CONSULTANCY AND ENGINEERING

TESTING, MAINTENANCE & PROJECT MANAGEMENT

EMA ELECTRICAL LICENSING

Permanent supply connection (Note: Below 45KVA shall only be tested by Singapore Power Testing Dept)

Temporary supply connection (For construction / renovation work)

Others: Upgrading of power supply / Reinstatement

The	Ap	prove	d Load	is_
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<u>Ampere, 1-Phase / 3-Phase</u>

(cancel where not applicable)

I would like to make an appointment for the Inspection / Turn On of electricity installation:

Full Address of Installation:						
Date of inspection / energization ⁽¹⁾ :		/(DD / MMM / YYYY – e.g: 23 / Nov / 2017) (You may leave the date as blank and call our office to book a date once your installation is ready for inspection / testing)				
Preferred Time slot ⁽²⁾ : (Tick the appropriate ✓)		9:00am ~ 12:00pm / 1:00pm ~ 3:30pm / 3:30pm ~ 6:00pm (Actual appointment time will be notified, subjected to availability of Building LEW.)				
LEW) if the a Preferred da who make p (2) Applicants s	application (ite / time slo ayment, boo hall carefull	tion / energization selected by applicant will be only be fixed (subjected to the availability of testing CS3 fee is paid. The may be occupied by other applicants as the booking of appointments will be given priority to applicants bing of testing schedule is based on the first-come-first served basis. The preferred time slot. Ensure that the revenue meter for supply connection billing is installed gization time slot.				

Part-5: **DOCUMENT SUBMISSION CHECKLIST:**

The following documents are attached together with this application:

Documents	No. of copies	Documents	No. of copies
Electrical Single-Line Diagram *#+		Overcurrent & Earth Fault Relay Operation Test Report ⁺	
Electrical Layout Diagram #+ (power / lighting / e-light / DB)		Electrical Installation Test Report ⁺ (insulation resistance test)	
Certificate of Compliance *#+		Other Equipment Test Reports (if any)	
EMA License (only for applied capacity more than 45kVA or above 63A, three phase)			

Note:

* Documents required to be submitted for review / approval of temporary CS3 application

Documents required to be submitted for review / approval of permanent CS3 application

* Documents (updated, if any) required to be submitted for review and record keeping during energization



FORM B – CS3 Form: Request for Electricity Supply by Tenants

(Rev: 29-Sep-2019)

CS3 F RM FOR

PART 1 – TEN		FORARY Y USE ONLY						
Send Application to:	Building LE	Building LEW - 1 Bukit Batok, #04-01, S(659592) 65674032 (Office) 65697507 (Fax) CS3@Lces.com.sg (email)						
Full Address of	Block:	Unit No: #	Building N	ame:				
Installation	Street: Post					al Code:		
Name of Company								
Total Approved		Amps at:	Total Floor	Powe	er Density			
Load (A) [#]		230V / 400V	Area (m ²)	(W/m	1 ²)			
(✓ Tick to select the type of application)								
New Tenant⁺								

Note:

[#] Applicant's installation design load shall comply with Landlord's agreement for the approved load.

The total approved load shall not exceed the total power calculated from the approved power density for the total tenanted floor area).

+ Private utility meter installed shall be complied to Landlord's requirement.

* Temporary supply for renovation, fit-out work / temporary installations for events site set-up shall comply with SS:650 (Formerly CP-88).

* Applicant of temporary power supply shall provide a temporary main DB with private utility meter installed for power consumption record purpose. Private Kwh meter is not required if landlord deems as not necessary and charges for usage of electricity is based on daily rate.

PART 2 – BUILDING LICENSED ELECTRICAL WORKER

- 1. I have checked the loading of the electrical installation of the above-mentioned building / complex and hereby confirm that the above-mentioned load requirement can be catered for from the rising / horizontal mains system / main switchboard of the building / complex and the total approved load to the entire building / complex will not be exceeded.
- I have no objection for the above-mentioned load to be connected to the rising / horizontal mains system / main switchboard of the building / complex.
- 3. I will check to ensure that the above-mentioned installation is compatible with the electrical installation of the building / complex.

Signature of Building's LEW

Date:_____

PART 3 – CONSENT FROM LANDLORD

To: Tenant of above-mentioned address:

- I hereby give consent for the above-mentioned tenant to tap electricity supply of the capacity indicated above from the rising / horizontal mains system / main switchboard of the building /complex.
- Please ask your tenant's LEW to liaise with our building's LEW for the inspection of your electrical installations.

Name / Signature of Authorised Personnel

Date:_____

FORM CS/3 Letter of Consent from the Landlord/Management Corporation

To:	SP Group Fax No.63048289 2Kallang Sector Singapore 349277 Attn: SP Services
ELE	CTRICITY SUPPLY TO
FOR	(Full Address of the Customer)
тот	(Name of Customer)
101	ALLOADALLOWEDFOR:ATVOLTS
PAF	<u>RT I</u>
	I have checked the loading of the electrical installation of the abovementioned building/complex and hereby confirm that the abovementioned load requirement can be catered for from the rising/horizontal mains system/main switchboard of the building/complex, and the total approved load to the entire building/complex will not be exceeded.
2.	I have no objection for the abovementioned load to be connected to the rising/horizontal mains system/main switchboard of the building/complex.
3.	The Electrical Installation Licence No. of the building/complex is
4.	The electrical installation of the building/complex from which this load is to be connected is
	Unmetered (i.e. without Master Account)
	Metered under Master Account No
5.	I will check to ensure that the abovementioned installation is compatible with the electrical installation of the building/complex.
Sign	nature of Licensed Electrical Worker
0	
	ence No:/ Tel No:
	ne:
Add	ress:
	S() RT II
	reby give consent for the abovementioned customer to tap electricity supply of a capacity indicated above from rising/horizontal mains system/main switchboard of the building/complex.
	Date:

Signature of Authorised Person

Name

Designation

Official Stamp of the Landlord/Developer/Management Corporation





APPENDIXES

SAMPLE SLD OF 63A AND 150A TYPICAL DESIGN (GUIDELINE FOR COMPLIANCE)

NOTE:

These sample drawings provide as a compliance reference guide for applicant to prepare the installation SLD for submission. SLD with missing / lack of information (strictly to comply with the guidelines stated in these samples) will be subjected to rejection which may result in longer processing time for application. Do not attached these sample SLD with your submission.

