

**Fitting Out Requirements of Building Services Installations for
Special Child Care Centre (SCCC) cum Early Education and Training Centre (EETC)
At Units 215-220, Ying Shui House, Shui Pin Wai Estate, Yuen Long.
(Capacity 18 : 45)**

Accommodation	Requirements
1. Supervisor's Office	<p>(a) Lighting : (i) General fluorescent fittings.</p> <p>(b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).</p> <p style="padding-left: 100px;">(ii) Necessary power supply for air conditioners.</p> <p style="padding-left: 100px;">(iii) 2 nos. 13A switched sockets next to each computer data point.</p> <p>(c) Computer Data Point (i) 1 no.</p> <p>(d) Air-Conditioning : (i) Required.</p> <p>(e) Telephone : (i) 1 no.</p> <p>(f) PA System : (i) Speakers required.</p>
2. General Office / Staff Room	<p>(a) Lighting : (i) General fluorescent fittings.</p> <p>(b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).</p> <p style="padding-left: 100px;">(ii) Necessary power supply for air conditioners.</p> <p style="padding-left: 100px;">(iii) Necessary power supply for emergency call bell system.</p> <p style="padding-left: 100px;">(iv) Necessary power supply for PA system.</p> <p style="padding-left: 100px;">(v) Necessary power supply for Fax machine and Photocopying machine.</p> <p style="padding-left: 100px;">(vi) 2 nos. 13A switched sockets next to each</p>

computer data point.

- (c) Computer Data Point : (i) 6 nos.
 - (d) Air-Conditioning : (i) Required.
 - (e) Telephone : (i) 7 nos. (for 6 direct lines and 1 fax line).
 - (f) Emergency Call Bell : (i) 1 no. emergency call bell panel with red indication lights and buzzer.
 - (g) PA System : (i) PA system control panel with zoning.
3. Reception/ Waiting Area/ Library Centre
- (a) Lighting : (i) General fluorescent fittings.
 - (b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).
 - (ii) Necessary power supply for oscillating fans.
 - (iii) Necessary power supply for air conditioners.
 - (iv) 2 nos. 13A switched sockets next to each computer data point.
 - (v) Necessary power supply for door bell system.
 - (c) Computer Data Point : (i) 1 no.
 - (d) Air-Conditioning : (i) Required with space heating facilities.
 - (e) Telephone : (i) 1 no.
 - (f) Emergency Call Bell : (i) 1 no. call bell push at above bench level and connected to panel at General Office.
 - (g) PA System : (i) Speakers required.
 - (h) Door Bell : (i) 1 no. push button at main entrance linked to the bell installed in the Reception.

- (i) Appliances : (i) 400mm dia. oscillating fans (1 no. per 10m² of floor area approximately).
4. Activity/ Training Rooms/ Gross Motor Training Room
- (a) Lighting : (i) General fluorescent fittings.
- (b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).
- (ii) 3 nos. 13A switched sockets near the TV/FM outlet.
- (iii) Necessary power supply for oscillating fans.
- (iv) Necessary power supply for air conditioners.
- (v) 2 nos. 13A switched sockets next to each computer data point.
- (c) Computer Data Point (i) 1 no.
- (d) Air-Conditioning : (i) Required with space heating facilities.
- (e) Emergency Call Bell : (i) 1 no. call bell push at above bench level and connected to panel at General Office.
- (f) PA System : (i) Speakers required.
- (g) BRI : (i) 1 no. TV/FM outlet.
- (h) Appliances : (i) 400mm dia. oscillating fans (1 no. per 10m² of floor area approximately).
- 5a. Occupational Therapy Room
- (a) Lighting : (i) General fluorescent fittings.
- (b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).
- (ii) Necessary power supply for air conditioners.
- (iii) Necessary power supply for oscillating fans.

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| | (c) | Air-Conditioning | : | (i) | Required with space heating facilities. |
| | (d) | Emergency Call Bell | : | (i) | 1 no. call bell push at above bench level and connected to panel at General Office. |
| | (e) | PA System | : | (i) | Speakers required. |
| | (f) | Appliances | : | (i) | 400mm dia. oscillating fans (1 no. per 10m ² of floor area approximately). |
| 5b. | | Physiotherapy Room | | | |
| | (a) | Lighting | : | (i) | General fluorescent fittings. |
| | (b) | Power | : | (i) | 13A switched sockets for general purpose. (at least 1 no. per 6.5m ² of floor area approximately). |
| | | | | (ii) | Necessary power supply for air conditioners. |
| | | | | (iii) | Necessary power supply for oscillating fans. |
| | (c) | Air-Conditioning | : | (i) | Required with space heating facilities. |
| | (d) | Emergency Call Bell | : | (i) | 1 no. call bell push at above bench level and connected to panel at General Office. |
| | (e) | PA System | : | (i) | Speakers required. |
| | (f) | Appliances | : | (i) | 400mm dia. oscillating fans (1 no. per 10m ² of floor area approximately). |
| 5c. | | Speech Therapy Room | | | |
| | (a) | Lighting | : | (i) | General fluorescent fittings. |
| | (b) | Power | : | (i) | 13A switched sockets for general purpose. (at least 1 no. per 6.5m ² of floor area approximately). |
| | | | | (ii) | Necessary power supply for air conditioners. |
| | | | | (iii) | Necessary power supply for oscillating fans. |
| | (c) | Air-Conditioning | : | (i) | Required with space heating facilities. |

- (d) Emergency Call Bell : (i) 1 no. call bell push at above bench level and connected to panel at General Office.
- (e) PA System : (i) Speakers required.
- (f) Appliances : (i) 400mm dia. oscillating fans (1 no. per 10m² of floor area approximately).
6. Food Store /General Store
- (a) Lighting : (i) General fluorescent fittings.
- (b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).
- (ii) Necessary power supply for 1 no. extract fan.
- (c) Mechanical Ventilation : (i) 1 no. extract fan.
7. Laundry Area
- (a) Lighting : (i) Corrosion resistant type fluorescent fittings.
- (b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).
- (ii) Necessary power supply for oscillating fans.
- (iii) Necessary power supply for 1 no. extract fan.
- (iv) 2 nos. 13A switched sockets at 1350mm above finished floor level for domestic washing machine and drying machine.
- (c) Mechanical Ventilation : (i) 1 no. extract fan.
- (d) PA System : (i) Speakers required.
- (e) Appliances : (i) 400mm dia. oscillating fans (1 no. per 10m² of floor area approximately).
8. Kitchen /Pantry
- (a) Lighting : (i) Corrosion resistant type fluorescent fittings.
- (b) Power : (i) 1 no. 13A switched sockets for general

purpose at skirting level.

- (ii) Necessary power supply for oscillating fans.
- (iii) 1 no. 13A switched sockets for refrigerator at 1350mm AFFL.
- (iv) 5 nos. 13A switched sockets for kitchen appliances at 200 mm above preparation table.
- (v) Necessary power supply for 1 no. extract fan.
- (vi) 1 no. 15A switched sockets for water boiler at 200 mm above preparation table.
- (vii) Necessary power supply for 1 no. of 6kW instantaneous type electric water heater for sink.

(c) Mechanical Ventilation

- : (i) 1 no. extract fan.

(d) PA System

- : (i) Speakers required.

(e) Appliances

- : (i) 400mm dia. oscillating fans (1 no. per 10m² of floor area approximately).
- : (ii) 1 no. 6 kW instantaneous type electric water heater.
- (iii) 1 no. 3kW electric water boiler.

9. Sick Bay / Quiet Room (a) Lighting

- : (i) General fluorescent fittings.

(b) Power

- : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).
- (ii) Necessary power supply for air conditioners.
- (iii) 2 nos. 13A switched sockets for refrigerator and sterilizer at 1350mm AFFL.
- (iv) 2 nos. 13A switched sockets above bed

head.

- (v) Necessary power supply for oscillating fans.
- (vi) Necessary power supply for 1 no. extract fan.
- (vii) Necessary power supply for 1 no. of 6kW instantaneous type electric water heater for sink.

- (c) Air-Conditioning : (i) Required with space heating facilities.
- (d) Mechanical Ventilation : (i) 1 no. extract fan.
- (e) Telephone : (i) 1 no.
- (f) Emergency Call Bell : (i) 1 no. call bell push at above bench level and connected to panel at General Office.
- (g) PA System : (i) Speakers required.
- (h) Appliances : (i) 400mm dia. oscillating fans (1 no. per 10m² of floor area approximately).
(ii) 1 no. 6 kW instantaneous type electric water heater.

10. Observation Room / Interviewing Room

- (a) Lighting : (i) General fluorescent fittings.
(ii) 1 no. red indication lamp above door outside the room.
- (b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).
(ii) Necessary power supply for oscillating fans.
(iii) Necessary power supply for air conditioners.
(iv) Necessary power supply for Intercom.
- (c) Air-Conditioning : (i) Required with space heating facilities.

Conditioning

- (d) Emergency Call Bell : (i) 1 no. call bell push at above bench level and connected to panel at General Office.
 - (e) PA System : (i) Speakers required.
 - (f) Intercom System : (i) Intercom required between Observation Room and the adjacent Training Rooms.
 - (g) Appliances : (i) 400mm dia. oscillating fans (1 no. per 10m² of floor area approximately).
11. Training Aids Adaptation Area / Workshop
- (a) Lighting : (i) General fluorescent fittings.
 - (b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).
(ii) Necessary power supply for oscillating fans.
(iii) Necessary power supply for air conditioners.
 - (c) Air-Conditioning : (i) Required with space heating facilities.
 - (d) Emergency Call Bell : (i) 1 no. call bell push at above bench level and connected to panel at General Office.
 - (e) PA System : (i) Speakers required.
 - (f) Appliances : (i) 400mm dia. oscillating fans (1 no. per 10m² of floor area approximately).
12. Training Aids Store
- (a) Lighting : (i) General fluorescent fittings.
 - (b) Power : (i) 13A switched sockets for general purpose. (at least 1 no. per 6.5m² of floor area approximately).
(ii) Necessary power supply for 1 no. extract fan.
 - (c) Mechanical Ventilation : (i) 1 no. extract fan.

13. Toilet for Children
- (a) Lighting : (i) Corrosion resistant type fluorescent fittings.
 - (b) Power : (i) Necessary power supply for 1 no. extract fan.
 - (ii) 1 no. 13A fused connection unit with integral switch and pilot light for hand dryer.
 - (iii) Necessary power supply for fan heaters.
 - (iv) Necessary power supply for 18 kW instantaneous type electric water heater controlled by a contactor and d.p. switch with pilot light.
 - (c) Mechanical Ventilation : (i) 1 no. extract fan.
 - (d) Emergency Call Bell : (i) 1 no. waterproof call bell push connected to panel at General Office.
 - (e) PA System : (i) Speakers required.
 - (f) Appliances : (i) 1 no. hand dryer.
 - (ii) 1 no. 18 kW instantaneous type electric water heater.
 - (iii) 1 no. 1.8kW/2kW wall mounted fan heater.
14. Toilet for Staff
- (a) Lighting : (i) General fluorescent fittings.
 - (b) Power : (i) Necessary power supply for 1 no. extract fan.
 - (ii) 1 no. 13A fused connection unit with integral switch and pilot light for hand dryer.
 - (c) Mechanical Ventilation : (i) 1 no. extract fan.
 - (d) Emergency Call Bell : (i) 1 no. waterproof call bell push connected to panel at General Office.

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| | (e) | PA System | : | (i) | Speakers required. |
| | (f) | Appliances | : | (i) | 1 no. hand dryer. |
| 15. Circulation Area | (a) | Lighting | : | (i) | General fluorescent fittings. |
| | (b) | Power | : | (i) | 13A switched sockets for general purpose.
(at least 1 no. per 6.5m ² of floor area approximately). |
| | | | | (ii) | Power supply for electric shutter at main entrance. |
| | (c) | PA system | | (i) | Speakers required. |
| | (d) | Exit Sign | : | (i) | To suit statutory requirements. |
| | (e) | Illumination of Signage | : | (i) | Appropriate lighting required. |

Notes:

1. Illumination levels shall follow the recommendations given in the Chartered Institution of Building Services Engineers (CIBSE) Lighting Guides.
2. Fluorescent lighting fittings shall be of batten type, using electronic ballasts and T5/T8 fluorescent tubes, complete with high performance low glare aluminum louver or acrylic prismatic diffuser. Lighting switches shall be mounted at 1100mm above finished floor level unless otherwise specified.
3. Socket outlets shall be 13A for general purpose, switched type, installed at 500mm above finished floor level unless otherwise specified.
4. For areas normally occupied by babies or young children, all socket outlets, lighting switches and fan regulators shall be installed at 1500mm AFFL.
5. Oscillating fans shall be of 400mm diameter with speed regulator, wall or ceiling mounted to suit the layout; they shall be connected to 2A fused connection units and separately controlled by 5A double pole switches.
6. Window-type or split-type air-conditioners with reverse cycle function are recommended for rooms entitled with both cooling and heating provisions. As such, the provision of radiators is not necessary. The air-conditioners shall be provided with terminal blocks and separately controlled by double pole switches of appropriate rating with pilot light.

7. Radiators shall be provided with 13A fused connection units and separately controlled by 20A double pole switches with pilot light.
8. Mechanical exhaust fans shall be provided with fused connection units and separately controlled by double pole switches of appropriate rating with pilot light.
9. Fire services installations shall be provided in compliance with the statutory requirements. Visual fire alarm shall be provided.
10. The type of fuels (e.g. gas or electricity) quoted for the appliances (e.g. *gas* water heater) in these fitting out requirements is a recommendation only. The Operator / Authorised Person can have his own choice provided that the appliances selected have the same performance as the ones quoted in these fitting out requirements.

Standards for HVAC and Lighting for Child Care Centres

1. Air-conditioning System for Activity Areas

Design Criteria

- (i) External conditions :
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|--------|-------------------|
| Summer | 33°C db
66% RH |
| Winter | 10°C db
40% RH |
- (ii) Internal conditions :
- | | |
|--------|---------------------|
| Summer | 25.5°C db
54% RH |
| Winter | 20°C db |
- (iii) Fresh air quantity : **10 litre/s/person.**
If room coolers or split type air conditioners are used, separate system of fresh air supply shall be provided to meet the said requirement.

2. Noise level in Activity Areas

Noise level shall not exceed more than 4dbA compared to the background noise.

3. Air-change rate for mechanical ventilation

Toilets	:	15 air-change/hour
Kitchen	:	15 air-change/hour (general extraction, not for kitchen exhaust hood)
Laundry	:	15 air-change/hour

4. Lighting

Average illuminance of 300 lux at children's working level, i.e. 0.5m above ground level to be maintained in the activity rooms.