

**GENERAL SPECIFICATION  
FOR  
AIR-CONDITIONING, REFRIGERATION, VENTILATION  
AND  
CENTRAL MONITORING & CONTROL SYSTEM  
INSTALLATION  
IN  
GOVERNMENT BUILDINGS  
OF  
THE HONG KONG SPECIAL ADMINISTRATIVE REGION**

2017 EDITION



ARCHITECTURAL SERVICES DEPARTMENT  
THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

**B3.13 IN-LINE CENTRIFUGAL FANS**

In-line centrifugal fans shall be mounted on G.I. steel support. Threaded steel rod with lock nuts shall be used for ceiling mounted purposes. Neoprene pad shall be provided for vibration isolation.

**B3.14 EC PLUG FANS**

Same as Clause B3.5

**B3.15 JET FANS**

Refer to Clause C3.15.

**B3.16 CONDUCTING FANS**

Refer to Clause C3.16.

**B3.17 TERMINAL AIR CONTROL DEVICES**

Terminal air control devices shall be mounted on a steel support. Threaded steel rod with lock nuts shall be used for ceiling mounted purposes. Neoprene pad shall be provided for vibration isolation.

Fixture shall be installed on the steel support to govern the lateral movement of the unit.

The power supply to the unit shall refer to Clauses B3.6.4, B3.6.5 and B3.6.6.

Flexible duct connecting the inlet/outlet of the unit shall be fixed by omega clip or similar approved devices.

**B3.18 GRILLES AND DIFFUSERS**

Grilles and diffusers shall be fixed on air duct by self-tapping stainless steel screw or purposely made spring or locking devices. Fixing the grille or diffuser by self-taping screw on the face panel exposed to view shall be avoided.

For linear diffuser or special made air fittings, lifting brackets or fixing devices shall be provided to facilitate site installation.

**B3.19 DOMESTIC EXHAUST FANS**

The installation of domestic exhaust fans shall follow the installation instruction of the manufacturer or refer to contract drawings. All domestic fans shall be protected with safety guard.

Comply

- (f) The equipment shall be a single compact unit of weatherproof design.

### **C3.21 DOMESTIC EXHAUST FANS**

The exhaust fan shall be completed with a safety front grille at suction side and shall be suitable for installation on wall or window opening. Cord control is not acceptable.

Comply

Electrical operated shutter blades, covered by internal grilles, shall be overlapped and interlocked for maximum back-draught protection.

Comply

Each fan shall be fitted with quiet motor. The shutter mechanism shall be of quiet and vibration free operation.

Comply

### **C3.22 HEAT PIPE**

Heat pipe coils shall be provided for humidity control process of the AHU as specified and indicated in the drawings. The heat pipe coils shall be installed into the AHU and tested in the factory.

The heat pipe coil act as a humidity control coil forms a "wrap-around" configuration which wrap around the chilled water cooling coil inside the AHU, with one section of the heat pipe coil upstream and one section downstream. The heat pipe system is being driven entirely by the temperature difference between the two air streams. There are no moving parts and no external power required.

The heat pipe coils shall be at least 2 rows and are partially filled with a suitable working fluid such as R134a or R407C, and hermetically sealed.