

## 1.7.1 REMOVAL OR DISMANTLING OF INSTALLED PLANT AND EQUIPMENT

Information provided by WM Building Services Ltd, the Mechanical Services

### Mechanical Services

#### **Removal of condensing unit from external compound**

1. Isolate all electrical supplies to plant and equipment.
2. Pump down and reclaim where necessary R410a refrigerant gas from the system.
3. Disconnect refrigeration pipework & electrical cabling from unit.
4. Bring in specialist company with suitable forklift/Hiab to remove unit to lift condensing units from compound
5. Use forklift or Hiab directly onto suitable collection vehicle.

#### **Removal of VRF fan coil units to office ceiling**

1. Isolate all electrical supplies to plant and equipment.
2. Pump down and reclaim where necessary R410a refrigerant gas from the system.
3. Disconnect ductwork & electrical cabling from fan coil unit.
4. Remove 4No ceiling tiles and ceiling grid below the unit.
5. Using mobile scaffold tower disconnect the 4No drop rods from the unit and lower to scaffold platform.
6. Remove from scaffold platform and exit through fire escape to ground level externally.

#### **Removal of plant & equipment from main office plant deck**

1. Isolate all electrical supplies to plant and equipment.
2. Isolate drain down and disconnection ventilation ductwork, water & heating pipework.
3. Pump down and reclaim where necessary R410a refrigerant gas from the system.
4. Disconnect electrical power and controls cabling from unit.
5. Cut section in warehouse white wall and erect safety handrail/barrier
6. Use forklift or mobile telescopic crane to remove to suitable collection vehicle.

## SECTION 1.7: REMOVAL OR DISMANTLING OF INSTALLED PLANT AND EQUIPMENT

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**Information provided by Walter Miles Electrical Engineers Ltd, the Electrical Services**

### **Removal of Distribution Boards**

Distribution boards and switch panels should be kept securely locked to prevent unauthorised access. Competent and authorised personnel should only be allowed to work on this equipment, and it is recommended that a permit to work system be implemented.

- 1 Isolate the incoming supply to the Distribution board (DB)
- 2 Test Incoming supply is dead using an approved method, lock off and fit warning notices.
- 3 Disconnect cables out of MCB's, neutrals and earths identifying cable circuit reference to aid with reinstallation.
- 4 Disconnect main incoming supply
- 5 Remove distribution board
- 6 Install new distribution board
- 7 Reconnect Incoming supply, checking polarity is correct.
- 8 Connect all cables into MCB's, neutrals and earths
- 9 Carry out dead testing on incoming and outgoing circuit cables
- 10 Re energise the supply
- 11 Live test circuits and record.

### **Replacement of external light fittings**

Around the Warehouse perimeter and within the service yard and carpark areas external lighting has been provided which after a certain time may become faulty and fail but due to the height powered access equipment will be required.

- 1 Highlight the faulty light fitting on the as fitted drawing and identify the circuit reference. Working from the local fuse board isolate the circuit and carry out the necessary tests to confirm the circuit is dead. Lock off and fit warning notices to front of fuse board.
- 2 For build mount lighting, use powered access equipment internally within the building to gain height to the fused spur and remove the fuse. For column mounted lighting remove the cover to the base of the column and remove the fuse cover and fuse. Check supply at fitting is isolated.
- 3 Using access equipment for both scenarios and at the height of the light fitting disconnect the flexible cable and working with second person unscrew and remove the fitting from its bracket.
- 4 Lower light fitting.
- 5 Raise replacement light fitting and connect flex cable, ensuring polarity and connections are correct.
- 6 Replace fuse and electrical test circuit, turning the supply back on and removing any warning.