

CONSULTANTS SPECIFICATION

FAN SPECIFICATION - SMOKE EXTRACT

The ventilation fan Unit shall be configured and arranged as detailed on the drawings and in accordance with the schedule of equipment and shall be of the High Temperature AXUS axial flow fan as manufactured by Nuaire. The units shall be manufactured heavy gauge galvanised corrosion resistant steel to BS EN10142 1991. The case shall be fitted with an external terminal box to IP55. The fan impeller and motor shall be direct drive with IE2 high efficiency motors to BS5000 as standard and shall be foot mounted TENV type with IP55 enclosures and class H insulation in accordance with BS4999 part 20. The bearing type shall either:

- a) Sealed for life (below 160 frame).
- b) Regreasable (160 frame and above).

Motors shall be pre-wired to an external electrical terminal box through weatherproof flexible conduit to IP55.

The units shall be suitable for operation in ambient temperatures up to 60°C and a one off operation of 300°C for 2 hours to class F300/120 minutes or 400°C for 2 hours to class F400/120 minutes.

The unit shall be certified to EN12101-3. The unit has been independently tested for high temperature operation by BSRIA and certified by BSI. The unit is suitable for operating in smoke reservoir and non smoke reservoir applications. A two speed version of the unit to be provided where specified and controlled in accordance with the specification and manufacturers recommendations.

The unit shall be supplied with all necessary ancillaries as recommended by the manufacturer and in accordance with the equipment schedule.

The contractor shall allow for all necessary ductwork transformations to and from the fan unit and any associated components in accordance with the manufacturers recommendations, DW 144 and general good practice.

The impeller blades shall be of special aero-foil section giving excellent performance and low noise characteristic manufactured from cast aluminium alloy (300°C). All units shall be suitable for internal and external operation and can be installed any angle.

The units will be provided complete with matching flanges, flexible connections, anti vibration mounts and all other necessary components to complete the installation and shall be in accordance with the manufacturer's specification.

The unit and ancillaries shall be supplied with a 3 year warranty.

The unit shall be of the High Temperature AXUS type as manufactured by Nuaire Ltd.