

- f. Sand trap louvers shall be manufactured from alloy aluminium, designed for removal of at least 85 % of typical dessert sand during a heavy sand storm, with self drained holes to outside.
- g. Isolator Switches shall be the rotary type on/off isolator switch, lockable by padlock to be provided together with the switch, protection grade IP 65, weather proof for outdoor installation, separate structural steel hot dip zinc coated stand mounted on the roof including flashing.
- h. Corrosion protection shall be as per specifications, Volume III , section 5

1.2.22.3 Louvers

- A. All outdoor louvers shall be sand trap louvers, self cleaning type, designed to filtrate at least 85 % of a typical type of desert sand from the intake air volume. Material shall be alloy aluminum sheet metal, thickness > 2mm for frames and >1.5mm for blades. All fixing material shall be made from non-corrosive material.

1.2.22.4 Grills and Diffusers

- A. Grills & diffusers shall be entirely made from extruded aluminum, with volume control dampers, separate wall/duct mounted frame, adjustable diffuser blades, non-corrosive fixing devices, removable without using special tools for easy cleaning and maintenance. For the dry well pump area, the supply and exhaust air grills shall be made from GRP material with stainless steel # 1.4571, DIN 17440 to 17441 and 17455 to 17458 wall mounted frame. The air velocity in the free area section shall not exceed 2.5 m/s.

1.2.22.5 Supply / Exhaust Air Ducts

- A. Air ducts shall be designed for the maximum airflow. The air flow velocity shall not exceed > 6m/s and < 10 m/s. Elbows shall have a minimum radius of 1.5 times of duct diameter or bent duct height. Duct and support material shall be:
 - a. GRP Material for dry / wet well ventilation system, supports made from stainless steel no. 1.4571 as above.
 - b. Galvanized sheet metal, thickness $\geq 1.2\text{mm}$ for all other systems used for indoor installation, supports made from hot dipped zinc coated steel.
 - c. Galvanised sheet metal as above, but with additional three field applied paints of epoxy paint including a first layer of primer for systems as per item b), but for outdoor installation.