

3.3 VAV AIR HANDLING UNIT

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3.3.1 VAV System Description

The reference VAV air handling system used by most Annex 25 participants to evaluate various BOFD methods was the single-duct pressure independent system shown in Figure 3.8. The air handling unit has outdoor and return air dampers, cooling and heating coils, an air filter section, a supply air fan, a return air fan, and air plenum sections. The supply air is ducted to three VAV boxes which supply conditioned air to three different zones. The return air fan takes air from the conditioned space and discharges it into the mixing section and/or the outside through a motorized exhaust air damper. Both supply and return fans are fitted with variable frequency controllers for regulating static pressure constant in air ducts.

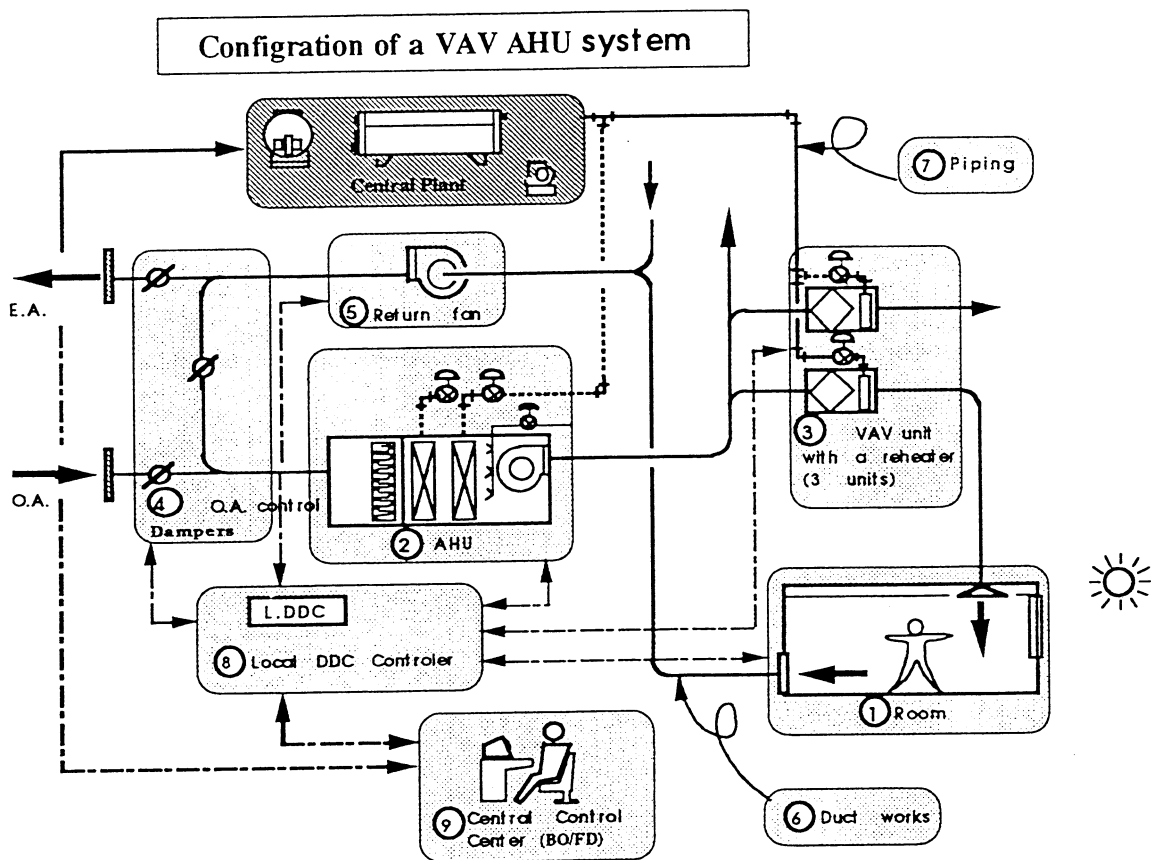


Figure 3.8. Reference air handling system.