HVAC Maintenance

IAC 33-4-5 Requires Trinity Christian School to establish and maintain a written procedure for rourine maintenance of HVAC systems.

1. Unit Ventilators- Routine will include the following
    a. Clean intake and exhaust vents
    b. Clean drip pan and condensate drain line
    c. Clean coils
    d. Clean all accessible areas of interior of unit
    e. Insure fresh air damper linkage is functioning
    f. Clean air intake on exterior of building
    g. If intake on ground level, check for pooling water along building
    h. Change filters(state suggest at minimum use a good quality pleated filter)
    i. Noise level should not be disruptive to students and teacher
    j. With fresh air damper at lowest setting, supply sufficient outside air to maintain a maximum of 700 ppm carbon dioxide over the outdoor measurement (ASHRAE recommends 15CFM outside air/person for classrooms)
    k. All cleaning residue that causes irritation or respiratory distress should be flushed from system prior to student returning to classroom
2. Central systems-routine maintenance will include the following
    a. Clean intake and exhaust vents in rooms
    b. Examine ductwork behind supply and return vents for accumulated dust and or mold
    c. Clean coils
    d. Clean drip pan and condensate drain line
    e. Insure dampers are functioning properly
    f. On automatic systems, with damper set at lowest setting, ensure minimum outside air to maintain maximum of 700 ppm carbon dioxide over the outside measurement (ASHRAE recommends 15 CFM outside air/person for classrooms)
    g. Check that fresh air intake is not blocked and no standing water or mold near intake. Do no allow birds to roost or nest on vents.
    h. Ensure individual thermostats are working
    i. Ensure individual room dampers are functioning properly
    j. Clean or replace filter (state suggest we use good grade of filter)
    k. Systems should be balanced to ensure minimum movement of odors from one area to another and minimum fresh air requirement is met for all rooms.
    l. Examine outside air intakes for cleanliness, and ensure no standing water near the intake.
    m. All cleaning residue that causes irritation or respiratory distress should be flushed from system prior to students returning to classroom.
    n. Check integrity of ductwork.

3. All Systems
    a. Check to see area in from of air intakes is unobstructed(shrubs are to be kept a minimum of 3 feet from air intakes)
    b. Check to ensure there is no standing water near air intakes
    c. Air filters that are used by the school have an acceptable minimum efficiency rating.
    d. Make sure waste containers (both indoor and outdoor) are away from any air intakes or air return vents.
    e. On new construction or renovations, air intake and exhaust will be located so as to minimize the possibility or re-intrainment of exhaust gasses, car exhausts or other outdoor pollutants.