

School/Facility: Atholton High
Location: Mechanical Room 33
Date of IEQ Report Form: December 16, 2016
Date(s) Investigated: December 19, 2016
Date of Report: March 14, 2017

IEQ Concern:

The IEQ walk through identified mold growth on seams of HVAC duct insulation.

IEQ Investigation Process:

Identify deficiencies that may impact IEQ and/or sources of odor concerns. Typically includes the following depending on the nature of concern, but not limited to:

- interview/questionnaire of concern individual(s)
- inspection above drop ceiling (condition of roof deck, pipe insulation, return air plenum)
- inspection of ventilation system (operation of variable air volume box and outdoor air dampers, check controls, measurements of carbon dioxide, temperature and relative humidity, sources near outdoor air intake, measure return and supply air volume, cleanliness of coils, liner and condensate pan)
- inspection of exterior
- inspection below drop ceiling (housekeeping, sink and floor drain traps, signs of past and present moisture concern via visual and/or moisture meter, mold growth, ensure connection of current and capping of abandoned sanitary vents, odorizers, excessive plants and fabric items, identify potential pathways, and measure volatile organic compounds, carbon monoxide, and lighting)

Findings:

- Ribs where two sections of supply air duct met were attached with Kindorf hangers. The hangers were insulated over and the ends open. This allowed for thermal differentials between the chilled metal duct (during air conditioning) and ambient air, thus forming condensate wetting duct insulation covering the hanger.

Corrective Actions:

- An insulator cut and removed the canvas jacket off the insulation. Then re-insulated the seams by gluing Armaflex rubber insulation over the seams, packed the hangers with insulation, and overlapped the existing insulation by two inches.