

Junior High Hot Water System Heat Exchanger Recommendation

Meridian Board of Education

Introduction

The heat exchanger uses steam to heat water, which then circulates through the entire 2001 addition of the building for space heating. A steam-to-water heat exchanger operates by transferring heat from steam to water without mixing the two. Steam flows through a series of tubes or plates inside the unit. As it condenses, it releases heat, which is transferred to the water on the opposite side. That heated water is then distributed throughout the building via radiators, baseboards, or air handlers.

Recommendation

I recommend the Board of Education consider replacing the unit. It has already been repaired twice, and based on its current condition, I'm concerned about its long-term reliability. If the existing unit were to fail again, even after further repair, we could be without heat for several days or more, depending on the severity of the failure. In addition to the disruption, a leak could lead to water damage and, in colder weather, frozen pipes if ambient temperatures drop too low.

Enclosure

Meridian School District - 2025 - Junior High School - Hot Water System Heat Exchanger -
Install New Tube Bundle

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