

CHILLER NOISE CONTROL CASE STUDY

ABSTRACT

Chillers are found in and on a lot of buildings in close proximity to neighborhoods and recreational areas. Chillers as from McQuay are air-cooling screw chillers where noise emanates from the screws. With the noxious noise they create though many company's need to take action to mitigate noise

INTRODUCTION

Noise control was approached by a large company that received several complaints about the noise coming from the chillers on the roof of their building. Neighbors and city demanded action such as mitigation analysis and noise annoyance surveys.

CRITERIA

The company needed a quick and good solution; noise had to be reduced to Decibel The solution had to be modular and not too costly, also easy access for maintenance was required.

PROCEDURE

The Noise Control team came for a site visit and performed several noise measurements and analyzed these and compared to the noise criteria. According to the finding in the measurement analysis the team could determine different options and solutions for the company to mitigate the chiller noise.

RECOMMENDATION

We recommended an outdoor sound barrier wall with acoustical louvers to improve airflow to the chiller.

RESULT



The neighbors, the city and company were please with the result.

Sound readings after the construction have shown that we met and succeeded our goal of noise mitigation for this particular project