



ALBERTA HEALTH SERVICES / CALGARY, ALBERTA, CANADA

HOW METAWRX HELPED TO ACHIEVE 'HEALTHY' NOISE LEVELS

Alberta Health Services (AHS) is part of Canada's first and largest provincewide, fully integrated health system. Every year, more than 4.4 million people come to AHS in search of care.

Part of the AHS South Health Campus is designated as a weight room and fitness space, used by staff to exercise and unwind, with a second, and larger contingency comprised of patients taking part in the various available rehabilitation programs. While the exercise equipment offerings are ideal, the location of the workout room within the multi-story building was anything but—situated on the second floor, the YMCA fitness facility sits squarely between a patient area on the first floor, and physician offices on the third.

When COVID restrictions necessitated that the workout room be shut down, building occupants enjoyed a brief respite from noise created from foot traffic, dropped weights and more, common to regular use of the space. Management acknowledged that, prior to gym's reopening, the noise issue had to be addressed.

With a desire to reduce both airborne and structure-borne noise, while also adding a running track and treadmills to the space, AHS enlisted the help of Merlin Noise Control to aid in the retrofit project.



WEIGHING IN ON THE SITUATION

To simulate a real-world scenario and noise problem, Merlin Noise Control performed drop tests from 16 test locations. Each entailed releasing a 40-pound dumbbell from chest height onto a 4'x4' square of 2.25" plywood, built up from three .75" layer sheets. The variable was the floor underlayment. Floor types included: bare floor, 1" rubber flooring, an existing and ineffective three-inch thick dimpled gym mat and a 4'x4' MetaWrx test assembly.

During the tests, nurses were stationed in multiple spots on multiple floors: two on the 1st floor, two on the 2nd floor near the facility, two on the 3rd floor, and one on the 4th floor. Each individual involved in the testing held a two-

way radio and noise monitor and recorded the reading of each drop at their designated location. In addition, each nurse also recorded their own perception of the results to pair qualitative data with the quantitative.

Notably, all of the nurses believed that Metawrx provided the most noticeable noise difference and was the best option—and the quantitative data supported this conclusion. Not only did Metawrx show a considerable difference in the sound and vibratory levels experienced on the floors above and below the workout space, everyone stationed on the gym floor during testing noted that minimal vibrations were felt in their feet when weights were dropped on Metawrx test assembly.

METAWRX WORKS

MetaWrx is a new class of isolator designed by HyperDamping, Inc. and offered exclusively by Kinetics in a forward-thinking collaboration. Offering superior shock, vibration attenuation and repeatable performance, MetaWrx is a perfect addition to fitness facilities, dance studios, performing spaces, and other facilities using lightweight low-profile floor build-ups. It is easy to install

and meets and exceeds building code criteria while maintaining desired floor and ceiling height.

With a successful installation at Alberta Health Services South Health Campus, Kinetics continues its tradition of innovation, to the delight of the many patients and staff members of AHS.