

CASE STUDY

UTAH VALLEY UNIVERSITY LIFE & WELLNESS CENTER



DETAILS

Location: Orem, UT

Products Installed:

44,219 SF — QTrbm 3025-7 (2 layers)

PROJECT NEEDS

- Sound transmission reduction between floors
- Durable

PRODUCT BENEFITS

- Reduction of impact noise
- Easy to install
- Sustainable

UVU Reduces Upper Level Weight Room Sound Transmission with QTrbm Underlayment

Utah Valley University (UVU), a once small vocational school founded in 1941, has since expanded its mission and focus, growing into a sizeable and respectable university that fosters the education of more than 33,000 students each year.

In order to promote health and wellness on its campus, UVU created its Student Life and Wellness Center (SLWC) that features three basketball courts, a climbing wall, fitness areas with cardio and free weights, a bowling alley, an indoor track, game and dance rooms, a massage room, and a reflection center.

Construction of the SLWC began in September 2013, and its doors officially opened on April 17, 2014, offering its students, faculty, and staff access to a quality campus recreation facility. "[The SLWC] is a state-of-the-art building," said Kevin Hirschi, President of Mountain Heights Hardwood, the company involved with supplying the surfacing for this project. Hirschi notes that this building is truly innovative, standing at an impressive four stories tall. One of the main considerations of GSBS Architects and Jacobsen Construction, the two firms involved with SLWC's construction, was how to reduce sound transmission from the noisy, upper-level athletic arenas to its quiet, lower-level classrooms and common areas.

Presented with this problem, GSBS Architects and Jacobsen Construction reached out to Ecore to find a flooring product that was capable of significantly reducing impact noise from upper-level athletic areas.

Hirschi said that Ecore was very receptive and "accepted the challenge" when it came to providing an effective sound underlayment to solve the noise problem. "Ecore conducted specific tests that yielded clear-cut results," said Hirschi. After getting the results they needed as well as the approval of the owner, the construction team installed two layers of Ecore's QTrbm 3025-7 sound underlayment in several areas of the building.

Composed of 92-percent recycled rubber, QTrbm is a dimpled acoustic underlayment, designed for use under gypsum or full weight concrete. QTrbm is available in four standard thicknesses, ranging from 6 millimeters (mm) to 25 mm. The first place QTrbm was laid was in the second floor Multipurpose Gym, where roller hockey, badminton, tennis, and lacrosse take place. The need for two layers of QTrbm was especially necessary in this area, because of a classroom located directly underneath. In addition to QTrbm, the contractors used Connor Sports Flooring, an Ecore partner,

to provide their Elastiplus sports floor as the top layer.

QTrbm was used underneath the second story, free-floating aerobic wood studio floors, where dance, yoga, and Pilates classes take place. This sound insulation was also laid underneath the fourth floor corridor, which hosts exercise equipment and free weights. QTrbm was also installed in both of these areas to eliminate the transmission of weight room and workout area impact noise to lower-level common areas.

With the need to sound proof three relatively large areas in the SLWC, Ecore provided 44,219 –square–feet of QTrbm 3025-7. Despite the immensity of this project, the installation process was relatively straightforward. "It was an easy install," said Hirschi. "[It] goes down really quick."

The use of two layers of QTrbm underlayment was an entirely new method that Ecore employed for this particular project, given its unique demands. With the success of the dual layer QTrbm at UVU's SLWC, Ecore provided another meaningful innovation in the realm of athletic acoustics.

