

Case Studies - Flooring



U.S. Rubber Recycling, Inc.

Established in 1996, U.S. Rubber Recycling, Inc. manufactures and distributes premium rolled underlayments and premium sports flooring made primarily from recycled rubber tire material. *QuietSound™ Acoustical Rolled Underlayment* is designed to reduce noise transmission in multi-story buildings for commercial offices or residential living spaces. *Survivor SportFloor* is the worldwide competitive flooring choice for chain clubs, private clubs, professional sports teams, colleges, and the U.S. military.

Recycled rubber provides sound reduction while remaining impervious to the elements. Unlike natural cork, recycled rubber remains permanently resilient and will not become brittle with exposure to air. It prevents the sound transmission of foot traffic to the floors below and effectively deadens the transmission of interior noise. Green building rating systems reward projects and interior spaces that do not transfer noise from space to space and do not off-gas harmful chemicals as volatile organic compounds (VOC's).

QuietSound, installed in a Downtown Los Angeles project, was a winner for more than its performance. This high-rise apartment complex is a multi-family development where indoor air quality was a deciding factor in selecting a product. The project uses 740,000 ft² of 5mm *QuietSound Acoustical Underlayment*, composed of 643,800 lbs. of crumb rubber or 32,190 tires (1,030,080 kWh of embodied energy) diverted from disposal to a landfill as waste. Equally important, the VOC's emissions from the underlayment are in the range of the lowest emitting building materials and labeled as low-emitting building material.





For residential spaces, occupants spend up to 90% of their time exposed to indoor air that can be two to three times more harmful than outdoor air. A 2015 study of 24 high-performance California homes found homes that reported using low-emitting materials had half the level of unhealthy indoor air pollutants such as formaldehyde². Multi-family development projects, like Twin Tower I, located in San Francisco, highlight not only the proven performance of U.S. Rubber's products but its concern for indoor air quality in spaces where people live. The project uses 751,000 ft² of 5mm and 9mm *QuietSound Acoustical Underlayment*, composed of 660,870 lbs. of crumb rubber or 33,048 tires diverted from the landfill.

Using *QuietSound* as an acoustical insulation and flooring underlayment in commercial office spaces means more privacy for workers and less distractions from ambient noise. This valuable TDP in the construction market is leading to growth in sales, increased demand for tire crumb rubber usage and a higher number of tires being diverted from the landfill. In the first half of 2019, U.S. Rubber has specified *QuietSound Acoustical Underlayment* in more than 3,000,000 ft² of office space and that number is growing. Architects, designers and general contractors choose their product for more than performance, cost savings and recycled content. They choose *QuietSound Acoustical Underlayment* for the future of their occupants' health and the air they breathe.



² Brennan Less, Nasim A. Mullen, Brett C. Singer, and Lain S. Walker, "Indoor Air Quality in 24 California Residences Designed as High-Performance Homes", *Science and Technology for the Built Environment*, (June 21, 2019), <https://doi.org/10.1080/10789669.2014.961850>