

QuietRock®

{ sound damping gypsum panel }



The Standard in Acoustical Building Design



**The Tundra Lodge
Green Bay, WI:** Using QuietRock® and QuietSeal®, the Tundra Lodge in Green Bay remodeled 161 suites constructed using resilient channel that failed within the first year. The QuietRock® retrofit has increased guest retention and loyalty.



Additional material needed
Multi-layer gypsum assemblies require twice the amount of labor and material to build. A 75,000 sqft. project would require an additional 21,976 drywall screws and 5 extra truck loads of drywall.

The resilient channel risk
in order for resilient channel to work, the gypsum panel must be allowed to “float” away from adjacent walls floors and ceilings. **RC fails when:**

- Gypsum panels installed improperly
- Placed too close together
- Fastened to studs incorrectly
- Installed upsidedown
- Moderate impact to wall (post construction)
- Insufficient air gap between adjacent walls, ceiling or floors
- Contact with HVAC, plumbing and conduit
- Pictures or shelves installed on RC wall

Reduce noise and increase architectural freedom

Building for sound and noise control presents architects, builders, and contractors with many design challenges. These challenges are driven by evolving building standards that include demands for greater sound isolation. Out-dated and unreliable methods dominate current sound attenuation practices used to build STC compliant buildings. Conventional methods and, in the case of resilient channels, sound clips or multi-layer gypsum; generate more waste, require additional labor, and often fail in the field. In some cases, buildings not meeting HIPAA or code-compliance can result in expensive litigation battles. The solution? Build reliable, high performance walls that meet tomorrow’s standards while minimizing waste, cost, and liability.

QuietRock® - easy, reliable & low cost

QuietRock® is the first gypsum product engineered to address airborne noise control in buildings. Construction professionals that specify QuietRock® in projects can eliminate the need for expensive and labor-intensive alternatives such as double stud framing, resilient channel or multi-layered assemblies. QuietRock® installs and finishes just like any standard gypsum panel product, requiring no special training to use.

QuietRock® vs. Conventional Methods:

	QuietRock®	Resilient Channel	Multiple Gypsum	Sound Clips
Performance	X	X	X	X
Low Failure Rate	X		X	X
Speed of Install	X			
Ease of Install	X			

Building guidelines and practices suggest that double wood stud wall assemblies have a base STC rating of 53-58. However, like resilient channel, this method can fail if the dual stud rows are acoustically shorted out by plumbing fasteners, air ducts, braces, or larger load bearing studs during construction. If this occurs, the rating could fall well below STC 45.



"Studies have shown that there are direct links between noise and health. Problems related to noise include stress related illnesses, high blood pressure, speech interference, hearing loss, sleep disruption, and lost productivity."

– U.S. Environmental Protection Agency

Exceed requirements and expectations with QuietRock®

STC 45 Wall Requirement



Method	3 Layers Type X
Thickness	7 7/8 "
*Tested STC	Tested STC 44
Compliance	NOT COMPLIANT



Method	QuietRock® 1 side
Thickness	7 1/4 "
*Tested STC	Tested STC 49
Compliance	COMPLIANT

STC 50 Wall Requirement



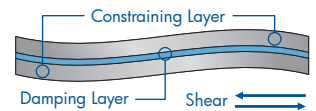
Method	4 Layers Type X
Thickness	8 1/2"
*Tested STC	Tested STC 47
Compliance	NOT COMPLIANT



Method	QuietRock® 2 sides
Thickness	7 1/4 "
*Tested STC	Tested STC 53
Compliance	COMPLIANT

*Tested on 6" 16-ga. steel studs, 16" OC

QuietRock® reduces noise by using constrained layer damping technology (CLD). When acoustic energy (sound) comes in contact with the constrained layer damped panel, the viscoelastic (inner) layer works together with the constraining (outer) layers to convert acoustic energy (sound) into thermal energy (heat), which dissipates harmlessly.



System under vibration (magnified). Note shearing of damping layer as panel flexes.

QuietRock® – The professionals' choice for acoustic design

For over a decade, QuietRock® products have successfully achieved STC design goals. Professionals increasingly choose QuietRock® for it's benefits:

- **High acoustic performance:** rivals common noise control methods like resilient channel (RC), sound clips, soundboard, mass loaded vinyl, and multiple layers of gypsum panels
- **Low cost:** sound attenuation at a lower total installed cost compared to other methods
- **Easy installation:** QuietRock® scores, cuts and installs like standard drywall with less time and labor costs than other acoustical treatments
- **Thoroughly tested and reliable:** UL and ASTM certifications and independent testing of 19 complete assemblies, more than 32 STC reports and 136 independent UL/ULC designs
- **Saves space:** achieves high STC goals without sacrificing valuable floor space when compared to traditional multi-layer or decoupled installations
- **Proven:** installed in thousands of successful projects across the U.S. and Canada

Visit www.QuietRock.com for architectural resources and product documentation

QuietRock® applications:

- Hospitals
- Schools and Universities
- Commercial Real Estate
- Multifamily Residences
- Private Residences
- Remodeling Projects
- Government Facilities
- Home Theaters
- Hotels
- Worship Facilities

Quiet® products address the annoying sounds that can cause distractions and obstruct privacy. QuietRock® is designed to reduce noise and meet architect design goals, while saving builders' time and exceeding customer expectations. QuietRock® provides performance and reliability with a simple installation – similar to standard gypsum panels. QuietRock® is clearly the key contributor to a quieter, more private and comfortable living and working space.

QuietRock® models for specific needs

	MODEL	THICKNESS	FEATURES	APPLICATION	UL/ULC
BASIC	510	1/2"	Lowest cost QuietRock panel option	Cost effective option suitable for basic remodel & retrofit projects	
	ES	5/8"	The only Type X sound damping panel with easy score & snap technology	Ideal for any new or existing project	
ULTIMATE	ES MR	5/8"	The only mold resistant Type X sound damping panel with easy score & snap technology	Ideal for any new or existing project in mold sensitive areas	
	530	5/8"	Heavy duty impact-resistant Type X	For use in high traffic or areas prone to impact abuse	
SPECIALIZED	530 RF	5/8"	Impact-resistant Type X with radio frequency (RF) shielding material	Special application for SCIF or projects requiring RF shielding	
	545	1-3/8"	Highest sound isolation performance at low frequencies (50 Hz to 100 Hz)	Designed for high-end media rooms, recording studios & theaters	



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