



Acoustic Floor Underlay Fabreeka<sup>®</sup> QuietDown<sup>®</sup>

> High performance mid to high frequency impact sound reduction



Fabreeka<sup>®</sup> QuietDown<sup>®</sup> is a multi-purpose, high performance acoustic underlay engineered to reduce sound transmission through subfloors. It is manufactured from durable recycled rubber, which translates into a stronger, more resilient acoustic underlay that won't pack down or fall apart over time.

Fabreeka QuietDown is perfect for condos, kitchens, playrooms, institutional settings and anywhere else where noise transmission is a concern.



Available for a wide variety of flooring types such as

ceramic tile, stone, hardwood, engineered wood, laminate, commercial carpet and vinyl, Fabreeka QuietDown offers incredible sound damping qualities. Easy-to-install sheets are thinner, lighter, and stronger than conventional underlays. Laying and trimming is quick and easy.

#### **Features and Benefits**

- High performance mid to high frequency impact sound reduction
- Achieves △IIC of 15 23 depending on material and floor assembly
- Laboratory and field tests of Fabreeka QuietDown have been conducted by independent organizations copies are available upon request
- Fabreeka QuietDown Max HB has excellent adhesion to mortar for tile applications
- Doubles as a crack isolation membrane under ceramic and stone installations
- Used under screed applications as a decoupling / sound insulation membrane
- Mildew and insect repellant
- Will not rot or fall apart over time
- Low surface deflection
- Will not sag or compress like foams and felt fiber underlays
- Fabreeka QuietDown Max HB meets ASTM C627-93 Robinson Test designation for medium to heavy commercial applications in tile and stone assemblies
- High coefficient of friction creep is less than 3% for Fabreeka QuietDown and less than 1% for Fabreeka QuietDown Max HB
- Excellent thermal R value
- Reduces passive thermal loss
- Easy to handle sheets make for less waste and lay down flat with no curled edges





The felted surface of **Fabreeka QuietDown Max HB** forms a solid bond with urethane adhesive and modified mortar. Fabreeka QuietDown Max HB is a 100% vapor barrier and is specially formulated for glue-down and tile/stone applications. Made for long-lasting strength.

Manufactured with recycled rubber, **Fabreeka QuietDown** is an economical underlay that offers superior sound insulation performance compared to cork, bitumen, felts and foams. Offering up to 21 dB impact sound reduction ( $\Delta$ IIC), Fabreeka QuietDown is mold and mildew resistant and will not degrade over time. It can be used under floor heat systems, and meets indoor air quality standards. Its bondable surface makes Fabreeka QuietDown an ideal acoustic underlay for a variety of applications.

# Ideal uses for Fabreeka QuietDown materials include:

- Under floor screeds concrete and wood joist systems
- Under floor coverings, such as wood, laminate, tile, stone, carpet and vinyl
- Load bearing applications to isolate noise and vibration, such as under machinery, appliances and exercise equipment
- Load securement applications, such as minimizing cargo damage in trailers, rail cars and shipping containers

## **Applications include:**

- New construction
- Renovations
- Residential
- Commercial
- Single- and multi- family homes
- Office buildings
- Apartment buildings
- Hotels
- Medical buildings/Hospitals
- Schools/Universities
- Libraries



# **Overview of IIC & \Delta IIC Sound Testing**

IIC stands for Impact Insulation Class. Acoustic labs conduct an IIC test using a tapping machine where hammers strike a test floor material generating sounds between 125 to 4,000 Hz. The impact creates vibrations that travel through the floor into the receiving room below. The engineer plots the results of each tap on a graph, compares the results to the reference assembly, and determines the IIC rating from comparing these two tests. A higher number indicates better performance. The IIC rating does not account for any squeaking or rattling caused by loose wood frame construction, nor does it account for low frequency footfall noise or structural deflection.

The IIC ratings for basic concrete sub-floor with no resilient underlayment is around 28 to 35 IIC. The IIC ratings for basic wood structure with no resilient underlayment is around 40 to 45 IIC. Without the addition of sound isolation products, the IIC rating of basic wood structures will rate better than concrete structures because they are naturally more resilient. An IIC rating of 50 and above is most common in building code requirements. IIC ratings are dependent on entire assemblies, not a single element.

The Delta IIC ( $\Delta$ IIC) rating shows what the product adds to the assembly in terms of isolating impact footfall noise. The  $\Delta$ IIC test first tests a full assembly with no underlayment included. Then an underlayment is installed, and the same test is repeated. The  $\Delta$ IIC rating is the *performance gain* between the first and second test. A higher number indicates better performance. The  $\Delta$ IIC rating is the best number to look at when comparing the performance of different types of underlayment. Be cautious, some underlayment suppliers provide the IIC of an entire assembly, but not what the underlayment actually contributes to the assembly ( $\Delta$ IIC).

Sample Fabreeka® QuietDown® Test Results					
Floor Type	Floor Covering	Underlay Type	Thickness	∆IIC	
6" Concrete Slab	Wood, Hard	Fabreeka® QuietDown®	2mm	21	
6" Concrete Slab	Wood, Hard	Fabreeka® QuietDown®	4mm	21	
6" Concrete Slab	Wood, Hard	Fabreeka® QuietDown®	6mm	23	
6" Concrete Slab	Tile, Ceramic	Fabreeka® QuietDown® Max HB	4mm	16	
6" Concrete Slab	Wood, Engineered	Fabreeka® QuietDown®	2mm	20	

# **Robinson Tests**

The Tile Council of North America has evaluated Fabreeka QuietDown and Fabreeka QuietDown Max HB using the Robinson method of evaluating ceramic floor tile installation.

#### Fabreeka QuietDown Max HB:

In accordance with the Performance-Level Requirement Guide and Selection Table of the 2003-2004 Handbook for Ceramic Tile Installation, the installation is rated as **"MODERATE"** for "normal commercial and light institutional use in public space of restaurants and hospitals".

#### Fabreeka QuietDown:

In accordance with the Performance-Level Requirement Guide and Selection Table of the 2010 TCA Handbook for Ceramic Tile Installation, the installation is classified **"LIGHT"** for "light commercial use in office space, reception areas, kitchens and bathrooms".



# **Green Materials**

All Fabreeka QuietDown products are engineered from recycled rubber, so every square foot you install means less landfill waste. For contractors, this means Fabreeka QuietDown contributes to green content and LEED credits.

# **LEED Description and Potential Credits**

LEED, or Leadership in Energy & Environmental Design, is a green building certification program through the US Green Building Council that recognizes best-in-class building strategies and practices. To receive LEED certification, building projects satisfy prerequisites and earn points to achieve different levels of certification. Prerequisites and credits differ for each rating system, and teams choose the best fit for their project.

Credit	Credit Name	Rating System	Relevance to Product		
LEED for Green Building Design and Construction 2009					
MRc4.1, 4.2	Recycled Content, 10-20%	LEED NC 2009	Recycled content		
MRc5.1, 5.2	Regional Content, 20-30%	LEED NC 2009	Regional-sourced content		
EQc4.3	Low-Emitting Materials: Flooring Systems	LEED NC 2009	Reduced off-gassing		
LEED for Commercial Interiors 2009					
MRc4.1, 4.2	Recycled Content, 10-20%	LEED CI 2009	Recycled content		
MRc5.1, 5.2	Regional Content, 20-30%	LEED CI 2009	Regional-sourced content		
EQc4.3	Low-Emitting Materials: Carpet Systems	LEED CI 2009	Reduced off-gassing		
LEED for Healthcare: New Construction and Major Renovations (USGBC)					
MRc3	Sustainably Sourced Materials and Products	LEED 2009 for Healthcare	Recycled, reused, or rapidly renewable content		
IEQc2	Acoustic Environment	LEED 2009 for Healthcare	Reduced sound disturbance		
IEQc4	Low-Emitting Materials	LEED 2009 for Healthcare	Reduced off-gassing		
LEED for Schools 2009 (USGBC)					
MRc4	Recycled Content, 10-20%	LEED 2009 for Schools	Recycled content		
MRc5	Regional Content, 20-30%	LEED 2009 for Schools	Regional-sourced content		
IEQp3	Minimal Acoustical Performance	LEED 2009 for Schools	Reduced sound disturbance		

# **Deflection & Creep**

All elastomers creep to some degree. Foams creep extensively. Fabreeka QuietDown creep is extremely low. At a max load, Fabreeka QuietDown creep is less than 3% of its original thickness, and Fabreeka QuietDown Max HB creep is less than 1% of its original thickness. Fabreeka QuietDown is reinforced with random fibers to maximize performance and provide very low creep.



# **Typical Floor Assemblies**



Urethane adhesive

5/8" plywood subfloor Wood joist system Insulation **Resilient channel** 5/8" gypsum board

6

8" Concrete slab



# **Frequently Asked Questions**

#### What type of floor covering can I use with Fabreeka QuietDown?

Laminate, engineered wood, solid hardwood, commercial carpet, ceramic tile, porcelain and stone.

#### Does the smell of rubber go away?

Yes it does. Fabreeka QuietDown is manufactured using recycled rubber, which has an odor of rubber. Left in the open, the smell will dissipate after a few days. Once covered by the floor covering the smell will no longer be detectable.

#### Can I use Fabreeka QuietDown in my basement?

Fabreeka QuietDown Max HB is 100% vapor proof, and we have had a number of customers install it in their basements. Fabreeka QuietDown Max HB will prevent moisture from traveling upwards into your floor covering, *but* if you have a wet basement issue, Fabreeka QuietDown Max HB will *not* solve your problem. It is recommended that you fix the root cause of the moisture, then install your floor coverings.

#### What type of sound does Fabreeka QuietDown reduce?

Mid to high frequency impact sounds, such as sliding chairs, moving furniture, people walking in hard soled shoes, children dropping toys, pots, pans or items being dropped in kitchens.

#### I want to get rid of the sound of booming bass, will Fabreeka QuietDown work for this?

No. Most acoustic underlay products will not get rid of low frequency sound transmission. In order to reduce low frequency sounds you need a combination of mass and structure, similar to the egg carton products you see in sound studios. This type of shape does not lend itself to underlay.

#### Why does Fabreeka QuietDown come in sheets and not rolls?

Homeowners and contractors have told us that rolls are heavy and cumbersome on a job site. Sheets are preferred for ease of installation.

#### What do you recommend I use for adhesive?

For tile/stone installations, use any brand name polymer modified thin set mortar that complies with TCNA (Tile Council of North America) specifications. For wood floor installations, use any brand name wood flooring urethane adhesive that complies with NWFA (National Wood Flooring Association) specifications.

#### What is IIC?

IIC, or Impact Insulation Class, is a unit of measure used in acoustics to measure the amount of impact sound transmission that passes through a subfloor. IIC ratings are dependent on entire assemblies, not a single element.

#### Does the higher IIC number mean the product is better?

Not necessarily. Unfortunately, a number of manufacturers claim that their products achieve extremely high IIC numbers. In order to determine the benefit of any underlayment, an IIC test must be done on the floor with and without the underlayment. The difference is the Delta IIC ( $\Delta$ IIC), which is what the underlayment contributes to the assembly. Laboratory and field tests of Fabreeka QuietDown have been conducted by independent organizations. Copies are available upon request.

#### Can Fabreeka QuietDown be used on walls?

Fabreeka QuietDown is tested and approved for use as an underlay below hard surface flooring. The product should be tested before use in other applications.



# Fabreeka's Learn at Lunch Program

Are you an Architect or Design Firm who would like to know more about Fabreeka's products for building and construction?

Fabreeka offers a Learn at Lunch program just for you. Fabreeka's presentation can assist with PDH credits and has been approved by several organizations. Please contact Fabreeka to find out more.

1-800-322-7352, info@fabreeka.com or www.fabreeka.com

# Additional Fabreeka® Products for Building & Construction











PTFE Bearing Pads

SA-47 Bearing Pads Fa

Fabreeka-TIM® Structural Thermal Break



Isolation Washers & Bushings

Expansion Bearings

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