

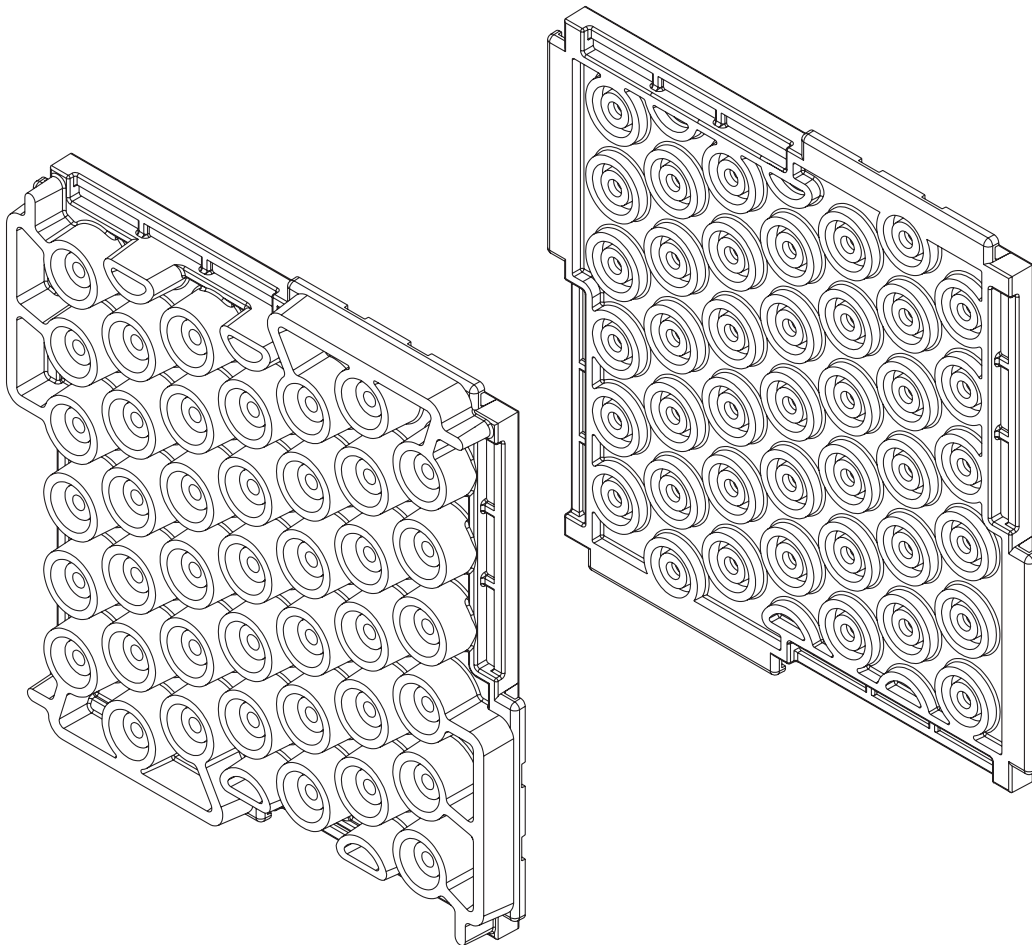


It's not magic, it's engineering.®

Impact Sound Control

GENIEMAT[®] FIT

For Weight Drop Impact Insulation




GENIEMAT[®] FIT

All-in-one fitness flooring

PRODUCT FEATURES

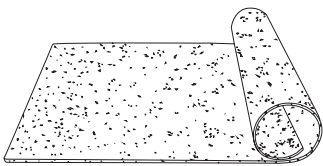
GenieMat FIT is an all-in-one fitness floor made from recycled rubber, engineered to reduce structure-borne sound and vibration transmission in concrete, wood frame and metal deck construction.

GenieMat FIT floors dramatically reduce low frequency impact noise in free weight areas, under cardio equipment and in fitness studios.

|  | GenieMat FIT08 | GenieMat FIT30 | GenieMat FIT70 |
|---|--------------------------------|--|--|
| Weight/sf | 1.7 - 2.2 lb (0.8 - 1.0 kg) | 5.2 lb (2.3 kg) | 9.2 lb (4.2 kg) |
| Thickness | 5/16" (8 mm) | 1 1/4" (30 mm) | 2 3/4" (70 mm) |
| Installed Dimension | 48" x 25' (1220mm x 7620mm) | 23 7/8" x 23 7/8" (607 mm x 607 mm) | 23 7/8" x 23 7/8" (607 mm x 607 mm) |
| Product Type | Roll | Interlocking Tile | Interlocking Tile |

All listed dimensions are nominal.

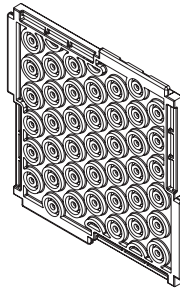
GenieMat FIT30 and **GenieMat FIT70** have a product and installed dimension tolerance of +/- 1/8".



GenieMat® FIT08

APPLICATIONS

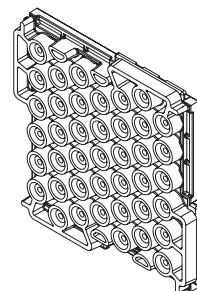
- Entryways/corridors
- Group fitness areas
- Locker rooms
- Spinning studios



GenieMat FIT30

APPLICATIONS

- Cardio studios
- Personal training areas
- Machine areas



GenieMat FIT70

APPLICATIONS

- High impact studios
- Free weight/dumbbell areas

ENGINEERED FOR PERFORMANCE

GenieMat® FIT DESIGN CRITERIA

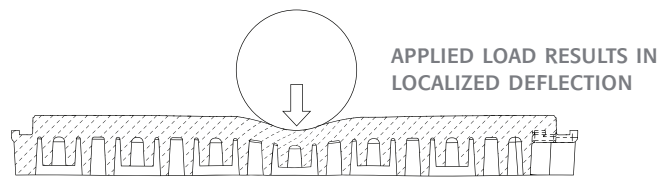
SIGNIFICANTLY REDUCES STRUCTURE-BORNE VIBRATION

- Low dynamic stiffness for improved low frequency response
- Engineered dual cylinder pedestals reduce vibration transmission
- Decreased impact force exposure level as measured using heavy/hard impact sources

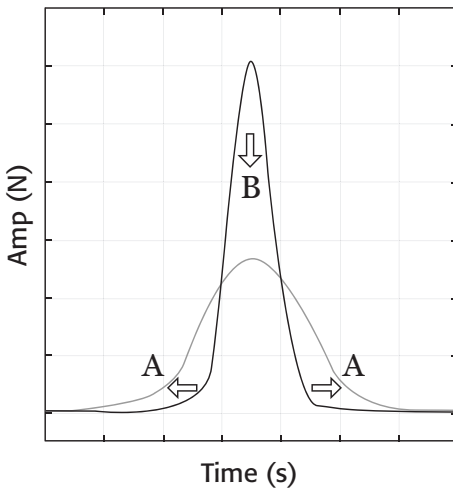
SEAMLESS, INTERLOCKING FIT

- Tiles are installed in compression to have a seamless aesthetic and eliminate seam separation over time
- Seam compression of 59 lbf/in (10.3 N/mm)

DESIGN OBJECTIVES OF A LOCALLY REACTIVE TILE

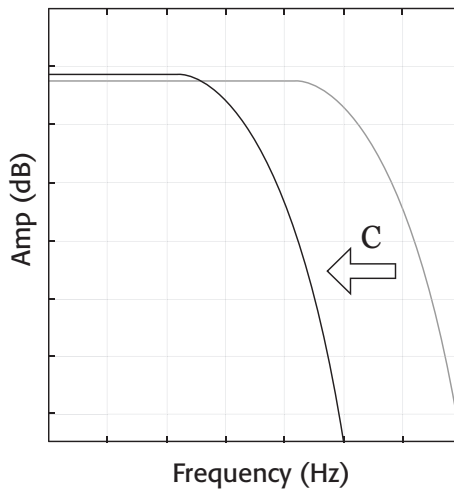


TIME DOMAIN FORCE PULSE



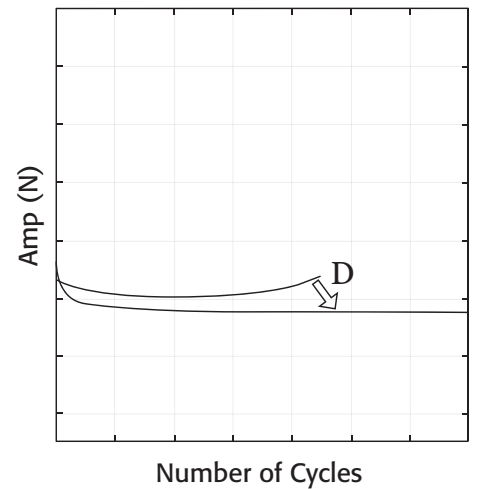
- A. Extending contact time improves lower frequency attenuation
- B. Reducing peak force value reduces overall sound pressure level

FREQUENCY DOMAIN FORCE PULSE



- C. Reducing 3 dB down point frequency improves lower frequency attenuation

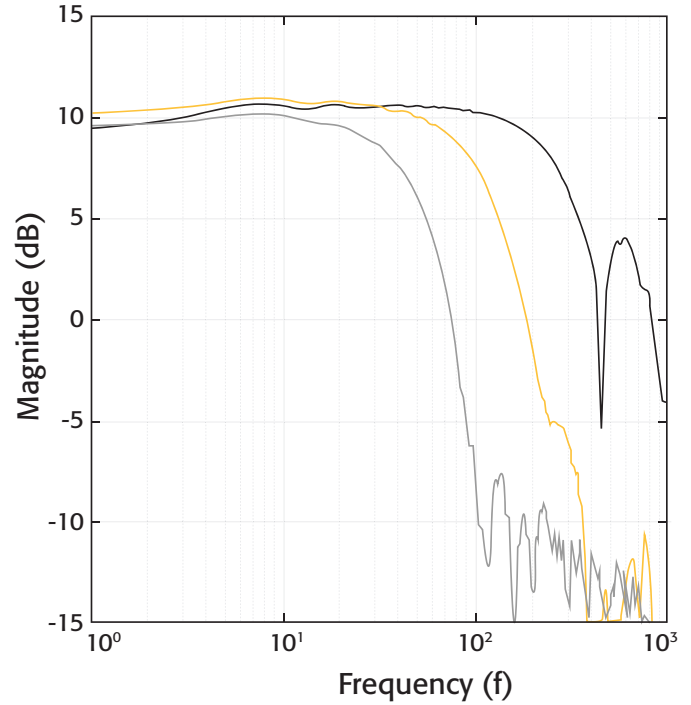
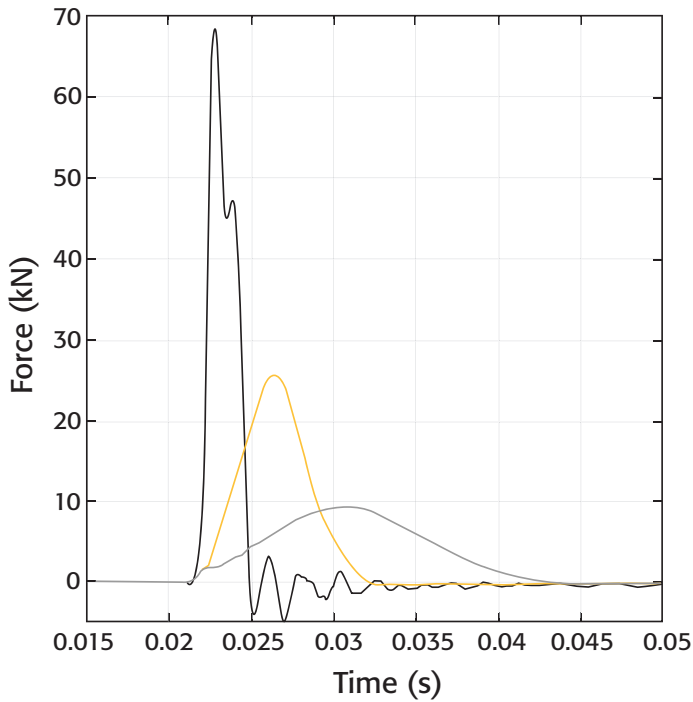
DURABILITY



- D. Flattening out durability curve equates to improved product lifetime
- Plot of peak force values taken from repeated force pulse measurements

FORCE PULSE MEASUREMENTS OF GENIEMAT® FIT SYSTEMS

- Can be used to predict in-situ performance. Contact **Pliteq** for *Internoise 2018* paper and methodology



GenieMat FIT08
 GenieMat FIT30
 GenieMat FIT70

GenieMat FIT08
 GenieMat FIT30
 GenieMat FIT70

ENGINEERING DESIGN CHARACTERISTICS

| TEST RESULTS | | | | |
|-----------------------------|--------------------|-----------------------|-----------------------|-----------------------|
| TEST DESCRIPTION | STANDARD REFERENCE | GenieMat FIT08 | GenieMat FIT30 | GenieMat FIT70 |
| Slip Resistance | ASTM D2047 | 0.90 | 0.81 | 0.81 |
| Tensile Strength | ASTM D412 | >300 psi | 107 psi | 92 psi |
| CHPS Section 01350 | ASTM D5116 | Pass | Pass | Pass |
| Chemical Resistance | ASTM F925 | No Change | No Change | No Change |
| Impact Force Exposure Level | ISO 10140 - Part 5 | 43 dB | 41 dB | 39 dB |
| Critical Radiant Flux | ASTM E648 | Class I /Class II* | Class I /Class II* | Class I /Class II* |

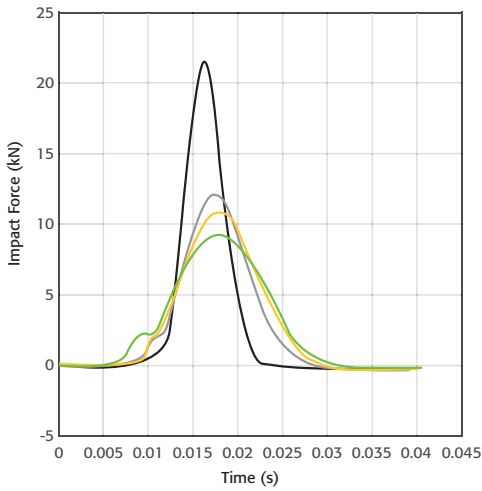
*Class I available upon request.

GENIEMAT® xFIT

GenieMat xFIT TESTING

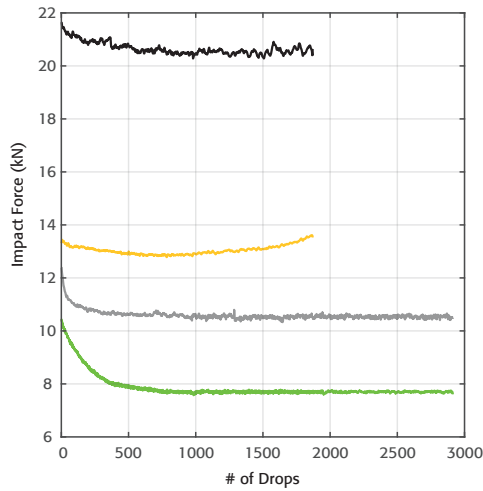
US Patent: US 10,676,920 B2

FORCE PULSE



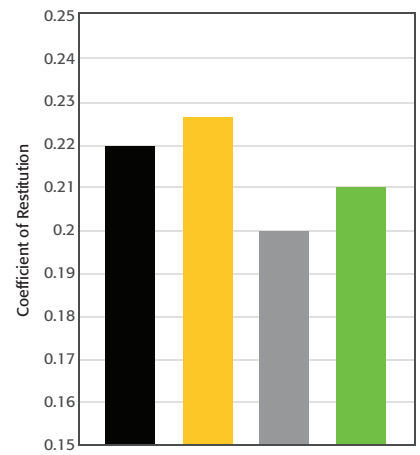
- GenieMat FIT30
- GenieMat FIT70
- GenieMat xFIT70
- GenieMat xFIT100

FATIGUE TESTING



- GenieMat FIT30
- GenieMat FIT70
- GenieMat xFIT70
- GenieMat xFIT100

REBOUND PLOTS

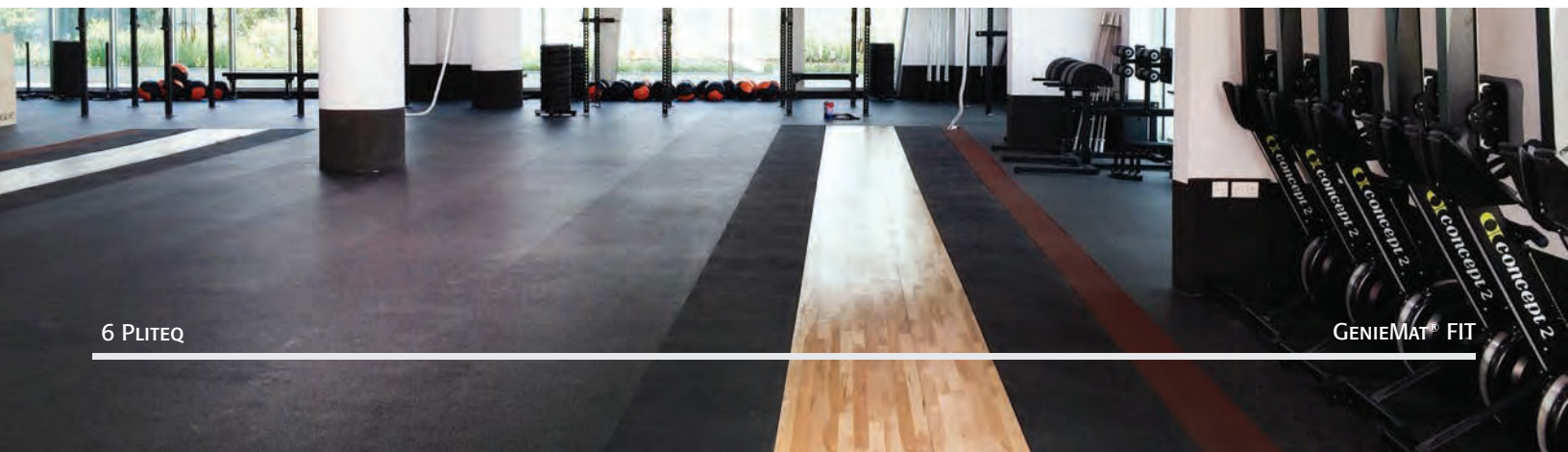


- GenieMat FIT30
- GenieMat FIT70
- GenieMat xFIT70
- GenieMat xFIT100

ENGINEERING DESIGN CHARACTERISTICS

| | GenieMat xFIT70 | GenieMat xFIT100 |
|----------------|-----------------------|------------------------|
| Weight/sf | 9.3 lb/sf (4.2 kg/sf) | 11.6 lb/sf (5.3 kg/sf) |
| Thickness | 2 3/4" (70 mm) | 4" (100 mm) |
| Product Finish | Interlocking Tile | Interlocking Tile |

PLATFORMS

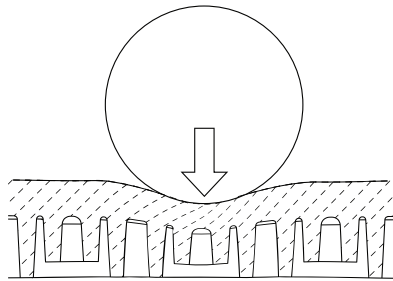


HYBRID SYSTEM

WITH **GenieMat® FIT** AND **GenieMat FF**

LOCALLY REACTIVE

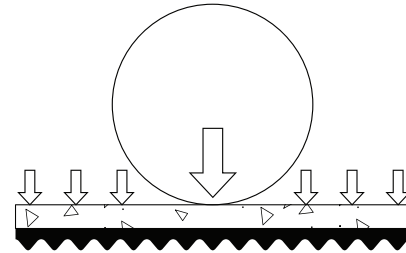
APPLIED LOAD RESULTS IN LOCALIZED DEFLECTION



RESILIENT TILE

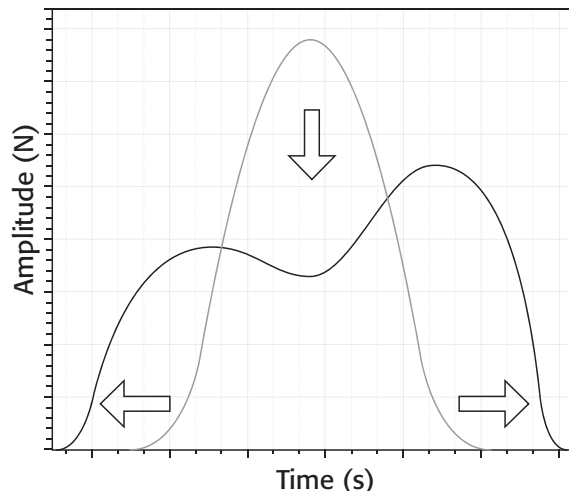
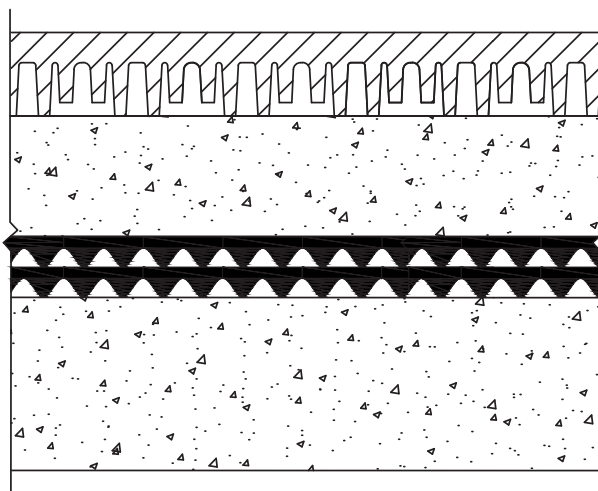
RESONANTLY REACTIVE

APPLIED LOAD RESULTS IN DISTRIBUTED DEFLECTION



RIGID LAYER & RESILIENT UNDERLAYMENT

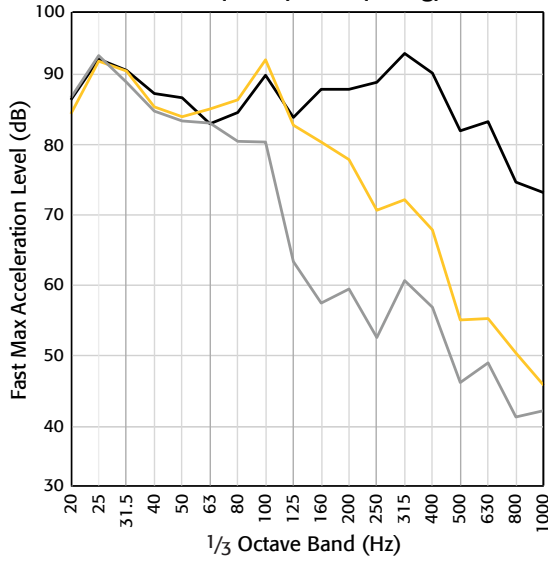
LOCALLY REACTIVE ABOVE RESONANTLY REACTIVE CREATES A HYBRID SYSTEM



- Helps reduce impact force amplitude and increase force impulse duration
- Ideal for rhythmic excitation such as dance studios and treadmill bays

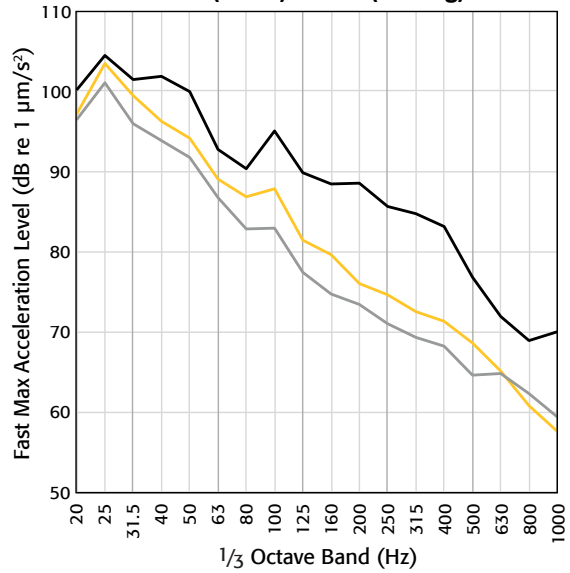
TILE DATA

Heavy Weight Drop - Acceleration
39" (1.0 m) 15 lb (6.8 kg)



- E5600.12 **GenieMat FIT08**
- E5600.14 **GenieMat FIT30**
- E5600.15 **GenieMat FIT70**

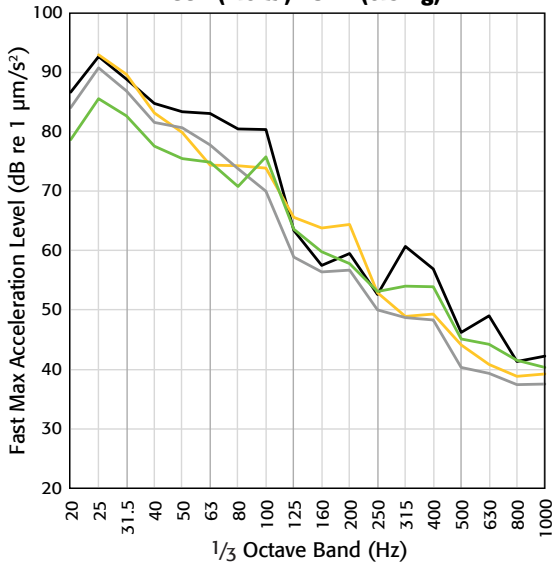
Heavy Weight Drop - Acceleration
39" (1.0 m) 100 lb (45.4 kg)



- E5600.15 **GenieMat FIT70**
- E5600.16 **GenieMat xFIT70**
- E5600.17 **GenieMat xFIT100**

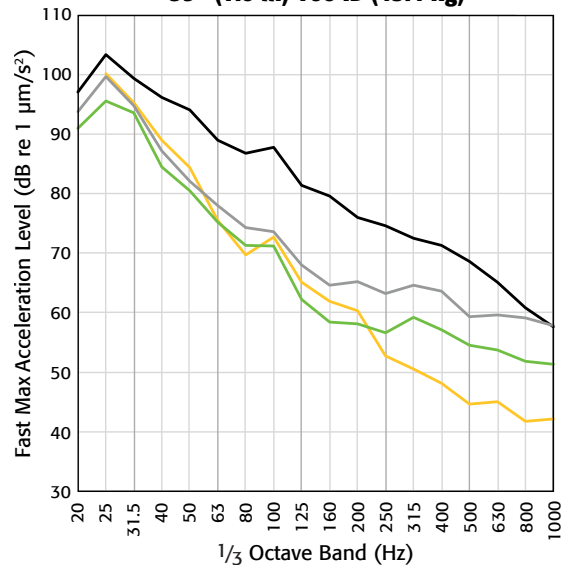
PLYWOOD HYBRID

Heavy Weight Drop - Acceleration
39" (1.0 m) 15 lb (6.8 kg)



- E5600.15 **GenieMat FIT70**
- E5600.26 **GenieMat FIT70, 1/2" Cement Board, GenieMat FF25**
- E5600.29 **GenieMat FIT70, 3/4" Plywood, GenieMat FF70**
- E5600.31 **GenieMat FIT70, 3/4" Plywood, GenieMat FF70LDM**

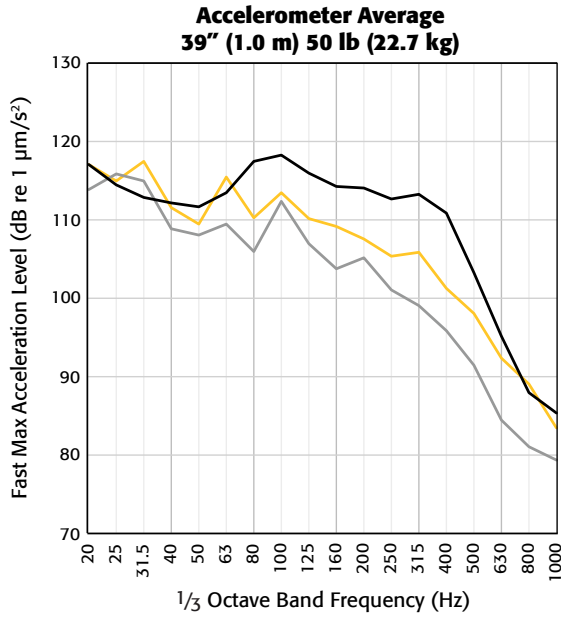
Heavy Weight Drop - Acceleration
39" (1.0 m) 100 lb (45.4 kg)



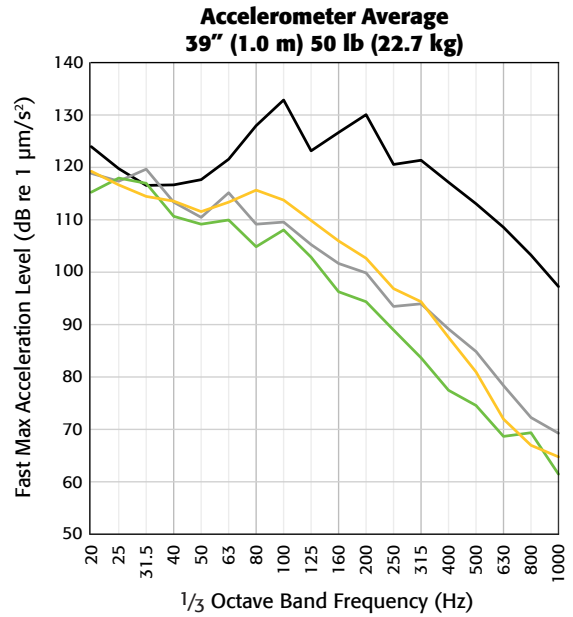
- E5600.16 **GenieMat xFIT70**
- E5600.27 **GenieMat xFIT70, 1/2" Cement Board, GenieMat FF25**
- E5600.30 **GenieMat xFIT70, 3/4" Plywood, GenieMat FF70**
- E5600.32 **GenieMat xFIT70, 3/4" Plywood, GenieMat FF70LDM**

CONCRETE HYBRID

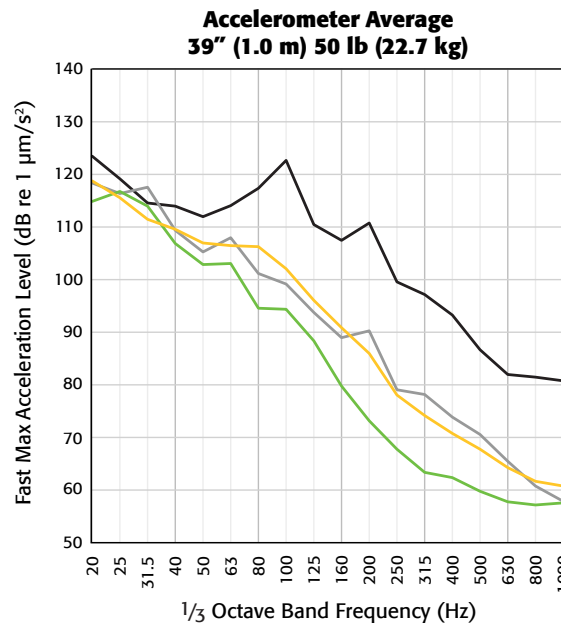
NOTE: FCS - Floating Concrete Slab



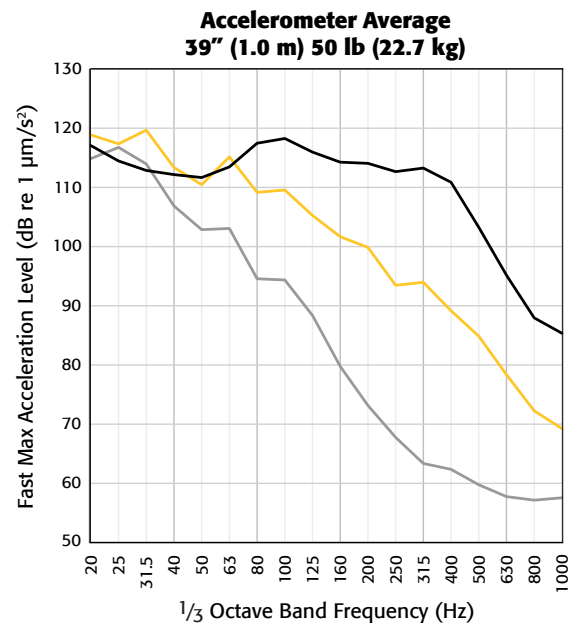
- A1-008867-01F **GenieMat FIT08**, 4" FCS, **GenieMat FF50**
- A1-008867-04F **GenieMat FIT08**, 4" FCS, **GenieMat FF70**
- A1-008867-05F **GenieMat FIT08**, 4" FCS, **GenieMat FF70LDM**



- A1-008867-00F **GenieMat FIT30**
- A1-008867-01F **GenieMat FIT30**, 4" FCS, **GenieMat FF50**
- A1-008867-04F **GenieMat FIT30**, 4" FCS, **GenieMat FF70**
- A1-008867-05F **GenieMat FIT30**, 4" FCS, **GenieMat FF70LDM**



- A1-008867-00F **GenieMat FIT70**
- A1-008867-01F **GenieMat FIT70**, 4" FCS, **GenieMat FF50**
- A1-008867-04F **GenieMat FIT70**, 4" FCS, **GenieMat FF70**
- A1-008867-05F **GenieMat FIT70**, 4" FCS, **GenieMat FF70LDM**



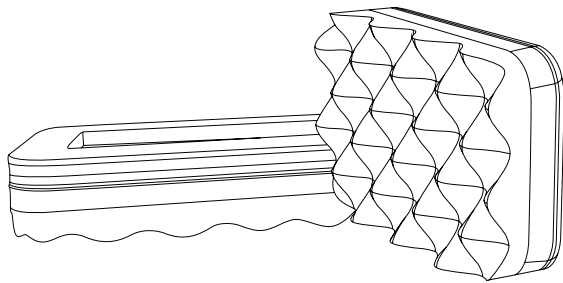
- A1-008867-01F **GenieMat FIT08**, 4" FCS, **GenieMat FF50**
- A1-008867-04F **GenieMat FIT30**, 4" FCS, **GenieMat FF70**
- A1-008867-05F **GenieMat FIT70**, 4" FCS, **GenieMat FF70LDM**

GENIEMAT[®] TMIP

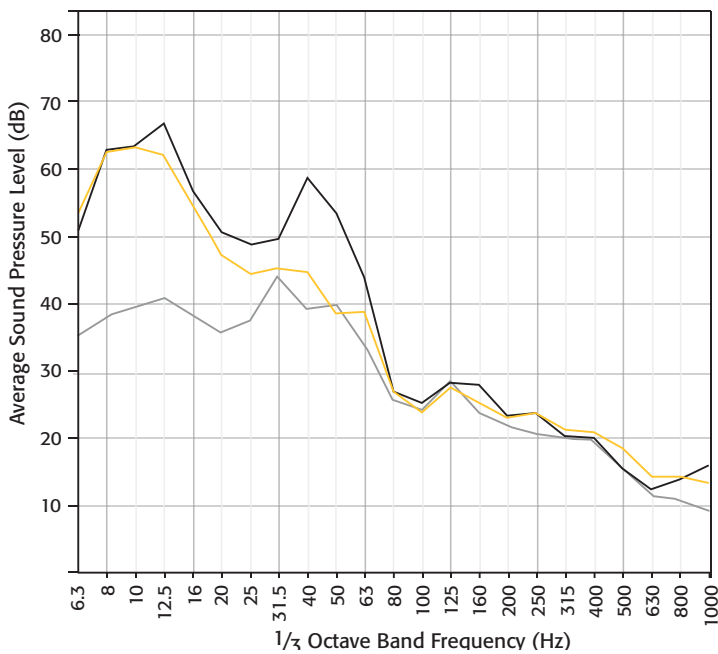
TREADMILL ISOLATION PADS

U.S Patent No.: 8,113,495
 Canadian Patent No.: 2,505,938

GenieMat TMIP are inherently non-slip.



| | |
|--------------------|--|
| STANDARD THICKNESS | 2" |
| STANDARD SIZES | 5" x 18" – Front Mounts 5" x 7" – Rear Mounts |
| STATIC DEFLECTION | Lightweight case: 100 lb user 1.46 psi deflection 1 to 2 cm Heavyweight case: 300 lb user 2.76 psi deflection 2 to 3 cm |



ENGINEERED TO REDUCE LOW FREQUENCY IMPACT

Field Measured Average Sound Pressure Levels

- Running with 1 layer of 3/4" rubber
- Running with **GenieMat[®] TMIP** on 1 layer of 3/4" rubber
- Ambient sound level, no running

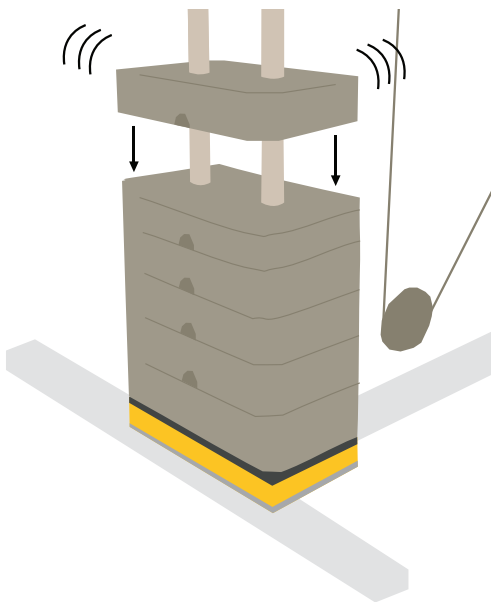
GENIEMAT® WSI

WEIGHT STACK ISOLATORS

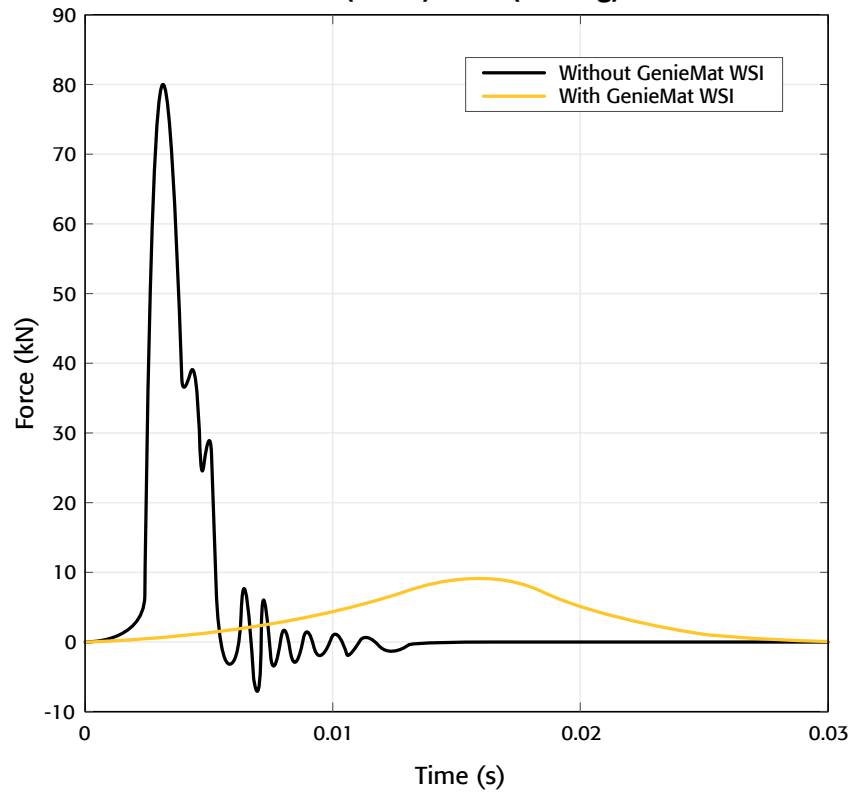
Patent pending

GenieMat WSI isolates impact noise from selectorized machines.

- Reduce impact noise at the source
- Customized size to fit every weight stack
- Installation does not require machine disassembly

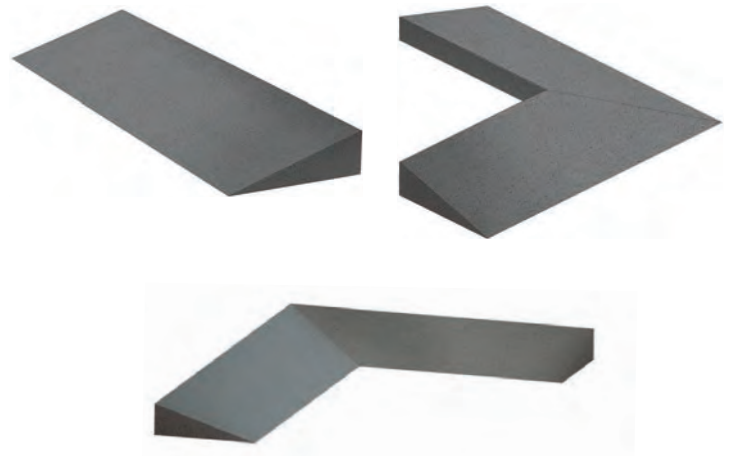


Force Pulse Comparison
20" (0.5 m) 50 lb (22.7 kg)



GENIEMAT® FIT ACCESSORIES

- Customized on site to accommodate any threshold
- Accessories for all installation types
- Corner transitions created in the field
- **GenieMat FASHM adhesive**
- ADA compliant ramps available
- Load plates available to accommodate high point loads

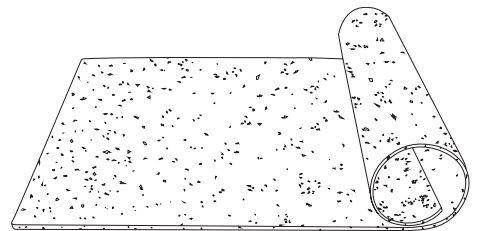




GENIEMAT[®] FIT08

Fitness Flooring Rolls

A protective, wear-resistant finished floor used in entryways, corridors, group fitness areas, locker rooms and spinning studios.





GenieMat® FIT08 PHYSICAL PROPERTIES

| TEST TYPE | ASTM | TEST RESULT |
|-------------------------|----------|------------------------|
| Shore hardness | D2240 | >70 +/- 5 |
| Density | D729 | >65 lb/ft ³ |
| Elongation (at break) | D412 | >90% |
| Tensile strength | D412 | >300 psi |
| Taber abrasion | C501 | 0.45 |
| Critical radiant flux | D395 | Class I/II* |
| Flame spread | E84 | 135** |
| Smoke density | E84 | <450** |
| Compression set | ISO 815 | 5% @ 72 Hrs |
| Coefficient of friction | D1894-95 | Wet 1.20 / Dry 1.20 |
| Tear | D624 | 5.71 lbf/in |
| Chemical resistance | F925-02 | No Change |

* Class I available upon request.

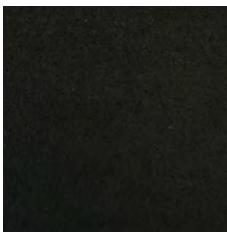
** Same as carpet and wood.

COLOR SELECTION

GenieMat® FIT

STANDARD COLORS

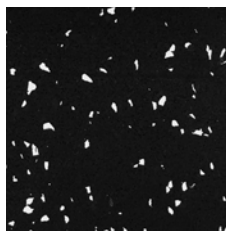
GenieMat FIT tiles are manufactured by fusing a durable wear layer to a recycled rubber crumb base. This provides superior acoustic performance in combination with excellent wear and grip. **GenieMat FIT30** tiles, **GenieMat FIT70** tiles and **GenieMat FITo8** rolls are available in 8 standard color options, see below.



BLACK



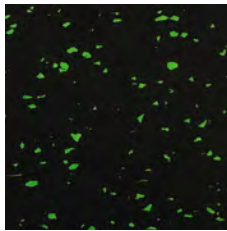
SILVER



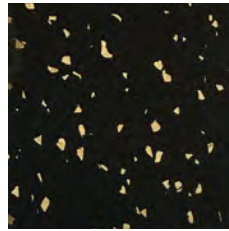
WHITE



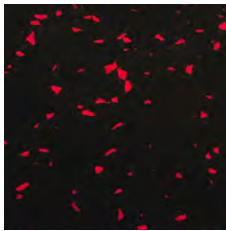
BLUE



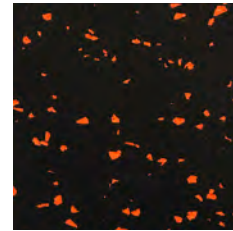
GREEN



CORK



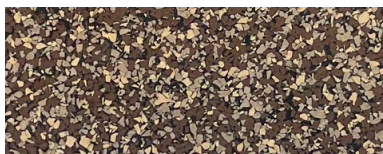
RED



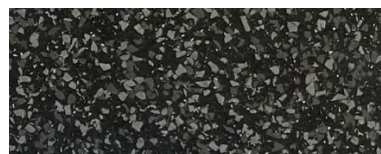
ORANGE

PREMIUM COLORS

GenieMat FIT70 tiles and **GenieMat FIT30** tiles are also available in 6 premium color options. For additional custom color formulations please contact your local Pliteq representative (minimum order quantities may apply).



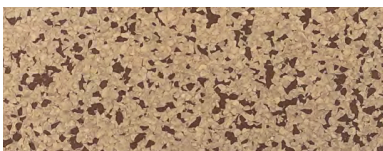
MULCH



OBSIDIAN



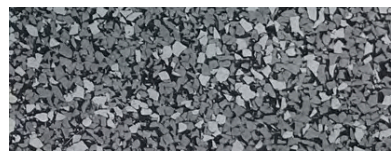
GRANITE



SANDSTONE



CONCRETE



MARBLE

*Product colors may vary. Images are for representation purpose only.

TEST RESULTS

| TEST RESULTS | | | | |
|--------------------|-------------------------|---|--|---|
| TEST REPORT NUMBER | FINISH FLOOR | SUBFLOOR SYSTEM* | 15 lb HARD IMPACT SOURCE (SPL OF COMBINED 63 Hz OCTAVE BAND IN dB) | 100 lb HARD IMPACT SOURCE (SPL OF COMBINED 63 Hz OCTAVE BAND IN dB) |
| E5600.11 | Bare | None | | |
| E5600.12 | GenieMat® FIT08 | None | | |
| E5600.14 | GenieMat FIT30 | None | 84 | 95 |
| E5600.15 | GenieMat FIT70 | None | 81 | 84 |
| E5600.16 | GenieMat xFIT70 | None | 81 | 88 |
| E5600.17 | GenieMat xFIT100 | None | 80 | 80 |
| E5600.26 | GenieMat FIT70 | 1/2" Cement Board, GenieMat FF25 | 80 | 76 |
| E5600.27 | GenieMat xFIT70 | 1/2" Cement Board, GenieMat FF25 | 79 | 82 |
| E5600.28 | GenieMat FIT30 | 3/4" Plywood, GenieMat FF70 | 82 | 86 |
| E5600.29 | GenieMat FIT70 | 3/4" Plywood, GenieMat FF70 | 80 | 76 |
| E5600.30 | GenieMat xFIT70 | 3/4" Plywood, GenieMat FF70 | 78 | 81 |
| E5600.31 | GenieMat FIT70 | 3/4" Plywood, GenieMat FF70LDM | 74 | 72 |
| E5600.32 | GenieMat xFIT70 | 3/4" Plywood, GenieMat FF70LDM | 72 | 75 |
| E5600.33 | Bare | 3/4" Plywood on 2" x 4" Sleepers, Mason MFS Springs | 74 | 89 |
| E5600.34 | GenieMat FIT70 | 3/4" Plywood on 2" x 4" Sleepers, Mason MFS Springs | 72 | 80 |
| E5600.35 | GenieMat xFIT70 | 3/4" Plywood on 2" x 4" Sleepers, Mason MFS Springs | 69 | 82 |

* All assemblies on 6" concrete slab with no ceiling.

CONTACT US

For Your Project Specific Questions
T. 416.449.0049 | **E.** info@pliteq.com

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www.pliteq.com