

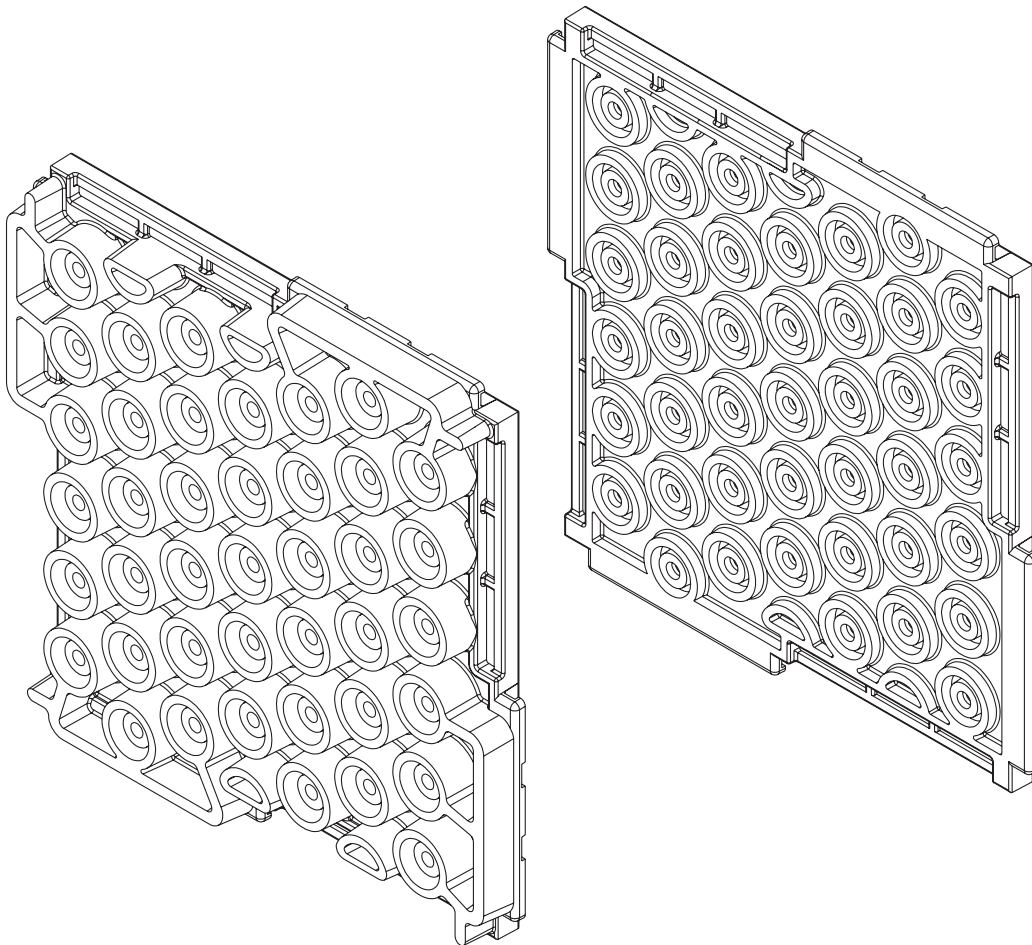


It's not magic, it's engineering.®

Impact Sound Control

GENIEMAT[®] FIT

For Weight Drop Impact Insulation





GENIEMAT® FIT

All-in-one fitness flooring

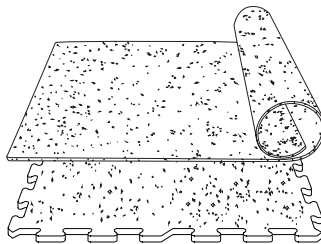
PRODUCT FEATURES

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' (1220 mm x 7620 mm)	23 1/8" x 23 1/8" (587 mm x 587 mm)	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

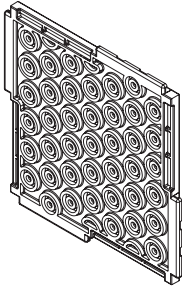
All listed dimensions are nominal.
 GenieMat FIT30 and GenieMat FIT70 have a product and installed dimension tolerance of +/- 1/8".



GenieMat® FIT08

APPLICATIONS

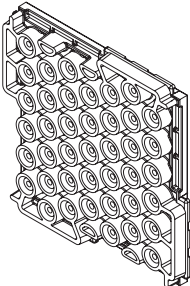
- Entryways/corridors
- Group fitness areas
- Locker rooms
- Spinning studios



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

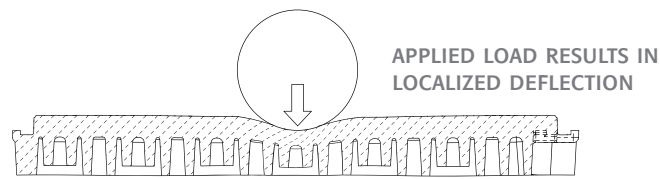
SIGNIFICANTLY REDUCES STRUCTURE-BORNE VIBRATION

- 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

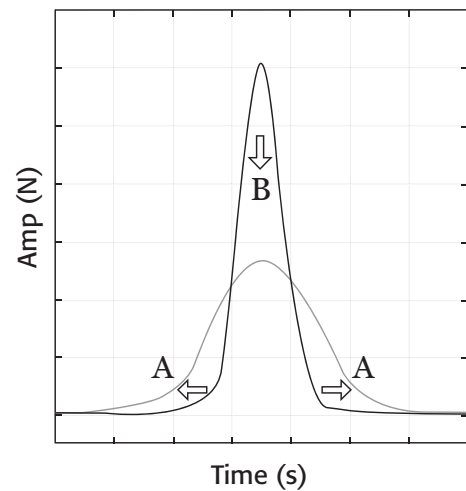
SEAMLESS, INTERLOCKING FIT

- 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

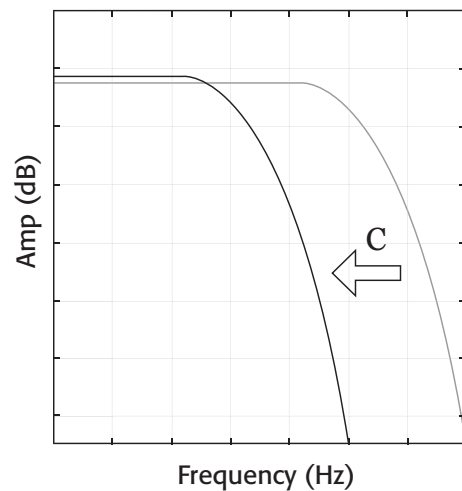


TIME DOMAIN FORCE PULSE



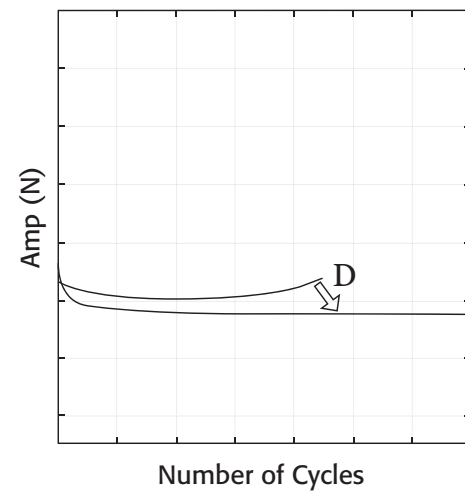
- A. Extending contact time improves lower frequency attenuation
- B. Reducing peak force value reduces overall sound pressure level

FREQUENCY DOMAIN FORCE PULSE



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

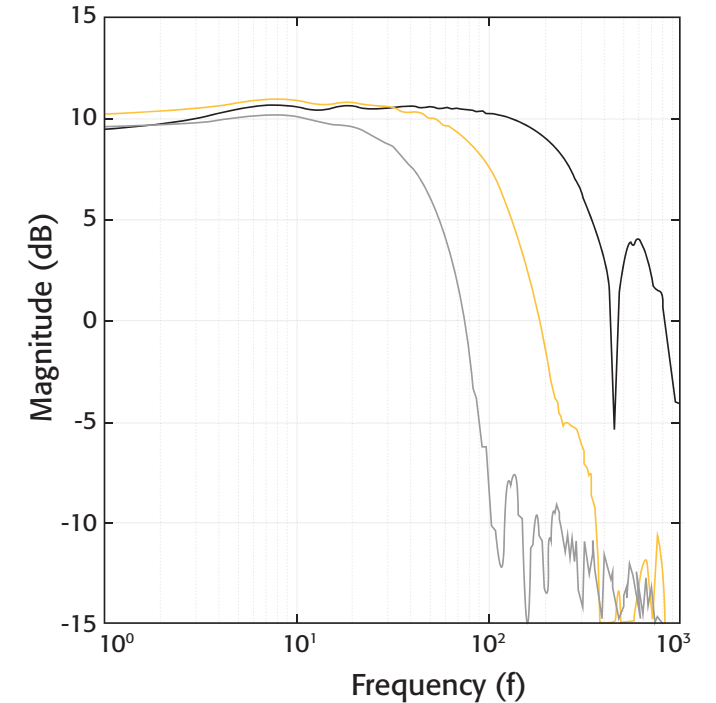
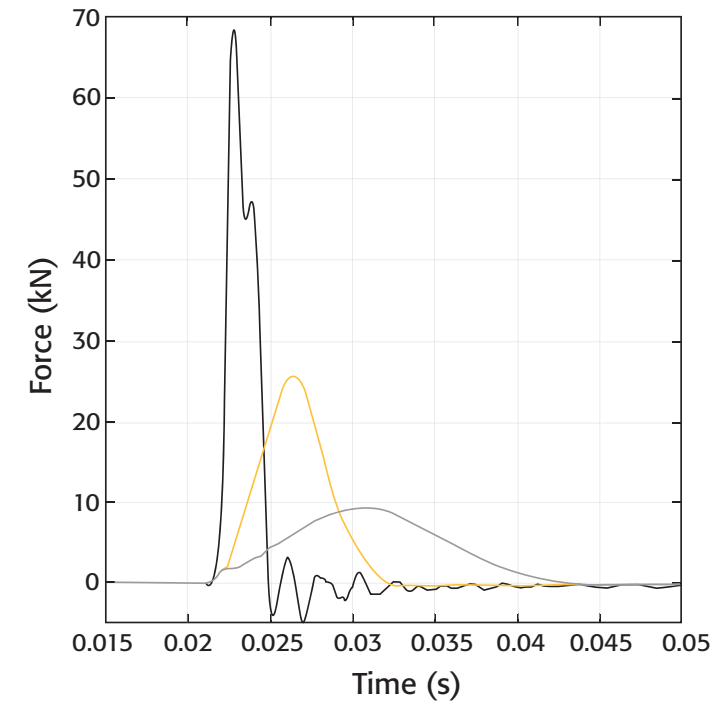
DURABILITY



- 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*

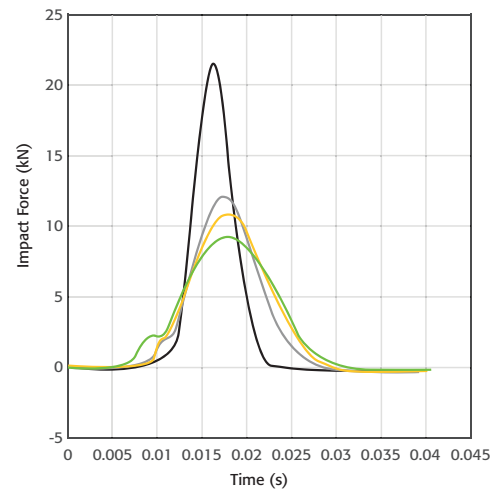
*Class I available upon request.

GENIEMAT® xFIT

GenieMat xFIT TESTING

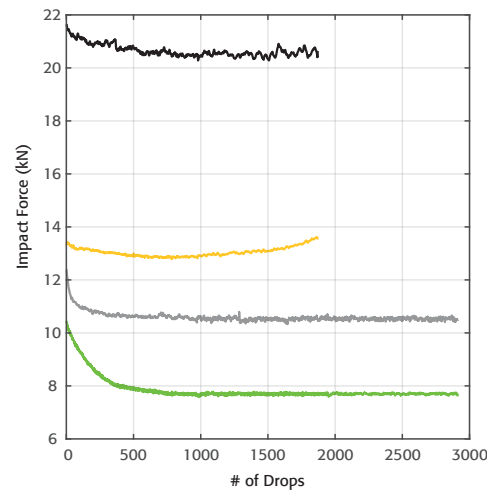
US Patent: US 10,676,920 B2

FORCE PULSE



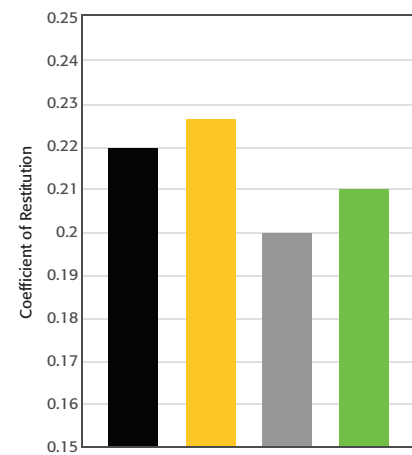
- GenieMat FIT30
- GenieMat FIT70
- GenieMat xFIT70
- GenieMat xFIT100

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

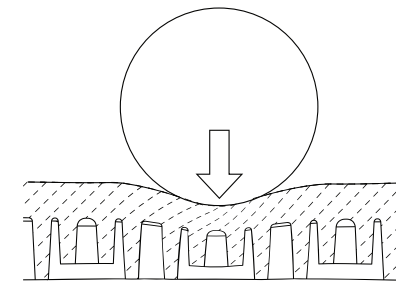


HYBRID SYSTEM

WITH GenieMat® FIT AND GenieMat FF

LOCALLY REACTIVE

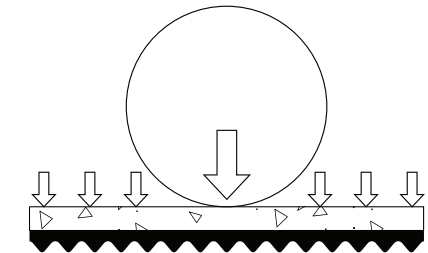
APPLIED LOAD RESULTS IN LOCALIZED DEFLECTION



RESILIENT TILE

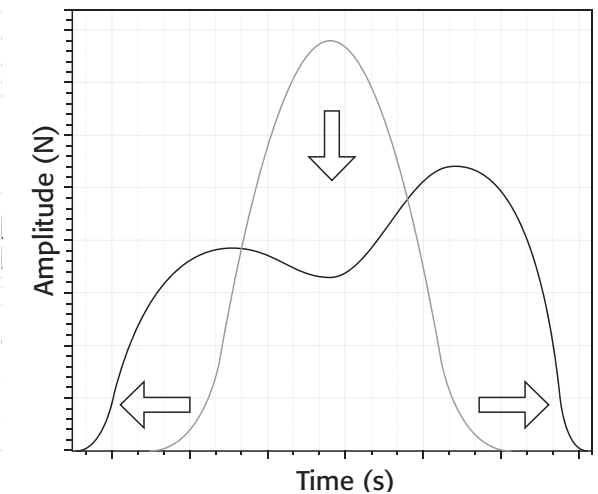
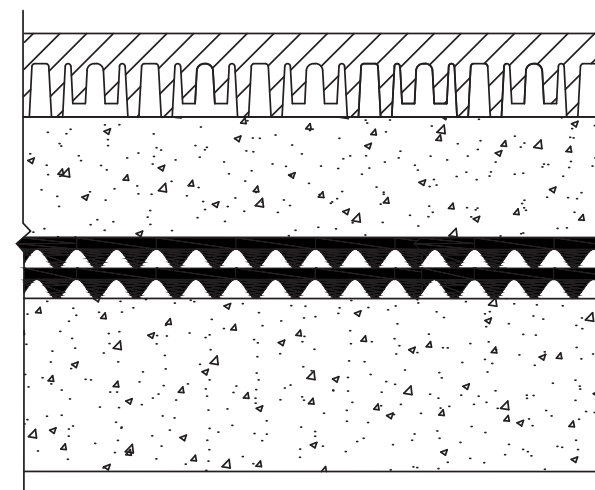
RESONANTLY REACTIVE

APPLIED LOAD RESULTS IN DISTRIBUTED DEFLECTION

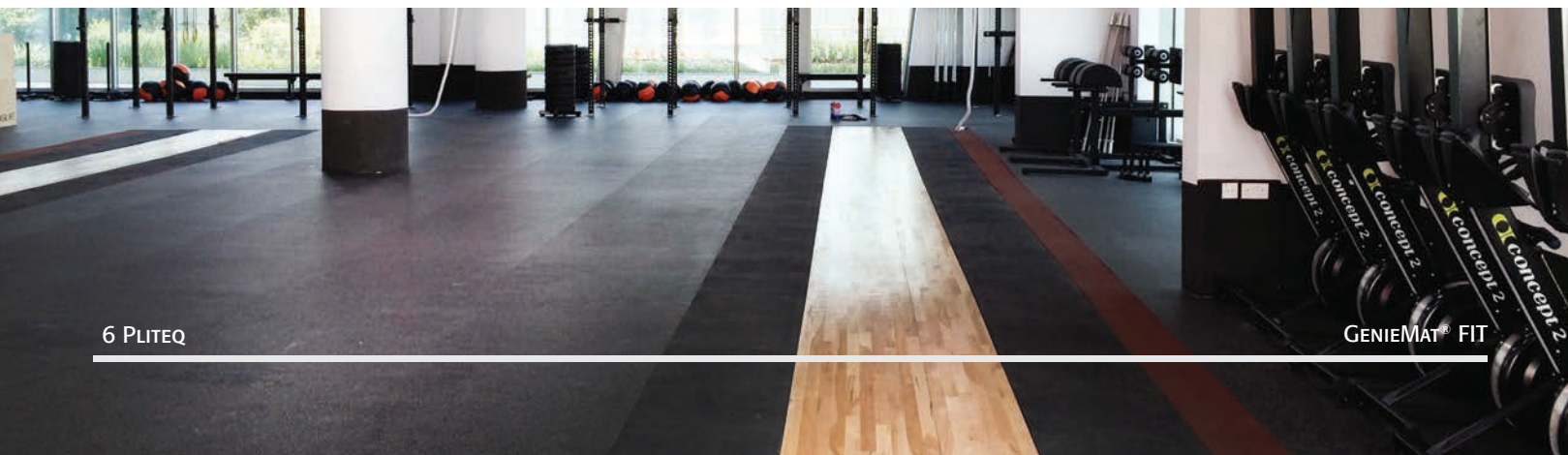


RIGID LAYER & RESILIENT UNDERLAYMENT

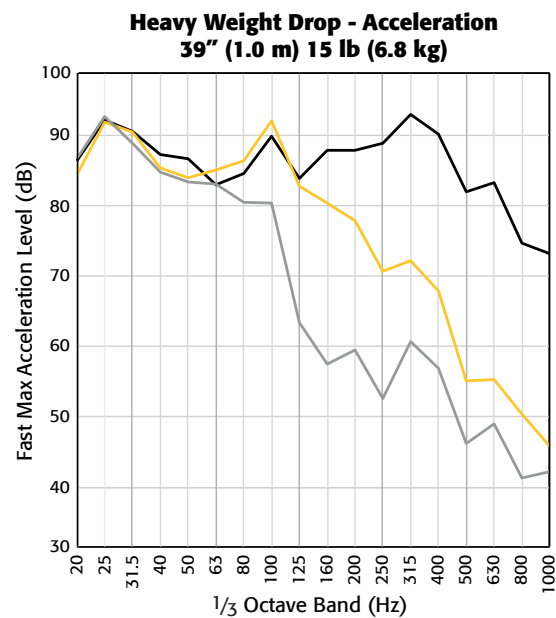
LOCALLY REACTIVE ABOVE RESONANTLY REACTIVE CREATES A HYBRID SYSTEM



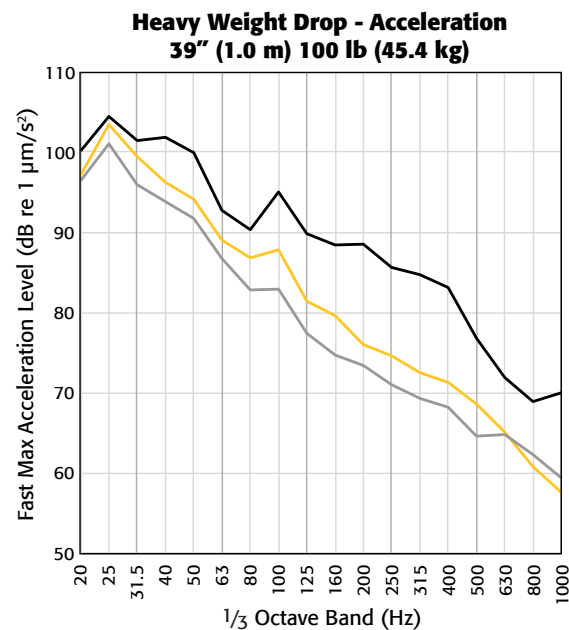
- Helps reduce impact force amplitude and increase force impulse duration
- Ideal for rhythmic excitation such as dance studios and treadmill bays



TILE DATA

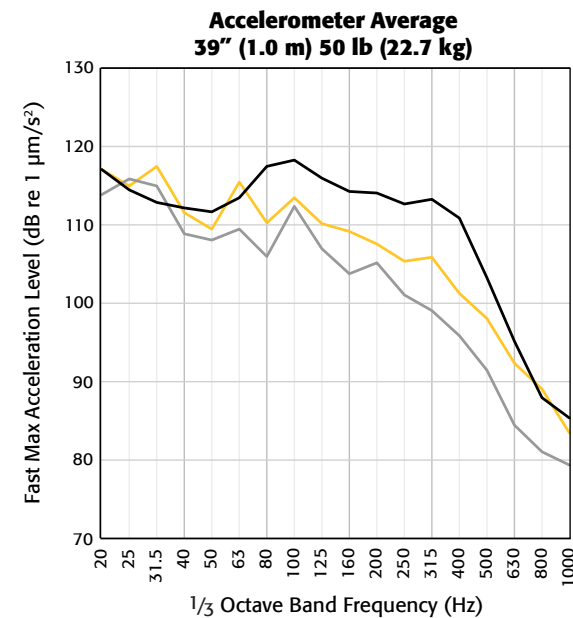


- E5600.12 **GenieMat FIT08**
- E5600.14 **GenieMat FIT30**
- E5600.15 **GenieMat FIT70**

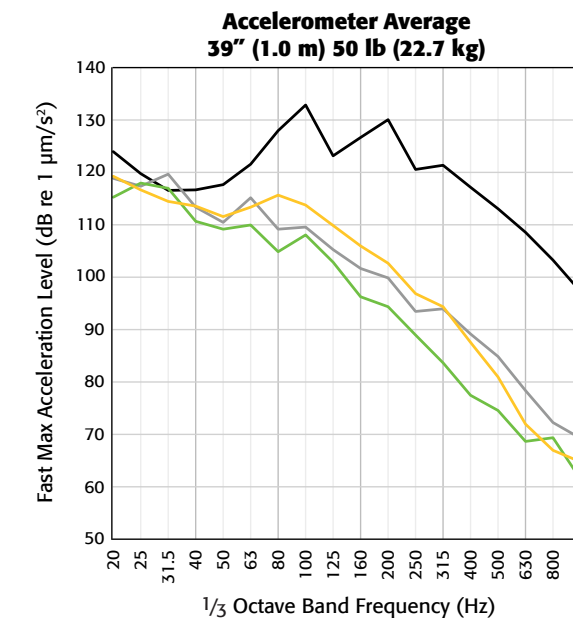


- E5600.15 **GenieMat FIT70**
- E5600.16 **GenieMat xFIT70**
- E5600.17 **GenieMat xFIT100**

CONCRETE HYBRID

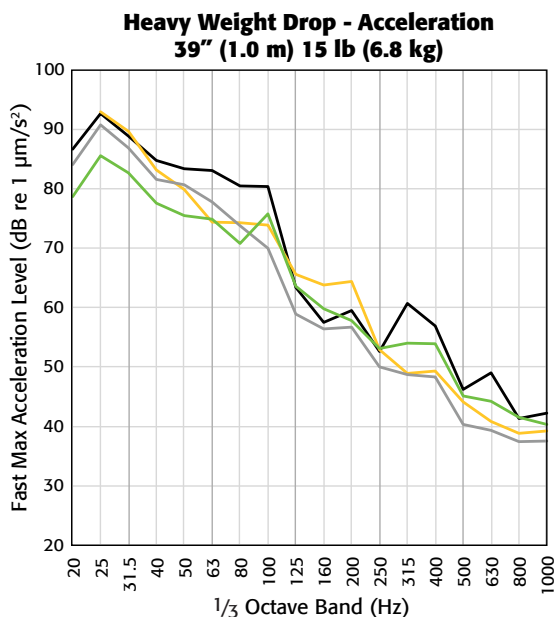


- A1-008867-01F **GenieMat FIT08, 4\" FCS, GenieMat FF50**
- A1-008867-04F **GenieMat FIT08, 4\" FCS, GenieMat FF70**
- A1-008867-05F **GenieMat FIT08, 4\" FCS, GenieMat FF70LDM**

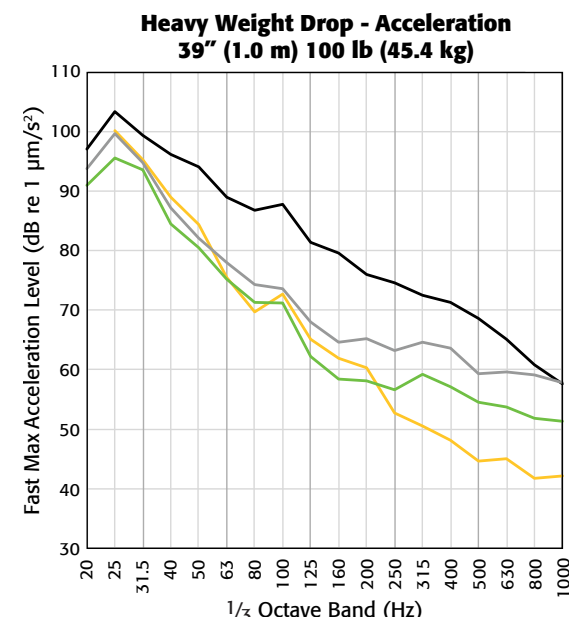


- A1-008867-00F **GenieMat FIT30**
- A1-008867-01F **GenieMat FIT30, 4\" FCS, GenieMat FF50**
- A1-008867-04F **GenieMat FIT30, 4\" FCS, GenieMat FF70**
- A1-008867-05F **GenieMat FIT30, 4\" FCS, GenieMat FF70LDM**

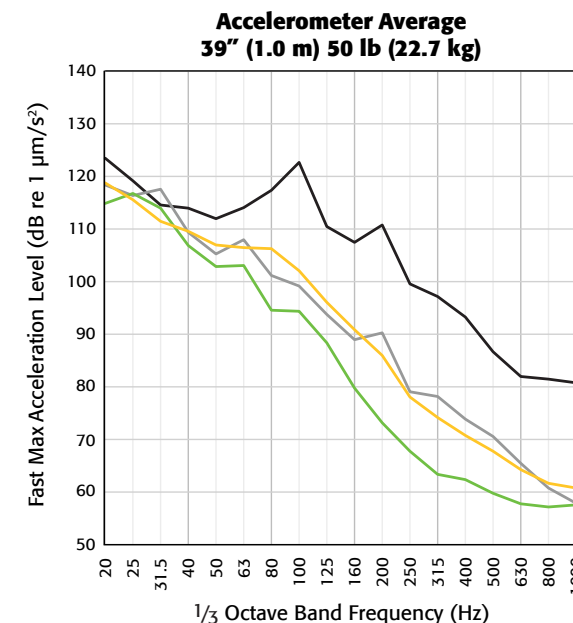
PLYWOOD HYBRID



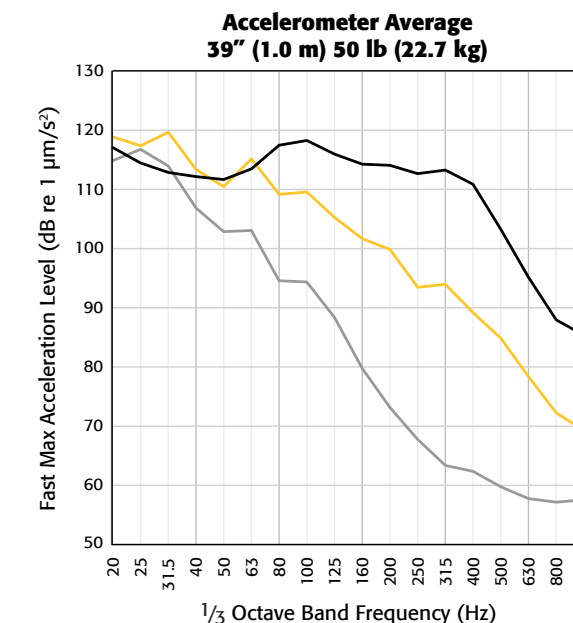
- E5600.15 **GenieMat FIT70**
- E5600.26 **GenieMat FIT70, 1/2\" Cement Board, GenieMat FF25**
- E5600.29 **GenieMat FIT70, 3/4\" Plywood, GenieMat FF70**
- E5600.31 **GenieMat FIT70, 3/4\" Plywood, GenieMat FF70LDM**



- 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**



- 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**

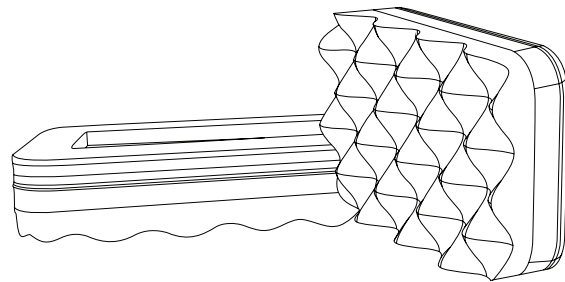


- A1-008867-01F **GenieMat FIT08, 4\" FCS, GenieMat FF50**
- A1-008867-04F **GenieMat FIT30, 4\" FCS, GenieMat FF70**
- A1-008867-05F **GenieMat FIT70, 4\" FCS, GenieMat FF70LDM**

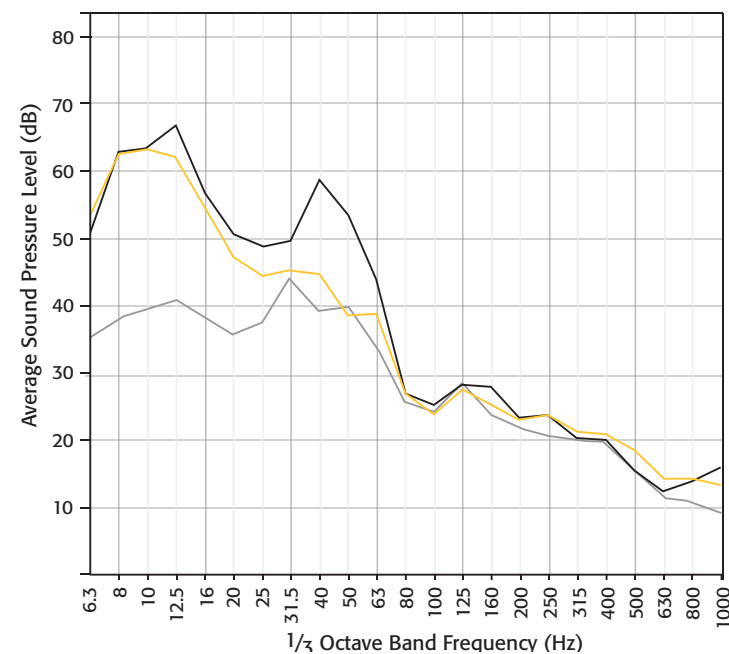
GENIEMAT[®] TMIP TREADMILL ISOLATION PADS

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

GenieMat TMIP are inherently non-slip. Custom sizes are available for other special applications.



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

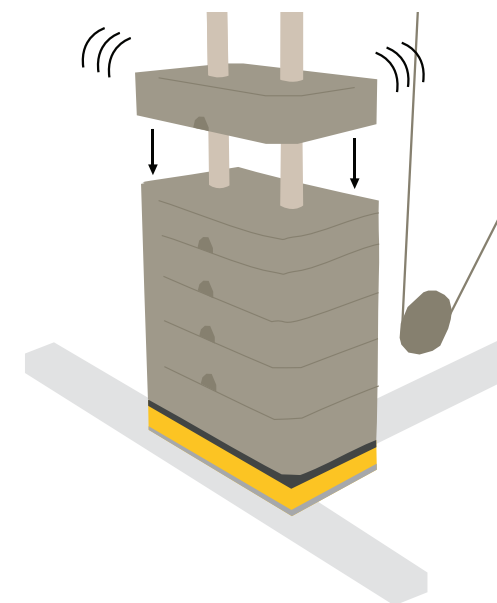
- Running with 1 layer of 3/4" rubber
- Running with **GenieMat[®] TMIP** on 1 layer of 3/4" rubber
- Ambient sound level, no running

GENIEMAT[®] WSI WEIGHT STACK ISOLATORS

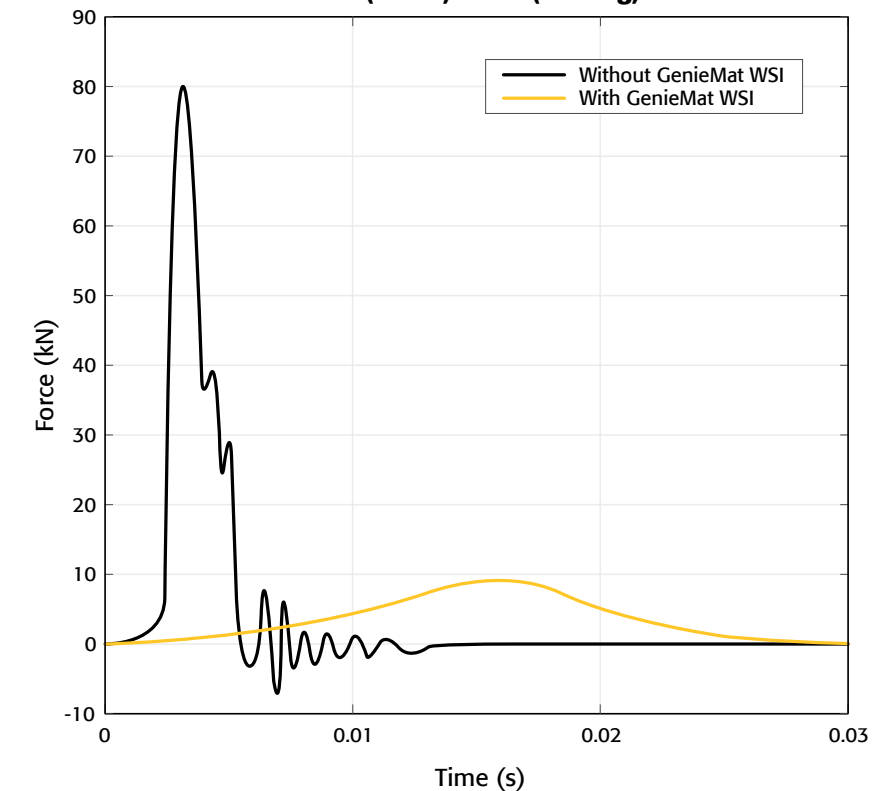
Patent pending

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

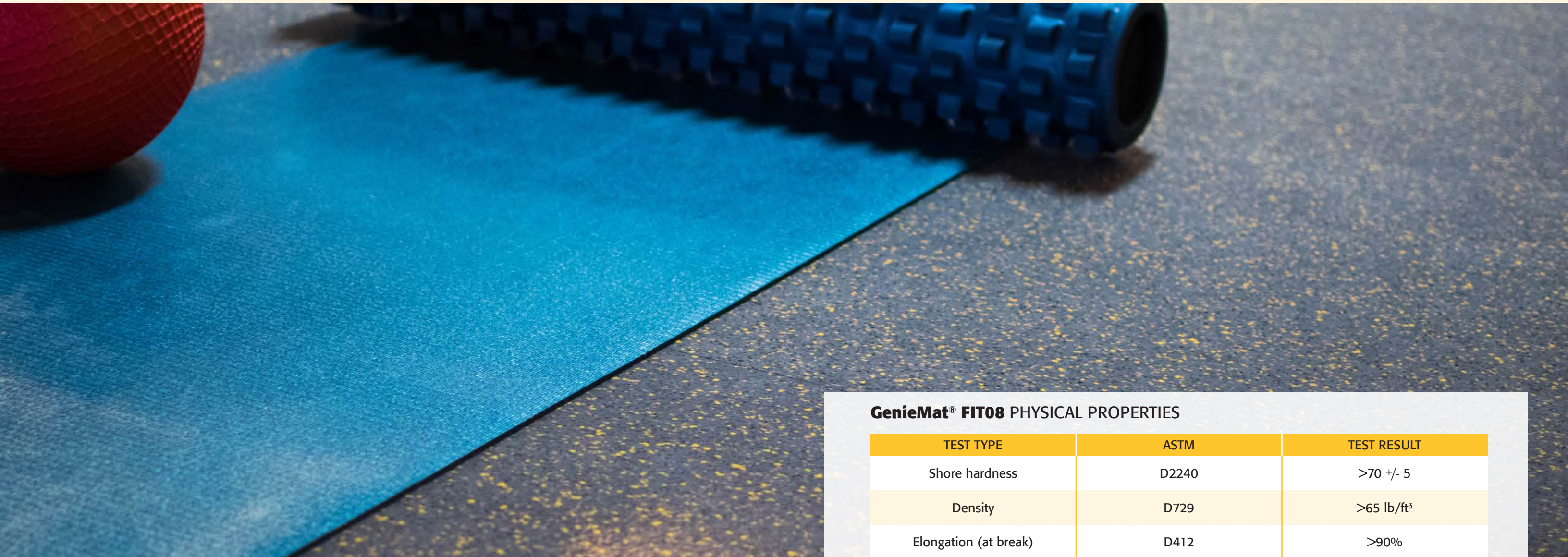


Force Pulse Comparison 20" (0.5 m) 50 lb (22.7 kg)



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

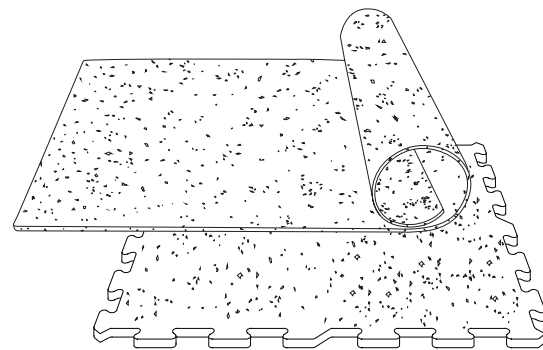


GENIEMAT® FIT08

Fitness Flooring Rolls & Puzzle Tiles

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

Our standard, the **GenieMat® FIT08** (8 mm) is also available in 6mm and 10mm nominal thicknesses. Custom orders can be made for any other thickness and combination of EPDM colors. See page 15 for EPDM color options.



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.

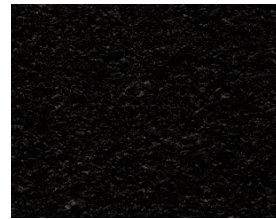
COLOR SELECTION

GenieMat® FIT30 & GenieMat FIT70

FUSION SERIES

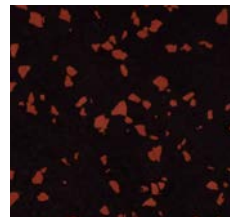
GenieMat FIT tiles are manufactured by fusing a 3 mm EPDM (up to 15%) wear layer to a recycled rubber crumb base. This provides superior acoustic performance in combination with excellent wear and grip.

STANDARD

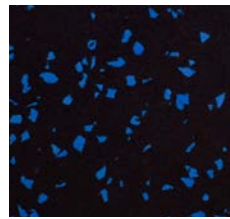


BLACK

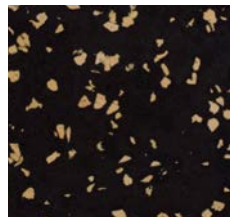
4 ALTERNATIVE PREMIUM COLORS:



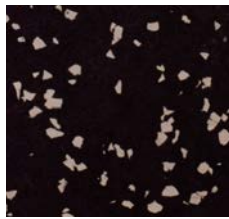
LAVA



OCEAN BLUE



CORK



SILVER GRAY



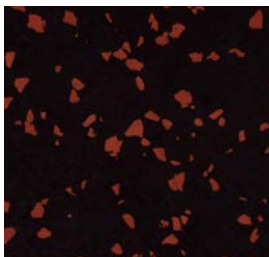
GenieMat® FIT08

EXPRESS COLORS

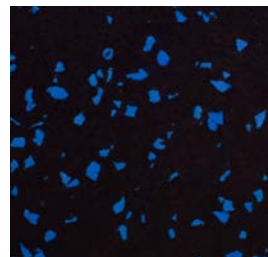
Available in 5 stock colors in roll and puzzle tile format. For more customizable flooring color options, see below for our selection of EPDM colors.



BLACK



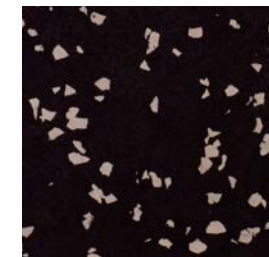
LAVA



OCEAN BLUE



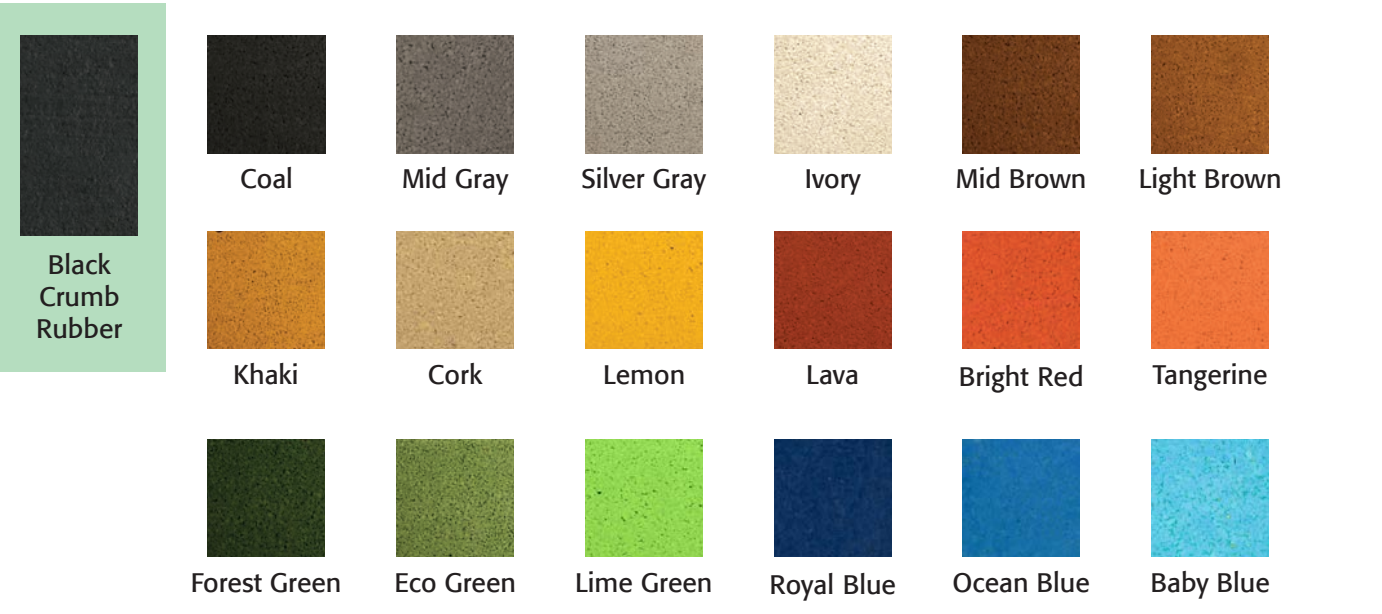
CORK



SILVER GRAY

EPDM COLORS FOR ANY GENIEMAT® FIT FLOORING

Choose from our selection of 19 colors and combine them together to create a unique flooring blend for your project.



Product colors may vary.
*Images are for representation purpose only. Other combinations can be customized.

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. pgartenburg@pliteq.com

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www.pliteq.com