

GYM FLOORING

ACOUSTIC TECHNICAL SPECIFICATION

Gym Floor Tiles



Recycled Rubber Gym Flooring

InstaFloor provide a high-performance range of rubber flooring products which are suitable for weightlifting areas, commercial gyms, strength and conditioning facilities and fitness studios.

All InstaFloor rubber gym flooring is made from recycled rubber from worn vehicle tyres, preventing these materials going into landfill and creating a fully recyclable product which is kind to the environment.

By specifying the InstaFloor recycled rubber gym flooring for your project you are helping to recycle truck tyres that would normally go to landfill. Working together we can reduce waste and support the sustainable management of our environment.

Recycled Tyre Calculation

Truck Tyre

100% Recovery of rubber

Rubber content of tyre = 70%

Tyre weight = 62kg x 70% = 43.4 kg (rubber)

92% weight of gym tile is rubber crumb = 31.28 kg

$43.4 / 31.28 = 1.39 = 1 \text{ tyre} / 1.39 \text{ tiles}$

500m² = 360 tyres recycled

Calculation based on 40mm Tile

500m²
360 Recycled Tyres



Rubber Flooring Technology

Importance of using high quality rubber gym flooring:

- Reduce impact noise and vibration from gym equipment
- Prevent impact sound transferring into the building structure and causing noise complaints
- Create a safe exercise platform for users that reduces fatigue and injuries
- Healthy microbial flooring surface
- Provide a durable layer to prevent damage to sub floor from free weights and reduce impact sound into the structure
- Provides high level of shock absorption
- Enhance the aesthetics of the internal space used for exercise

Product Range

SBR Recycled Rubber

Bevelled edge (tile product only)

High degree of colour consistency

Colour options: Black + 15% EDPM Coloured Flecks

Tile Products

25mm x 1000mm x 1000mm

40mm x 1000mm x 1000mm

45mm x 1000mm x 1000mm

Roll Products

6mm x 1,250mm x 10,000mm

8mm x 1,250mm x 10,000mm

10mm x 1,250mm x 10,000mm

Acoustic Performance

GT25 Gym Tile 25mm x 1000mm x 1000mm

Improvement in impact sound insulation measured according to BS EN ISO 10140-3 : 2010

Rating according to BS EN ISO 717-2:2013

Weighted reduction of impact sound pressure level of sample and (spectrum adaptation term)

$\Delta L_w (C_{ld}) = 21 (-11) \text{ dB}$

Weighted normalised impact sound pressure level of bare reference floor and (spectrum adaptation term)

$L_{n,r,0,w} (C_{l,r,0}) = 78 (-11) \text{ dB}$

Weighted normalised impact sound pressure level of reference floor with sample and (spectrum adaptation term)

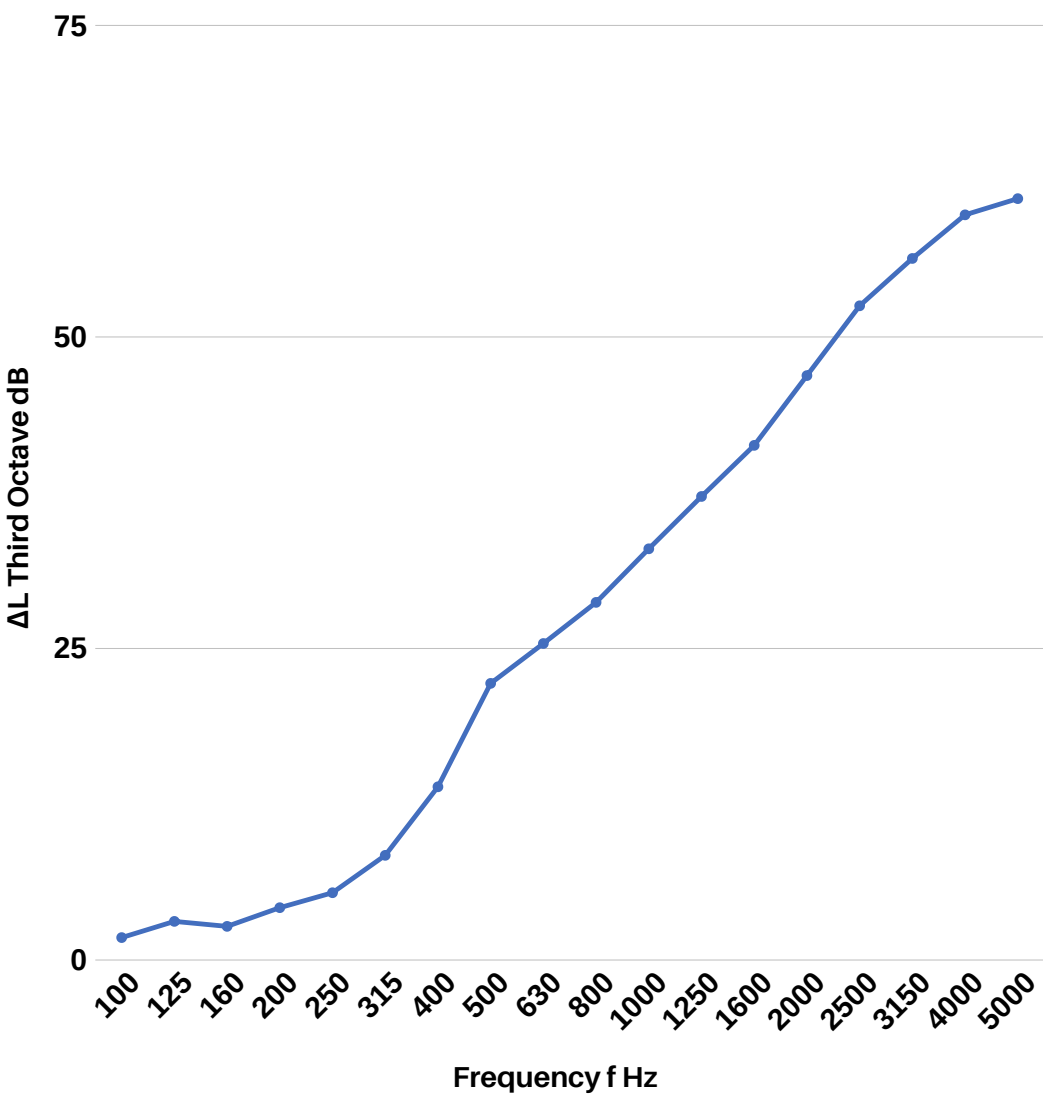
$L_{n,r,w} (C_{l,r}) = 57 (0) \text{ dB}$

Test Floor 160mm concrete with no drop ceiling

*Denotes results corrected for background

#Denotes results at background

Freq f Hz	$L_{n,0}$ Third Octave dB	ΔL Third Octave dB
100	66.0	1.8
125	67.5	3.1
160	69.6	2.7
200	69.2	4.2
250	70.3	5.4
315	70.7	8.4
400	71.5	13.9
500	71.8	22.2
630	72.7	25.4
800	72.7	28.7
1000	73.5	33.0
1250	74.5	37.2
1600	76.1	41.3
2000	76.6	46.9
2500	77.2	52.5
3150	77.4	56.3
4000	76.2	59.8*
5000	73.6	61.1#



Acoustic Performance

GT40 Gym Tile 40mm x 1000mm x 1000mm

Improvement in impact sound insulation measured according to BS EN ISO 10140-3 : 2010

Rating according to BS EN ISO 717-2:2013

Weighted reduction of impact sound pressure level of sample and (spectrum adaptation term)

$\Delta L_w (C_{ld}) = 23 (-12) \text{ dB}$

Weighted normalised impact sound pressure level of bare reference floor and (spectrum adaptation term)

$L_{n,r,0,w} (C_{l,r,0}) = 78 (-11) \text{ dB}$

Weighted normalised impact sound pressure level of reference floor with sample and (spectrum adaptation term)

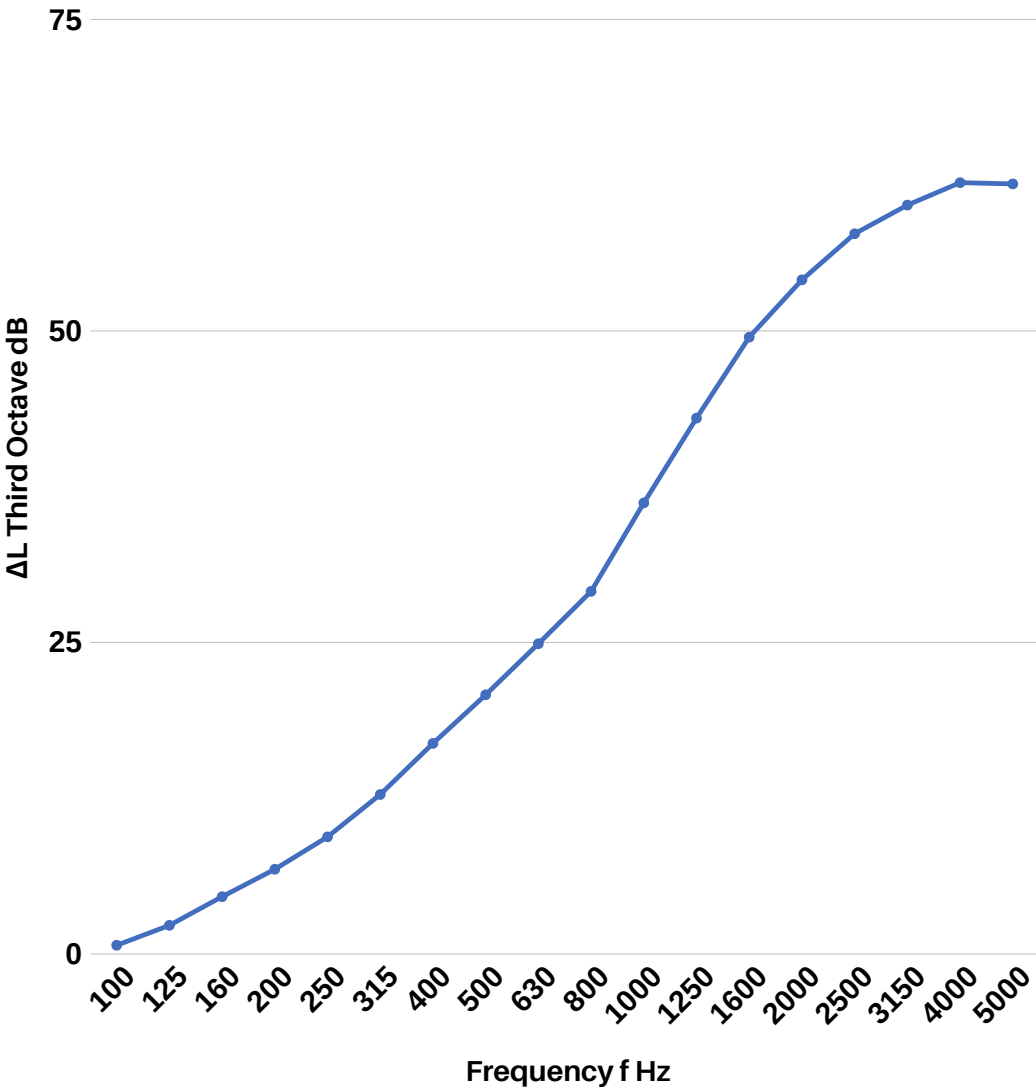
$L_{n,r,w} (C_{l,r}) = 55 (1) \text{ dB}$

Test Floor 160mm concrete with no drop ceiling

*Denotes results corrected for background

#Denotes results at background

Freq f Hz	$L_{n,0}$ Third Octave dB	ΔL Third Octave dB
100	66.0	0.7
125	67.5	2.3
160	69.6	4.6
200	69.2	6.8
250	70.3	9.4
315	70.7	12.8
400	71.5	16.9
500	71.8	20.8
630	72.7	24.9
800	72.7	29.1
1000	73.5	36.2
1250	74.5	43.0
1600	76.1	49.5
2000	76.6	54.1
2500	77.2	57.8
3150	77.4	60.1*
4000	76.2	61.9*
5000	73.6	61.8#



Acoustic Performance

GT45 Gym Tile 45mm x 1000mm x 1000mm

Improvement in impact sound insulation measured according to BS EN ISO 10140-3 : 2010

Rating according to BS EN ISO 717-2:2013

Weighted reduction of impact sound pressure level of sample and (spectrum adaptation term)

$\Delta L_w (C_{ld}) = 23 (-11) \text{ dB}$

Weighted normalised impact sound pressure level of bare reference floor and (spectrum adaptation term)

$L_{n,r,0,w} (C_{l,r,0}) = 78 (-11) \text{ dB}$

Weighted normalised impact sound pressure level of reference floor with sample and (spectrum adaptation term)

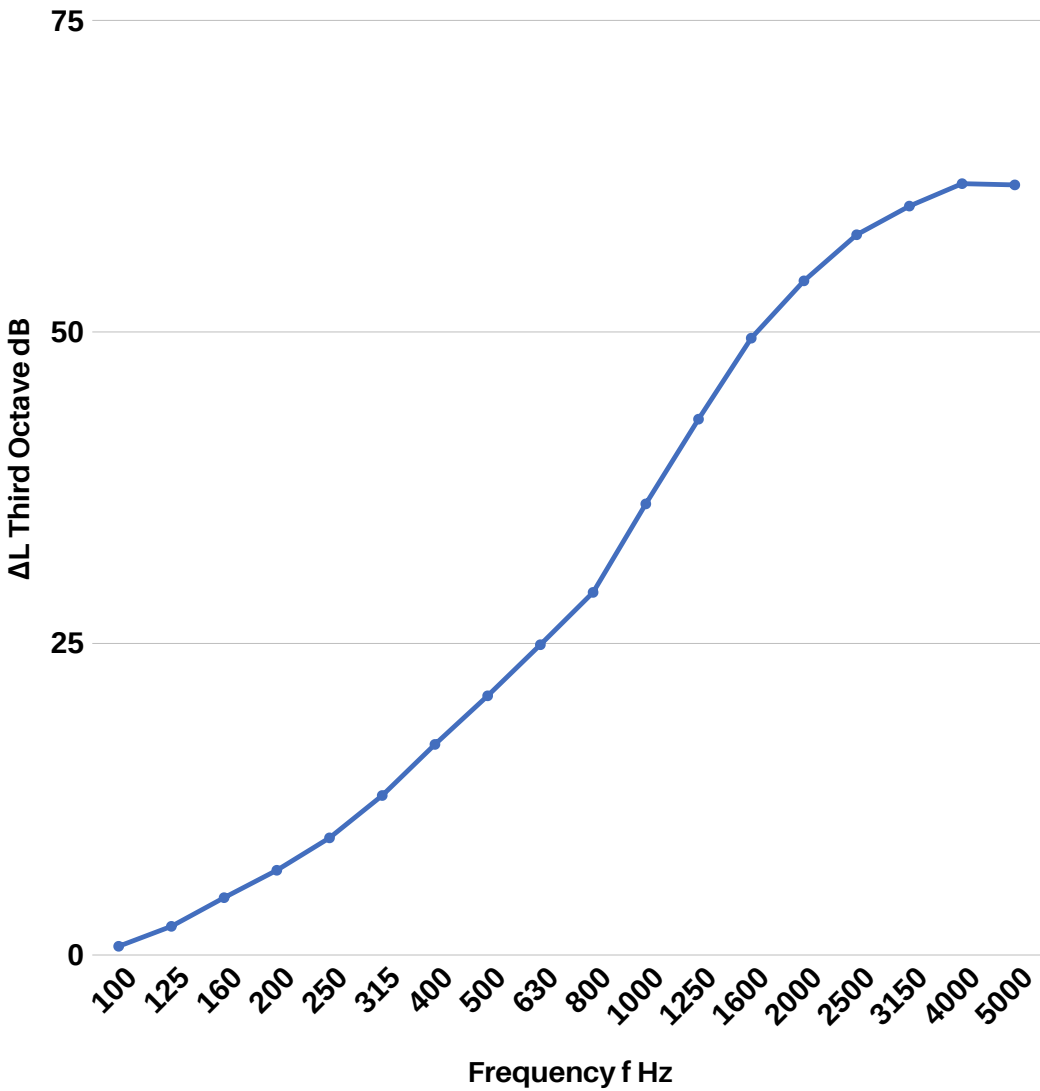
$L_{n,r,w} (C_{l,r}) = 55 (0) \text{ dB}$

Test Floor 160mm concrete with no drop ceiling

*Denotes results corrected for background

#Denotes results at background

Freq f Hz	$L_{n,0}$ Third Octave dB	ΔL Third Octave dB
100	66.0	3.0
125	67.5	4.2
160	69.6	4.5
200	69.2	5.3
250	70.3	8.3
315	70.7	11.9
400	71.5	18.3
500	71.8	25.6
630	72.7	31.7
800	72.7	37.4
1000	73.5	45.4
1250	74.5	52.7
1600	76.1	56.1
2000	76.6	57.8
2500	77.2	60.9*
3150	77.4	60.4*
4000	76.2	61.7*
5000	73.6	61.5#





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