TDS-SS-SHIELD-001 | Rev. 1.0 | March 2025

SHIELD

Acoustic Isolation Underlay

PRODUCT DESCRIPTION

Superstrata Shield is a composite foam acoustic underlay engineered to dramatically reduce impact sound transmission and structural vibration in commercial fitness environments. When installed as a complete system beneath Superstrata Pulse 20mm tiles, the combined assembly achieves a certified 28dB impact sound reduction — an increase of 7dB over the tile alone. Shield is the specification solution for upper-storey gyms, mixed-use developments, and any project where acoustic performance is a planning or building-control requirement.

TECHNICAL SPECIFICATIONS

Property	Value	Test Standard
Material Composition	Composite foam	—
Format	Roll (2m wide × 10m length)	—
Thickness Options	10mm, 20mm	—
Coverage	20 m²	—
Sound Insulation (System)	28 dB reduction (20mm tile + 20mm Shield)	NBN EN ISO 17025
Sound Insulation (Tile only)	21 dB reduction (20mm Pulse tile alone)	NBN EN ISO 17025
Density	20 kg/m³	—
Installation Method	Loose lay beneath primary floor covering	—
Warranty	1 Year	—

AVAILABLE FINISHES & DIMENSIONS

Standard: Composite foam (concealed beneath primary floor covering).
Roll Size: 2m wide × 10m length (20 m² per roll).
Thickness Options: 10mm, 20mm.

Data based on manufacturer testing. Subject to manufacturing tolerances.

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RECOMMENDED APPLICATIONS

Upper-storey gym installations · Mixed-use developments with residential below · Hotel fitness suites · Any installation where acoustic performance is a planning condition · Refurbishment of existing gym floors requiring upgraded sound isolation.

NBS SPECIFICATION CLAUSE

Clause Reference: M50 / 120 — Acoustic Underlay, Composite Foam

Supply and install Superstrata Shield composite foam acoustic underlay to the areas indicated on drawings. Underlay to be supplied in 2m-wide × 10m-length rolls (20 m² coverage per roll), 20kg/m³ density, 10mm or 20mm thickness as specified, installed loose-laid beneath Superstrata Pulse 20mm rubber tiles. Complete system to achieve minimum 28dB impact sound reduction (NBN EN ISO 17025). Provide 1-year manufacturer's warranty on completion. Manufacturer: Superstrata Performance Flooring, www.superstrata.fit

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Shield Acoustic Composite Foam Roll

Reference visuals and dimensional summary

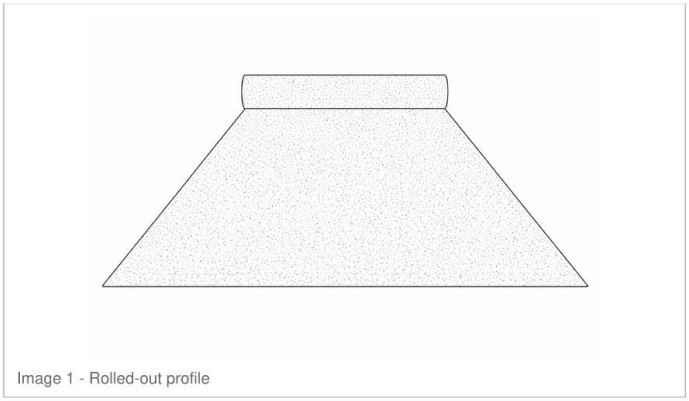

Image 1 - Rolled-out profile

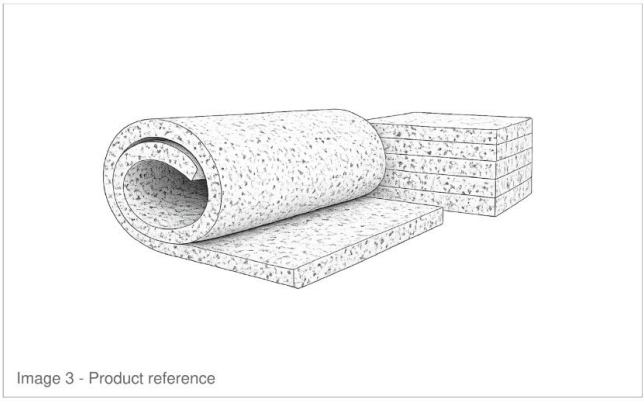

Image 3 - Product reference

Key Product Data

- Material format: composite acoustic foam roll
- Rolled-out size: 2000 mm wide x 10000 mm long
- Coverage per roll: 20 m2
- Thickness options: 10 mm and 20 mm

PROJECT Shield Acoustic Composite Foam Roll	**REV**	**SHT**	**OF**
DRAWING 1 - Cover	A	1	3

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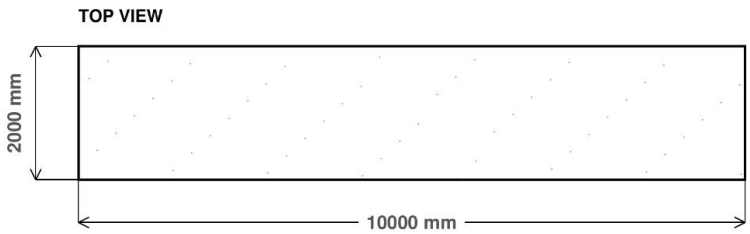
Page 1 - Flat Layout

Scaled orthographic top view of foam roll laid flat. All dimensions in millimetres.



Overall footprint when unrolled flat

DRAWING NOTES

Scale: 1:20
Coverage: 20 m2 / roll
Material shown laid flat

PROJECT Shield Acoustic Composite Foam Roll	REV	SHT	OF
DRAWING 2 - Flat Layout	A	2	3

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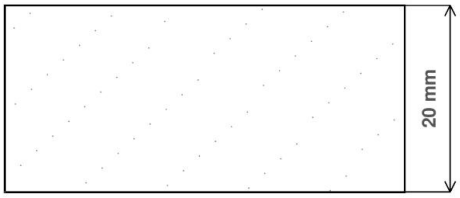
Page 2 - Thickness Options

Side profile reference showing nominal thicknesses available.

Nominal composite foam section



Nominal composite foam section

Thickness	Coverage
10 mm	20 m2 / roll
20 mm	20 m2 / roll

PROJECT Shield Acoustic Composite Foam Roll	REV	SHT	OF
DRAWING 3 - Thickness Options	A	3	3