

Mikro Mat Solo

www.anutone.com/matsolo.htm

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Key Attributes

MAT, an invention of Anutone®, is a unique matrix layer technology of intelligent blending of calibrated micro fibres with mineral binders resulting in tiles that offer the best in broadband sound absorption! MAT Solo is a natural tile surface with an extraordinary micro-cell finish, perfectly blending fabulous acoustics with superior aesthetics. Since April 2000, MAT has served the architectural community very well.

Typical Applications

MAT Solo is used as an exposed tile for acoustical ceilings and wall panellings or as an acoustical substrate for finishing systems like FabStretch for all architectural spaces.

Aesthetics

MAT Solo boasts a micro textured surface and edge treatment is important for installed aesthetics. For ceilings, MAT Solo has edge profiles in Square, Steppe (Tegular). For panellings, edge profiles consist of Square, F-Spline groove (for 20 mm thickness only).

Features

- Volume Density - 600 kgs/m³
- Surface density for 15mm - 9 kgs/m²
- Sizes - Width 600mm; Lengths 600 / 1200 mm
- Thickness - 15 / 20 mm
- Custom sizes - Nominal 595x595/1195 mm suits 600x600/1200 mm grids; Non-metric 610x610/1220 mm suits 2'x2'/2'x4' grids;
- Conforms to clauses of ISO 8335 / ASTM C367 / IS 14276.

Accessibility

MAT Solo in Skelet T-system makes it modular and dismantable for plenum access to services in the ceiling void. MAT Solo installed on Strut C-system requires unfastening and refastening of Stitch. Fastener heads can be camouflaged with Seam.

Logistics

Item (mm)	Nos./carton	Ctn wt (kgs)	Carton size
600x600x10	15	39	606 x
600x600x15	10	39	606 x
600x600x20	08	36	165mm
1200x600x10	15	78	1206 x
1200x600x15	10	78	606 x
1200x600x20	08	72	165mm

Minimum order quantity - 1 carton

Site Considerations

MAT Solo must be stored on a flat surface and if panels come in contact with water accidentally they must be air-dried prior to installation. Installation surfaces must be dry and level. MAT Solo can be vacuumed post-installation.



Visual Variants

The visual variants for MAT Solo are realised when they are factory-painted or insitu sprayed in a range of colours. Factory-finish is classified in two categories –

- MAT Solo - the brilliant white tile for neutral ceilings like offices and malls.
- MAT Choice - architect's choice of shade.

Design Considerations

MAT Solo with Normal edge must never be butt jointed if exposed. Options include the edges separated by a 4-6 mm gap to create natural grooves. MAT Solo must not be installed at pedestrian height unless the surface is covered with finishing materials such as Spun fabrics system.

Framework

- T-system for ceilings - exposed grids
- C-system for ceilings, panellings, partitions - concealed
- F-Spline for panellings - fastener-less, quick installation

Tech Performance

For the MAT base panel of 15mm thickness and density 650 kg/m³ tested for fire reaction at FRL, CBRI Roorkee vide Test Report # F(S) 1906 in July-October 2006

- Non-combustibility - Mass loss 52% @ 750 °C - BS 476 Part 4
- Ignitibility – 'P' - BS 476 Part 5
- Fire Propagation Index – 9.00 - BS 476 Part 6
- Surface Spread – Class I - BS 476 Part 7
- Specific Optical Density of Smoke - Flaming Exposure 25.00 Dm (Corr) - ASTM E662
- Thermal Conductivity – 0.10 Wm/k - IS 3346

Environmental Impact

MAT Solo is an eco-friendly system and wins GBC's 15 LEED points for green buildings.

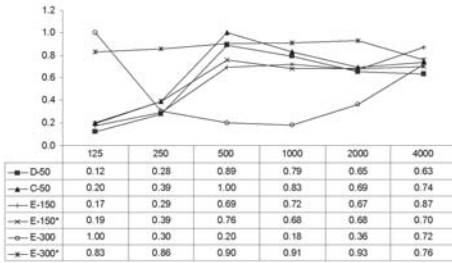
Economics

MAT Solo 15 mm on Skelet T-system is techno-commercially economical for the lifecycle cost of the system.

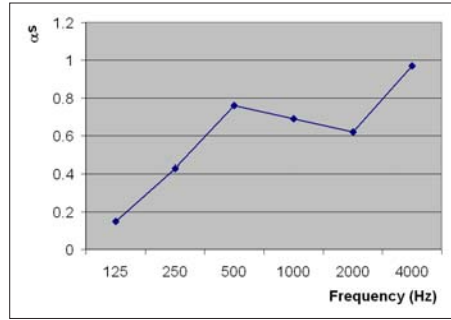
Warranty

10 years Surety - limited warranty - on the assembled system when installed to Anutone's specifications and maintained as per instructions.

Acoustical Parameters



15mm thick



10mm thick, Mounting D-50

Frequency (Hz)	125	250	500	1000	2000	4000
α_s	0.2	0.43	0.76	0.69	0.62	0.97

NRC - 0.63

NOTE - Anutone has the capability, expertise and own infrastructure to perform custom acoustics tests for given design as per ISO 354 at its AnutoneScans lab and provide acoustic values of MAT Solo specific to installations.

References

Cinema

Abirami Mall Chennai

Education

IIT Chennai
Swamy Research Foundation Chennai

Worship Spaces

Jain Chennai

SStudio

NDTV Mumbai

Testing Cells

Bajaj Probiking Aurangabad

Installation Guidelines

Ceiling (E300 mounting) – Scope - Selec's protocol performing to acoustical requirements conforming to international standards consisting of Design, Supply, Build of MAT Solo, per approved drawings and specifications, by Anutone Acoustics Limited, an ISO 9001 2000 company. Framework - Skelet T-System, consisting of Main and Cross Tees interlocked at 600 mm centres. Acoustical panels - MAT Solo painted to choice colour; Size 595x595 mm; Thickness 15 mm; Edge profile - Steppe.

Panelling (C50 mounting) – Scope - Selec's protocol performing to acoustical requirements conforming to international standards consisting of Design, Supply, Build of MAT Solo, per approved drawings and specifications, by Anutone Acoustics Limited, an ISO 9001 2000 company. Framework - Strut C-System 50 mm, consisting of ASP Cross Channels fixed at 606x606mm centres, using Stitch. Acoustical infill - Synth PF 10x50 friction-fitted between the Strut. Acoustical panels - MAT Solo; Size 600x600mm; Thickness 20 mm installed on the Strut C-system with H-Spline. Joints and finish - Edges separated by 6 mm groove.

Custom Methodology

The installation of MAT Solo can be custom-designed to suit specific or special project requirements. The methodology includes the entire value-chain - site evaluation, criteria definition, noise spectra capture, design optimisation, system specs, systems engineering & integration, project management, acoustic testing & site validation.

Ordering Information

Interior application, Installation application, Dimensions, Edge Profile, Framework, Jointing Compound, Acoustic Infill, Packing

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