





Vibrant, energetic design

to pep up the active ambience

Inspirational and interactive design

for the entertainment ambience

Stimulating, intriguing design

for the thinking ambience

Calm, subdued design

for the relaxation ambience

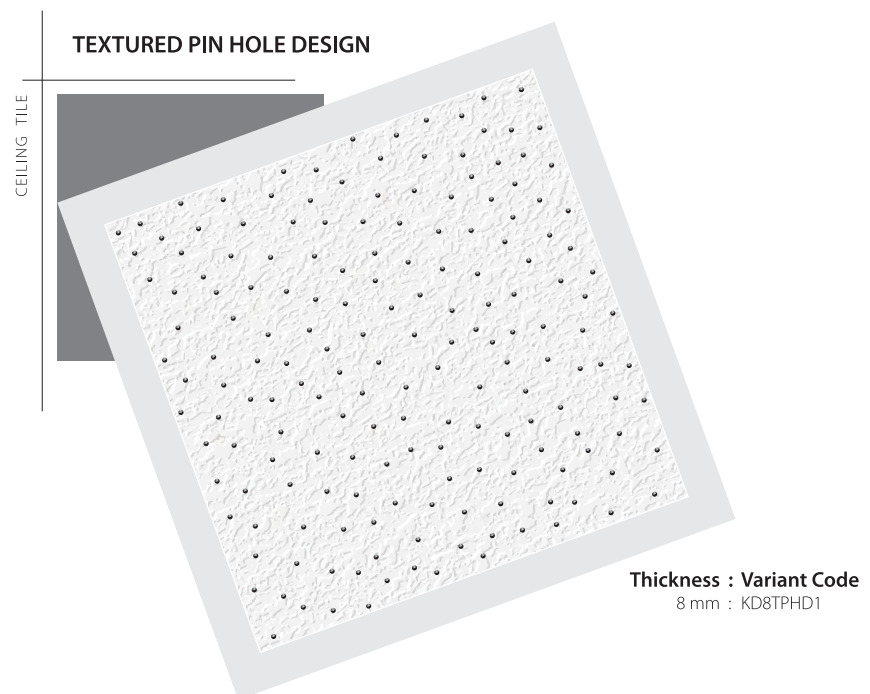
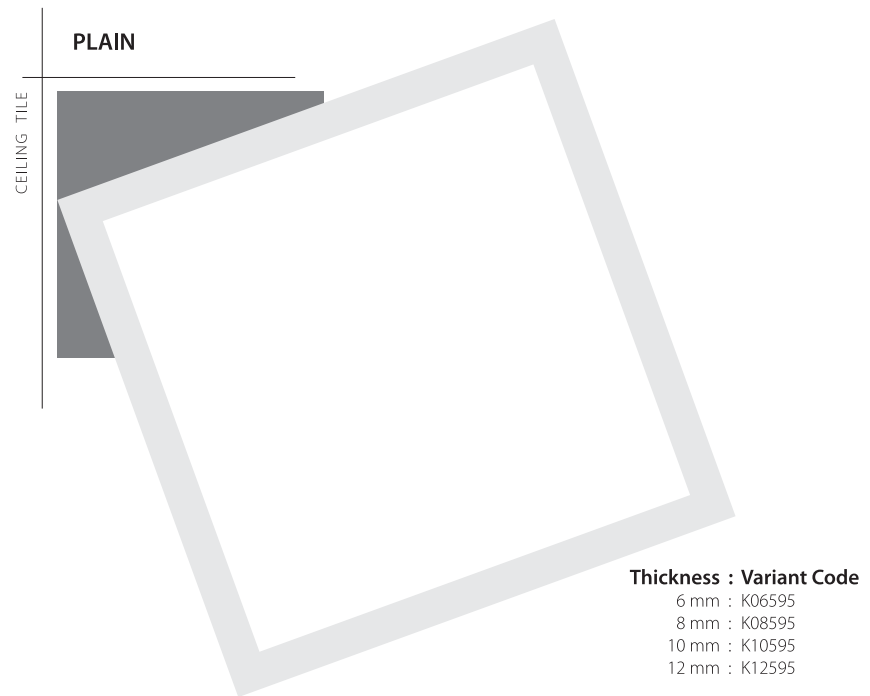
Eye-catching, fascinating design

for the guest ambience



Hilux range of tiles are a novel innovation in the world of interiors and exhibit all the core properties of calcium silicate boards.

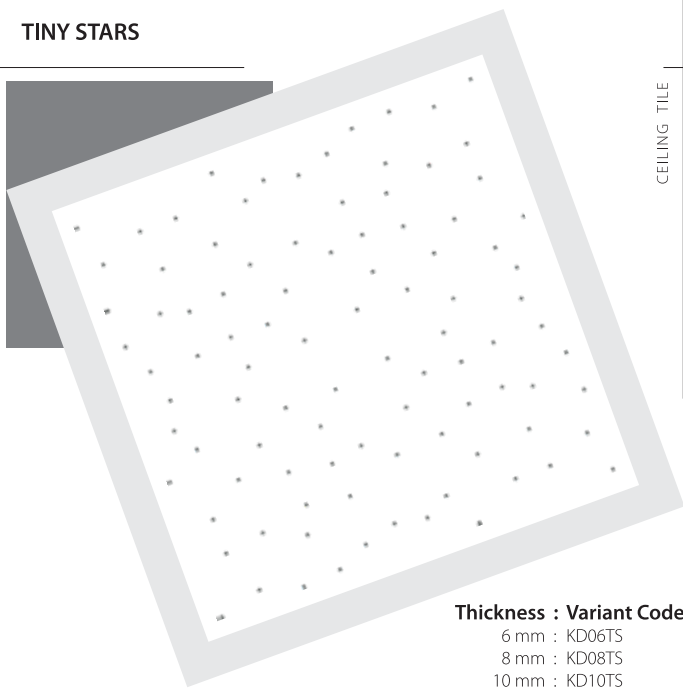
It is available in 595 mm x 595 mm and 610 mm x 610 mm sizes with different designs and thicknesses. These tiles impart an exquisite appearance to the building interiors along with functional benefit of noise reduction. Unlike ordinary tiles, Hilux tiles are very strong and durable.





TINY STARS

CEILING TILE

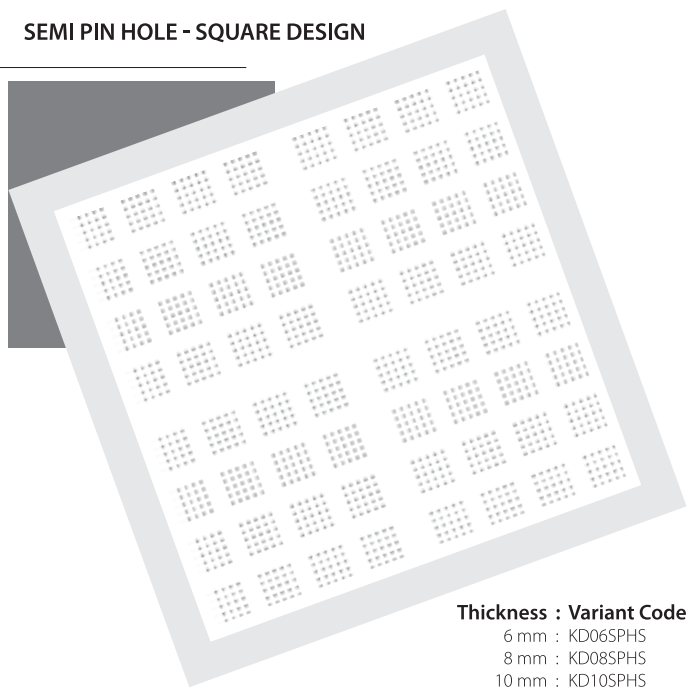


Thickness : Variant Code

- 6 mm : KD06TS
- 8 mm : KD08TS
- 10 mm : KD10TS
- 12 mm : KD12TS

SEMI PIN HOLE - SQUARE DESIGN

CEILING TILE



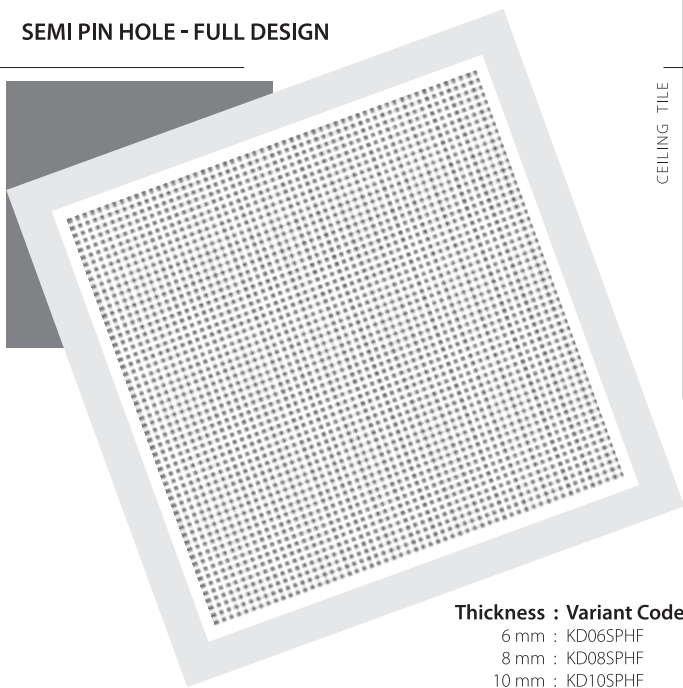
Thickness : Variant Code

- 6 mm : KD06SPHS
- 8 mm : KD08SPHS
- 10 mm : KD10SPHS
- 12 mm : KD12SPHS



SEMI PIN HOLE - FULL DESIGN

CEILING TILE

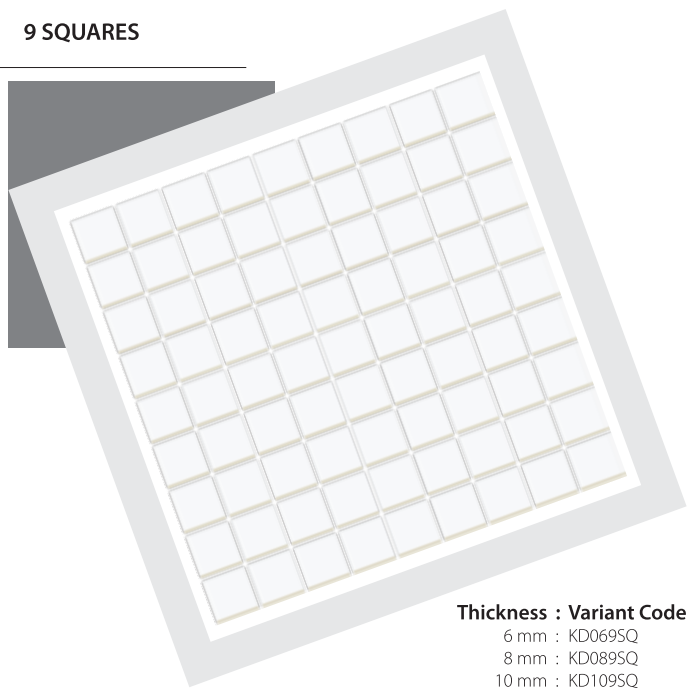


Thickness : Variant Code

- 6 mm : KD06SPHF
- 8 mm : KD08SPHF
- 10 mm : KD10SPHF
- 12 mm : KD12SPHF

9 SQUARES

CEILING TILE



Thickness : Variant Code

- 6 mm : KD069SQ
- 8 mm : KD089SQ
- 10 mm : KD109SQ
- 12 mm : KD129SQ

Sound.

**It is
all around us.**

We are so used to it and we take it for granted.
We use sound to evoke certain emotional states
in us or amongst our audience.

But what is the right recipe for sound ?

It depends on what and how much we want to hear or want our audience to hear.
Herein lies the science of architectural acoustics - which is useful, inspiring and
helping in creating the right ambience in spaces we design.

Sound can be **too high** or **too low**,
it can be **soft** and it can be **shrill**,
it can be **soothing** and it can be **annoying**.

Various measurement parameters have been defined by the architectural,
building and sound industries to assess
and measure the intelligibility,
reverberation and
blocking of sound.

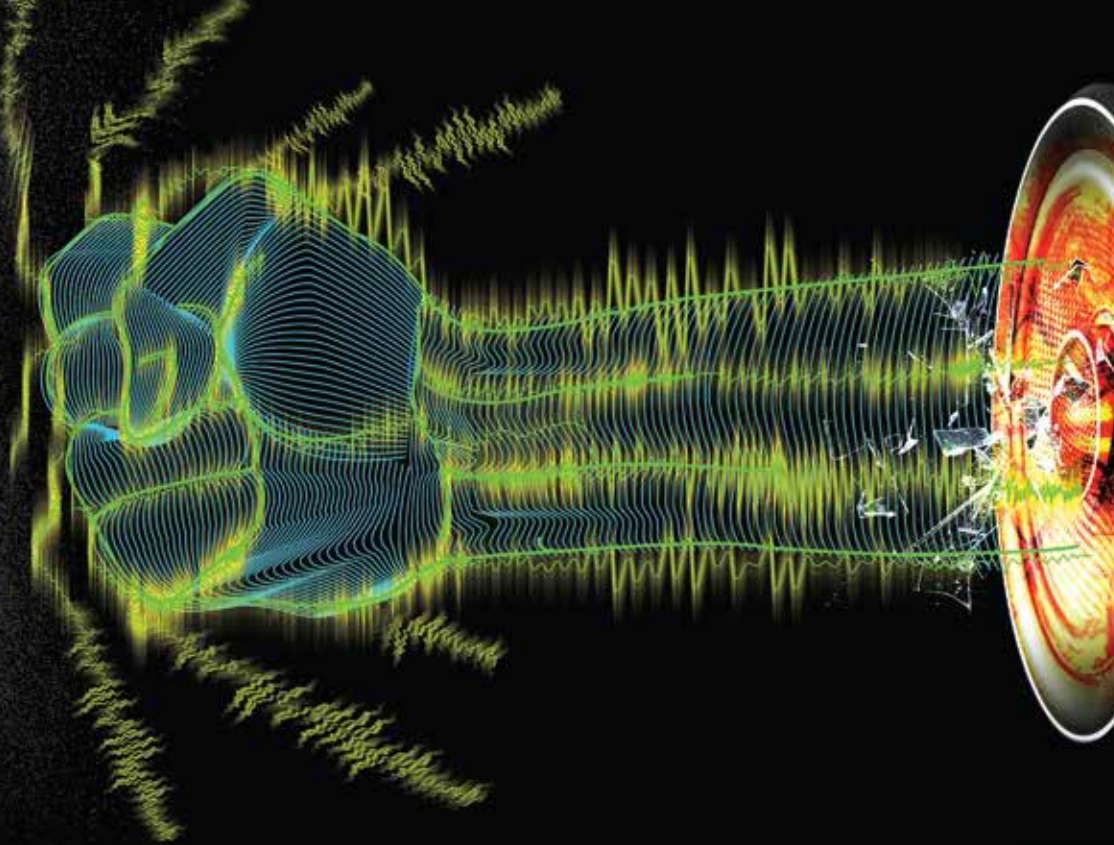
Noise Reduction Coefficient (NRC)
and
Sound Transmission Class (STC) are
two such measures.

**At Hilux, our acoustic experts have evolved
a range of ceiling tiles which not only address varying
acoustic needs but also
offer a choice of designs and patterns.**

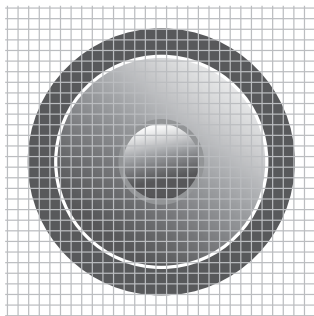
SOUND INSULATION

More than Plywood.
Far better than Gypsum.

RAMCO
HILUX
CALCIUM SILICATE Dry Walls & Ceilings



Excellent acoustics with transmission class between **39 - 56 dB**



Sound Insulation

39-56 dB

SOUND INSULATION

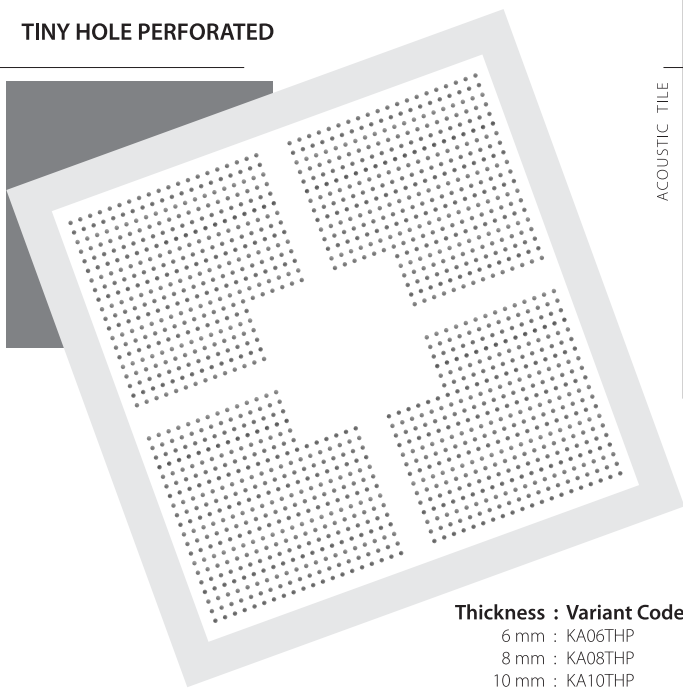
Ramco Hilux Boards also have great acoustic properties, with sound transmission class between 39 to 56 dB, helping to minimize sound generated in the work environment.

Ramco Hilux Board's off-white surface is very hard and smooth and an excellent reflector of light when compared to other boards. Not only does this result in brightening up of working environment, it saves energy as well.



TINY HOLE PERFORATED

ACOUSTIC TILE

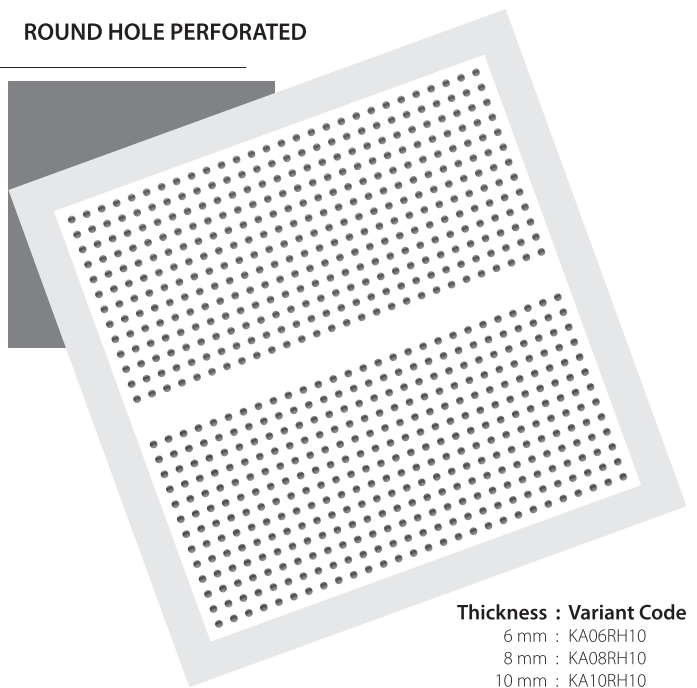


Thickness : Variant Code

- 6 mm : KA06THP
- 8 mm : KA08THP
- 10 mm : KA10THP
- 12 mm : KA12THP

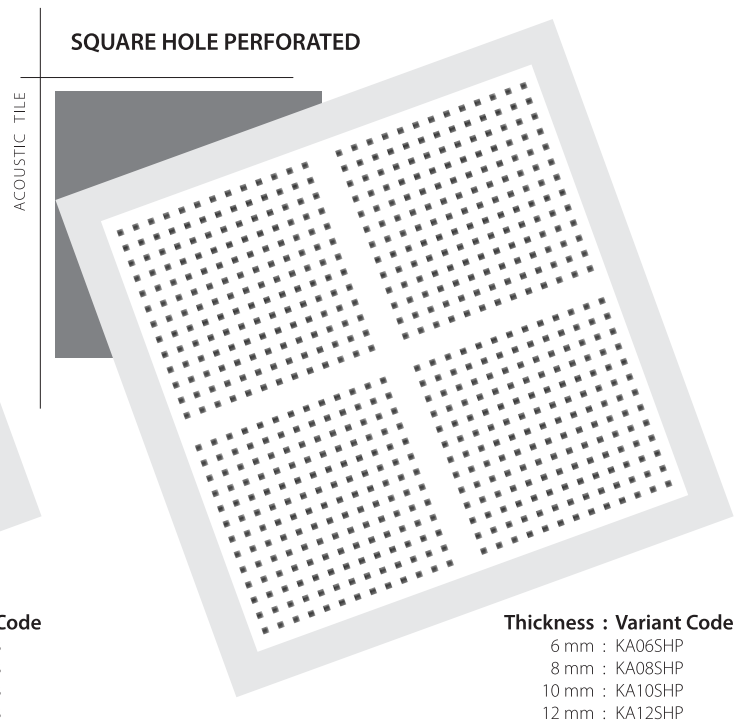
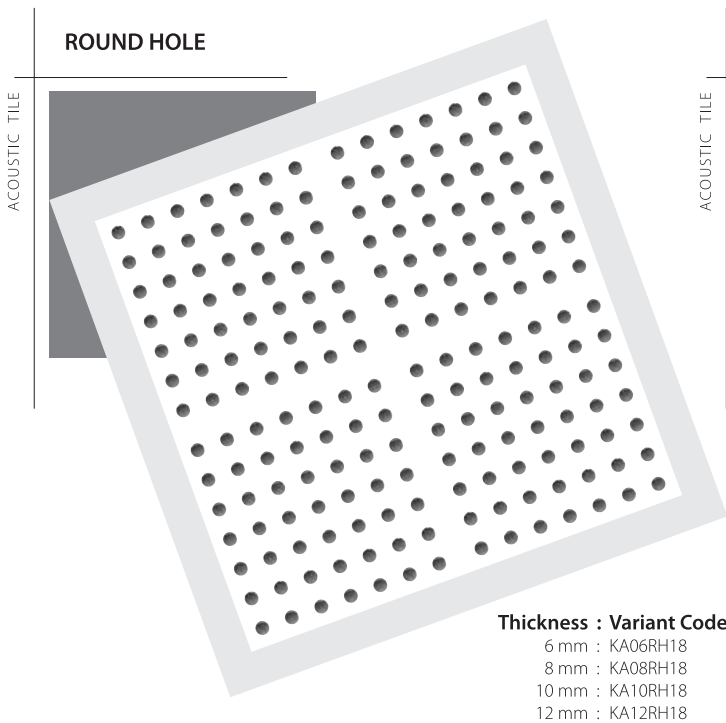
ROUND HOLE PERFORATED

ACOUSTIC TILE



Thickness : Variant Code

- 6 mm : KA06RH10
- 8 mm : KA08RH10
- 10 mm : KA10RH10
- 12 mm : KA12RH10





RANDOM SLIT PERFORATED

ACOUSTIC TILE

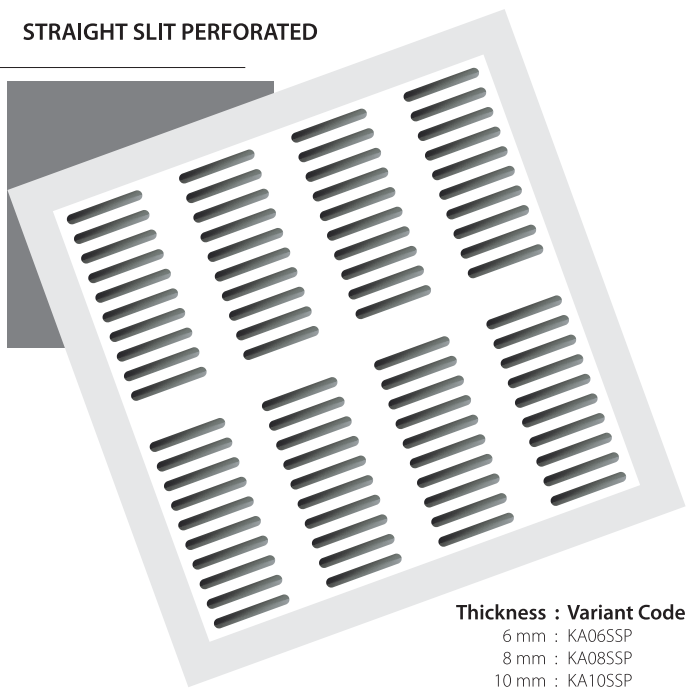


Thickness : Variant Code

- 6 mm : KA06RSP
- 8 mm : KA08RSP
- 10 mm : KA10RSP
- 12 mm : KA12RSP

STRAIGHT SLIT PERFORATED

ACOUSTIC TILE



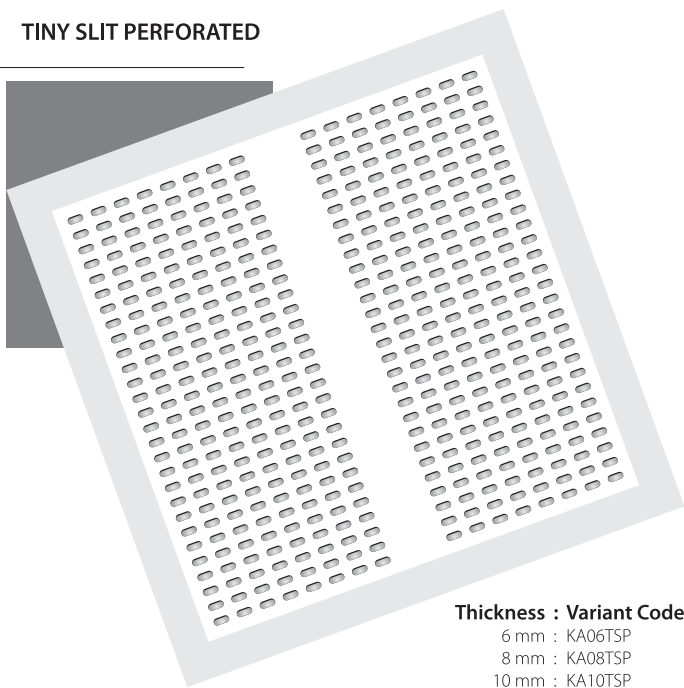
Thickness : Variant Code

- 6 mm : KA06SSP
- 8 mm : KA08SSP
- 10 mm : KA10SSP
- 12 mm : KA12SSP



TINY SLIT PERFORATED

ACOUSTIC TILE



Thickness : Variant Code

- 6 mm : KA06TSP
- 8 mm : KA08TSP
- 10 mm : KA10TSP
- 12 mm : KA12TSP

Hilux - Range of Acoustic Tiles

Hilux acoustic tiles, being perforated and backed by non-woven cloth in black/white colour, offer excellent acoustic functionality with NRC (Noise Reduction Coefficient) value of 0.70 - 0.85 with a backing of 50/100 mm rock/glass wool at 48 Kg/m³ density.

RAMCO
HILUX
CALCIUM SILICATE Dry Walls & Ceilings

LIGHTWEIGHT As good as Wood.
Much more lighter than brick and mortar.

Light in weight with superior properties

Why are HILUX Tiles

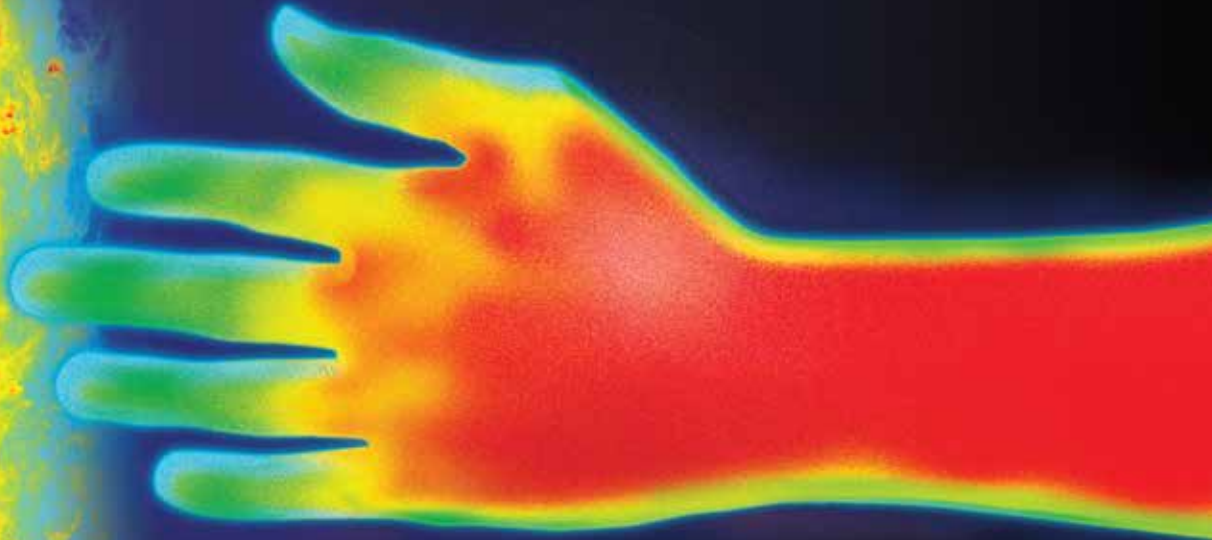
LIGHTWEIGHT

Ramco Hilux Tiles are very light in weight, having dry density of $900 \text{ Kg/m}^3 (\pm 50)$. The 6/8 mm boards of size 1220 mm x 610 mm would weigh approx. 4 and 6 Kgs respectively and Tile of size 595 mm x 595 mm would weigh approx 2 and 3 kgs respectively. This helps in reducing structural cost.

THERMAL INSULATION

More than Wood.
Much more than
plastic, rubber and glass.

RAMCO
HILUX
CALCIUM SILICATE Dry Walls & Ceilings



Minimises heat transfer in buildings, up to 40% energy and cost savings

best suited for Ceilings

THERMAL INSULATION

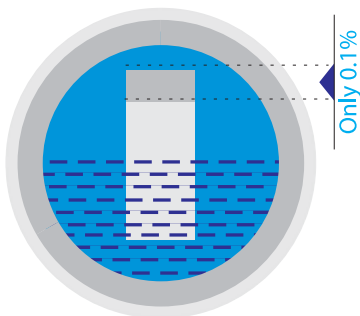
Ramco Hilux Tiles have excellent thermal insulation properties which maintains the required humidity levels and saves energy costs.

WATER RESISTANCE

More than Plywood.
Far better than Gypsum.

RAMCO
HILUX
CALCIUM SILICATE Dry Walls & Ceilings

The only board dimensionally stable even when exposed to water !



Length Change in Water

WATER RESISTANCE

Ramco Hilux Tiles do not lose their dimensional strength even when exposed to moisture. Other light-weight boards, like Gypsum, cannot withstand such humid conditons without having suitable coating on all sides of the board.

The coatings too do not last long. Once the effect of the coating wanes, it cannot be redone. Thus the cost of coating not only makes plaster boards costlier but also unsuitable for the purpose. Hilux tiles can withstand 99% Relative Humidity - its expansion in water is the least (0.1%) as against >2.5% in asbestos cement sheets. It can also withstand temperatures as high as 50°C without any change in its shape and size.

FUNGUS RESISTANCE

More than Plywood.
Far better than Gypsum.

RAMCO
HILUX
CALCIUM SILICATE Dry Walls & Ceilings



The only board with zero fungus growth ensuring clean and healthy environment



No Fungus growth

FUNGUS RESISTANCE

Humid environment is an ideal breeding ground for micro-organisms like fungus and bacteria. Ramco Hilux Tiles resist any such growth and keep the environment clean and healthy.

FIRE RESISTANCE



Fire Rating (System)

4 hrs (max)



Combustibility

Non-combustible according to
(BS 476:Part 4-1970)

Surface spread of flame

Class - 1 as per
(BS 476:Part 7-1997)

Fire Propagation

Fire propagation index I = 1.2 as per
(BS 476:Part 6-1989+A1:2009)

Ignitability

Class 'P' not easily ignitable as per
(BS 476:Part 5-1979)

Properties	Unit	Values
Thermal Conductivity-K	W/mK	0.15
Thermal Resistance-R	m ² K/W	0.04/0.05/0.06/0.08 for 6 /8/10/12mm thick boards respectively
Moisture Content	%	Under 15
Shrinkage Dimension (dry-saturated)	%	< 0.1
Alkalinity	pH	10



* Conditions apply

Unique Warranty

Such is the confidence we have in the performance of our products that we are offering a 15-year Warranty on our Boards and a 25-year Warranty on our Tiles, covering free replacement of the Boards or Tiles if they deteriorate owing to a manufacturing defect.

Terms & Conditions of Warranty:

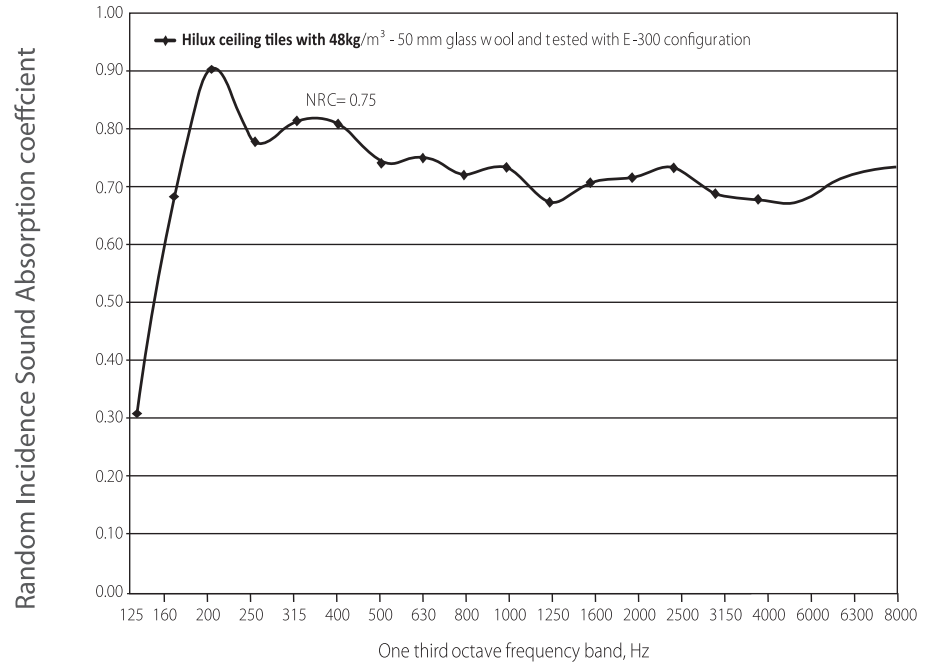
The Warranty is not valid in case of

1. Boards/Tiles purchased from a dealer/retailer/seller other than those authorized by Ramco Industries Limited.
2. Installation, storage and maintenance procedures followed are found to be in contravention to those outlined on our website www.ramcohilux.com.
3. Only on usage of Hilux accessories in your installations.
4. Wilful negligence by user personnel.
5. Force Majeure.

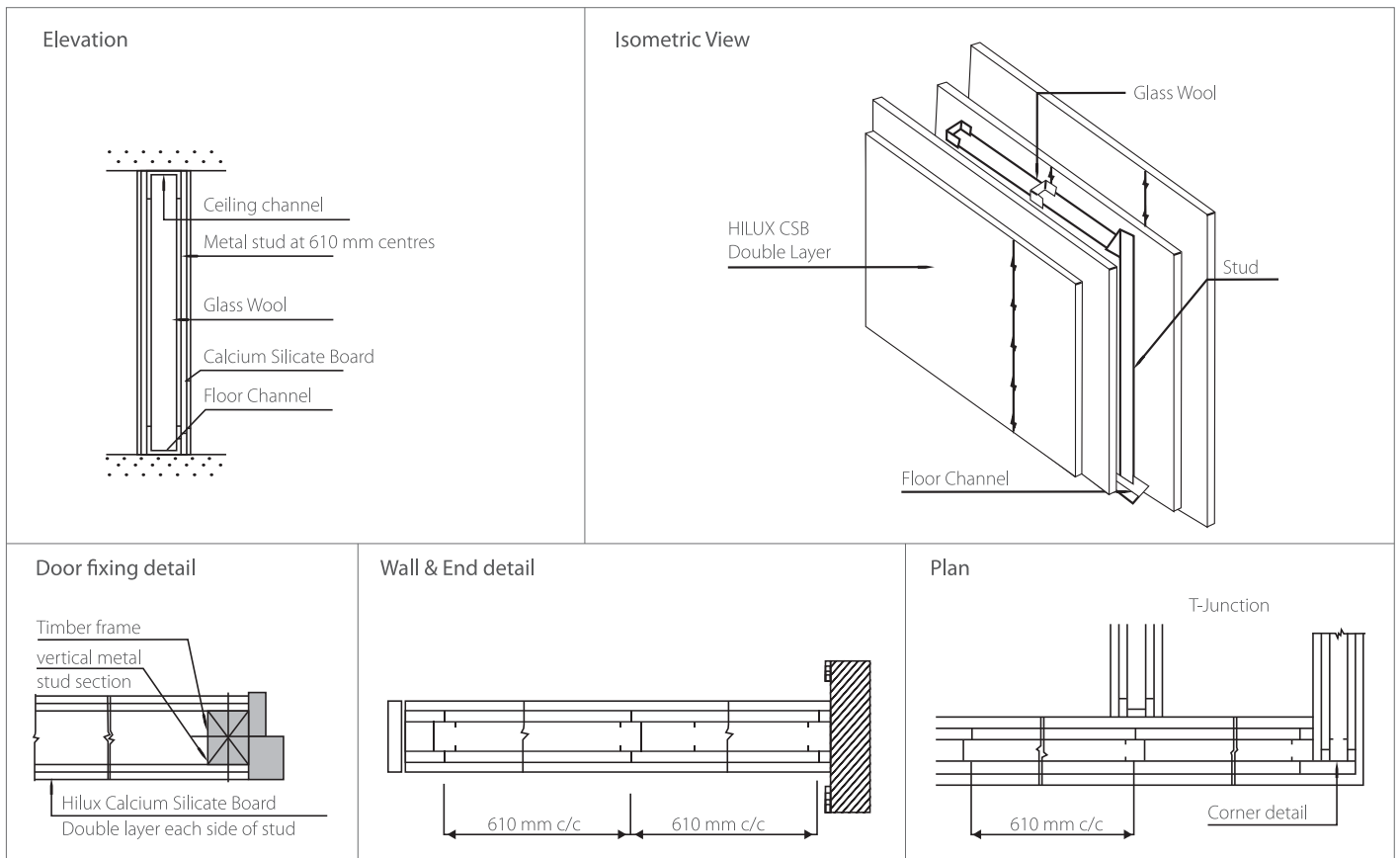
SOUND TRANSMISSION CLASS

One Third Octave Frequency, HZ	Sound Transmission Loss, dB
100	36.0
125	37.0
160	42.3
200	40.6
250	44.0
315	46.0
400	49.0
500	54.1
630	67.8
800	61.1
1000	63.6
1250	65.7
1600	68.3
2000	68.0
2500	61.9
3150	55.3
4000	60.2
5000	64.9
6300	70.1
8000	72.4
STC	56
R _w (C, C _{tr})	55 (0; -6)

NOISE REDUCTION CO-EFFICIENT



HILUX SPECIFICATION - SOUND INSULATED PARTITION



• HILUX Board: 6' x 4' - 2 x 12 mm (Each side)

• Glass Wool: 48 Kg/m³, 100 mm thickness

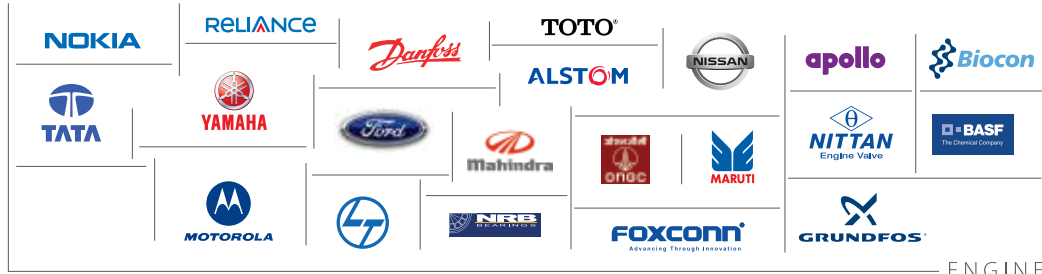
• Door fixing detail: Double layer board in each side of stud

Certifications

Product Properties	Description	Standards	Certification	Result
Density	Low density board, results in less weight & easy workability.	-	M/s CMS, Chennai	900 kg/m ³ (+/- 50)
Flexural Strength	Longitudinal (L) & Transverse (T), which indicates a stronger material.	-	M/s CMS, Chennai	L - 10.65 N/mm ² & T - 5.75 N/mm ²
Impact Strength	Suitable for high impact areas.	-	M/s CMS, Chennai	1900 J/M ²
Compressive Strength	Suitable for Nominal compressive areas.	-	M/s CMS, Chennai	22.95 N/mm ²
Thermal Conductivity	Energy saving, less heat transmission & better insulating efficiency.	ASTM C177 & ISO 8302	M/s ANNA UNIVERSITY, Chennai	0.15
Non-Combustibility	The average mass loss is 22.73%, which indicates the time of flaming is NIL, doesn't act as fuel to fire.	BS 476 Part 4 :1970	M/s PSB Corp, Singapore	Non-Combustibility
Ignitability	Not easily Ignitable, good one against the fire.	BS - 476 : Part 5 : 1979	M/s PSB Corp, Singapore	Class "P" Not Easily Ignitable
Fire Propagation	Better fire resistance	BS - 476 - Part 6 : 1989 + A1 : 2009	M/s PSB Corp, Singapore	I-1.2
Surface spread of flame	After testing the spread of flame on the HILUX CSB, for 10 min is NIL, comes under CLASS1, will not help in spread of fire.	BS - 476 - Part 7 : 1997	M/s PSB Corp, Singapore	Class -1
Sound Absorption	Perforated HILUX board NRC value ranges from 0.70 to 0.85 and 0.3 for plain board hence the Sound Absorption is good.	IS 8225 - 1987 / ASTM C423	M/s NPL, Delhi M/s ARAI, Pune	0.85 0.7
Sound Transmission Loss	By Placing the Mineral / Glass wool in the cavity, Sound Transmission of HILUX is very less ranges from 39, 41, 42, 45, 47, 52 & 56 dB 's respectively.	IS : 9901 (Part 3) - 1981, DIN 52210 Part 4 - 1984 & ISO : 140 (Part 3) - 1995 / ASTM E 413 & ASTM E 90	M/s NPL, Delhi M/s ARAI, Pune	39 db 56 db
Moisture content	Better moisture resistant, Maintenance free board, exterior use is possible.	-	M/s CMS, Chennai	12.36%
Shrinkage Dimension	Dry saturated condition, regains to original position, Dimensionally stable Board.	-	M/s CMS, Chennai	0.10%
Alkalinity	Ph - Corrosive Resistant Board.	-	M/s CMS, Chennai	9.30%
Water Impermeability	The Cut specimens of CSB are subjected to a height of water of 20 mm over the surface of the board for 24 hr. Traces of moisture appeared on the bottom surface and not droplets.	BS EN 12467 : 2012	M/s NTH, Chennai	SATISFACTORY
Mould Growth	HILUX CSB is made from natural minerals free from mould growth	JSS - 55555; ISO 846 : 1997E	M/s VIMTA LABS, Hyderabad	Free from Fungal Growth
Bacterial Growth	Board will not contribute to Bacterial growth	BS	M/s VIMTA LABS, Hyderabad	-
Fire Resistance	Better Index, CLASS1 & less ignitability, HILUX board acts as a better FIRE resistant, Ceramic wool, rated for 132 minutes respectively. 12 mm x 2 + 64 kg/m ³ , 50 mm thk + 50 mm web	BS - 476 - Part - 20/22, IS : 3614 - Part 2 - 1992 & IS : 3809 - 1979	M/s PSB Corp, Singapore	Two hour
Fire Resistance	Better Index, CLASS1 & less ignitability, HILUX board acts as a better FIRE resistant, Rock wool, rated for 240 minutes respectively. 12 mm x 3 + 64 kg/m ³ , 50 mm thk + 92 mm web	BS - 476 - Part - 20/22, IS : 3614 - Part 2 - 1992 & IS : 3809 - 1979	M/s Spectro, Delhi	Four hour
Smoke Developed Index and Flame Spread Index	Smoke Developed Index - 18 and Flame Spread Index - 0	ASTM E84 -16:	M/s Spectro, Delhi	0

Note: Further Technical enquires Please contact @ +91 44 - 42983109 or www.info@ril.co.in

M A R Q U E E C L I E N T S



ENGINEERING



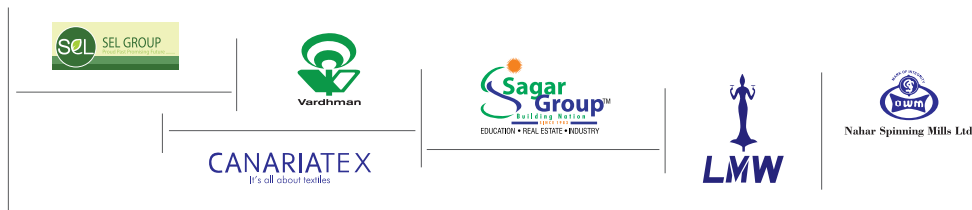
IT SECTOR



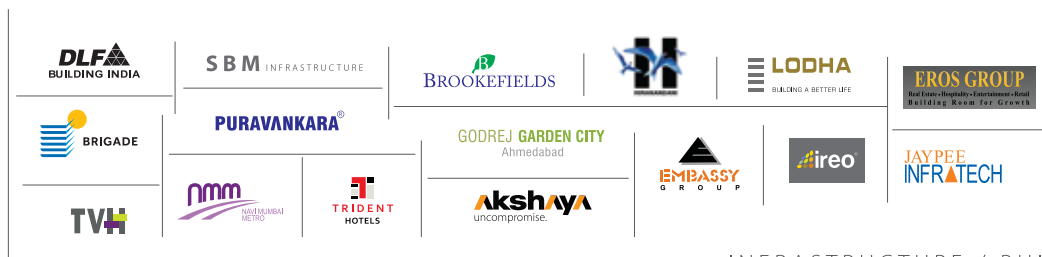
PHARMA / HOSPITALS



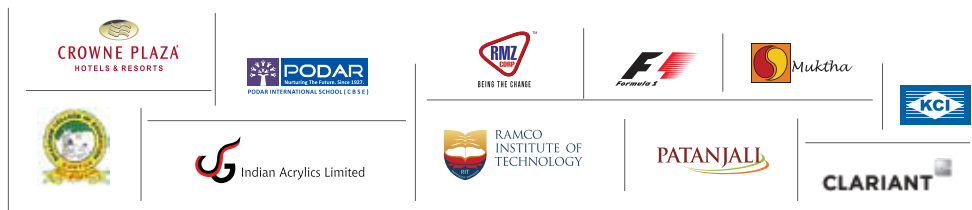
GOVT. SECTORS



TEXTILES



INFRASTRUCTURE / BUILDERS



OTHERS

RAMCO SmartBuild

T e c h S e r v i c e s

Ramco SmartBuild is an end-to-end Service and Solutions initiative for Dry Construction



Design & Material Consultancy



Project Execution



Site Quality Assurance



Training in Dry Construction methods

Boards	Accessories
Chroma Walls	Finishing Jointing compound, Fibre mesh tape
Wall Woods	
Visual Walls	Frame work accessories G.I. Channels, Connecting Clip, Soffit cleat, Rawl Plug
Marble Walls	
	Minor accessories Self drilling and tapping screws



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