

category	<b>absorber</b>
description	<b>i-Tec and i-TecFLEX timber perforated acoustic panel systems for walls and ceilings</b>
part code	<b>custom order only</b>



### Applications

- Schools
- Lobbies
- Offices
- Meeting rooms
- Halls
- Hotels
- Auditoriums



### Features of the I-Acoustic system

- Unique shape profiles
- Simple to fix and remove
- Available in many perforations
- Can meet class D to class A acoustic panel
- Fire rating class 2 or class 0
- Can be used on walls or ceilings
- Option to apply on curved surfaces

### Specification

The I-Tec perforated and slotted system of noise-absorbent timber acoustic panels for walls and ceilings which, due to unbeatable acoustics and aesthetic qualities, the warmth of the material and ease of installation, is ideal for acoustically treating all kinds of areas such as theatres, auditoriums, offices, hotels, conference rooms, restaurants and lobby areas, etc.

I-Tec wall and ceiling panels are available in a choice of: a melamine wood veneer finish; real wood veneer finish; or RAL painted finish.

The perforations can be 4, 6, 8 or 10mm diameter.

The slots can be 4, 6, 8 or 10mm wide.

Unlike cheaper import imitations which require on-site lacquering to upgrade to Class 0, our panels can be supplied in a Class 0 Fire Rating thus saving substantial labour time.

Our standard melamine and wood veneer finishes are shown on page 4. However, we can also supply to specific requirements so please contact our Technical Department for other options if they are not shown.

MDF is the standard core material but the panels can also be manufactured using plywood or HPL phenolic compact.

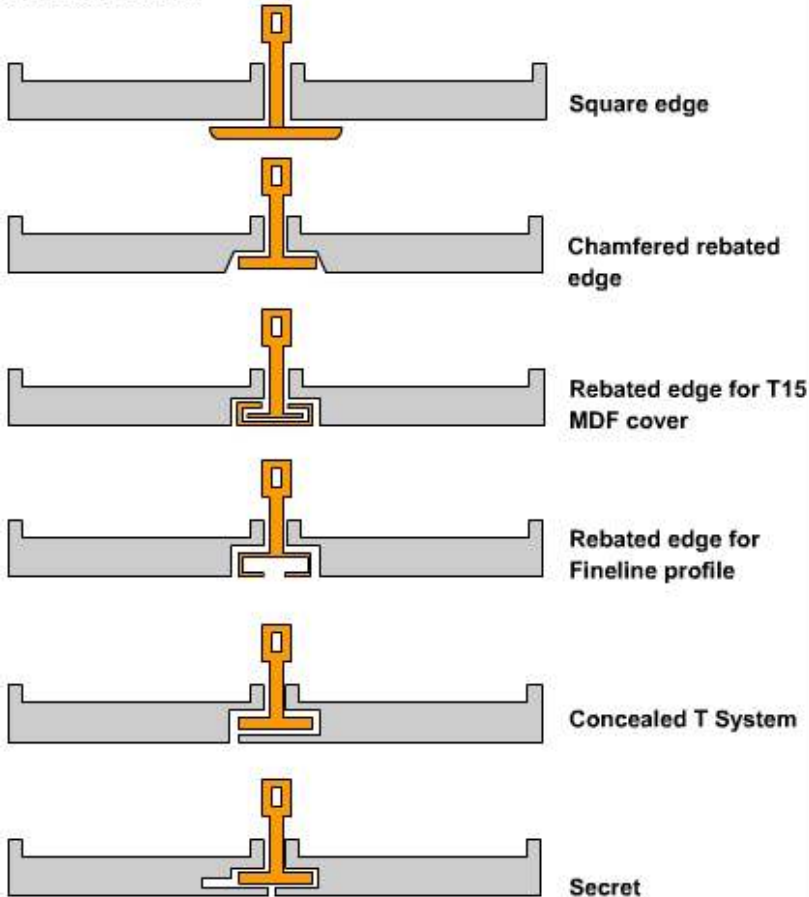
### Technical

Fire reaction		
Fire resistant material	Euroclass B-s2, d0 (Class 0)	
Standard material	Class 2	
Dimensional stability	Increase %	Decrease %
Wide	0.2	1.1
Length	0.2	0.1
Thickness	4.1	0.0
Light resistance of colours		
Valuation (greyscale)	4-5	
Humidity reaction		
Humidity percentage	7 ±3%	
Swelling in water 24h	15%	
Weight (kg/m <sup>2</sup> )		
Standard panel	9	
Fire resistant panel	9.9	
Mass (kg/m <sup>3</sup> )		
Standard Panel	739	
Fire resistant panel	830	
Impact resistance		
Spring method	8N	



## Edge details available for ceiling and wall panels.

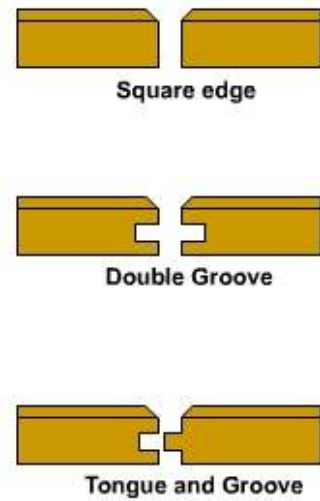
### CEILING PANELS



Standard ceiling panels are available in the following sizes:

T1: 600 x 600 x 12mm or 610 x 1220 x 12mm  
T2: 1200 x 600 x 12mm or 610 x 1220 x 12mm

### WALL PANELS



Standard wall panels are available in the following sizes:

R1: 600 x 600 x 12mm  
R2: 1200 x 600 x 12mm  
R3: 2430 x 600 x 12mm

Please Note: The 1mm top edge bevel, shown above, is an option and best discussed with our technical department for application suitability.



## Accessories

Coated melamine edge trims, primary and secondary profiles, to match the panels, are available as an optional extra.

Same species real wood veneer is available, but subject to larger minimum orders.

External corner edge trims can be supplied in a 24mm x 24mm metal profile, or a 40mm x 40mm MDF profile.

For ceiling applications, if using only main runners and 'gauges', then all ceiling panels are easily removable

However, if using main runners and across tees (which is more common) then access requires removal of several previous panels.

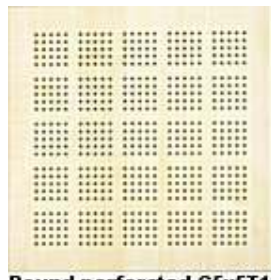
Please contact our technical department if easy access is required for services behind the suspended ceiling.

An optional black acoustically transparent fleece is available for the back of all the I-Tec panels.

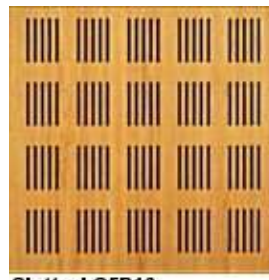
## I-Tec Perforation and Slotted Configurations



Plain



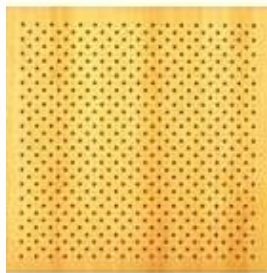
Round perforated G5x5T11



Slotted G5R16



Lego



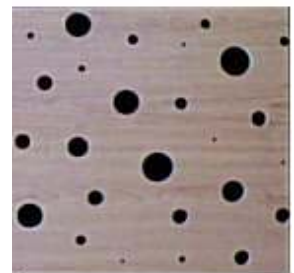
Round Perforated T16



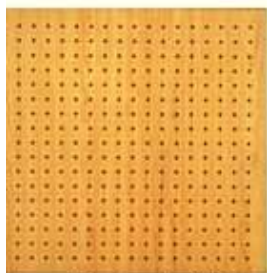
Round perforated T32  
Square



Grooved



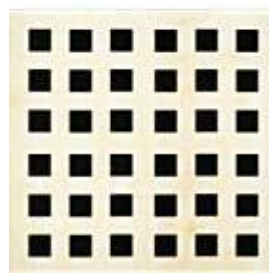
Cosmos



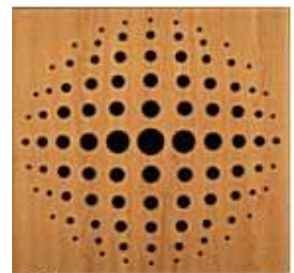
Round Perforated T32



Round perforated  
2GT32



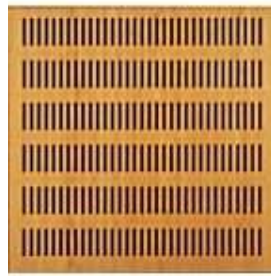
Square perforated



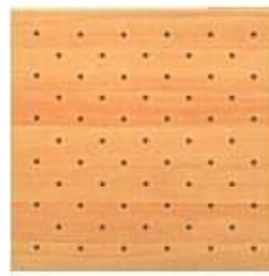
Sphere



Micro 16



Slotted R16



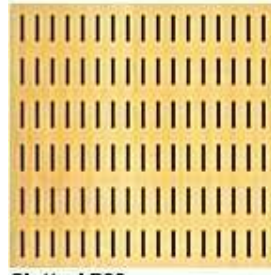
I-Cost



Ventilation grille



Micro 8



Slotted R32



Micro 0.5

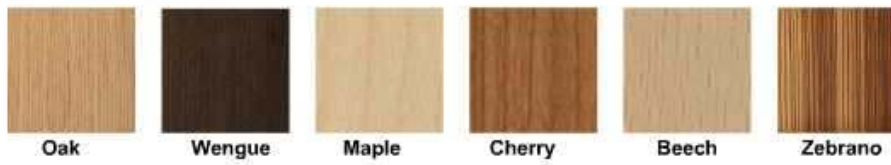


Loudspeaker Grille

**Melamine Finishes**



**Real Wood Veneers**



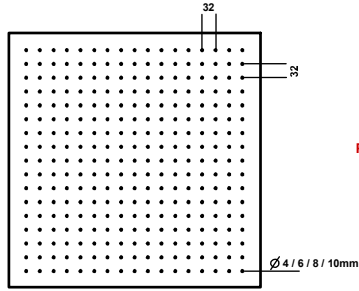
**Pantone, RAL or NCS colours all available**



# Type of Perforations

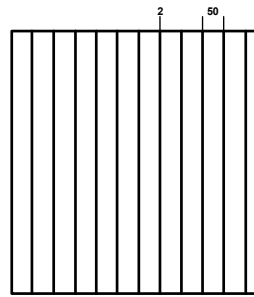
## T32

$\alpha_w$  0.20 (LM)  
NRC = 0.45  
Perforations - 289  
Perf Percentage  
4.04% - 6.3%



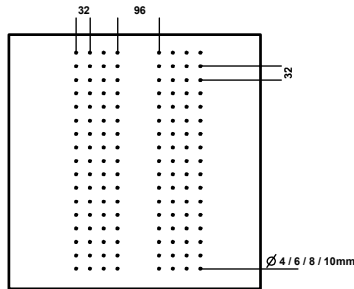
## Ca

Perforated area:0%



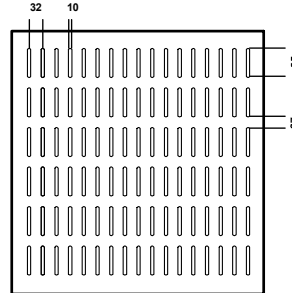
## 2GT32

$\alpha_w$  0.15 (LM)  
NRC = 0.35  
Perforations - 136  
Perf Percentage  
1.9% - 3%



## R32

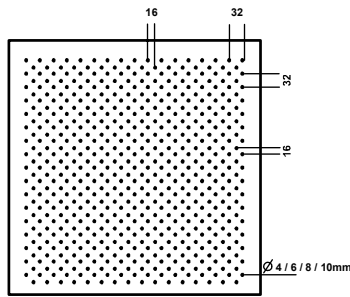
$\alpha_w$  0.45 (LM)  
NRC = 0.60  
Slots - 102  
Perf Percentage  
17.81%



Available with slots of 4 / 6 / 8 / 10mm

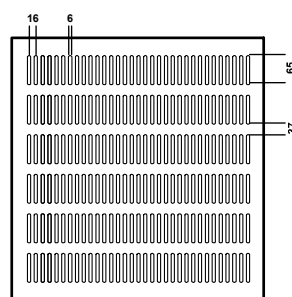
## T16

$\alpha_w$  0.30 (LM)  
NRC = 0.55  
Perforations - 545  
Perf Percentage  
7.61% - 11.9%



## R16

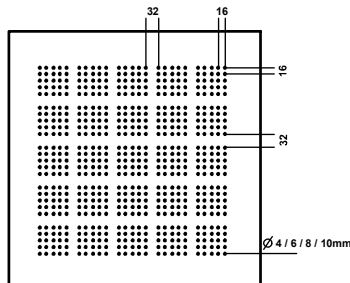
$\alpha_w$  0.50 (M)  
NRC = 0.60  
Slots - 198  
Perf Percentage  
19.71%



Available with slots of 4 / 6 / 8 / 10mm

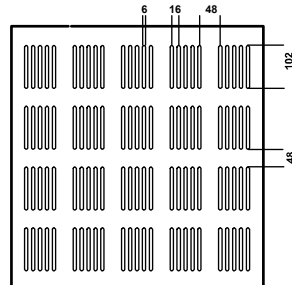
## G5x5 T16

$\alpha_w$  0.40 (LM)  
NRC = 0.55  
Perforations - 625  
Perf Percentage  
8.73% - 13.6%



## G5R16

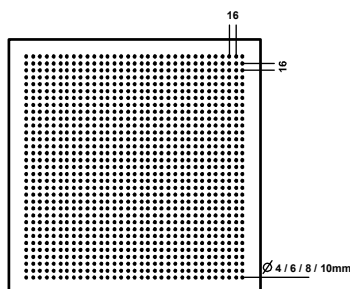
$\alpha_w$  0.50 (M)  
NRC = 0.65  
Slots - 100  
Perf Percentage  
16.12%



Available with slots of 4 / 6 / 8 / 10mm

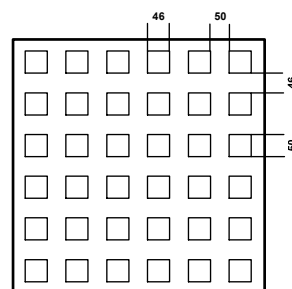
## Micro 16

$\alpha_w$  0.50 (M)  
NRC = 0.60  
Perforations - 1089  
Perf Percentage  
15.21% - 23.7%



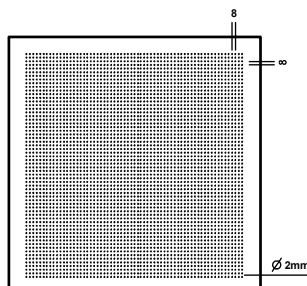
## Cu

$\alpha_w$  0.55  
NRC = 0.60  
Squares - 36  
Perf Percentage  
25%



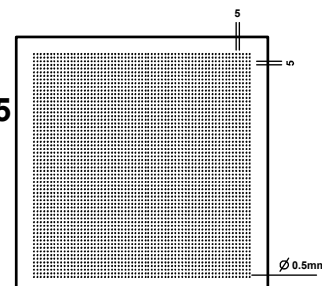
## Micro 8

$\alpha_w$  0.35 (LM)  
NRC = 0.70  
Perforations - 4225  
Perf Percentage  
3.68%



## Micro 0.5

$\alpha_w$  0.95  
NRC = 0.90  
Perforations -  
Perf Percentage  
2.70%



## IMPORTANT

### Installation and Maintenance Recommendations

- The panels must be stored and installed in dry, moisture-free areas at a temperature between 18°C and 25°C. (**Note:** the original packaging does **NOT** protect the material from rain or moisture.)
- Do not place any loads on the packaged material.
- The product is for interior installation only. Premises must be weathertight and suitably habitable and the panels must have been acclimatised in the space where they will be installed for a minimum of 24 hours before installation.
- We recommend installation joints every 6–7 m<sup>2</sup>.
- The premises **must not** be subject to sudden changes in temperature or humidity, as the panels require constant climate conditions all year round.
- Room temperature must always be between 18°C and 25°C, and relative humidity between 40% and 60%.
- Use only a damp cloth to clean the panels. Never apply products with chemical agents.
- Natural wood products may show variations in colours, shades and grey tones.

## Acoustic Test Data

Panel	Octave Band Absorption Coefficients						NRC	$\alpha_w$
	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz		
T32, 8mm holes, 50mm cavity and 40mm absorbent	0.17	0.62	0.70	0.35	0.13	0.13	0.45	0.20 (LM)
T32, 8mm holes, 80mm cavity and 40mm absorbent	0.18	0.65	0.60	0.23	0.06	0.12	0.40	0.15 (LM)
2GT32, 8mm holes, 50mm cavity and 40mm absorbent	0.39	0.60	0.47	0.22	0.06	0.11	0.35	0.15 (LM)
2GT32, 8mm holes, 80mm cavity and 40mm absorbent	0.35	0.71	0.39	0.12	0.01	0.10	0.30	0.10 (LM)
T16, 8mm holes, 50mm cavity and 40mm absorbent	0.16	0.51	0.81	0.54	0.25	0.22	0.55	0.30 (LM)
T16, 8mm holes, 80mm cavity and 40mm absorbent	0.21	0.63	0.83	0.43	0.16	0.20	0.50	0.25 (LM)
Mi, 4mm holes, 50mm cavity and 40mm absorbent	0.18	0.57	0.70	0.34	0.12	0.13	0.45	0.20 (LM)
Mi, 4mm holes, 80mm cavity and 40mm absorbent	0.16	0.70	0.63	0.26	0.05	0.12	0.40	0.15 (LM)
Mi, 6mm holes, 50mm cavity and 40mm absorbent	0.16	0.47	0.79	0.53	0.26	0.22	0.50	0.30 (LM)
Mi, 6mm holes, 80mm cavity and 40mm absorbent	0.18	0.58	0.83	0.42	0.16	0.18	0.50	0.25 (LM)
Mi, 8mm holes, 50mm cavity and 40mm absorbent	0.13	0.42	0.78	0.67	0.44	0.41	0.60	0.50 (M)
Mi, 8mm holes, 80mm cavity and 40mm absorbent	0.19	0.45	0.82	0.60	0.34	0.35	0.55	0.40 (M)
Mi, 0.5mm holes, 50mm cavity and 40mm absorbent	0.27	0.66	0.94	0.95	0.98	0.98	0.90	0.90 (MH)
G5x5T16, 6mm holes, 50mm cavity and 40mm absorbent	0.19	0.57	0.70	0.37	0.15	0.18	0.45	0.25 (LM)
G5x5T16, 6mm holes, 80mm cavity and 40mm absorbent	0.21	0.67	0.60	0.26	0.08	0.16	0.40	0.15 (LM)
G5x5T16, 8mm holes, 50mm cavity and 40mm absorbent	0.19	0.53	0.78	0.56	0.31	0.29	0.55	0.40 (LM)
G5x5T16, 8mm holes, 80mm cavity and 40mm absorbent	0.18	0.65	0.74	0.43	0.21	0.27	0.50	0.30 (LM)
R32, 6mm slots, 50mm cavity and 40mm absorbent	0.14	0.52	0.81	0.57	0.31	0.29	0.55	0.40 (LM)
R32, 6mm slots, 80mm cavity and 40mm absorbent	0.17	0.51	0.80	0.43	0.18	0.26	0.50	0.25 (LM)
R32, 10mm slots, 50mm cavity and 40mm absorbent	0.14	0.43	0.82	0.68	0.41	0.38	0.60	0.45 (M)
R32, 10mm slots, 80mm cavity and 40mm absorbent	0.15	0.50	0.84	0.58	0.29	0.29	0.55	0.35 (LM)
R16, 6mm slots, 50mm cavity and 40mm absorbent	0.14	0.43	0.76	0.68	0.44	0.43	0.60	0.50 (M)
R16, 6mm slots, 80mm cavity and 40mm absorbent	0.17	0.49	0.82	0.59	0.33	0.33	0.55	0.40 (LM)
G5R16, 6mm slots, 50mm cavity and 40mm absorbent	0.23	0.55	0.86	0.68	0.42	0.38	0.65	0.50 (M)
G5R16, 6mm slots, 80mm cavity and 40mm absorbent	0.13	0.50	0.81	0.55	0.27	0.29	0.55	0.35 (LM)
CU Square, 50mm cavity and 40mm absorbent	0.26	0.57	0.77	0.67	0.48	0.45	0.60	0.55
CU Square, 80mm cavity and 40mm absorbent	0.33	0.61	0.86	0.64	0.36	0.35	0.60	0.45 (LM)
I-Acoustic 32/4, 50mm cavity no absorbent	0.12	0.36	0.61	0.67	0.60	0.50	0.55	0.60
I-Acoustic 32/4, 50mm cavity and 40mm absorbent	0.44	0.65	0.77	0.71	0.60	0.50	0.70	0.65
I-Acoustic 32/4, 210mm cavity no absorbent	0.86	0.72	0.66	0.51	0.53	0.50	0.60	0.55 (L)
I-Acoustic 32/4, 210mm cavity and 40mm absorbent	0.97	0.72	0.69	0.62	0.56	0.52	0.65	0.60 (L)
I-Acoustic 16/3, 50mm cavity no absorbent	0.14	0.27	0.55	0.71	0.68	0.55	0.55	0.55
I-Acoustic 16/3, 50mm cavity and 40mm absorbent	0.33	0.67	0.90	0.89	0.74	0.65	0.80	0.75
I-Acoustic 16/3, 210mm cavity no absorbent	0.90	0.90	0.80	0.59	0.59	0.52	0.70	0.60 (L)
I-Acoustic 16/3, 210mm cavity and 40mm absorbent	0.85	0.75	0.83	0.70	0.64	0.62	0.75	0.70
I-Acoustic 8/3, 50mm cavity and 40mm absorbent	0.24	0.49	0.90	0.84	0.74	0.75	0.75	0.75
I-Acoustic 8/3, 210mm cavity and 40mm absorbent	0.87	0.95	0.82	0.71	0.65	0.75	0.80	0.70 (L)

	PROPERTIES	UNITS	STANDARD		FIRE-RATED		WATERPROOF	
			> 9/12	> 12/19	> 9/12	> 12/19	> 9/12	> 12/19
EN 323	DENSITY	Kg/m	750 / 730	740 / 710	830 / 800	800 / 780	770 / 730	730 / 700
EN 319	INTERNAL BOND	N/mm <sup>2</sup>	0.65	0.60	0.60	0.55	0.80	0.75
EN 310	BENDING STRENGTH	N/mm <sup>2</sup>	30		22	20	32	30
EN 310	MODULUS OF ELASTICITY	N/mm <sup>2</sup>	2500		2500	2200	2800	2700
EN 317	THICKNESS SWELLING IN WATER 24H	%	15	12	15	12	10	8
EN 318-1	DIMENSIONAL STABILITY Length / Width	%	0.4		0.4		0.4	
EN 318-1	DIMENSIONAL STABILITY Thickness	%	6		6		6	
EN 311	SURFACE SOUNDNESS	N/mm <sup>2</sup>	1.2		1.2			
EN 382-1	SURFACE ABSORPTION	mm l	> 150 (on both sides)		> 150 (on both sides)		> 150 (on both sides)	
EN 322	MOISTURE CONTENT	&	7±3		7±3		7±3	
EN 120	FORMALDEHYDE CONTENT	mg/100g	8 < to ≤ 30 class E2		8 < to ≤ 30 class E2		≤ 8 - class E1	
ISO 3340	GRIT CONTENT	% du poids	= 0.05		≤ 0.05		≤ 0.05	
<b>Characteristics of fire-resistance</b>								
UNE EN 13501-1	FIRE-RESISTANCE	Class	D s2 d0		B s2 d0		----	----
<b>Tolerance in normal dimensions</b>								
EN 324-1	THICKNESS	mm	± 0.2		± 0.2		± 0.2	
EN 324-1	LENGTH / WIDTH	mm	±2mm/m. max ± 5mm		±2mm/m. max ± 5mm		±2mm/m. max ± 5mm	
EN 324-1	SQUARENESS	mm	± 2		± 2		± 2	
EN 324-1	EDGE STRAIGHTNESS	mm	± 1.5		± 1.5		± 1.5	