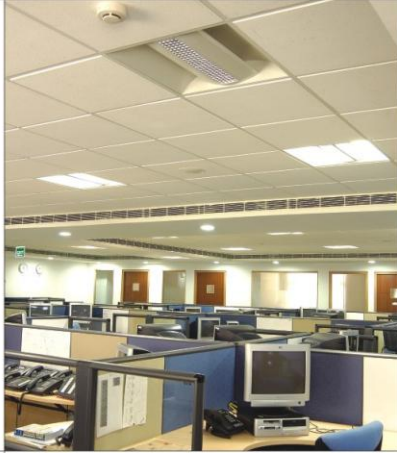


# Aerolite®

Non-Cementitious  
Lightweight Calcium Silicate Ceilings



Indian Green Building Council  
Greening India since 2001  
Member



## Performance with style

- Non-combustible
- 100% RH resistance
- Densified Edge

## Introduction

Every element contributes to the synergy of space. By viewing the space as whole, we can help you fulfill both the functional and aesthetic demands of your interiors: Innovation, style, function, durability and safety. Discover how Aerolite brings them all together, beautifully!

Aerolite is a unique light-weight ceiling with densified edges made from non-cementitious Calcium Silicate and available in a range of elegant designs and textures. Unlike conventional materials, only Calcium Silicate is inherently 100% RH resistant and noncombustible, ensuring durability and safety. Aerolite offers you a total ceiling solution complete with a supporting grid.

When the design calls for unique inspired solutions, turn to the Aerolite range of designer ceilings. This unconventional collection exemplifies Aerolite's commitment to innovation. These innovative designs integrate style, function and safety. And every solution is unique to Aerolite. Through these collections, Aerolite not only responds to today's needs but also anticipates tomorrow's challenges.

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Humidity Resistance-  
100%RH



Superior  
Aesthetics



Noncombustible



Design Range



Excellent  
Thermal Insulation



Durable



Range of  
Acoustics



Light Weight



High  
Light-Reflectance



Termite  
Resistant

## Why Suspended Ceilings

A suspended ceiling is used by a building designer to provide one or more of the following:

### **Aesthetics**

To provide a visual surface that provides desired appearance by an interplay of pattern, texture and or colour

### **Service void**

To conceal services by providing a plenum through which services can run while providing access to them with demountability.

### **Acoustic control**

Sound absorption to reduce noise levels and reverberation within the area covered by the ceiling.

Sound attenuation to reduce the transmission of sound between adjacent areas.

### **Thermal insulation**

Reduction of heat loss or gain through the structure thereby saving energy cost or the control of condensation and humidity.

### **Fire protection**

Safety in case of a fire by control of fire propagation.

### **Ventilation**

By ducts in the plenum with outlets in the ceiling surface or by a plenum system where air passes through the whole of the void to the outlets.

### **Lighting**

Lighting units to provide an illuminated ceiling or by modular light units in lieu of selected ceiling panels.

## Why Aerolite

AEROLITE is the world's first lightweight non-cementitious calcium silicate ceiling system with several unique features and meets all the requirements of an ideal ceiling from a building designer's perspective. Several patents have been applied for AEROLITE.

### Aesthetics:

AEROLITE ceilings are available in a pleasing range of surface textures and design options to meet the most demanding and creative requirements of today's interiors. The design range is available in a wide range of geometric patterns with subtle relief and presents a wealth of exciting possibilities, which can be used to create truly inspiring and impressive interiors.



### Humidity and Water resistance:

AEROLITE ceilings have 100% RH resistance and are not affected by moisture, water and extremes of temperature. So, the ceiling does not soften and sag in high humidity environments. AEROLITE can be stored, installed and used under all weather conditions including in non air-conditioned buildings. There is also no need to control the temperature variations or to maintain any specified temperature or humidity level in the room by using heaters, dehumidifiers, ventilators, air conditioners, etc. This enables quick and easy installation of the ceiling and early occupation and use of the building.



AEROLITE ceilings do not lose their physical integrity even in the case of condensation from air conditioning ducts or in case of any leakage of water from the main ceiling above the suspended ceiling and can be safely used even in industrial and semi exposed locations.

### Fire resistance:

AEROLITE non-cementitious calcium silicate ceilings are noncombustible as per the requirements of BS 476 Part 4.

They are rated class '1' for spread of flame as per BS 476 Part 7 and class '0' for fire propagation as per BS 476 Part 6.

AEROLITE ceilings offer unmatched fire protection. Building structures thus remain stable for longer period during a fire and meet the time rating required by building regulations. This in turn, allows time for escape and ensures comparative safety to fire fighters. Installers should always select appropriate grid systems for installation of the ceiling, so as not to reduce the tested performance of the ceiling system.



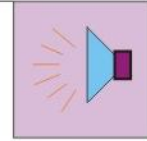
### Thermal insulation:

AEROLITE non-cementitious calcium silicate ceilings have outstanding thermal insulation properties which are superior to that of any other ceiling material. This helps to maintain room comfort at all times and saves heating and cooling expenses.



### Acoustics:

Lightweight non-cementitious calcium silicate is a sound absorbing material that neither transmits nor augments sound. Thus Aerolite calcium silicate ceilings are perfect for adjusting the acoustics' in areas covered by the ceiling by using tiles with perforations and fissures or in combination with plain or design tiles. It is essential to define the acoustics requirement early in the design stage. The following should be considered i.e., the applied building materials, surfaces within the room, volume of the room, soft furnishing and finally the proposed use of the room.

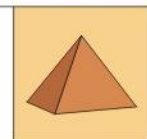


There are two aspects of acoustics: The sound absorption performance of the tile which deals with the reduction of sound emanating from within the room, and measured as the noise reduction coefficient (NRC) (from 0.1 to 1), and sound attenuation (STA) which deals with the transmission of sound between adjacent areas and measured in decibels (db).

Sound absorption coefficients are measured at various sound frequencies from 125 to 4000 HZ and noise reduction coefficient (NRC) is the average of the absorption at 250, 500, 1000 and 2000 HZ. Three factors should be kept in mind while deciding room acoustics. Firstly, the ceiling is only one of the surfaces within a room besides the floor and four walls and it is important to take into consideration all the surfaces within a room to ensure that the correct balance between absorption and reflection is achieved. Secondly, with the increased use of soft furnishings ceilings with only moderate sound absorption may be required, if a lifeless environment is to be avoided. In short, too much absorption in a room can be as bad as not enough. Thirdly, the acoustic characteristics of the ceiling should be selected based on the frequencies of sound expected to be encountered in the room which, in turn, depend on the proposed use of the room.

### Durability:

Aerolite ceilings have high flexural strength as a result of their composition and manufacturing process. Aerolite ceilings have patented densified edges to give high edge strength which minimizes damage in handling, transport, storage and installation of the tiles, besides facilitating demountability as per service requirements.



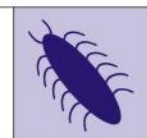
### Light Reflectance:

The excellent light reflectance of Aerolite ceilings helps to minimize lighting operating expenses besides ensuring maximum effectiveness of indirect lighting.



### Termite Resistance:

Aerolite ceilings are made from inorganic materials and are immune to termite attack



## Technical Comparison

Characteristics	"Aerolite" Calcium Silicate Ceilings	Mineral Fibre Ceilings	Calcium Silicate Board Ceilings	Gypsum Ceilings	Metal Ceilings
<b>Humidity Resistance</b>	100% RH	75% - 99% RH	100% - 95% RH	90% RH	POOR- The backing wool get drenched
<b>Water Resistance</b>	In case of contact with water, Aerolite does not lose its physical integrity	In case of contact with water, the ceiling starts disintegrating.	In case of contact with water, Board does not lose its physical integrity. But the painting done at the site starts peeling off.	In case of contact with water, the ceiling starts disintegrating.	Decolourisation. Rusting and bad smell from the backing wools
<b>Noncombustibility</b>	Noncombustible as per BS 476 Part 4	Combustible	No Test Certificate available	Combustible	Combustible
<b>Fire Performance</b>	Class 0/ Class 1 under BS 476 Part VI & VII	Class 0/ Class 1 under BS 476 Part VI & VII	No Test Certificate available	Class 0/ Class 1 under BS 476 Part VI & VII	Class 0/ Class 1
<b>Light Reflectance</b>	> 85%	> 85%	No Test Certificate available	> 75%	Due to more perforations less light reflectance
<b>Sound Absorption(NRC)</b>	0.10 to 0.75 depending on product	0.10 to 0.75 depending on product	High density product Poor acoustics. No Test Certificate available	0.10 to 0.70 depending on product	0.10 to 0.90
<b>Sound Attenuation</b>	32 dB	34 dB	No Certified Data available	No Certified Data available	No Certified Data available
<b>Thermal Conductivity</b>	≤ 0.05/W/M° K	0.057/W/M° K C	0.15(W/M° K C) N	0.16/W/M° K C Poor insulation	Being Metal, Thermal Conductivity is High, hence more Electricity consumption required to keep Room Cool
<b>Termite Resistance</b>	Inorganic material. Hence no termite attacks	Organic binders used, hence prone to termite attacks	Inorganic material, hence prone no termite attacks	Prone to termite attacks	No termite attacks
<b>Design Ceilings</b>	Full range offered with 100% RH resistance & Noncombustible	Limited range offered with 70% RH resistance	Plain tiles offered to be painted at site	Plain tiles with design Paper laminations offered	Only Perforated and strip Ceilings available
<b>Size</b>	595 mm x 595 mm x 15 mm Densified Edges	595 mm x 595 mm x 15 mm edges	8mm thick, 6'x 4' Plain sheets are cut into 2'x2' size without Tegular edge offered	600 mm x 600 mm x 12 mm edges	600 mm x 600 mm 625 mm x 625 mm 600 mm x 1200 mm 625 mm x 1250 mm
<b>Edge</b>	Densified Square & Tegular	Square & Tegular	No Tegular edge available	Square & Tegular	Tegular Available
<b>Weight</b>	5 - 5.5 Kgm <sup>2</sup>	3.8 Kgm <sup>2</sup>	High density product Heavy weight Not suitable for suspended ceilings 8 mm Board- 7.3Kgm <sup>2</sup>	12.5 Kgm <sup>2</sup> undue load onto the building structure	10 Kgm <sup>2</sup>
<b>Installation</b>	Neat & Quick	Neat & Quick	Neat & Quick	For partition & Seem less Ceilings	Require Mineral wool or Acoustic Fleece backing for performance adding cost
<b>Availability</b>	Across all India	Imported - Long lead time	Across all India	Across all India	Across all India

## Aerolite Technical Data

<b>Composition :</b>	Non-cementitious hydrated calcium silicate, reinforcing fibres and natural fillers. Free from formaldehyde and other harmful materials. Does not contain any toxic ingredients.
<b>Manufacturing Process :</b>	Lime and silica are reacted to produce hydrated calcium silicate slurry which is mixed with reinforcing fibres and fillers and moulded to form a tile in filter presses. These tiles are dried, trimmed, punched and fissured (if required) and then coated to the required surface finish.
<b>Surface :</b>	All tiles are prime coated on both sides. Standard finish in two coats white dispersion type, solvent-free paint.
<b>Dimensions :</b>	600 mm x 600 mm x 15 mm edge. Sizes referred to are always module sizes. The exact or nominal panel size may differ depending on the suspension system used.
<b>Density :</b>	350-450 Kg/m <sup>3</sup>
<b>Relative Humidity :</b>	100% RH resistant
<b>Fire Resistance :</b>	Noncombustible as per BS 476, Part 4, Class 1 for spread of flame as per BS 476, Part 7 Class 0 for fire propagation as per BS 476, Part 6
<b>Thermal Conductivity :</b>	≤0.05 W/m <sup>0</sup> k
<b>Acoustic Control :</b>	Sound absorption NRC - 0.10 to 0.75 depending on the product. Sound attenuation STA-32dB
<b>Light Reflectance :</b>	>85%
<b>Weight :</b>	5 - 5.5 Kg/m <sup>2</sup>
<b>Suspension System :</b>	Suspension system made of roll-formed hot-dipped galvanised steel.

## Range of Products

### TEXTURE

#### Spectra



Plain surface with pin holes.

#### Fine fissured



Plain surface with fissured & micro perforations.

#### Spintone



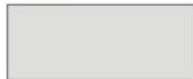
A finely granulated surface with micro perforations.

#### Cosmos



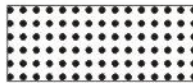
Lightly textured with micro perforations.

#### Plain



A natural smooth surface.

#### Globe



A smooth surface with round through holes.

### DESIGN

#### Quadra



Surface finished with small square studs.

#### Quadra Plus



Surface finished with 12 mm square studs.

#### Quadra Max



Surface finished with 25 mm square studs.

#### Hexa



Surface finished with elegant hexagonal studs.

#### Diagonal



A unique diagonal design to form pattern

#### Linear



Surface finished with a subtle linear pattern



## Applications

Non-cementitious calcium silicate bestows upon Aerolite an array of technical characteristics that extend across the entire range on offer. The designer therefore has complete flexibility to work with any product from among Aerolite's texture or design range to meet even the most demanding and creative requirements of contemporary interiors. This is in stark contrast to the limitations of most ceiling materials in the market in terms of some products attribute or the other.

Areas of Application	Selection Criteria	Recommended Aerolite Products
Offices Computer Rooms	Aesthetics Non-combustibility Humidity Resistance	Complete Texture Range Complete Design Range
Shopping Malls Departmental Stores Super Markets Retail Outlets	Aesthetics Non-combustibility Humidity Resistance	Complete Texture Range Complete Design Range
All buildings in high humidity or coastal areas	Humidity Resistance (100%RH) Aesthetics Non-combustibility	Complete Texture Range Complete Design Range
Bath/Shower areas Kitchens Semi exposed locations External Canopies Swimming Pools	Humidity Resistance (100%RH) Aesthetics Non-combustibility	Complete Texture Range Complete Design Range
Factories Warehouses Work Shops	Non-combustibility Humidity Resistance (100%RH) Durability	Complete Texture Range Complete Design Range
Schools Colleges Universities Training Centres	Aesthetics Non-combustibility Humidity Resistance	Complete Texture Range Complete Design Range
Hospitals Clinics	Aesthetics Non-combustibility Humidity Resistance	Complete Texture Range Complete Design Range
Hotels Cafeterias Canteens Restaurants	Aesthetics Non-combustibility Humidity Resistance	Complete Texture Range Complete Design Range
Airports Railway Stations Public Areas	Aesthetics Non-combustibility Humidity Resistance	Complete Texture Range Complete Design Range
Cinema Theaters Auditoriums Studios	High Acoustics Aesthetics Non-combustibility Humidity Resistance	Complete Texture Range Complete Design Range High Acoustic Range

# Texture





5

1. Spectra
2. Fine fissured
3. Spintone
4. Cosmos
5. Plain
6. Globe

4

6



**Spectra**

TEXTURE



# Spectra

A plain surface with pin holes resulting in a perfect combination of acoustical performance and light reflectance.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

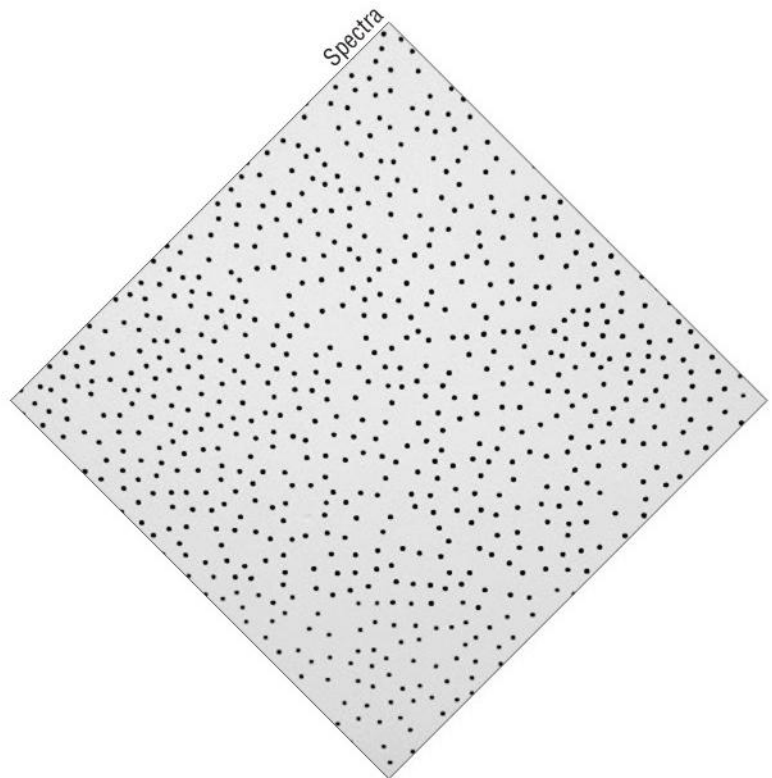
5 kgs/m<sup>2</sup>

## Sound absorption

NRC 0.50

## Sound attenuation

32dB



	Board	T - 24	T - 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>	 15mm	 10 mm 7 mm 15 mm 6" H	 5.5 mm 7 mm 15 mm 6" H	 5.5 mm 7 mm 15 mm 6" H
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Item No.</b>	5131	5132	5133	5133

**Fine Fissured**

TEXTURE



# Fine Fissured

A smooth surface with microperforations interspread with non directional fine fissures for effective sound absorption making it ideal for offices software centers and commercial space.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

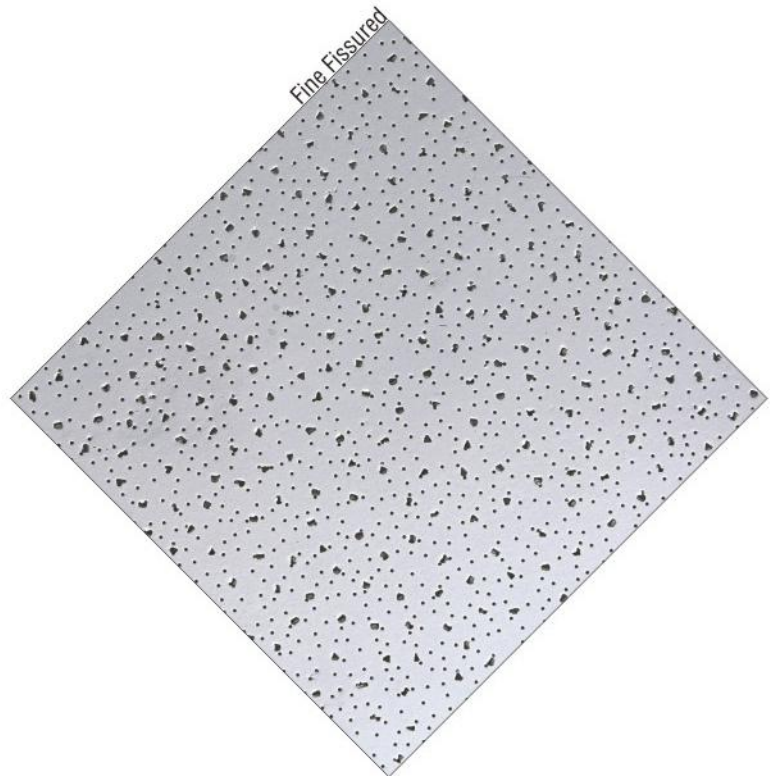
5 kgs/m<sup>2</sup>

## Sound absorption

NRC 0.50

## Sound attenuation

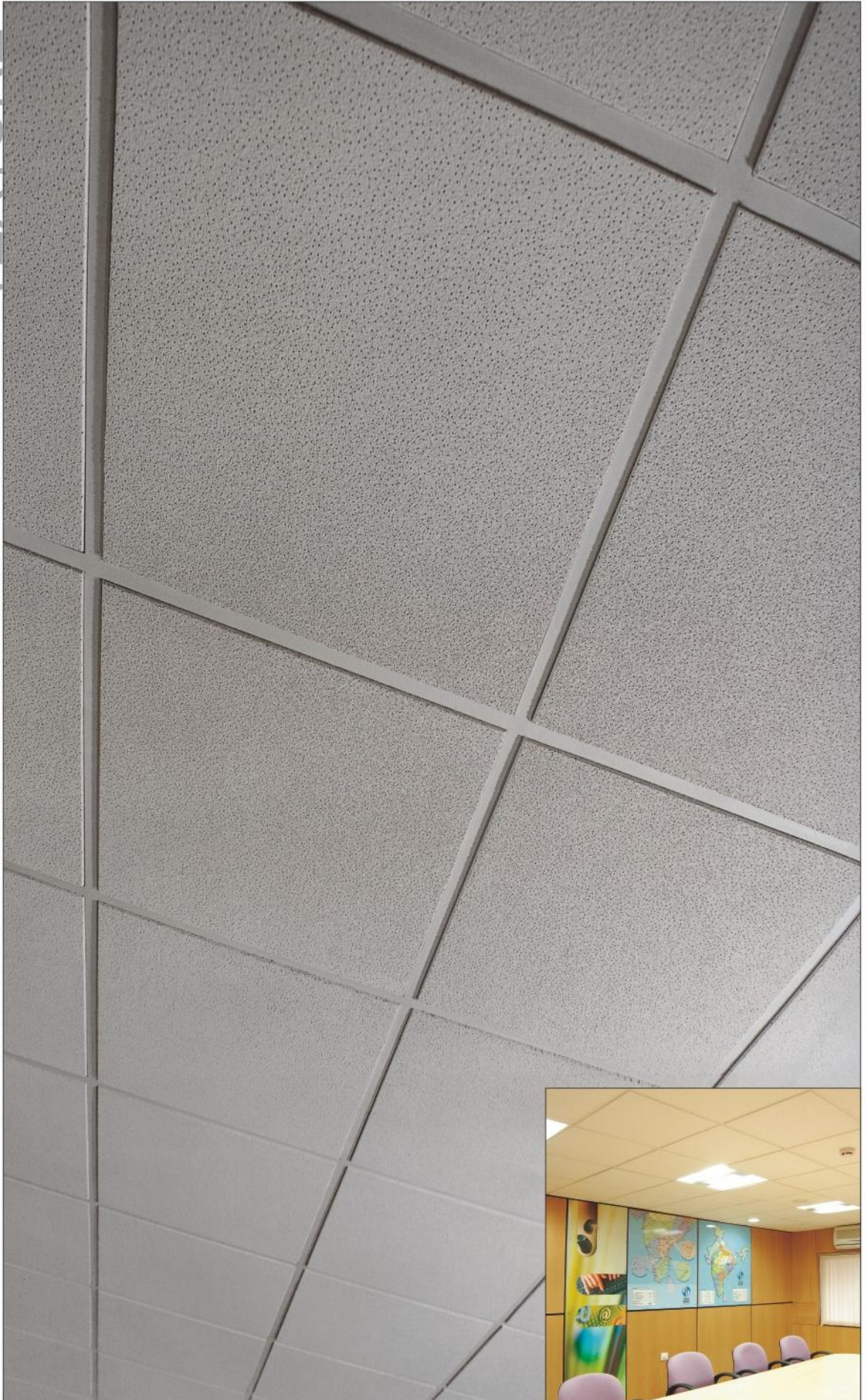
32dB



	Board	T - 24	T - 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>	 15mm	 10 mm 7 mm 15 mm	 5.5 mm 7 mm 15 mm	 5.5 mm 7 mm 15 mm
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Item No.</b>	4131	4132	4133	4133

Spintone

TEXTURE





# Spintone

A crisp finely granulated surface with microperforations to provide distinctive elegance to your interiors.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

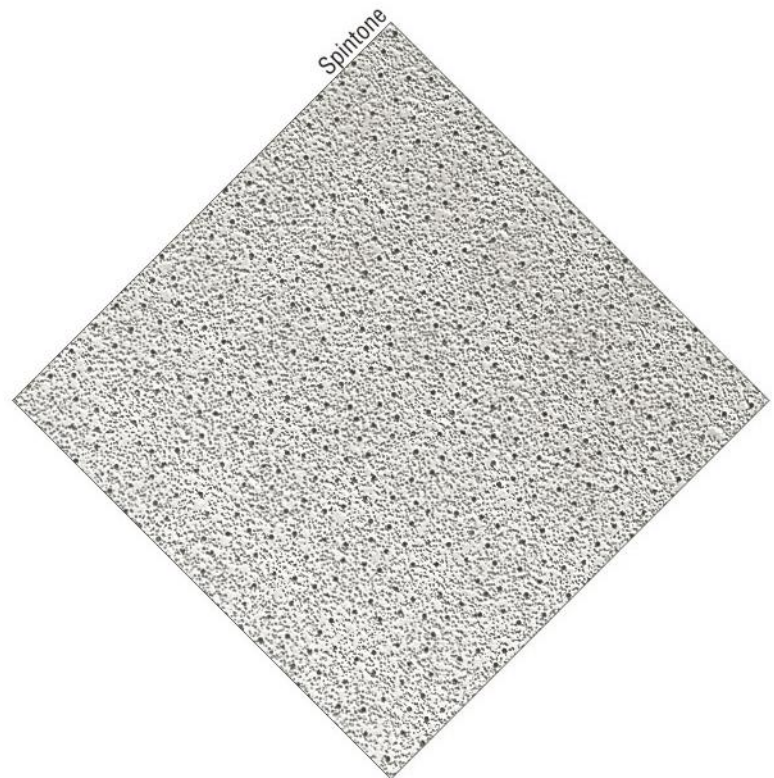
5.5 kgs/m<sup>2</sup>

## Sound absorption

NRC 0.50

## Sound attenuation

32dB



	Board	T - 24	T - 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>	 15 mm	 10 mm 7 mm 15 mm	 5.5 mm 7 mm 15 mm	 5.5 mm 7 mm 15 mm
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Item No.</b>	6131	6132	6133	6133

**Cosmos**

TEXTURE



# Cosmos

A lightly textured surface with microperforations. The non directional pattern ensures a smooth monolithic appearance ideally suited for today's contemporary interiors.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

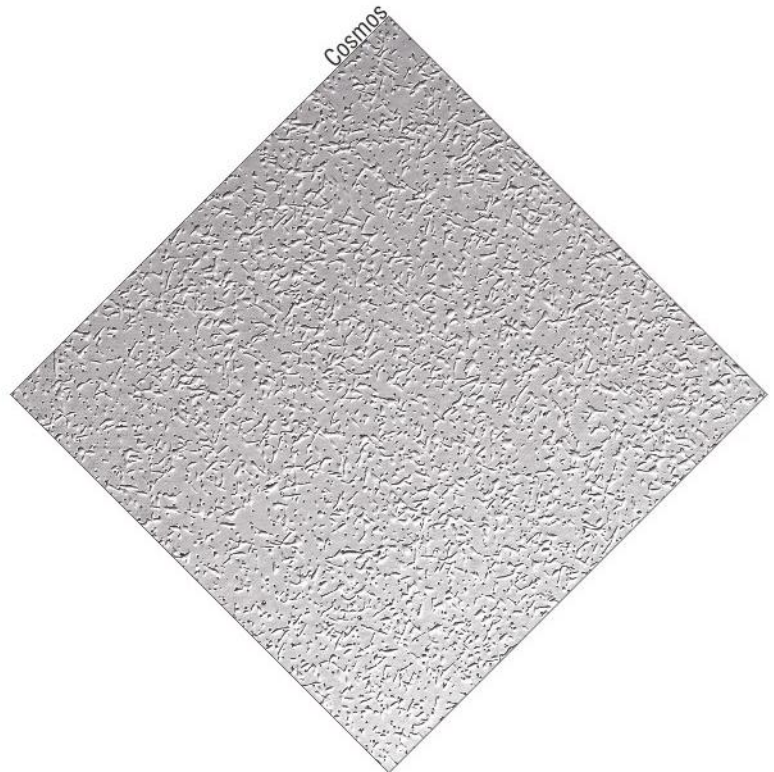
5.5 kgs/m<sup>2</sup>

## Sound absorption

NRC 0.50

## Sound attenuation

32dB



	Board	T - 24	T - 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>	 15mm	 10 mm 7 mm 15 mm	 5.5 mm 7 mm 15 mm	 5.5 mm 7 mm 15 mm
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Item No.</b>	7131	7132	7133	7133

Plain

TEXTURE



# Plain

A natural smooth surface which offers a high degree of light reflectance to maximise the effectiveness of indirect lighting fixtures. Plain allows the designer several design options including elegant borders and back drops for textured and design tiles.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

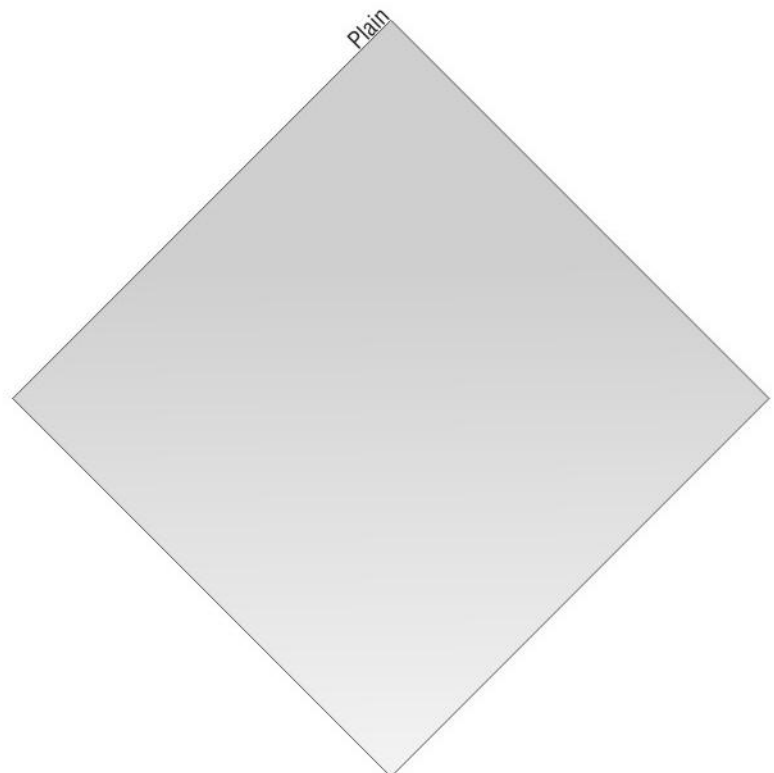
4.8 kgs/m<sup>2</sup>





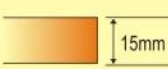
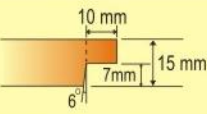
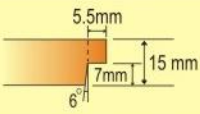
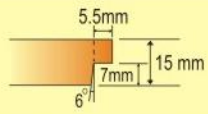
## Sound absorption

NRC 0.10

## Sound attenuation

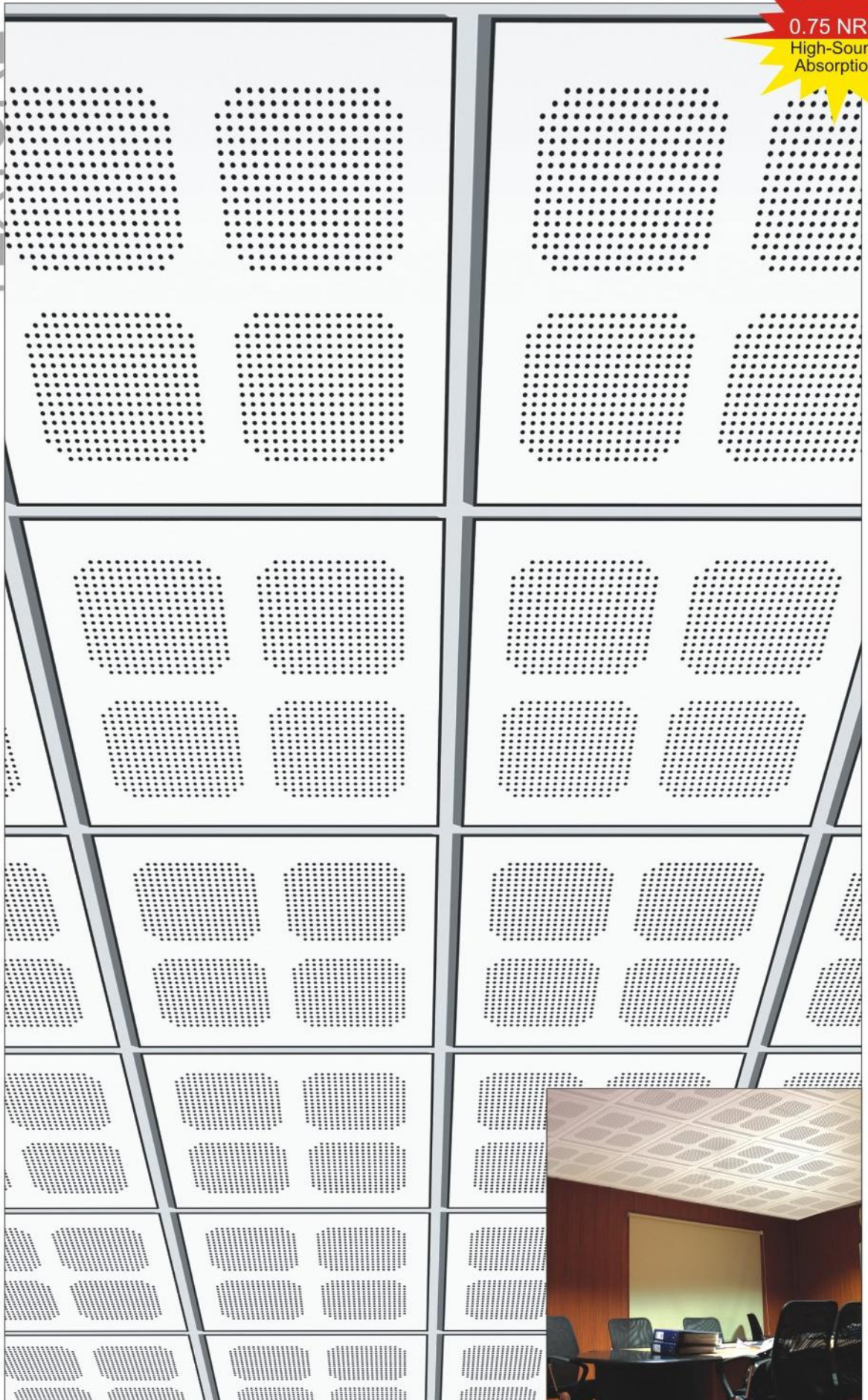
30dB



	Board	T - 24	T - 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>	 15mm	 10 mm 7mm 15 mm 6" H	 5.5mm 7mm 15 mm 6" H	 5.5mm 7mm 15 mm 6" H
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Item No.</b>	8131	8132	8133	8133

Globe

TEXTURE



**0.75 NRC**  
High-Sound  
Absorption



# Globe

A smooth surface with round through holes and backing of special acoustic mat for high sound absorption.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

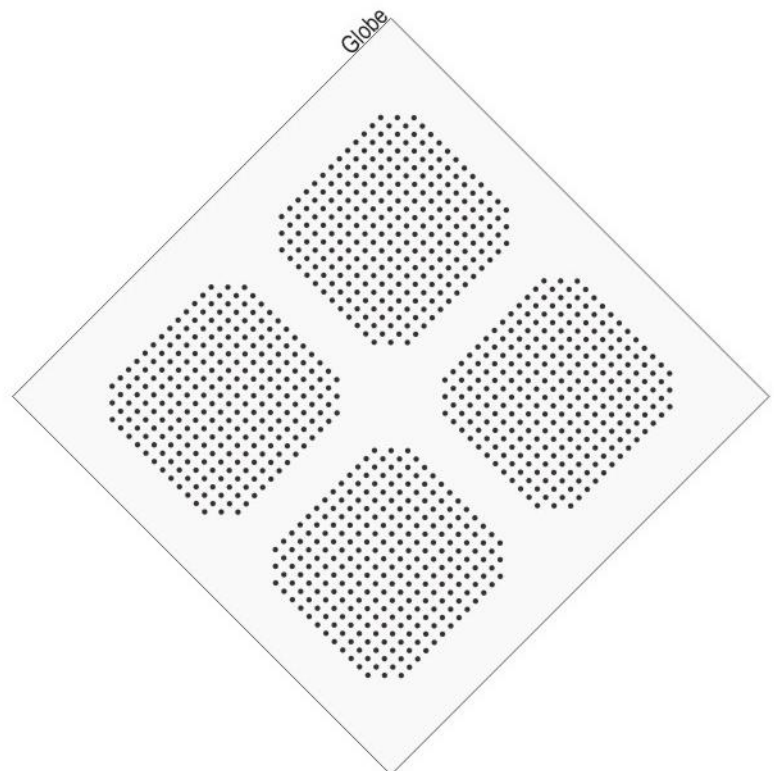
4.8 kgs/m<sup>2</sup>

## Sound absorption

NRC 0.75

## Sound attenuation

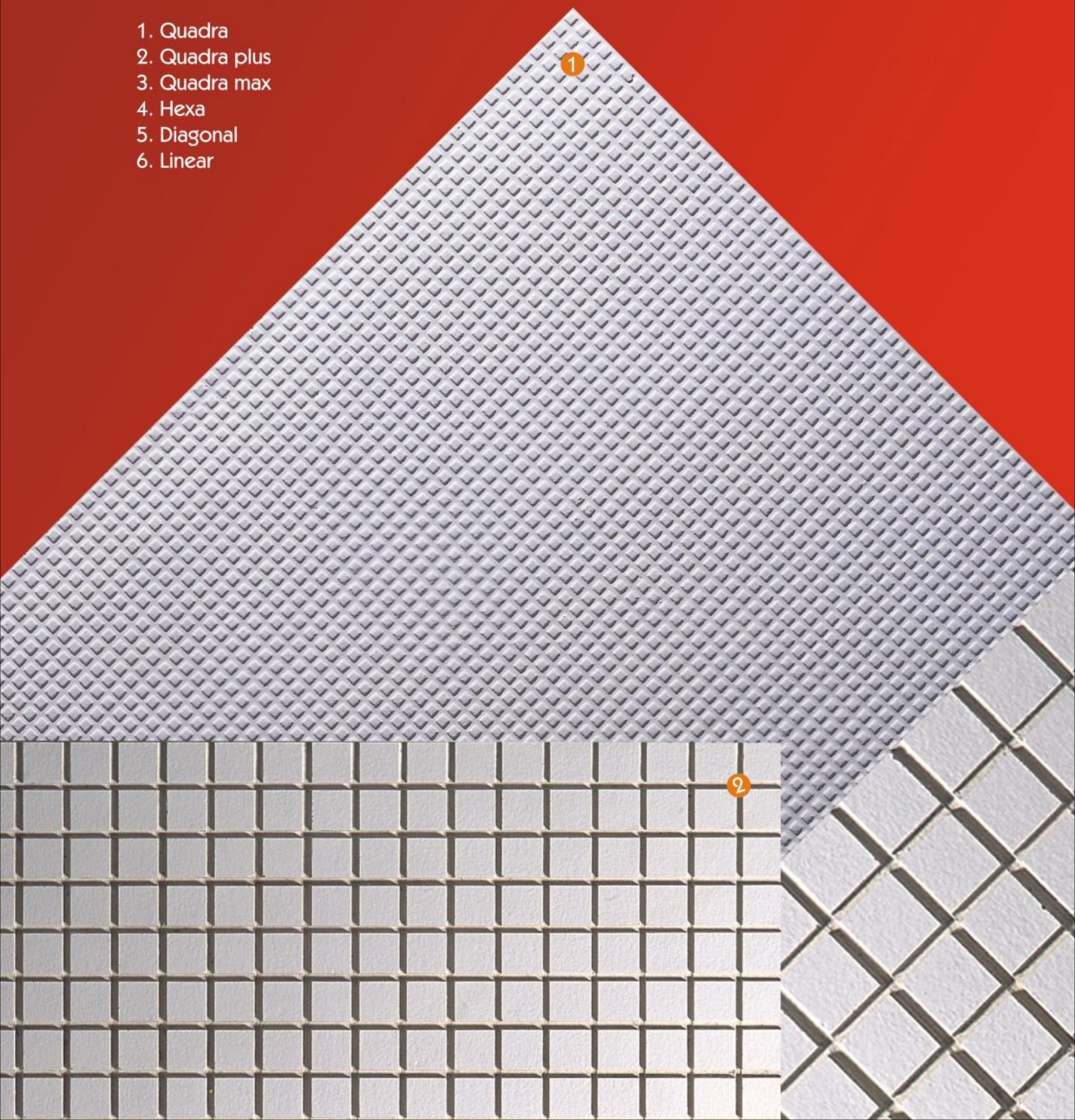
32dB



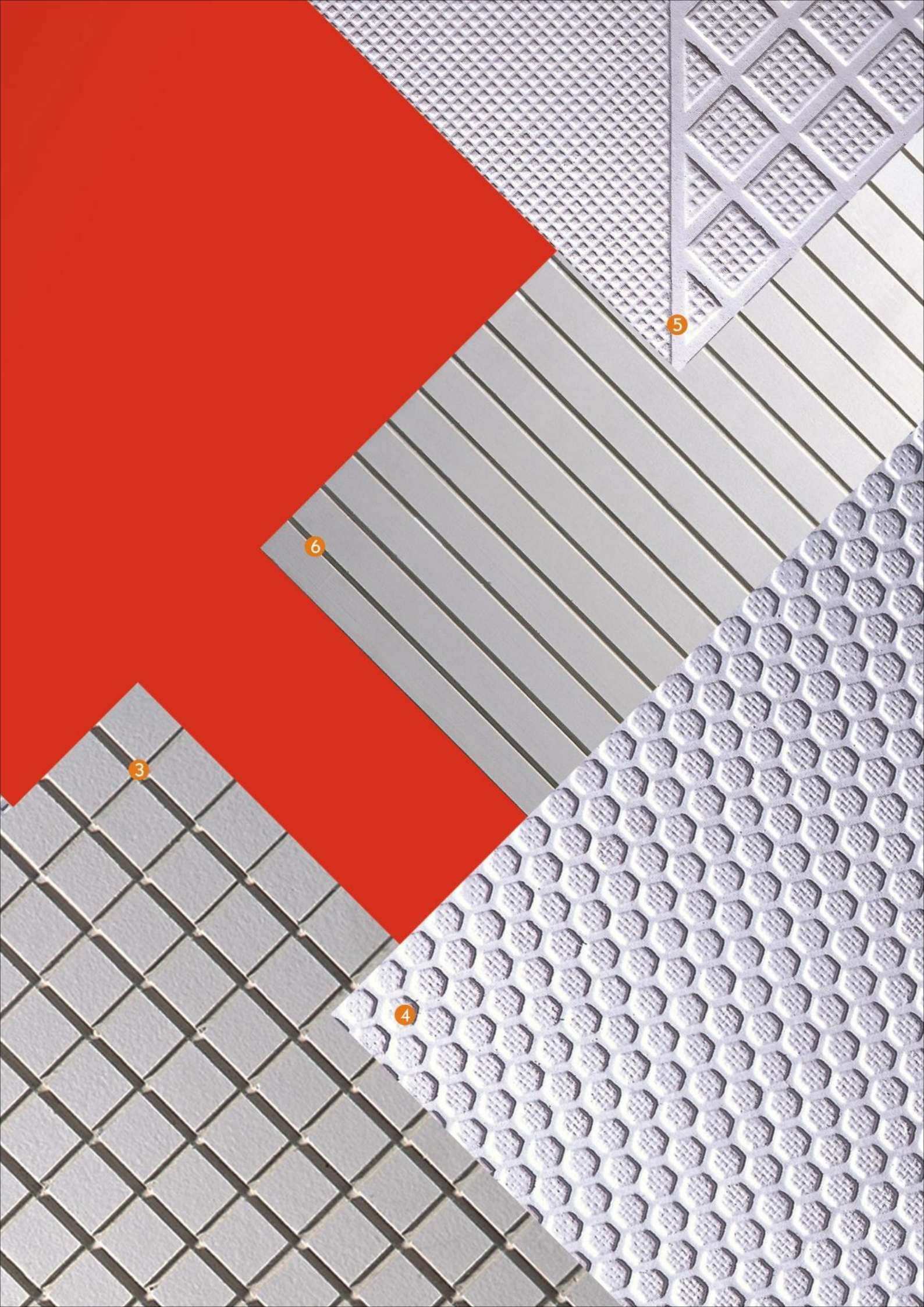
	Board	T - 24	T - 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>	 15mm	 10 mm 7 mm 15 mm 6" H	 5.5 mm 7 mm 15 mm 6" H	 5.5 mm 7 mm 15 mm 6" H
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Item No.</b>	11431	11432	11433	11433

# Design

1. Quadra
2. Quadra plus
3. Quadra max
4. Hexa
5. Diagonal
6. Linear







3

4

5

6

Quadra

DESIGN



# Quadra

The subtle geometric relief provided by the square studded surface is unobtrusive and pleasantly soothing. Quadra, by itself, or in combination with other available patterns, adds style and elegance to any space. By a suitable selection of the type and location of lighting fixtures, interesting shadow effects can be created to enhance the ceiling's beauty.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

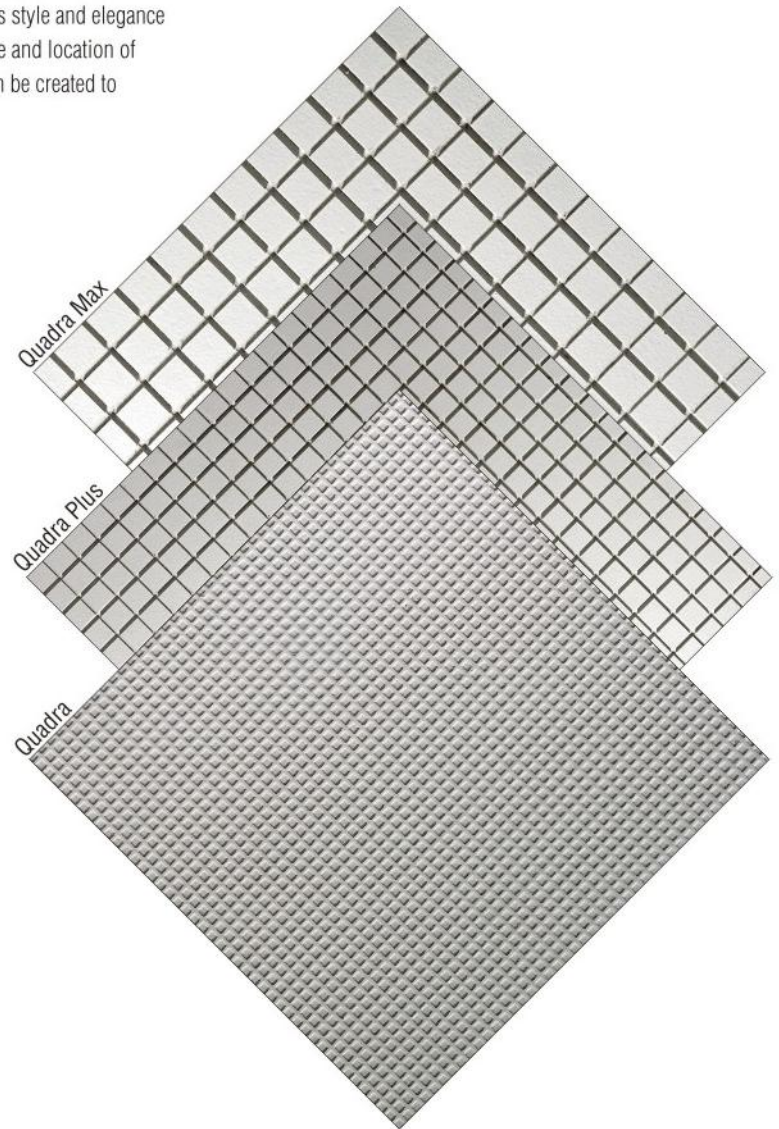
5 kgs/m<sup>2</sup>






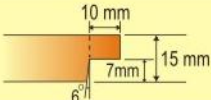
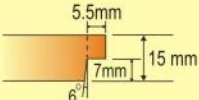
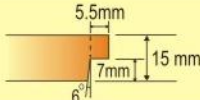
## Sound absorption

NRC 0.15

## Sound attenuation

30dB



	Board	T- 24	T- 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>	 15mm	 10 mm 7mm 6 <sup>h</sup> 15 mm	 5.5mm 7mm 6 <sup>h</sup> 15 mm	 5.5mm 7mm 6 <sup>h</sup> 15 mm
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Quadra Item No.</b>	9131	9132	9133	9133
<b>Quadra Plus Item No.</b>	10131	10132	10133	10133
<b>Quadra Max Item No.</b>	10231	10232	10233	10233

# Hexa

DESIGN



# Hexa

The hexagonal studded surface adds an oriental mystique to your ceiling which is refreshingly different. By a careful selection of the type and location of lighting fixtures, interesting shadow effects can be created to enhance the ceiling's beauty.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

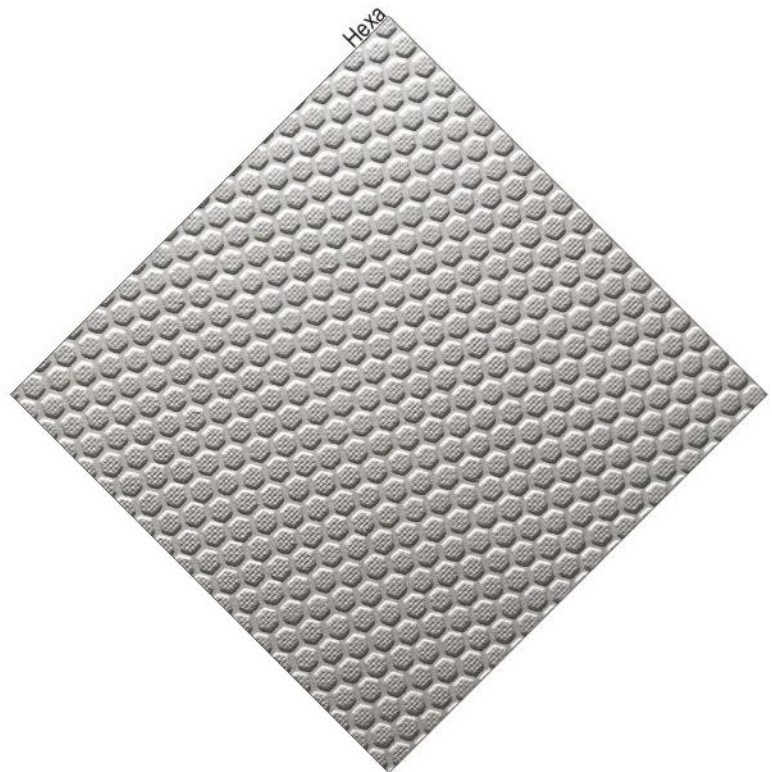
5 kgs/m<sup>2</sup>

## Sound absorption

NRC 0.15

## Sound attenuation

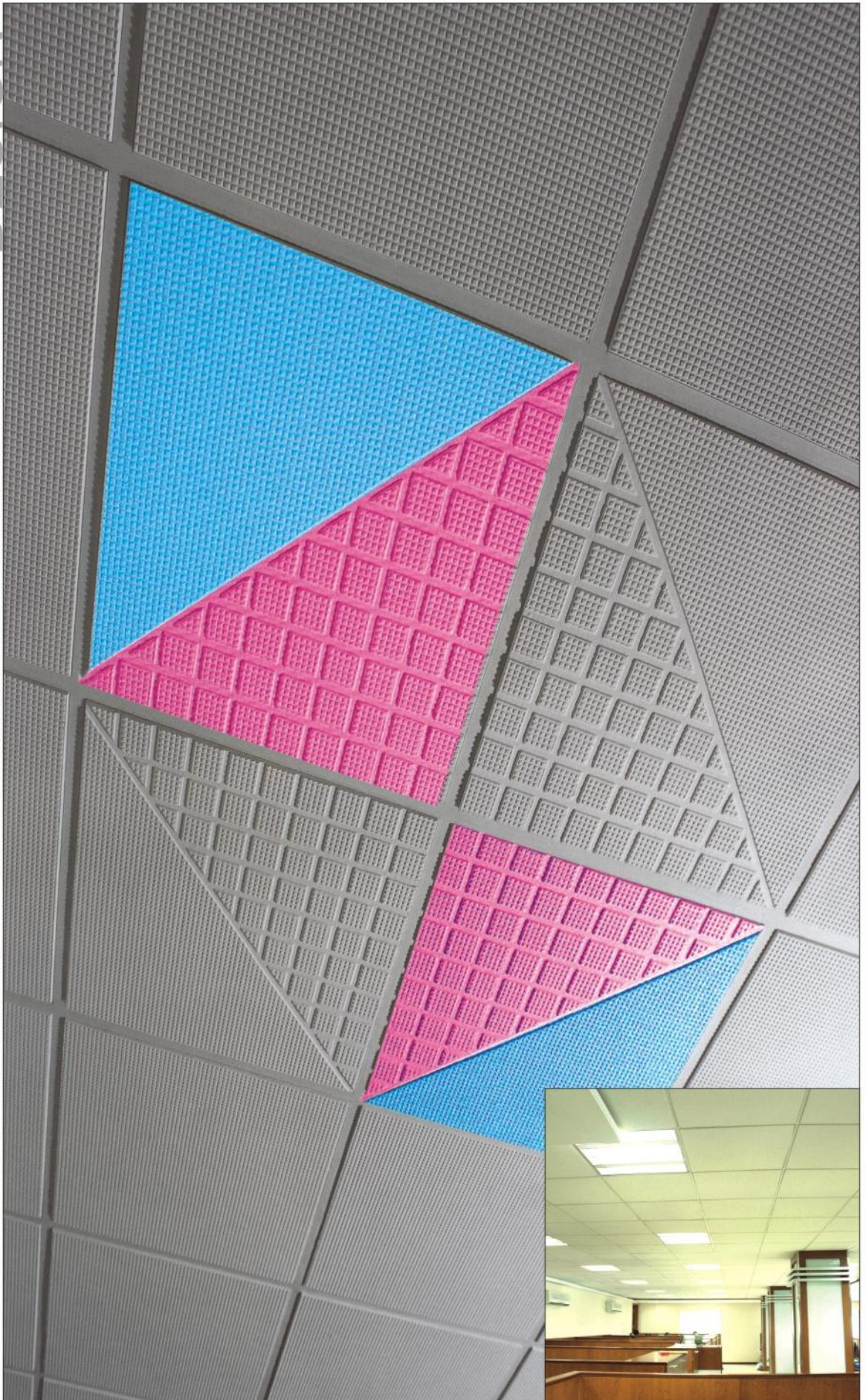
30dB



	Board	T - 24	T - 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>	 15mm	 10 mm 7 mm 15 mm 6" H	 5.5mm 7 mm 15 mm 6" H	 5.5mm 7 mm 15 mm 6" H
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Item No.</b>	10031	10032	10033	10033

Diagonal

DESIGN



# Diagonal

The combination of two different designs on either side of the diagonal in the same tile enables decorative panels to be created in the ceiling. Thus, the designer can use the multi-design option available to create truly inspiring ceilings.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

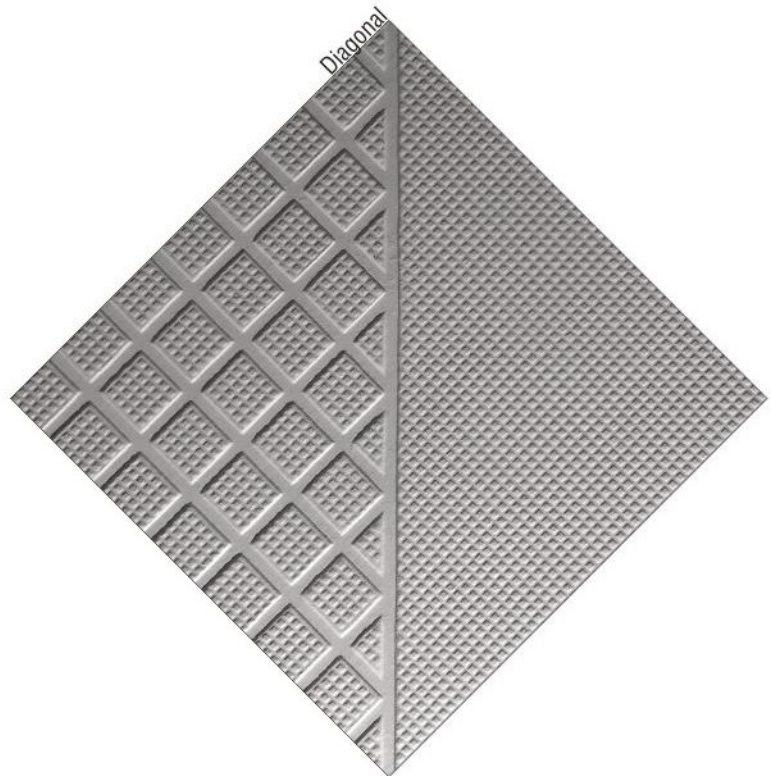
5 kgs/m<sup>2</sup>





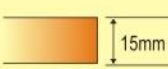
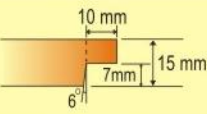
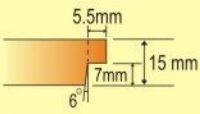
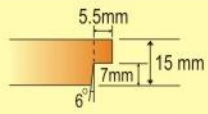
## Sound absorption

NRC 0.15

## Sound attenuation

30dB



	Board	T - 24	T - 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>				
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Item No.</b>	11231	11232	11233	11233

Linear

DESIGN





# Linear

The subtle linear relief presents a surface with unidirectional stripes which can be used to create extremely effective ceiling visuals either by itself or in combination with other patterns in the design range. Adjacent tiles located with transverse stripes are an interesting option.

## Humidity resistance

100% RH

## Fire resistance

Noncombustible  
as per BS 476 Part IV  
Class 0/Class 1  
as per BS 476 Part VI & VII

## Thermal conductivity

K value  $\leq 0.05$  W/m<sup>2</sup>k

## Light reflectance

>85%

## Weight

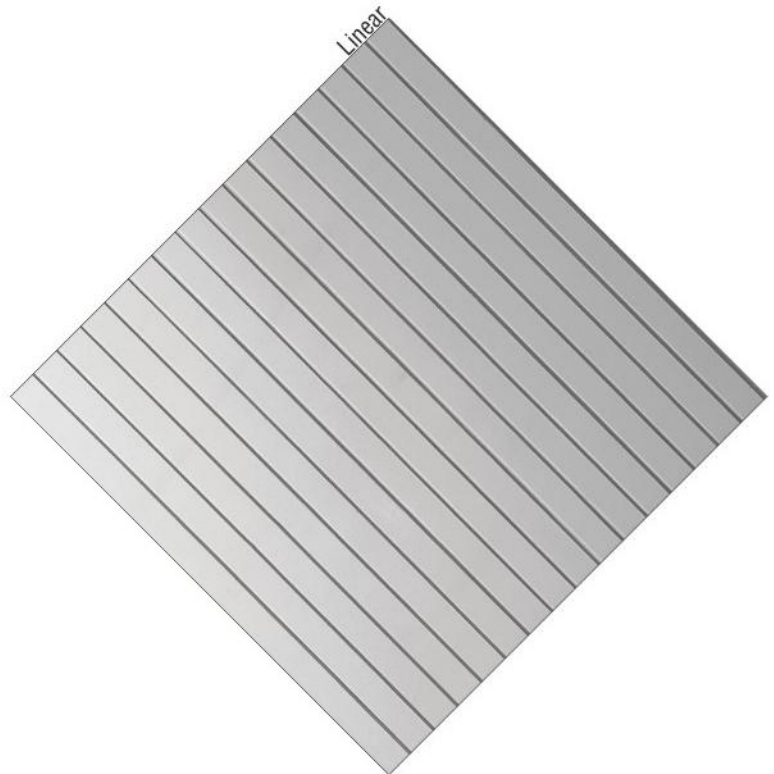
5 kgs/m<sup>2</sup>





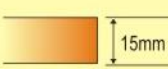
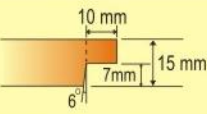
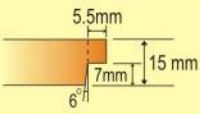
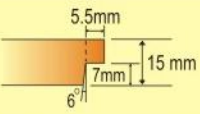
## Sound absorption

NRC 0.15

## Sound attenuation

30dB



	Board	T - 24	T - 15	Silhouette
<b>Grid System</b>	 24 mm	 24 mm	 15 mm	 15 mm
<b>Edge Detail</b>	 15 mm	 10 mm 7 mm 15 mm	 5.5 mm 7 mm 15 mm	 5.5 mm 7 mm 15 mm
<b>Module Size</b>	600x600 mm	600x600 mm	600x600 mm	600x600 mm
<b>Item No.</b>	11331	11332	11333	11333



GOVERNMENT OF INDIA  
CENTRAL PUBLIC WORKS DEPARTMENT

# DELHI SCHEDULE OF RATES 2016



Published under the Authority of Director General, CPWD, New Delhi

## NEW ITEMS 12.53

Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate tiles of approved texture Spintone /Cosmos / Hexa or equivalent of size 595 x 595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main "T" runner suitably, spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm centre to centre to form a grid of 1200 x 600mm and secondary cross "T" of length 600 mm and size 24x28 mm made of 0.33 mm thick (minimum) sheet to be inter locked at middle of the 1200 x 600 mm panel to form grid of size 600 x 600 mm, resting on periphery walls / partitions on a Perimeter wall angle pre-coated steel of size (24x24x3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15mm thick densified edges calcium ceiling tiles of approved texture (Spintone / Cosmos / Hexa) in the grid including, cutting / making opening for services like diffusers, grills, light, fittings, fixtures, smoke detectors etc., wherever required. Main "T" runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200mm centre to centre along main "T", bottom exposed with 24 mm of all T-sections shall be pre-painted with polyster backed paint for all heights, as per specifications, drawing and as directed by engineer-in-charge.

Note:- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames / opening (cut outs) having area less than 0.30 sqm. The calcium silicate ceiling tile shall have NRC. value of 0.50 (minimum) light reflection > 85%, non-combustible as per B.S 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/m OKC



**Indian Green Building Council**  
C/o-Confederation of Indian Industry  
CII - Sohrabji Godrej Green Business Centre  
Survey No. 64, Kothaguda Post, NearHITEC City,  
R R Siatrict, Hyderabad - 500 084, INDIA  
Tel: +91 )40)44185111 Fax: +91(40) 23112837  
Email : igbc@cii.in  
Web : www.greenbusinesscentre.com;  
www.igbc.in

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that **M/s Aerolite Ceiling Systems (A unit of Andhra Polymers Pvt Ltd.)** is one of the Members of Indian Green Building Council (IGBC) UNDER category: **Manufacturing / Product Suppliers.**

M/s Aerolite Ceiling Systems (A unit of Andhra Polymers Pvt Ltd.) membership number is **"IGBC - MP - 1357"**.

**Dr. Prem C Jain**  
Chairman, Indian Green Building Council.



### TO WHOMSOEVER IT MY CONCERN

Aerolite non-cementitious light-weight calcium silicate ceiling tiles are manufactured with 52% of recycled materials, qualifying as one of the best green building product, Ceiling Tiles available in the country.

Aerolite is an inorganic material. We do not use any Hazardous chemicals like formaldehyde for bonding or Neocide an anti bacterial chemical to avoid bacteria and fungus growth.

Aerolite is very safe to use and are eco-friendly **Green Product**

Aerolite is Non-combustible as per BS 476 Part IV

# भारत की राष्ट्रीय भवन निर्माण संहिता 2005 National Building Code of India 2005

## Group 1

### ANNEX - C

(Clauses 3.4.11.1, 4.18.2, 5.1.8, 5.2.2, 6.1.2, 6.2.3, 6.3.2, 6.4.3, 6.5.2, 6.6.2, 6.7.2, 6.8.2 and 6.9.2)

### FIRE PROTECTION REQUIREMENTS FOR HIGH RISE BUILDINGS - 15 m IN HEIGHT OR ABOVE

#### C-0 GENERAL

In addition to the general provisions given in this Part, the Authority may insist on suitable protection measures (see C-1 to C-11) in building 15 m in height or above.

#### C-1 CONSTRUCTION

C-1.1 All materials of constructions in load bearing elements, stairways and corridors and facades shall be non-combustible.



Aerolite's excellent thermal insulation helps to Save Energy.  
Thermal conductivity:  $\leq 0.05 \text{ W/m}^0 \text{ k}$



**MINISTRY OF POWER**  
Government of India

# ENERGY CONSERVATION BUILDING CODE

## Foreword

The Energy Conservation Act, 2001 (52 of 2001) empowers the Central Government under Section 14(p) read with Section 56(2) (1) to prescribe Energy Conservation Building Code (ECBC). The Code defines norms and standards of energy consumption expressed in terms of per square meter of the area wherein energy is used and includes the location of the building (section 2(j) of the Act). The Bureau of Energy Efficiency is mandated to take suitable steps to prescribe guidelines for ECBC under clause (p) of Section 14 of the Act (Section 13(2) (d) of the Act). In addition, the Central Government including the State Governments can amend the ECBC to suit regional and local climatic conditions (Section 14(q) and Section 15(a) of the Act) as well as direct every owner or occupier of the building or building complex, being designated consumer to comply with the provisions of the ECBC for efficient use of energy and its conservation (Section 14(r) and Section 15(b) of the Act). Further, the Central Government and State Government can direct, any designated consumer, if considered necessary for efficient use of energy and its conservation, to get energy audit conducted by an accredited energy auditor in such manner and at such interval of time as may be specified by regulations (Section 14(s) and 15 (c) of the Act).



Bureau of  
Energy Efficiency

### Storage and handling:

- Aerolite ceiling systems are supplied in neatly packed cartons.
- Store cartons flat in a dry locations.
- Handle cartons and individual tiles on edges or corners.
- Do not drop or stand cartons or tiles on edges or corners.
- Open cartons completely and Using both hands, remove tiles in pairs with faces together.

### Installation:

Always follow recommended installation procedure to ensure aesthetics and performance. Ensure the following before installation of the Aerolite ceiling system:

- The area is dry prior to ceiling installation work.
- All wet trades are completed such as plastering, flooring, etc.,.
- Air conditioning ductwork is completed.
- Electrical chasing or drawing lines, etc. are in place.
- No unauthorised weight is put on ceiling. Lighting fixtures to be suspended independently.
- The laying of ceiling tiles in the gridwork is recommended to be done as the last work before completion of interiors.

*Further detailed information on procedure can be provided on request.*

### Redecoration:

Aerolite ceiling can be re-painted, \*We recommend using a standard dispersion type emulsion.

*\* Re-Painting may affect the acoustical performance of the ceiling tile*

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## 10-year Guarantee

Andhra Polymers Pvt. Ltd., Span Solitaire, 6-3-1090/B/5, Rajbhavan Road, Hyderabad 500 082, India guarantees "AEROLITE" Non-cementitious Calcium Silicate Ceiling Tile sold by it shall be free from sag\* caused as a direct result of defect in material for 10 years from the date of installation of the material subject to the conditions set forth below:

- Aerolite should be installed by experienced contractors in compliance with APPL's specifications and conditions.
- Installations shall be done in areas free from chemical fumes / freezing temperatures and vibrations.
- Aerolite shall not be used to support any unauthorised loads.
- Aerolite shall be mechanically suspended properly and shall not be cemented nor glued to the surface of any other material.
- Prior to installation, Aerolite shall be stored in a dry and clean area, enclosed and protected from any possible damages.

In spite of the observance of the above conditions, should there be any sagging, it must be informed to Andhra Polymers Pvt. Ltd. in writing within seven days after first observation of such sagging. After necessary inspection and survey of the case and acknowledgment, APPL shall furnish new material for replacement in the same or similar specifications and in equal quality, which is acknowledged by APPL as sagged.

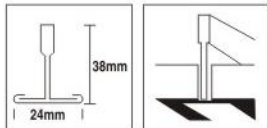
Any such replacement of Aerolite shall constitute the responsibility of APPL and APPL shall not be responsible for any installation or replacement costs or for incidental or consequential damages of any nature.

*\*N.B. Maximum sag as defined in the appropriate code of practice in the country or British code of practice.*

## Guide Specifications

### 24 mm exposed grid system

#### Guide specification No.1 for butt (square) edge tiles



Butt

Board

Aerolite Butt edge ceiling tile (finish) of size 600 x 600 x 15mm densified edge item code (....)

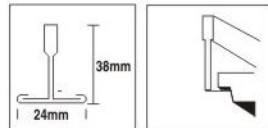
#### Suspension System:

Shall be of stitched exposed T-24 laying-in system to fit in 600 x 600mm ceiling modules. It shall be suspended to the soffit by a proprietary 4mm diameter adjustable quick fit hanger system.

**Installation:** To comprise main runners spaced at 1200 mm centres securely fixed to the structural soffit by approved hangers at 1200 mm maximum centres and not more than 150 mm from spliced joints. The last hanger at the end of each runner should not be greater than 600 mm from the adjacent wall.

600 x 600 mm modules to be formed by fitting 600 mm long flush fitting cross tees centrally between the 1200 mm cross tees.

#### Guide specification No.2 for Tegular - 24 mm wide edge



T-24

Tegular

Aerolite Tegular edge ceiling tile (finish) of size 600 x 600 x 15mm densified edge item code (....)

#### Suspension System:

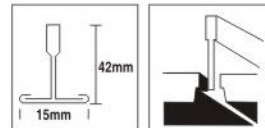
Shall be of stitched exposed T-24 laying-in system to fit in 600 x 600mm ceiling modules. It shall be suspended to the soffit by a proprietary 4mm diameter adjustable quick fit hanger system.

**Installation:** To comprise main runners spaced at 1200 mm centres securely fixed to the structural soffit by approved hangers at 1200 mm maximum centres and not more than 150 mm from spliced joints. The last hanger at the end of each runner should not be greater than 600 mm from the adjacent wall.

600 x 600 mm modules to be formed by fitting 600 mm long flush fitting cross tees centrally between the 1200 mm cross tees.

### 15 mm exposed grid system

#### Guide specification No.3 for Micro Look edge tiles



T-15

Micro Look

Aerolite Micro Look tegular edge ceiling tile (finish) of size 600 x 600 x 15mm densified edge item code (....)

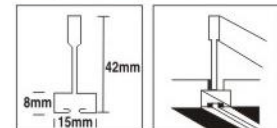
#### Suspension System:

Shall be of stitched exposed T-15 laying-in system to fit in 600 x 600mm ceiling modules. It shall be suspended to the soffit by a proprietary 4mm diameter adjustable quick fit hanger system.

**Installation:** To comprise main runners spaced at 1200 mm centres securely fixed to the structural soffit by approved hangers at 1200 mm maximum centres and not more than 150 mm from spliced joints. The last hanger at the end of each runner should not be greater than 600 mm from the adjacent wall.

600 x 600 mm modules to be formed by fitting 600 mm long flush fitting cross tees centrally between the 1200 mm cross tees.

#### Guide specification No.4 for Micro Look edge with Silhouette reveal profile Suspension System



Silhouette Module

Micro Look

Aerolite Micro Look tegular edge ceiling tile (finish) of size 600 x 600 x 15mm densified edge item code (....)

#### Suspension System:

Silhouette reveal grid system with 15 mm wide flanges incorporating a 3 or 6 mm central recess. Colours (state all white or all black or white with black reveal). Silhouette main runner & cross tees to have mitered ends and "birdsmouth" notches to provide mitered cruciform junction.

**Installation:** To comprise main runners spaced at 1200 mm centres securely fixed to the structural soffit by approved hangers at 1200 mm maximum centres and not more than 150 mm from spliced joints. The last hanger at the end of each runner should not be greater than 600 mm from the adjacent wall.

600 x 600 mm modules to be formed by fitting 600 mm long flush fitting cross tees centrally between the 1200 mm cross tees.

The 1200 mm cross tees to have central "birdsmouth" notches to facilitate 600 mm cross tees.



## **AEROLITE CEILING SYSTEMS**

(A Unit of Andhra Polymers Pvt. Ltd.)

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