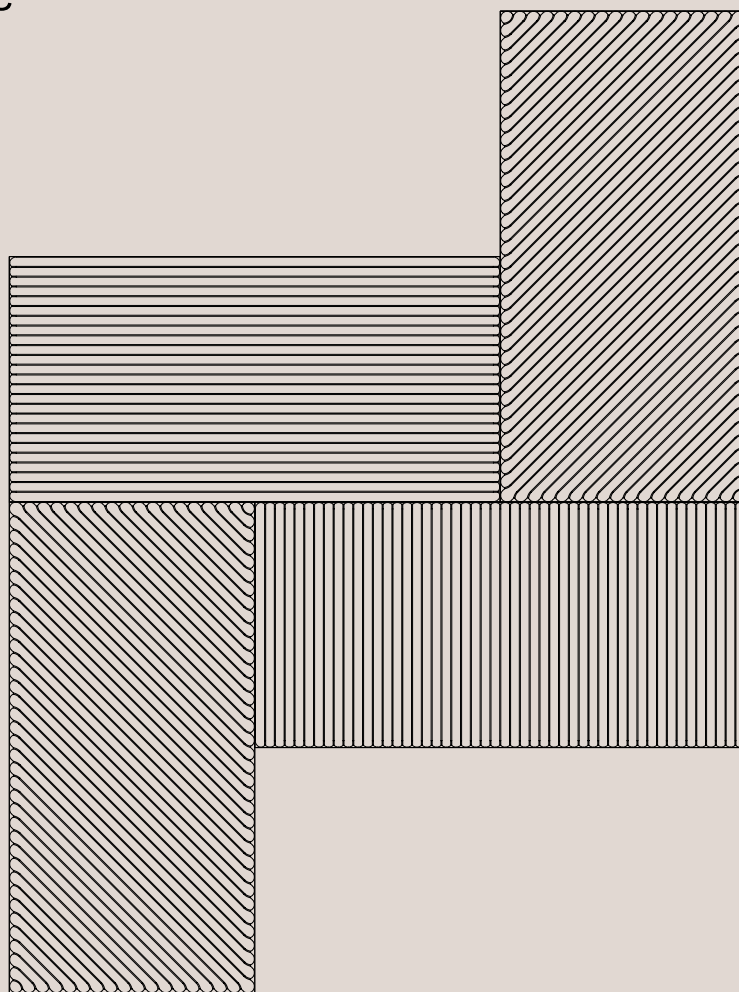


IMPACT ACOUSTIC®



Archisonic® Cotton⁴ Wall Tiles

938.12.24.000.00

938.13.24.000.00

938.14.24.000.00

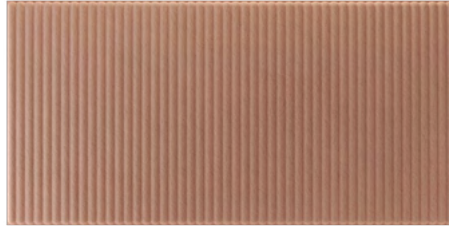
TECHNICAL DATA SHEET

Archisonic® Cotton⁴ Tile

General Information



Longitude
(938.12.24.000.00)



Latitude
(938.13.24.000.00)



Diagonal
(938.14.24.000.00)

Data

Dimensions¹

Length	600mm	23.6"
Height	300mm	11.8"
Thickness	24mm	0.9"

Material

Wall Covering Archisonic® Cotton (100% circular) in 24 colors

Weight²

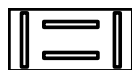
24mm / 0.95"	5.5 kg/m ²	1.13 lbs/ft ²
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Included

Archisonic Cotton Tiles (14 pieces)



Z-Clip Installation Jig (if ordered with Z-Clips)



Installation guide



Take back program

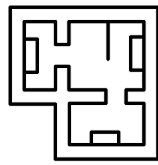


¹ - all dimensions are nominal ² - all weights are nominal
⁴ - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

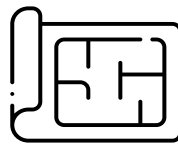
Archisonic® Cotton⁴ Tile

Specification Guide

1 Prepare this information:



Project Area

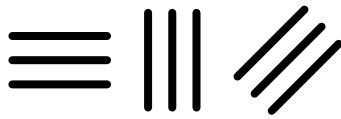


Plans



Other Considerations

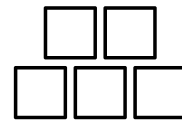
2 Specify your Cotton Tile:



Pattern
page 4-7



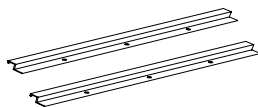
Color
page 9-11



Quantity
multiples of 14 tiles
(2.5 m² / 27 ft²)*

3 Specify your mounting add-on:

Article Numbers:



Mounting
Z-Clip profiles

938.12.10.000.00: Z-Clip Set for the tiles (28x 260mm Z-Clips, incl. Screws)

938.12.20.000.00: Z-Clip Set for the wall (7x 1200mm Z-Clips, excl. Screws)

NOTE: The amount of Z-clips for the wall may vary depending on the installation:

- For tiles in vertical position, you will need one of each set of z-clips per box.
- For tiles in horizontal position, you need 1x set of Z-clips for the tiles and 2x sets of Z-clips for the wall.
- For tiles in horizontal AND vertical position, you will need 1x set of Z-clips of tiles and 2x sets of Z-clips for the wall.
- It is always recommended to check over all quantities of Z-clips for the walls with our Consultancy Team.

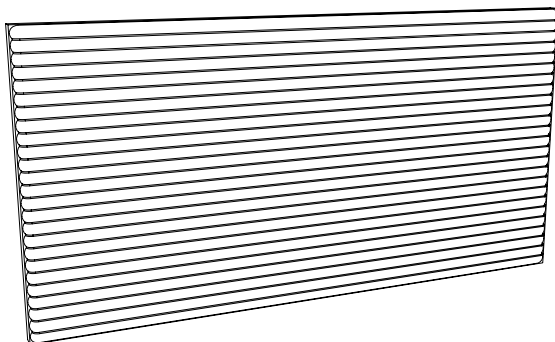
* Archisonic® Cotton Tiles are supplied in a pack of 14 tiles (2.5m² / 27ft²)
4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

Archisonic® Cotton⁴ Tile

Product Family Overview

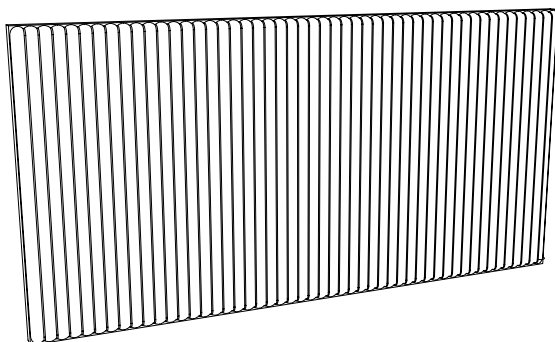
1 Longitude

938.12.24.000.00 - Longitude Pattern Tile



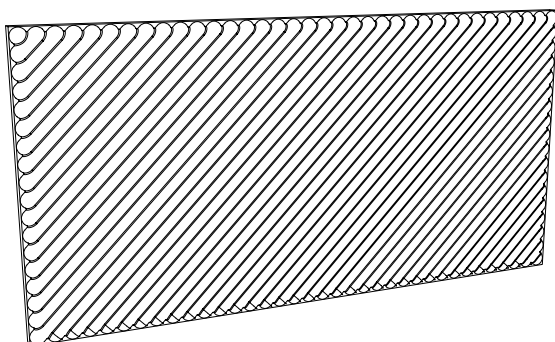
2 Latitude

938.13.24.000.00 - Latitude Pattern Tile



3 Diagonal

938.14.24.000.00 - Diagonal Pattern Tile

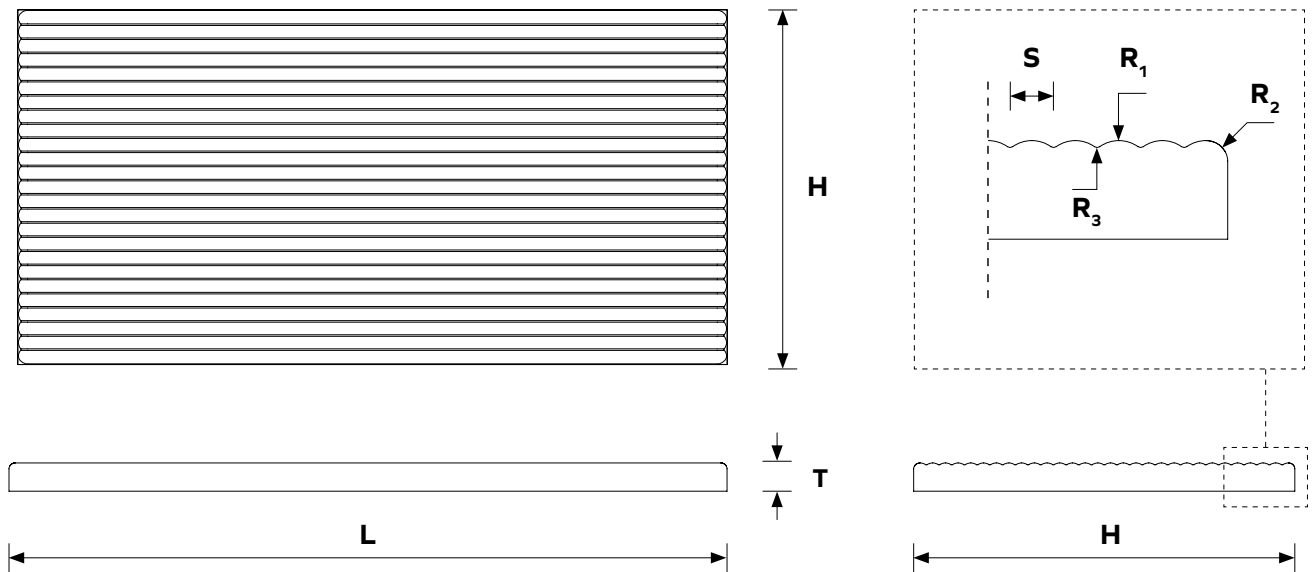


4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

Archisonic Cotton Tile

Geometry Information

Longitude 938.12.24.000.00



Dimensions table

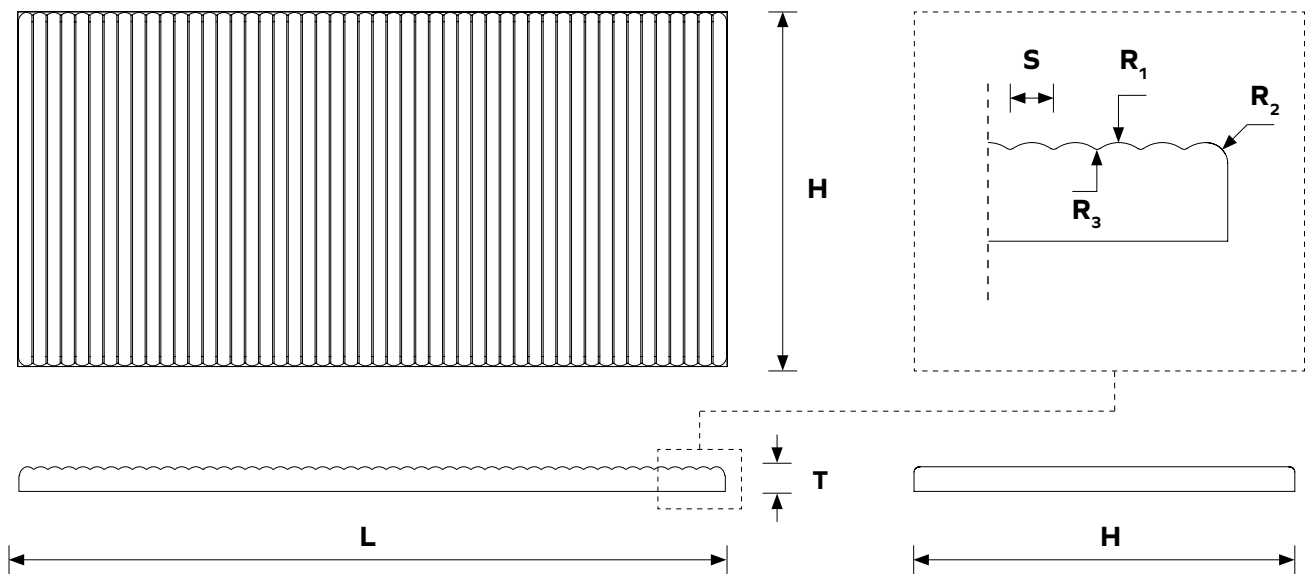
L	Lenght	600 mm	23.6"
H	Height	300 mm	11.8"
T	Thickness	24 mm	0.9"
S	Spacing	10 mm	0.39"
R₁	Radius	7 mm	0.27"
R₂	Radius	5 mm	0.2"
R₃	Radius	1 mm	0.05"

4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

Archisonic Cotton Tile

Geometry Information

Latitude 938.13.24.000.00



Dimensions table

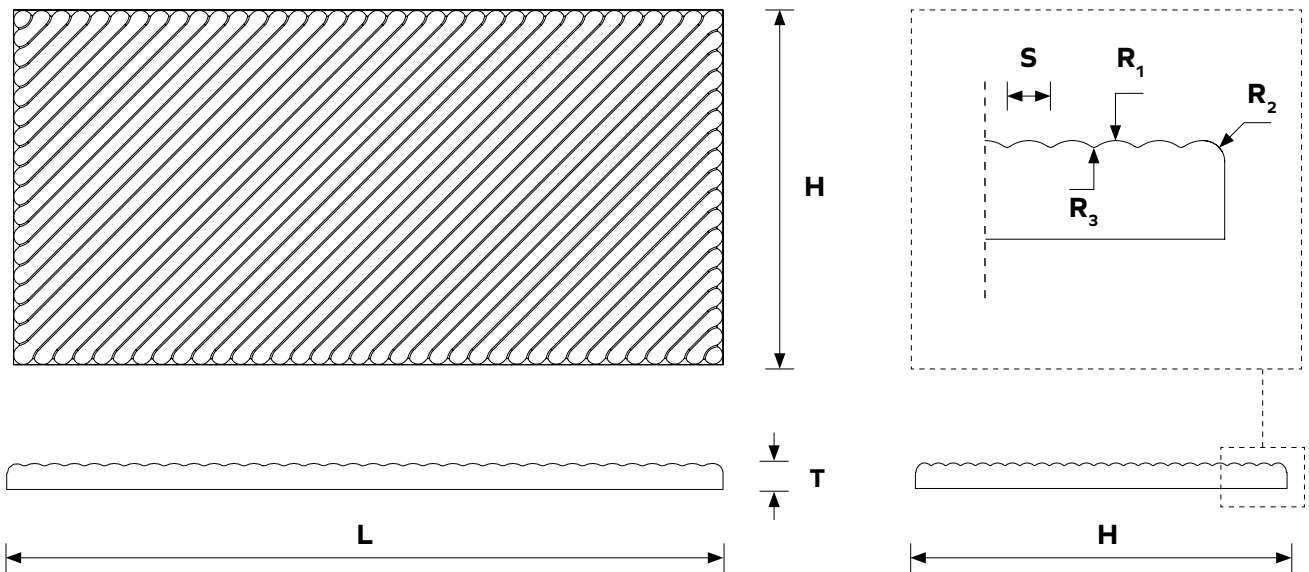
L	Lenght	600 mm	23.6"
H	Height	300 mm	11.8"
T	Thickness	24 mm	0.9"
S	Spacing	10 mm	0.39"
R₁	Radius	7 mm	0.27"
R₂	Radius	5 mm	0.2"
R₃	Radius	1 mm	0.05"

4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

Archisonic Cotton Tile

Geometry Information

Diagonal 938.14.24.000.00



Dimensions table

L	Lenght	600 mm	23.6"
H	Height	300 mm	11.8"
T	Thickness	24 mm	0.9"
S	Spacing	10 mm	0.39"
R₁	Radius	7 mm	0.27"
R₂	Radius	5 mm	0.2"
R₃	Radius	1 mm	0.05"

4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

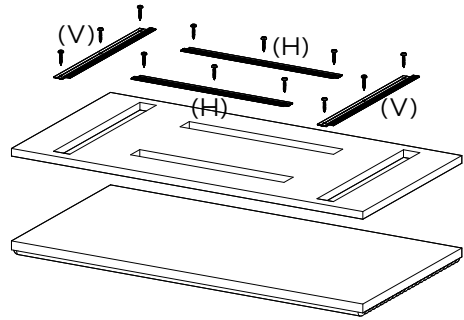
Archisonic Cotton Tile

Recommended Installation Method

Not included in the scope of delivery.

1 Screw the Z-clips to the tiles.

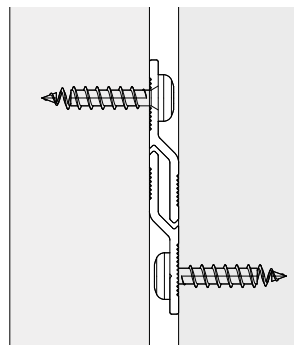
Screw the Z-clips to the tiles using the cardboard jig supplied. For a horizontal position of the tile, fix 2x Z-clips in parallel to the long edge of tile (H), for a vertical position, do this in parallel to the short edge of the tile (V).



2 Screw Z-clips to the wall

When screwing the Z-clips to the wall, it is recommended to use every third hole in the profile. Please note a distance of 46mm (1.8in) from the bottom z-clip to the start of the covered area is recommended.

If the tiles are to be installed all horizontally or in both vertical and horizontal positions, a greater number of Z-clip sets will be required for the wall. It is always recommended to check over all quantities of Z-clips for the walls with our Consultancy.

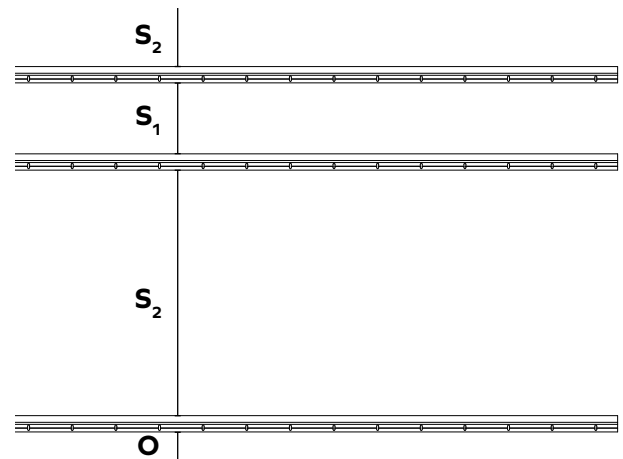


Bottom edge of 1st tile

Bottom edge of 1st tile



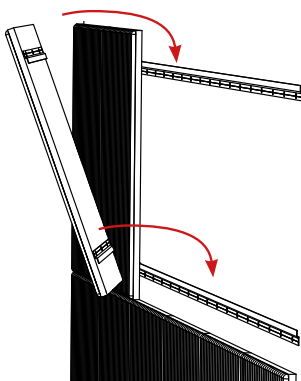
Spacing for horizontal or mixed layouts



Spacing for vertical layouts

3 Hanging the tiles

Hook the tiles into place.



Dimensions table

O	Offset	46 mm	1,8"
S₁	Spacing 1	122 mm	4,8"
S₂	Spacing 2	422 mm	16,6"

4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

ARCHISONIC®

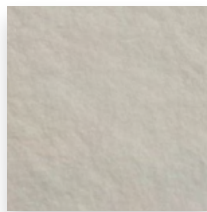
Colours

Our innovative Archisonic Cotton wall tiles, crafted from sustainably sourced cotton linters mixed with kaolin, earth pigments, and water, showcase a unique and natural texture. Due to the organic nature of these materials, slight variations in colour and texture are a testament to their authenticity and eco-friendly production process, with these variations being more noticeable in darker colours than in brighter ones. These subtle differences not only enhance the aesthetic appeal of each tile but also highlight our commitment to creating beautiful, fully circular products with superior noise-absorbing properties.

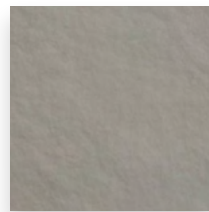
Neutrals

24 mm

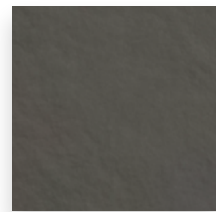
Neither warm nor cool, this group features three tones of Shadow. Designer White, as the cleanest white available is an essential standalone colour.



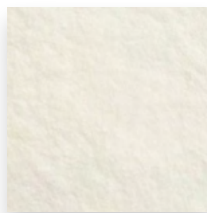
Shadow
20



Shadow
30



Shadow
50

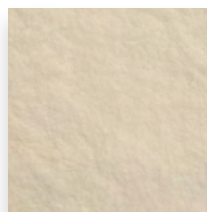


Designer White
00

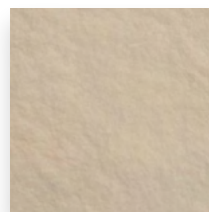
Warm Neutrals

24 mm

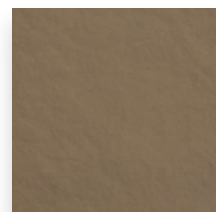
A timeless and classic warm neutral scale represented by three tones of Flax.



Flax
10



Flax
30



Flax
50

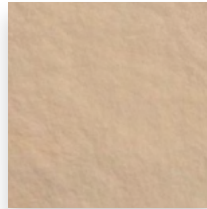
ARCHISONIC®

Colours

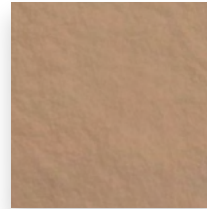
Yellows+Oranges

24 mm

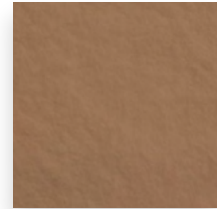
A duo tone of Wheat and three tones of Almond create a small group of yellows and oranges.



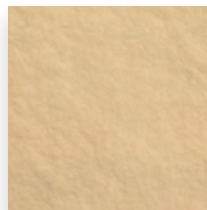
Almond
20



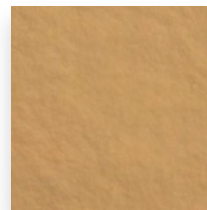
Almond
30



Almond
40



Wheat
30

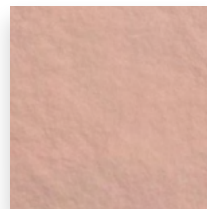


Wheat
50

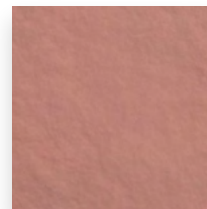
Reds+Pinks+ Purples

24 mm

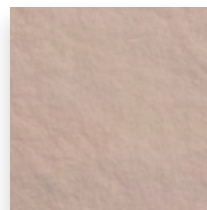
Featuring a duo tone of Rose and a duo tone of the shaded red, Pigeon.



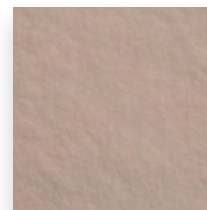
Rose
20



Rose
50



Pigeon
20



Pigeon
30

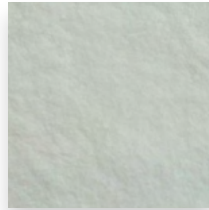
ARCHISONIC®

Colours

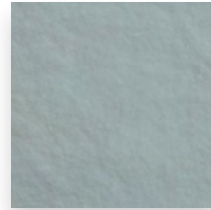
Blues

24 mm

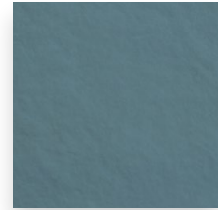
A classic, easy blue scale represented by three tones of Denim.



Denim
10



Denim
30

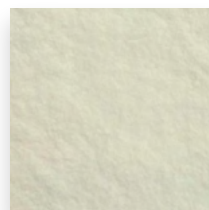


Denim
40

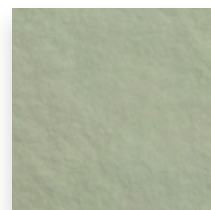
Greens

24 mm

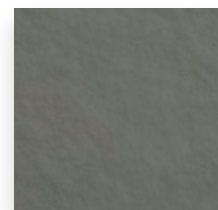
A duo tone of the fresher Aloe and three tones of the more shaded Sage create a commercial group of greens.



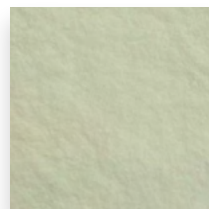
Sage
10



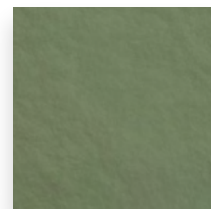
Sage
30



Sage
50



Aloe
30



Aloe
50

ARCHISONIC®

Cotton

Density

250kg/m³

15.6lbs/ft³

(+/-10%)



EN 15102: 2007 + A1: 2011
0497

Tile thickness

24mm

0.94"

(+/-10%)

Composition

73% cotton cellulose, 26% mineral components
(micronized kaolin, colouring earths, fireproof salts),
<1% acrylic resin

Fire rating

B-s1, d0

Class 1

EN ISO 13823:2010

(tested with Pattex adhesive)

VOC emission

A+

UNI EN ISO 16000-9: 2006 + ISO 16000-6: 2011

Care instructions

Gently clean with a vacuum cleaner or a dry cloth.

Do not use water, soap or liquid detergents.

4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

Archisonic® Cotton⁴ Tile

NCS Colour Codes

Developed by Colour Hive

Neutrals	Shadow 20	Shadow 30	Shadow 50	Designer White 00	
NCS Code	S 1500 N	S 4000 N	S 7500 N	S 0300-N	
Warm Neutrals	Flax 10	Flax 30	Flax 50		
NCS Code	S 0603-Y40R	S 3010-Y30R	S 5010-Y30R		
Yellows+Oranges	Almond 20	Almond 30	Almond 40	Wheat 30	Wheat 50
NCS Code	S 0907-Y50R	S 2010-Y50R	S 5020-Y50R	S 0515-Y20R	S 1030-Y20R
Reds+Pinks+Purples	Rose 20	Rose 50	Pigeon 20	Pigeon 30	
NCS Code	S 1020-Y90R	S 2020 Y90R	S 2010-Y90R	S 4010-Y90R	
Blues	Denim 10	Denim 30	Denim 40		
NCS Code	S 0505-B	S 3010-B	S 4020-B		
Greens	Sage 10	Sage 30	Sage 50	Aloe 30	Aloe 50
NCS Code	S 1505-G50Y	S 2005-G50Y	S 6005-G50Y	S 1010 G30Y	S 4020-G30Y

These NCS codes are the closest visual match available and may not be exact to natural pigments.

Circularity

ARCHISONIC® Cotton addresses the issue of sound absorption while being fully circular. Circularity refers to the idea of designing products and processes that are inherently restorative and regenerative. This means that they aim to eliminate waste and pollution while creating a closed-loop system in which resources are used efficiently and sustainably.

ARCHISONIC® Cotton embodies this concept by using only natural and renewable materials in its production process. The main component of the material is cellulose derived from cotton linters, a by-product of the cotton industry that would otherwise be discarded. The production process is also designed to be circular, recycling, and reusing water and minimising waste.

Handcrafted in Italy.

4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

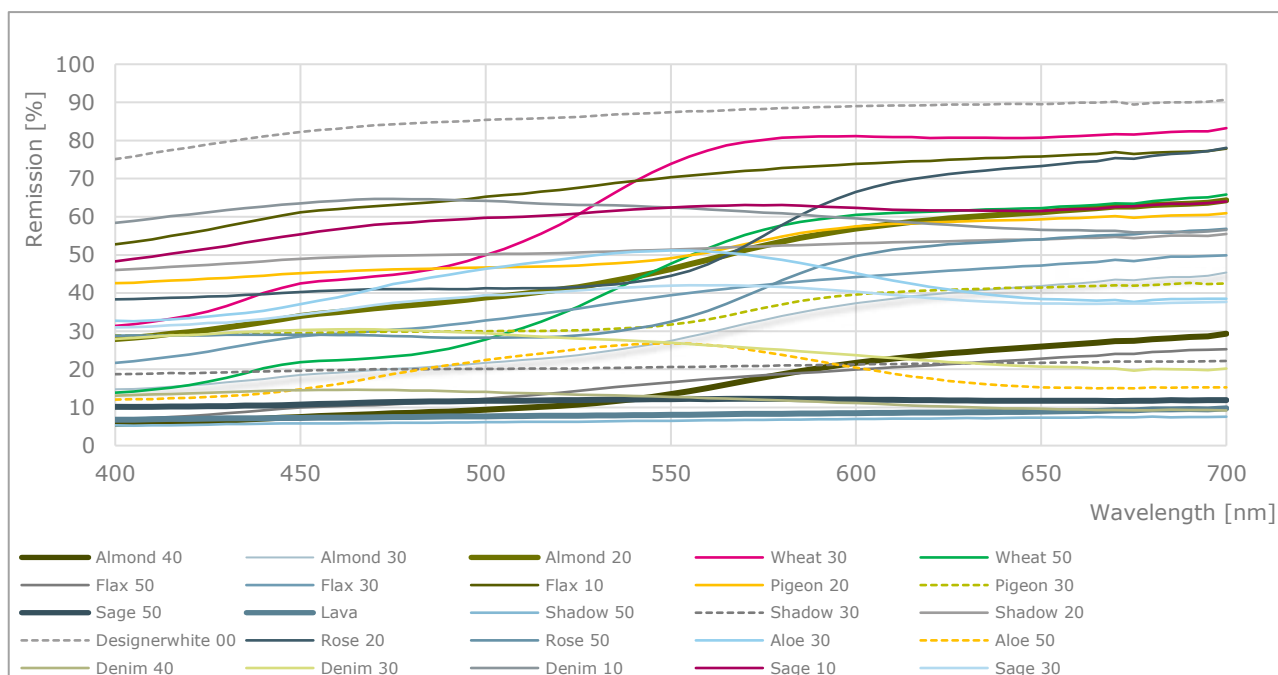
Archisonic® Cotton⁴ Tile

Light Reflection Values

Light Reflectance Values (LRVs) measure the percentage of visible and usable light reflected from a surface when illuminated by a light source. These values are crucial in the architecture and design industry, as they help professionals select materials that achieve the desired brightness and energy efficiency within spaces. To provide accurate and reliable LRVs for our Archisonic Cotton tiles, we collaborated with Lucerne's University of Applied Sciences and Arts, where their experts conducted comprehensive analyses on our samples. These detailed measurements ensure that our products meet industry standards and help designers make informed decisions about lighting and material use.

Neutrals	Shadow 20	Shadow 30	Shadow 50	Designer White	
Reflectance ρ	52%	21%	7%	87%	
Warm Neutrals	Flax 10	Flax 30	Flax 50		
Reflectance ρ	70%	39%	46%		
Yellows + Oranges	Almond 20	Almond 30	Almond 40	Wheat 30	Wheat 50
Reflectance ρ	47%	29%	15%	69%	46%
Reds + Pinks + Purples	Rose 20	Rose 50	Pigeon 20	Pigeon 30	
Reflectance ρ	50%	37%	51%	34%	
Blues	Denim 10	Denim 30	Denim 40		
Reflectance ρ	62%	27%	13%		
Greens	Sage 10	Sage 30	Sage 50	Aloe 30	Aloe 50
Reflectance ρ	61%	40%	12%	47%	23%

HSLU Hochschule
Luzern



Archisonic® Cotton⁴ Tile

Acoustic Performance

Testing Standards

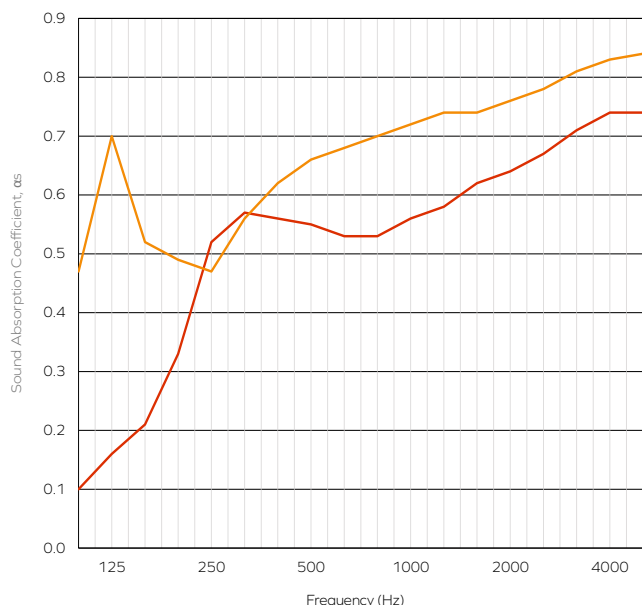
ISO 354:2003	Acoustics — Measurement of sound absorption in a reverberation room
ISO 11654:1997	Acoustics — Sound absorbers for use in buildings — Rating of sound absorption
ISO 20189:2018	Acoustics — Screens, furniture and single objects intended for interior use — Rating of sound absorption and sound reduction of elements based on laboratory measurements
ASTM C423-17	Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
ASTM E795-16	Standard Practices for Mounting Test Specimens During Sound Absorption Tests

Acoustic Test Result	α_w	SAA	NRC
Archisonic Cotton 24mm	0.60 (H)	0.56	0.55
Archisonic Cotton 24mm with 50mm insulation	0.70 (H)	0.66	0.65

The NRC rating is calculated as the average of the absorption coefficients measured at frequencies of 250Hz, 500Hz, 1000Hz and 2000Hz and round to the nearest 0.05. SAA rating is calculated as the average of the sound absorption coefficients of a material for the twelve one-third octave bands from 200Hz through 2500Hz and rounded off to the nearest 0.01.

Acoustic Performance

Frequency (Hz)		125	250	500	1000	2000	4000
Archisonic Cotton 24mm	α_p	0.15	0.45	0.55	0.55	0.65	0.75
Archisonic Cotton 24mm with 50mm insulation	α_p	0.55	0.50	0.65	0.70	0.75	0.85



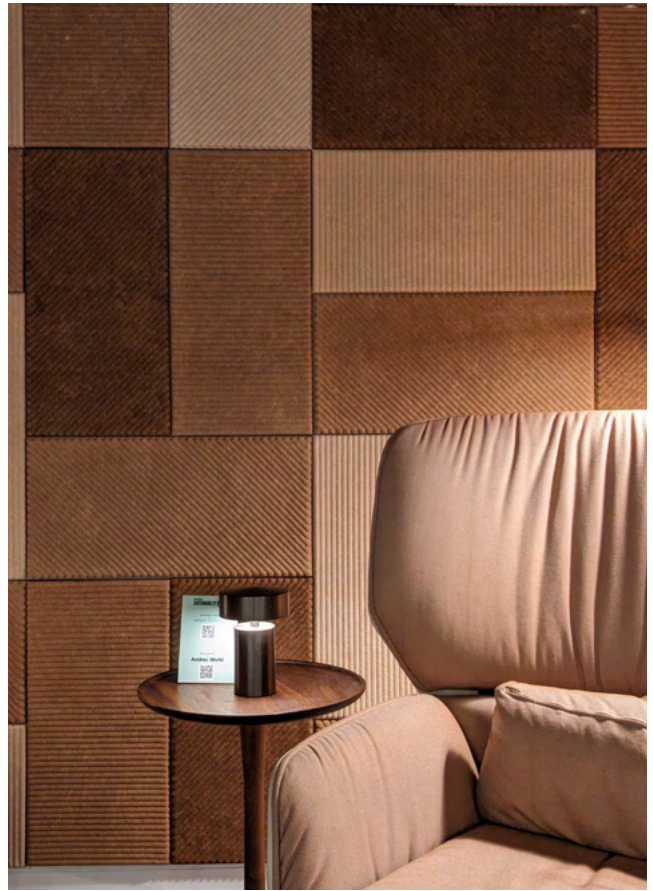
- Archisonic Cotton 24mm
- Archisonic Cotton 24mm with 50mm insulation

The table represents the practical sound absorption coefficient (α_p) in accordance with ISO 11654. The graph represents the sound absorption coefficients (α_s) in the third octave band center frequencies in accordance with ISO 354. Measurement used Pink Noise as excitation signal in a reverberant room.

4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

Archisonic® Cotton⁴ Tile

Project Images



4 - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

IMPACT ACOUSTIC®
Archisonic® Cotton Tile 11.07.24

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(Philippines)

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(+1) 646 918 1581
(+63) 285 80 02 50

#WeMakeAnImpact

Archisonic® Cotton⁴ Tile

Additional Information

Online Resources

A variety of resources are available online for all of our products. Please visit the product's page for more information.



CAD files



Spec sheets and
Installation Guide



Color families



Instruction
videos



Associated
products specs.

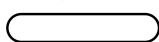
Ordering Process

Our experienced team of Project Consultants will guide and support you throughout the order process. We fulfill the majority of our orders in as little as 21 days¹ from your first point of contact, allowing you to focus on what truly matters to you.



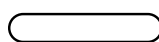
Contact our
consultant

Quote¹



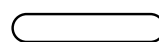
Order Confirmation

Production¹



Dispatch

Transit



Delivery

Contact Us

Ready to make an impact? We are just an email or call away to discuss your project and answer any question.



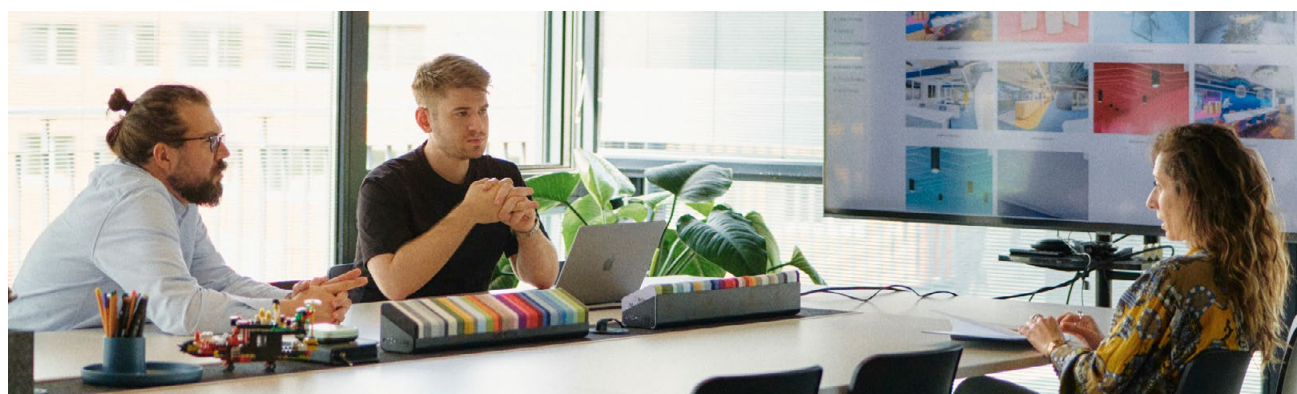
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Online form



¹ - Quote and Production times may vary.

⁴ - patent pending: EU:23211902.4, IT:102022000024846, USA:18/522,889

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