







High Absorption



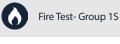
Hygiene



Hygrothermal



Lightweight Tile











# **PRODUCT SUMMARY**

Phonic Clean is a hydrophobic treatment which can be applied to the Phonic range of ceiling tiles. It is a glasswool ceiling tile with a water-repellent, white painted, monolithic, pre-finished face.

- Suitable for use in medical centres, hospitals, laboratories and other commercial interiors.
- Tested to the principal requirements in accordance 14644.1:2015 and ISO 14644.3:2015 and the tile meets Cleanroom ISO Class 3.
- Water repellent face; can be wiped and cleaned, won't allow moisture penetration. Wipeable and cleanable face; stains
  don't stick.
- Optional foil backing to allow positive pressure in ceiling plenum.
- High Noise Reduction Coefficient. Reduces reverberation time and improves speech intelligibility. This is very important for patient well-being. Good acoustics promote faster recovery times.
- Lightweight tile (non-Combo) is ideal for seismic design.

10 year warranty to withstand conditions up to 40°C and 99% relative humidity without visible sag. Tiles should be installed in accordance with NZS1170.5 and the grid manufacturer's instructions.







**Direct Fix Ceiling** 

<b>GENERAL TEST DES</b>	CRIPTION	RESULT	<b>TEST METHOD</b>		
Absorption (ISO 354)		NRC 0.80	ASTM C423	ASTM C423	
(with foil backer)		SAA 0.87	ASTM C423		
		αW 0.75	ISO 11654: 1997		
Attenuation (ASTM E1414-11A)		CAC 26	ASTM E1477-98	ASTM E1477-98	
		Dn,c,w 26	ISO 717-1	ISO 717-1	
Light Reflectance		LR 84%+	ASTM E1477-98		
Density		100kg/m3			
Weight		15mm: 1.5kg/m2			
Fire Test (ISO 5660 Part 1)		Group 1-S	Cone Calorimeter	Cone Calorimeter	
		2013 Fire Test  Classification 1-5 Classification notes recovered.	NZBC C/VM2 Apper	ndix A	
Cleanroom		ISO Class 3	ISO 14644.3:2015	ISO 14644.3:2015	
Moisture Rate		≤ 1%	JC/T 670 – 2005	JC/T 670 – 2005	
Thermal Resistance		≥ 0.4 (m² -k/w)	ASTMC 423	ASTMC 423	
Antimicrobial		(any result <1000 is considered	d low)		
Sample	Total Bacteria	Total Actinomycetes	Total Yeast	Total Fungi	
	per 10cm²	per 10cm²	per 10cm²	per 10cm²	
Tile 1	10 Staphylococcus aureus 100%	<10	<10	30 Cladorsporium 34%, Penicilliur 33%, Non- sporing fungus 33%	
Tile 2	<10	<10	<10	10 Penicillium 100%	
Est. R-Value (m2k/w)		15mm: R0.4	1		
Colour		White			
Size		Depth: 15mm, Square Edge, Concealed Edge, [1200 x 600], to suit 24mm grid patterns.			
Edge Detail		Air Flour Pormion			
		Air Flow Barrier Foil Backing	\[ \]		

<sup>\*</sup> For Acoustic performance for different tiles, see the relevant Phonic datasheets. This test data shows 15mm with foil backer. Available on indent as Phonic Direct Fix. See Phonic Direct Fix datasheet.

Available on indent as Phonic Combo + (with attenuating backer) See Phonic Combo + datasheet.

Suspended Ceiling

#### **INGREDIENTS**

Fibreglass tissue face with acrylic resin (back and front of tile) 7-10% - Fibreglass (Glasswool) 80-85%, Acrylic resin 15-20%, Acoustic board 70-80% - Glasswool 88-89%, Phenolic resin 11-12%, Water-based paint 20-25% - Acrylic emulsion 10-15%, Inorganic filler (Kaolin, Calcium carbonate) 40-55%, Environmentally friendly flame retardant 15-25%, A variety of additives (Dispersant, Leveling agent; from Polycarboxylate ammonium salt, EGBE-Ethylene glycol monobutyl ether, Water) 3-5%, Ion water 15-20%, Glue 2-4% - Acrylic resin 50-55%, Ion water 45-50%.







## **VOC INFORMATION**

<b>GENERAL TEST DESCRIPTION</b> ASTM D5116-06: Standard Guide for Small-Scale Environmental Chamber		ASTM D5116-06 Determination of Organic Emissions From Indoor Materials/Products.		
Test	Test Results (after 24 hours)	Criteria for Singapore Green Label Product	Pass	
Total Volatile Organic Compounds (TVOC) Emissions Rate Test Result	0.11 mg per m³ per hour	0.25 mg per m³ per hour or less	YES	
Test	Test Results (after 48 hours)	Criteria for Singapore Green Label Product	Pass	
Formaldehyde Emission Rate Test Result	< 0.01 mg per m³ per hour	0.02 mg per m³ per hour or less	YES	
Test	Test Results (after 48 hours)	Criteria for Singapore Green Label Product	Pass	
4-Phenylcyclohexene Emission Rate Test	Not Detected*	0.0065 mg per m³ per hour or less	YES	
Test	Test Results (after 48 hours)	Criteria for Singapore Green Label Product	Pass	
Total Phthalate Emission Test Result	< 0.003 mg per m³	< 0.01 mg per m <sup>3</sup>	YES	
Test	Test Results (after 48 hours)	Criteria for Singapore Green Label Product	Pass	
Total Particles Emission Test Result	0.01 mg per m³	<0.02 mg per m <sup>3</sup>	YES	

#### **ENVIRONMENTAL INFORMATION**

Recycled product: the rate of pre-consumer recycled content in Phonic fibreglass ceiling tiles is 80%. The recycled content includes 30% industrial waste and 70% civilian used waste, all procured from reclamation depots.

The Factory has invested significant amounts into energy conservation and emission reduction and the factory runs on renewable energy sources. Professional air purification devices purify polluted air at the factory.

The Factory supplies a Gypsum Brick which utilises the scrap glasswool material created as a by-product during manufacture of the Phonic tiles. This brick is commercially available overseas.

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