The advantage of suspended ceilings is in their ability to create an aesthetic interior finish while concealing and allowing access to all the services that make an interior space function practically including lighting and air-conditioning and if required optimising acoustics as well.

econogrid is designed to meet the most stringent requirements for modern day's complex buildings and is suitable for any suspended ceiling application including offices, retail outlets, hospitals, schools, hotels and restaurants.

Features and Benefits

- · High quality hot-dip galvanised steel with pre-painted capping ensuring effectiveness against corrosion and high light reflectance properties
- Positive lock coupling mechanism with an audible click
- · econogrid can be disassembled and reused
- Stepped end cross tees that prevent tee rotation
- Mid-span deflection not exceeding 1/360 of the span length
- Main Tee includes a fire safety feature (see additional information below)
- Main Tees are punched at 100 centres to facilitate versatility for all tile sizes

econogrid 24mm x 38mm (including fire safety feature)

Description	Size (m)	Qty / Box	Mass / Box (kg)	Coverage (m² / Box)	Boxes / Pallet	Qty / Pallet	Mass / Pallet (tons)
Main Tee	3.6	20	24.11	82	105	2100	2.50
Cross Tee	1.2	60	21.18	43	50	3000	1.10
Cross Tee	0.6	60	10.65	43	90	5400	1.00
Wall Angle 24 x 19 x 0.5 mm	3.6	40	27.16	144 lm / Box	92	3680	2.80
Shadowline Wall Angle 24 x 20 x 20 x 13 mm	3.6	30	35.24	108 lm / Box	67	2010	2.50



Recommendations for Installation

Being part of the decorative finish, the installation of the ceiling needs to take place after services are installed to avoid interference and damage to the grid, especially the white chromodek face. It is advisable to limit the amount of time the grid is stored on site, and ensure that the area is clean and dry.

Fire Safety

econogrid Main Tees include a fire punch out as an additional safety feature to facilitate a more controlled collapse of the ceiling in the event of a fire. The punch-out allows expansion of the Main Tee during a fire which prevents econogrid from twisting, bending or bowing unpredictably and enables the econogrid system to tighten and remain intact limiting any collapsing of the ceiling tiles and the creation of gaps in the perimeter thereby assisting in the containment of the fire.

Bill of Quantity Specification

Supply and install Pelican Systems econogrid consisting of econogrid Wall Angle (standard / shadowline) fixed to the perimeter wall using fixings at 400mm centres. Space econogrid Main Tees at 1200mm centres. Suspend Main Tees using 2.5mm thick pre-stretched Galvanised Hanger Wire or 19mm Hanger Strap at 1200mm centres. Galvanised Hanger Wire shall be put through the Main Tees hole and wound three times around itself. Two Steel Pop Rivets or one 13mm Wafer Tek Screw shall be used to fix the Hanger Strap to the Main Tees bulb.

Install econogrid Cross Tees (1200mm long) at 600mm centres to create a 1200 x 600mm ceiling grid.

Install econogrid Cross Tees (600mm long) into the 1200mm long cross tees to create a 600 x 600mm ceiling grid. Main tee should be fixed to the wall using angle cleats.

All installations to be done in accordance with SABISA guidelines. Specifications are available on Autospec and our website.

Pelican Systems has an ISO 9001 Quality Management System in place and has had continuous certification since 2005. A full list of stockists is available on the Contacts Page of our website.

econotile

foil back gypsum ceiling tile



ceiling systems

partitioning systems

opening systems

flooring systems



Head Office / Durban (031) 563 7307 Pietermaritzburg Branch (033) 345 3701

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(034) 375 6051/2

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087 943 4040

Wynberg, Johannesburg Supertec Ceilings & Board (011) 440 3712

Hamilton , Bloemfontein Smart Boards (Pty) Ltd (051) 430 8123

it our website on www.pelican.co.za



Features and Benefits include:

- · Foil backing increases thermal resistance and NRC properties
- Encapsulated (taped) edges limit water penetration, promote a longer life span and minimize gypsum dust
- · Tiles are non-toxic, non-combustible and resistant to humidity



SAFE & SUITABLE FOR ALL TYPES OF COMMERCIAL APPLICATIONS

Retail Outlets, Offices, Schools, Hospitals and Restaurants

Test Item	Test Result
Acoustics	NRC 0.509
Thermal Resistance	0.25(m2.k)/W
Fire Classification	Class B/B1/2
Encapsulated Edges &	No cracks, no fragments, no warps, no distortions,
Appearance Quality	no broken edges & corners that have bad effects
	on its usage and appearance
Bulk Density	7.7 kg/m ³
Moisture Content	1.4 %
Flexural Load	169N

FIRE PERFORMANCE CLASSIFICATION FOR BUILDINGS: SANS 428:2012 (10177-5 & 10177-10)

The econotile ceiling system as tested did not propagate flaming during the standard SANS 10177-10 test. The material is classified as combustible in terms of SANS 10177-5:2012.

The overall classification of econotile in terms of the SANS specification is therefore: CLASS B/B1/2

SURFACE FINISHES AND SIZES

9_{mm} 1200 x 600 600 x 600 6.75 kg/m² 12mm 1200 x 600 600 x 600

shell white

9.00 kg/m²

1200 x 600: 6 tiles / 4.32 $\rm m^2$ per pack, 300 tiles per stack 600 x 600: 6 tiles / 2.16 $\rm m^2$ per pack, 600 tiles per stack Packing Details: 12mm: 1200 x 600: 8 tiles / 5.76 m² per pack, 400 tiles per stack 9mm: 600 x 600: 8 tiles / 2.88 m² per pack, 800 tiles per stack

Bill of quantity specification:

Supply and install Pelican Econotile foil back ceiling tiles with (white) or (fissured) vinyl face finish, size (600 x 600 x 9 or 12mm) or (600 x 1200 x 9 or 12mm) laid on Pelican Econogrid exposed suspension ceiling grid system with pre-painted white capping, ceiling perimeter to be finished with pre-painted (Standard) or (Shadowline) wall trim. Hold down clips may be used to hold the ceiling tiles firmly in position. Suspension shall be in accordance with the manufacturer's recommendations and to include all necessary hangers, sub grid and fixings.

Find this spec on Autospec and CCN

*NOTE: All ceilings should be installed in accordance with the current code of practice for ceiling installation adopted by the South African Building Interior System Association (SABISA) and the manufacturer's instructions. Care should be taken to ensure that the fixing used for the suspension points should be able to support a safety factor of three times the design load of the ceiling. Suspended ceilings are not designed to take the weight of services personnel walking around on its surface. The ceiling erection should take place at a late stage in the building contract when the area is clean and there is less likelihood of damage from other trades and exposure to the elements.



Pelican Systems is an ISO 9001:2008 certified company (certified from 2005)

econocal ceiling tiles are produced from calcium silicate and are an extremely strong and durable tile which resists moisture and is ideally suited for ceilings in areas exposed to high humidity as well as hygiene sensitive areas. econocal tiles have a fire classification of A/A1/1 meaning they are non-combustible and there are no limitations as to where they can be used.

econocal ceiling tiles have a white vinyl face and an aluminium foil backing, as well as encapsulated edges which further enhance the tiles inherent properties.

econocal tiles are 100% humidity resistant..

Features

Manufactured using incombustible raw materials Excellent fire resistant properties Resists moisture without degradation

Low co-efficient of expansion and contraction

Composition and hardness Hardened Tile Edges Stable and durable

Benefits

The product will not burn

Flame spread is reduced and no smoke or poisonous gas is produced Ideal for wet areas eg: bathrooms, kitchens and non-airconditioned areas which have high relative humidity

Systems installations improve efficiency of air conditioning thereby lowering long term running costs

Particle emission is greatly reduced

Offers extra strength and reduces risk of breakages

Resistant to buckling, cracking and sagging even under adverse

environmental conditions

Safe & suitable for all types of commercial applications

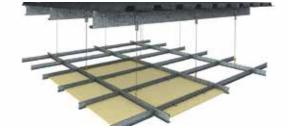
Hospitals, Schools, Industrial Kitchens, Clinics and any areas exposed to high humidity and hygiene sensitive areas. Preferred specification for healthcare facilities

Product and Stocking Information



100% humidity resistant vinyl clad calcium silicate ceiling tile

1200 x 600 x 6mm SE 600 x 600 x 6mm SE 8.33 kg/m²



Packing Details: 10 tiles / 7.2 m² per box / 3.6 m² per box

1200 x 600 - 40 boxes / 400 tiles per pallet | 600 x 600 - 80 boxes / 800 tiles per pallet / Mass per pallet 2.5 tons

Recommended Tools for Installation

econocal can be cut with a scoring knife, circular saw or hand saw. Holes can be made with a hole saw.

Fire Performance Classification for Buildings: SANS 428:2012 (10177-5 & 10177-10)

The econocal ceiling tile as tested did not propagate flaming during the standard SANS 10177-10 test. The overall classification of econocal in terms of the SANS specification is therefore: CLASS A/A1/1

Bill of Quantity Specification

Lay Pelican Systems White econocal (1200 x 600mm / 600 x 600mm) x 6mm ceiling tile into econogrid ceiling grid. Ceiling grid consisting of econo Wall Angle (Standard / Shadowline) fixed to the perimeter wall using fixings at 400mm centres. Space econogrid Main Tees at 1200mm centres and suspend Main Tees using 2.5mm Galvanised Hanger Wire or 19mm Hanger Strap at 1200mm centres. Galvanised Hanger Wire shall be put through the Main Tees hole and must wind three times around itself. Two Steel Pop Rivets or one 13mm Wafer Tek screws shall be used to fix the Hanger Strap to the Main Tees web. Install econogrid Cross Tees (1200 long) at 600mm centres to create a 1200 x 600mm ceiling grid.

All installations to be done in accordance with SABISA guidelines. Specifications are available on Autospec and our website.

Pelican Systems has an ISO 9001 Quality Management System in place and has had continuous certification since 2005. A full list of stockists is available on the Contacts Page of our website.



econotherm tiles have an added component of 25mm fire retardant polystyrene applied to the back of the standard econocal tile which improves the thermal resistance of the tile.

Features

Manufactured using incombustible raw materials Excellent fire resistant properties Resists moisture without degradation

Composition and hardness Hardened Tile Edges Stable and durable

Benefits

The product will not burn

Flame spread is reduced and no smoke or poisonous gas is produced Ideal for wet areas eg: bathrooms, kitchens and non-airconditioned areas which have high relative humidity

Particle emission is greatly reduced

Offers extra strength and reduces risk of breakages

Resistant to buckling, cracking and sagging even under adverse environmental conditions

Safe & suitable for all types of commercial applications

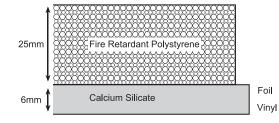
Hospitals, Schools, Industrial Kitchens, Clinics and any areas exposed to high humidity and hygiene sensitive areas. Preferred specification for healthcare facilities

Product and Stocking Information

Approved by the Health Department

100% humidity resistant

white vinyl finish 1200 x 600 x 31mm (6 + 25mm) 9.03 kg/m²



Characteristics

Humidity Resistance Fire Classification

Density Thermal Resistance Impact Resistance

100% CLASS A/A1/2 1.01 g/cm³ $0.7 - 0.8 \text{m}^2 \text{k/w}$

High impact resistance

Packing Details: 4 tiles / 2.88 m² per box

30 boxes / 120 tiles per pallet / Mass per pallet 780 kgs

Recommended Tools for Installation

econotherm can be cut with a scoring knife, circular saw or hand saw. Holes can be made with a hole saw.

Fire Performance Classification for Buildings: SANS 428:2012 (10177-5 & 10177-10)

The econotherm ceiling tile as tested did not propagate flaming during the standard SANS 10177-10 test. The overall classification of econotherm in terms of the SANS specification is therefore: CLASS A/A1/2

Bill of Quantity Specification

Lay Pelican Systems White econotherm 1200 x 600 x 31mm ceiling tile into econogrid ceiling grid. Ceiling grid consisting of econo Wall Angle (Standard / Shadowline) fixed to the perimeter wall using fixings at 400mm centres. Space econogrid Main Tees at 1200mm centres and suspend Main Tees using 2.5mm Galvanised Hanger Wire or 19mm Hanger Strap at 1200mm centres. Galvanised Hanger Wire shall be put through the Main Tees hole and must wind three times around itself. Two Steel Pop Rivets or one 13mm Wafer Tek Screws shall be used to fix the Hanger Strap to the Main Tees web. Install econogrid Cross Tees (1200 long) at 600mm centres to create a 1200 x 600mm ceiling grid.

All installations to be done in accordance with SABISA guidelines. Specifications are available on Autospec and our website.

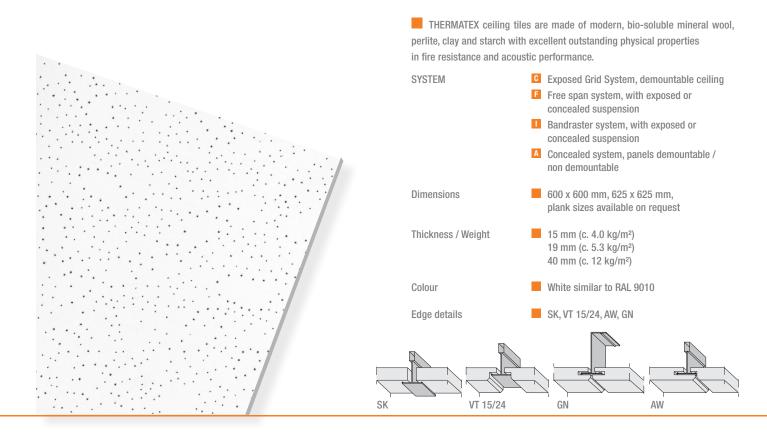
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PERFORMANCE CEILINGS



More scope for innovation

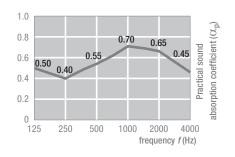
THERMATEX Star



TECHNICAL PERFORMANCE

Reaction to fire	A2-s1, d0 as per EN 13501-1
Fire protection	Up to 60 minutes as per BS 476: parts 20 - 23 (according to test certificate)
Sound absorption	EN ISO 354 $\alpha_{W} = 0.60 \text{ as per EN ISO } 11654 \\ \textit{NRC} = 0.60 \text{ as per ASTM C } 423$
Sound attenuation	$D_{\text{n,c,W}} = 34 \text{ dB}$ as per EN 20140-9 (15 mm thickness, according to test certificate)
Light reflectance	Up to 90%
Thermal conductivity	$\lambda =$ 0.052 - 0.057 W/mK as per DIN 52612

Up to 95% RH





Humidity





Knauf AMF GmbH & Co. KG
Elsenthal 15
D-94481 Grafenau , Germany
Phone +49 (0) 8552 / 422-0 - Fax +49 (0) 8552 / 422-32
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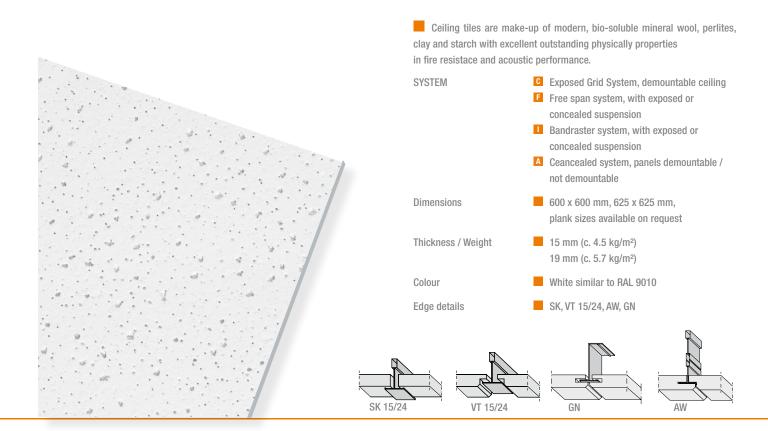
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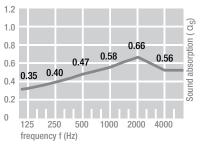
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THERMATEX Mercure



TECHNICAL PERFORMANCE

Reaction to fire	A2-s1, d0 as per EN 13501-1	
Fire protection	Up to 60 minutes as per BS 476: parts 20 - 23	
Sound absorption	$\alpha_{\rm W} = 0.60$ as per EN ISO 11654	1.2
	NRC = 0.55 as per ASTM C 423-01	1.0
		0.6 0.47 0.58
	- D 04 ID FN 00440 0 (45 H) I	0.35 0.40
Sound attenuation	$D_{n,c,w} = 34 \text{ dB as per EN } 20140-9 \text{ (15 mm thickness)}$	0.2
Thermal conductivity	$\lambda = 0.052 - 0.057 \text{ W/mK}$ as per DIN 52612	0 125 250 500 1000 2
Humidity	■ Up to 90 % RH	frequency f (Hz)







Knauf AMF GmbH & Co. KG Elsenthal 15 D-94481 Grafenau Telefon +49 (0) 8552 / 422-0 - Fax +49 (0) 8552 / 422-32 info@amf-grafenau.de - www.amfceilings.com

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THERMATEX® Fine Stratos micro



THERMATEX® ceiling tiles are made of modern, bio-soluble mineral wool, perlite, clay and starch with excellent outstanding physical properties in fire resistance and acoustic performance.

SYSTEM Exposed Grid System, demountable ceiling Free span system, with exposed or concealed suspension Bandraster system, with exposed or concealed suspension Concealed system, panels demountable / non demountable Dimensions 600 x 600 mm, 625 x 625 mm, plank sizes available on request Please note The minimum quantities according to the price list! Thickness / Weight 15 mm (c. 4.0 kg/m²) 19 mm (c. 5.3 kg/m²) Colour White similar to RAL 9010 SK. VT 15/24. AW. GN Edge details SK VT 15/24 GN AW

TECHNICAL PERFORMANCE

Building material class A2

A2-s1, d0 as per EN 13501-1

Fire resistance

F30 - F120 as per DIN 4102 part 2 (as per test certificate)
REI30 - REI120 per EN 13501 part 2 (as per test certificate)

Sound absorption

EN ISO 354

 $\ensuremath{\alpha_{W}} = 0.60$ as per EN ISO 11654 $\ensuremath{\textit{NRC}} = 0.60$ as per ASTM C 423

Sound attenuation

 $D_{\rm n,f,W} = 34$ dB as per EN ISO 10848 (15 mm thickness)

 $D_{n,f,w} = 38$ dB as per EN ISO 10848 (19 mm thickness) according to test certificates

Sound insulation

R_w = 22 dB as per EN ISO 10848

(15 mm thickness, acording to test certificate)

Light reflectance

Up to 88%

Thermal conductivity

 $\lambda = 0.052 - 0.057$ W/mK as per DIN 52612

Air permeability

PM1 (≤ 30 m³/hm²) as per DIN 18177

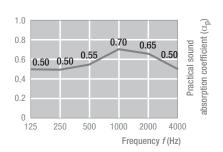
Humidity

Up to 95% RH





Knauf AMF GmbH & Co. KG
Elsenthal 15
D-94481 Grafenau Germany
Telefon 08552 / 422-0 - Fax 08552 / 422-32
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THERMATEX® Thermofon



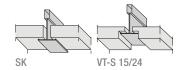
THERMATEX® Thermofon is a low density mineral tile with a painted acoustic fleece facing. It offers outstanding sound absorption values.

Dimensions 600 x 600 mm, 625 x 625 mm further sizes available on request

Thickness / weight 15 mm (c. 2.6 kg/m²)

Colour White similar to RAL 9010

Edges details SK, VT-S 15/24



TECHNICAL PERFORMANCE

Building material class A2-s1, d0 as per EN 13501-1
Class A as per ASTM E1264 (tested according to ASTM E84)

Sound absorption EN ISO 354

 $\alpha_{\rm W}$ = 0.80(H) as per EN ISO 11654 *NRC* = 0.85 as per ASTM C 423

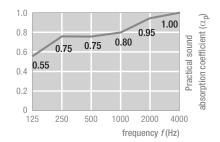
Sound attenuation $D_{n,f,w} = 28 \text{ dB}$ as per EN ISO 10848 (15 mm thickness, according to test certificate)

Light reflectance Up to 88%

Thermal conductivity $\lambda = 0.038 \text{ W/mK}$ as per EN 12667

Humidity Up to 95% RH

Clean room classification ISO - Class 4 (as per ISO 14644-1)









Knauf AMF GmbH & Co. KG
Elsenthal 15
D-94481 Grafenau Germany
Telefon 08552 / 422-0 - Fax 08552 / 422-32
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PERFORMANCE CEILINGS



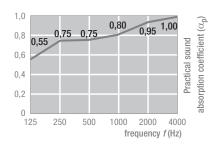
More scope for innovation

THERMATEX Thermofon black



TECHNICAL PERFORMANCE











Knauf AMF GmbH & Co. KG
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