



## Acoustic comfort without compromise!

The Rockfon dB range has been designed to absorb the passage of sound through the ceiling and as such can make a significant contribution to both room-to-room and direct sound insulation. It provides a unique combination of both outstanding sound insulation and sound absorption in one tile.

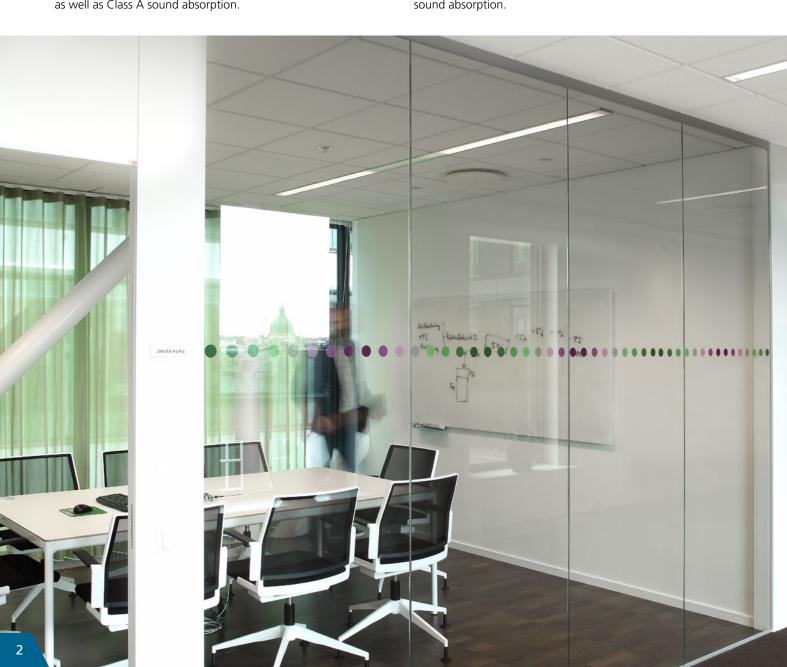
Rockfon dB range offers two types of surface: micro-textured and smooth white, both offering the same acoustic properties.

### Sonar dB:

– ceilings with the same micro-textured white surface as the popular Sonar range, providing sound insulation up to 44 dB as well as Class A sound absorption.

## Tropic dB:

 ceilings with a smooth white surface, like the Tropic range, providing sound insulation up to 44 dB as well as Class A sound absorption.





Rockfon dB range has been designed to provide best in class acoustic properties and also succeeds in offering many design options. A selection of different edges, surfaces and module sizes, enable you to create a ceiling expression that meets the needs of any building or room type.

#### **Edges**

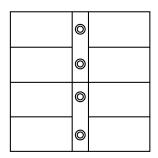
Ceilings from the Sonar dB and the Tropic dB range may be installed with a choice of the concealed (D edge), semiconcealed (E edge) and exposed (A edge) grid systems.

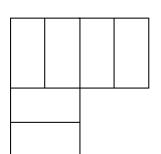
#### **Surface**

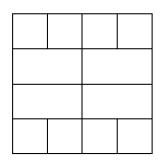
Rockfon dB ceilings offer two types of surfaces. The microtextured Sonar and smooth mat Tropic surfaces can be combined to create a design feature.

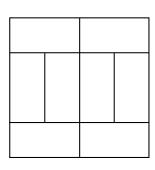
#### **Dimensions**

Products from the Sonar dB and Tropic dB ranges are available in standard module sizes of 600 x 600mm and 1200 x 600mm.

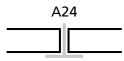






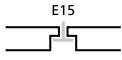


#### **Edges**

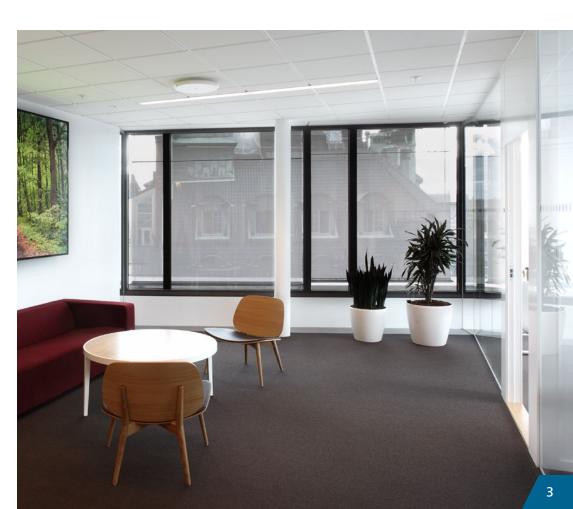












# Acoustic comfort

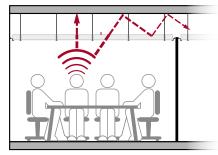
Rockfon dB range provides the best combination of sound absorption and sound insulation. It is available as a class A sound absorber with up to 44 dB sound insulation. The Rockfon sandwich technology is made up of two sound absorbing layers of stone wool with a high performance membrane in between. The first stone wool layer absorbs sound from the room itself and with the high performance membrane it reduces the transmission of sound from room to room. The stone wool layer on the back absorbs sound in the ceiling void coming from adjacent rooms and the floor above.

It can enhance acoustic performance in areas where confidentiality and acoustic comfort is very important.

Rockfon dB ceilings with high sound absorption reduce the reverberation time to a sufficient level to ensure optimum speech intelligibility. In addition they reduce the reverberant sound level in rooms as well as insulate against intrusive noise from service installations in the ceiling void and from adjacent spaces. Rockfon dB ceilings provide a high level of privacy and therefore help to achieve a comfortable working environment.

Room to room sound insulation*) D <sub>n,f,w</sub> (dB)						
	Without a light installation	With a light installation**)	With a light installation*) and a sound absorbing overlay material			
dB 35 A-edge, 1200 x 600 mm	35	33	35			
dB 40 A-edge, 1200 x 600 mm	40	36	39			
dB 42 A-edge, 1200 x 600 mm	42	38	40			
dB 44 A-edge, 1200 x 600 mm	44	38	41			

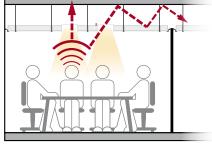
- \*) The acoustic insulation measurement between the rooms amounting to Dn,f,w is conducted in a certified laboratory. The entire acoustic insulation of the construction depends on many different factors, i.e. the partition walls, the ceiling covering, the connections and leading the cables of various installations.
- \*\*) The 4 x TBS 260 light installation for one room.



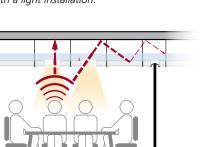
Without a light installation, with an additional

60 mm layer of absorbing material.

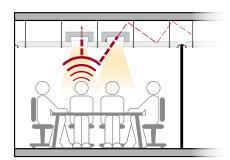
Without a light installation.



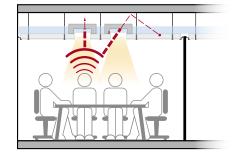
With a light installation.



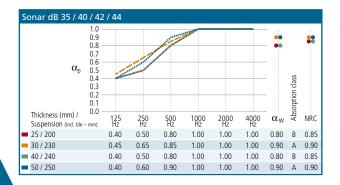
With a light installation, with an additional 60 mm layer of absorbing material.

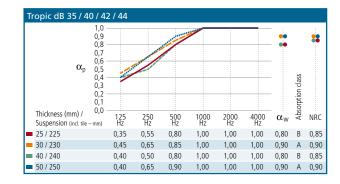


With a light installation and the appurtenant sound insulating partitions.



With a light installation, with the appurtenant sound insulation partitions and an additional 60 mm layer of absorbing material.





# Fire safety and humidity resistance

Like all Rockfon products, the dB range is made from highquality stone wool and benefits from its unique properties: reaction to fire and humidity resistance. Most of the dB products are classified A1 for reaction to fire, meaning they are non-combustible and the safest possible, allowing extra time for evacuation in case of fire. Rockfon dB tiles are dimensionally stable even at humidity levels of up to 100% RH

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and can be installed at all temperatures ranging from 0°C to 40°C without acclimatization.

Moreover, the stone wool has no nutritional value and therefore it provides no substance to harmful microorganisms. Rockfon dB ceilings actively contribute to a comfortable indoor environment and have been awarded the Danish Indoor Climate Label.





#### Minutes

#### **15 YEAR GUARANTEE**

Our products can withstand even extreme climatic conditions

and still remain dimensionally stable. For this reason the life expectancy of Rockfon tiles is high. This is why we offer a 15 year product quarantee.





# Quick and easy installation

A common feature of all Rockfon dB ceilings is its light weight. The products weigh half as much as their competitive gypsum based products. In practice this means that for a project of 1000 m<sup>2</sup> one has to transport and carry 8 tons less material than in the case of equivalent products.

This reduces the emissions of carbon dioxide into the atmosphere due to decreased transport requirements and improves the work of the installers – and what is very significant – it speeds up the installation.

Rockfon's lightweight products not only contribute to a better workplace, but are also an economical factor for contractors. The light weight is also helpful for installation on high floors where lifts or cranes are often required. As a consequence of their light weight, Rockfon is able to offer solutions that are easy to handle and can be installed faster and more economically.

The lower density of Rockfon tiles not only reduces the weight and increases sound absorption, it also enables installers to cut the tiles with just one stroke. Cutting Rockfon tiles does not generate any dust and thus can be carried out inside the building on the installation site.

With all these characteristics, Rockfon dB products provide fast installation as well as simple demounting and maintenance.

#### Rockfon dB ceilings are:

- Easy to handle
- Easy to cut
- Easy to install
- ...and easy to demount



## Product information

On the following pages, you will find information about the individual products from the Sonar dB and Tropic dB ranges. For more detailed information, visit www.rockfon.com

Sonar dB products with a micro-textured white surface:

Sonar dB 35	page	80
Sonar dB 40	page	09
Sonar dB 42	page	10
Sonar dR 44	nage	11

Tropic dB products with a smooth white surface:

Tropic dB 35	. page	12
Tropic dB 40	. page	13
Tropic dB 42	. page	14
Tropic dB 44	Page	15









Sonar dB 35 provides room to room sound insulation as well as good sound absorption with a micro-textured surface.

Sonar dB 35 is made from 25mm stone wool with a high-performance membrane on the back which reduces the transmission of noise from room to room. Sonar dB 35 provides sound insulation as well as good sound absorption.

In addition, its fire classification is A1 – the safest class possible.

Sonar dB 35 has a pleasing matt white micro-textured surface, is easy to cut, and with its light weight of 3.5 kg/m<sup>2</sup> is easy to install.

#### **ASSORTMENT**

Edge detail	Module size (mm)	Weight (kg/m²)	MS* easy access (mm)	Installation system
A24	600 x 600 x 25	3.5	100	System SY24
	1200 x 600 x 25	3.5	100	
E15	600 x 600 x 25	3.5	100	System SY15
	1200 x 600 x 25	3.5	100	
E24	600 x 600 x 25	3.5	100	System SY24
745	1200 x 600 x 25	3.5	100	

<sup>\*</sup> MS - Minimum Suspension



#### SOUND INSULATION

The "room-to-room" sound insulation properties of Sonar dB 35 have been measured in a certified laboratory and it can provide a  $D_{n,f,w}$  (C;C<sub>tr</sub>) of 35 dB (-2;-8).

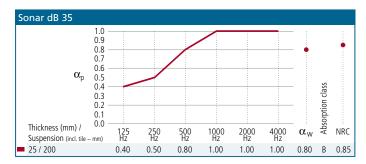
The sound insulation value has been measured in accordance with ISO 10848-2. The overall sound insulation for a building depends on several construction elements such as walls, ceilings, sealants, connections and penetrations.

The sound reduction index of Sonar dB 35 has been measured in a certified laboratory and can provide an  $R_w$  (C;C $_{tt}$ ) of 19 (-1;-3). The sound reduction index has been measured in accordance with ISO 140-3.



#### SOUND ABSORPTION

Sound absorption has been measured in accordance with ISO 354. Sound absorption data  $\alpha_p$ ,  $\alpha_w$  and absorption class are calculated in accordance with ISO 11654. Noise Reduction Coefficient (NRC) is calculated in accordance with ASTM C423.





#### FIRE PERFORMANCE

**General:** Rockfon ceiling tiles have a core of stone wool. Stone wool is non-combustible with a melting point of more than 1000°C.

Reaction to fire: Class A1 in accordance with EN 13501-1.

**Fire protection:** The fire resistant properties of stone wool ensure Rockfon ceiling tiles provide fire protection in construction. The fire protection properties of Rockfon ceilings have been tested and classified in accordance with European norm EN 13501-2 and/or national norms depending on requirements in national building codes.



Sonar dB 40 provides enhanced room to room sound insulation as well as a high level of sound absorption, with a pleasing matt white micro-textured surface.

Sonar dB 40 is made from 30mm stone wool with a high-performance membrane on the back which reduces the transmission of noise from room to room. Sonar dB 40 provides enhanced sound insulation as well as a high level of sound absorption.

In addition, its fire classification is A1 – the safest class possible.

Sonar dB 40 has a subtly textured surface, is easy to cut, and with its low weight of 5.0 kg/m<sup>2</sup> is also easy to install.

#### **ASSORTMENT**

Edge detail	Module size (mm)	Weight (kg/m²)	MS* easy access (mm)	Installation system
A24	600 x 600 x 30 1200 x 600 x 30	5.0 5.0	150 150	System SY24
	600 x 600 x 30 1200 x 600 x 30	5.0 5.0	70 70	System D
E15	600 x 600 x 30 1200 x 600 x 30	5.0 5.0	150 150	System SY15
E24	600 x 600 x 30 1200 x 600 x 30	5.0 5.0	150 150	System SY24





#### SOUND INSULATION

The "room-to-room" sound insulation properties of Sonar dB 40 have been measured in a laboratory and it can provide a  $D_{n,f,w}$  (C;C<sub>tr</sub>) of 40 dB (-2;-6).

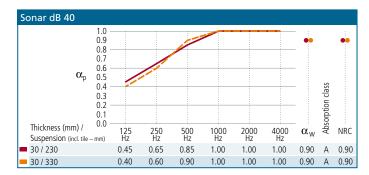
The sound insulation value has been measured in accordance with ISO 10848-2. The overall sound insulation for a building depends on several construction elements such as walls, ceilings, sealants, connections and penetrations.

The sound reduction index of Sonar dB 40 has been measured in a certified laboratory and can provide an  $R_w$  (C;C<sub>tr</sub>) of 21 (-1;-2). The sound reduction index has been measured in accordance with ISO 140-3.



#### SOUND ABSORPTION

Sound absorption has been measured in accordance with ISO 354. Sound absorption data  $\alpha_p$ ,  $\alpha_w$  and absorption class are calculated in accordance with ISO 11654. Noise Reduction Coefficient (NRC) is calculated in accordance with ASTM C423.





#### FIRE PERFORMANCE

**General:** Rockfon ceiling tiles have a core of stone wool. Stone wool is non-combustible with a melting point of more than 1000°C.

Reaction to fire: Class A1 in accordance with EN 13501-1.

**Fire protection:** The fire resistant properties of stone wool ensure Rockfon ceiling tiles provide fire protection in construction. The fire protection properties of Rockfon ceilings have been tested and classified in accordance with European norm EN 13501-2 and/or national norms depending on requirements in national building codes.



#### THERMAL CONDUCTIVITY

Sonar dB 40 with a thickness equal to and exceeding 30mm has been measured in accordance with EN 12667 and has obtained the following value:  $\lambda_D = 40$  mW/mK.

Thermal resistance:  $R = 0.75 \text{ m}^2 \text{ k/W}$ .

### Sonar dB 42 offers a high level of sound insulation as well as absorption and is well-suited where confidentiality is important.

Sonar dB 42 is made of two sound absorbing layers of stone wool with a high-performance membrane in between. The first stone wool layer (25mm) absorbs sound from the room itself and with the high-performance membrane, it reduces the transmission of sound from room to room. The stone wool layer on the back (15mm) absorbs sound in the ceiling void coming from adjacent rooms and the floor above.

This "sandwich" construction offers a high level of sound insulation as well as absorption and is well-suited where confidentiality is important.

Sonar dB 42 has a micro-textured surface, is easy to cut, and with its light weight of  $7.0 \text{ kg/m}^2$  is easy to install.

#### **ASSORTMENT**

Edge detail	Module size (mm)	Weight (kg/m²)	MS* easy access (mm)	Installation system
A24	600 x 600 x 40 1200 x 600 x 40	7.0 7.0	200 200	System SY24
	600 x 600 x 40	7.0	80	System D
E15	600 x 600 x 40 1200 x 600 x 40	7.0 7.0	200 200	System SY15
E24	600 x 600 x 40 1200 x 600 x 40	7.0 7.0	200 200	System SY24

<sup>\*</sup> MS - Minimum Suspension



#### SOUND INSULATION

The "room-to-room" sound insulation properties of Sonar dB 42 have been measured in a certified laboratory and it can provide a  $D_{n,f,w}$  (C;C<sub>tr</sub>) of 42 dB (-1;-7).

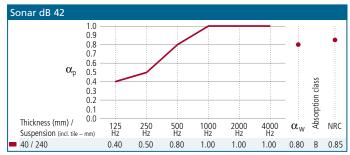
The sound insulation value has been measured in accordance with ISO 10848-2. The overall sound insulation for a building depends on several construction elements such as walls, ceilings, sealants, connections and penetrations.

The sound reduction index of Sonar dB 42 has been measured in a certified laboratory and can provide an  $R_w$  (C;C<sub>tr</sub>) of 23 (-1;-4). The sound reduction index has been measured in accordance with ISO 140-3.



#### SOUND ABSORPTION

Sound absorption has been measured in accordance with ISO 354. Sound absorption data  $\alpha_{\rm p}, \, \alpha_{\rm w}$  and absorption class are calculated in accordance with ISO 11654. Noise Reduction Coefficient (NRC) is calculated in accordance with ASTM C423.





#### FIRE PERFORMANCE

**General:** Rockfon ceiling tiles have a core of stone wool. Stone wool is non-combustible with a melting point of more than 1000°C.

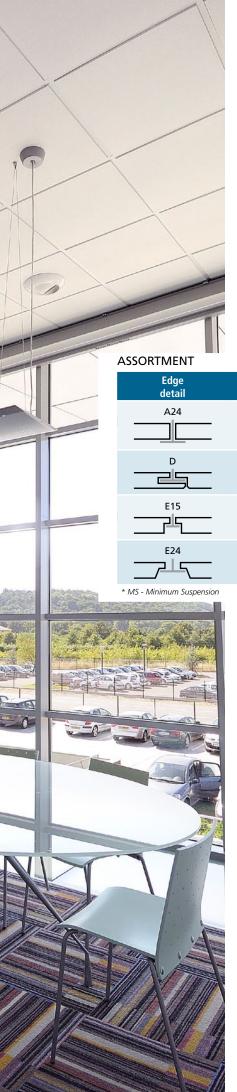
Reaction to fire: Class A2-s1,d0 in accordance with EN 13501-1.

**Fire protection:** The fire resistant properties of stone wool ensure Rockfon ceiling tiles provide fire protection in construction. The fire protection properties of Rockfon ceilings have been tested and classified in accordance with European norm EN 13501-2 and/or national norms depending on requirements in national building codes.



#### THERMAL CONDUCTIVITY

Sonar dB 42 with a thickness equal to and exceeding 30 mm has been measured in accordance with EN 12667 and has obtained the following value:  $\lambda_D = 40$  mW/mK. Thermal resistance: R = 1.00 m2 K/W.



Sonar dB 44 provides outstanding sound insulation as well as class A sound absorption with a micro-textured surface for areas where acoustic comfort is extremely important.

Sonar dB 44 is made of two sound absorbing layers of stone wool with a high-performance membrane in between. The first stone wool layer (30mm) absorbs sound from the room itself and with the high-performance membrane, it reduces the transmission of sound from room to room. The stone wool layer on the back (20mm) absorbs sound in the ceiling void coming from adjacent rooms and the floor above.

This 'sandwich' construction provides outstanding sound insulation as well as class A sound absorption that is necessary where confidentiality and acoustic comfort is very important.

Sonar dB 44 has a subtly textured surface, is easy to cut, and with its light weight of 8.5 kg/m<sup>2</sup> is easy to install.

Edge detail	Module size (mm)	Weight (kg/m²)	MS* easy access (mm)	Installation system
A24	600 x 600 x 50 1200 x 600 x 50	8.5 8.5	200 200	System SY24
	600 x 600 x 50	8.5	100	System D-XL
E15	600 x 600 x 50 1200 x 600 x 50	8.5 8.5	200 200	System SY15
E24	600 x 600 x 50 1200 x 600 x 50	8.5 8.5	200 200	System SY24



#### SOUND INSULATION

The "room-to-room" sound insulation properties of Sonar dB 44 have been measured in a laboratory and it can provide a  $D_{n,f,w}$  (C;C<sub>tr</sub>) of 44 dB (-1;-7).

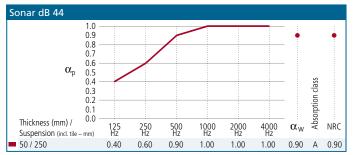
The sound insulation value has been measured in accordance with ISO 10848-2. The overall sound insulation for a building depends on several construction elements such as walls, ceilings, sealants, connections and penetrations.

The sound reduction index of Sonar dB 44 has been measured in a certified laboratory and can provide an  $R_w$  (C;C<sub>tt</sub>) of 27 (-1;-4). The sound reduction index has been measured in accordance with [ISO 140-3].



#### **SOUND ABSORPTION**

Sound absorption has been measured in accordance with ISO 354. Sound absorption data  $\alpha_p$ ,  $\alpha_w$  and absorption class are calculated in accordance with ISO 11654. Noise Reduction Coefficient (NRC) is calculated in accordance with ASTM C423.





#### FIRE PERFORMANCE

**General**: Rockfon ceiling tiles have a core of stone wool. Stone wool is non-combustible with a melting point of more than 1000°C.

Reaction to fire: Class A2-s1,d0 in accordance with EN 13501-1.

**Fire protection:** The fire resistant properties of stone wool ensure Rockfon ceiling tiles provide fire protection in construction. The fire protection properties of Rockfon ceilings have been tested and classified in accordance with European norm EN 13501-2 and/or national norms depending on requirements in national building codes.



#### THERMAL CONDUCTIVITY

Sonar dB 44 with a thickness equal to and exceeding 30 mm has been measured in accordance with EN 12667 and has obtained the following value:  $\lambda_D = 40$  mW/mK. **Thermal resistance:** R = 1.25 m<sup>2</sup> k/W.

Tropic dB 35 provides room to room sound insulation as well as good sound absorption with a smooth white surface.

Tropic dB 35 is made from 25mm stone wool with a high-performance membrane on the back which reduces the transmission of noise from room to room. Tropic dB 35 provides sound insulation as well as good sound absorption. In addition, its fire classification is A1 - the safest class possible.

Tropic dB 35 has an attractive smooth, mat white surface, is easy to cut, and with its light weight of 3.5 kg/m, is easy to install.

#### **ASSORTMENT**

Edge detail	Module size (mm)	Weight (kg/m²)	MS* easy access (mm)	Installation system
A24	600 x 600 x 25 1200 x 600 x 25	3.5 3.5	100 100	System SY24
E15	600 x 600 x 25 1200 x 600 x 25	3.5 3.5	100 100	System SY15
E24	600 x 600 x 25 1200 x 600 x 25	3.5 3.5	100 100	System SY24

<sup>\*</sup> MS - Minimum Suspension



#### **SOUND INSULATION**

The "room-to-room" sound insulation properties of Tropic dB 35 have been measured in a laboratory and it can provide a  $D_{n,f,w}$  (C;C<sub>tt</sub>) of 35 dB (-2;-8).

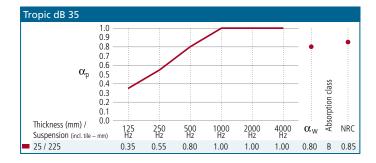
The sound insulation value has been measured in accordance with ISO 10848-2. The overall sound insulation for a building depends on several construction elements such as walls, ceilings, sealants, connections and penetrations.

The sound reduction index of Tropic dB 35 has been measured in a certified laboratory and can provide an  $R_w$  (C;C $_{tr}$ ) of 19 (-1;-3). The sound reduction index has been measured in accordance with ISO 140-3.



#### SOUND ABSORPTION

Sound absorption has been measured in accordance with ISO 354. Sound absorption data  $\alpha_p$ ,  $\alpha_w$  and absorption class are calculated in accordance with ISO 11654. Noise Reduction Coefficient (NRC) is calculated in accordance with ASTM C423.



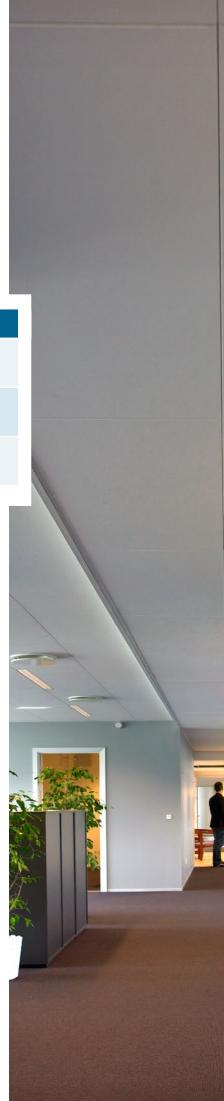


#### FIRE PERFORMANCE

**General:** Rockfon ceiling tiles have a core of stone wool. Stone wool is non-combustible with a melting point of more than 1000°C.

Reaction to fire: Class A1 in accordance with EN 13501-1.

**Fire protection:** The fire resistant properties of stone wool ensure Rockfon ceiling tiles provide fire protection in construction. The fire protection properties of Rockfon ceilings have been tested and classified in accordance with European norm EN 13501-2 and/or national norms depending on requirements in national building codes.



Tropic dB 40 provides enhanced room to room sound insulation as well as a high level of sound absorption, with a smooth white surface.

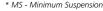
Tropic dB 40 is made from 30mm stone wool with a high-performance membrane on the back which reduces the transmission of noise from room to room. Tropic dB 40 provides enhanced sound insulation as well as a high level of sound absorption.

In addition, its fire classification is A1 - the safest class possible.

Tropic dB 40 has an attractive smooth, mat white surface, is easy to cut, and with its low weight of 5.0 kg/m<sub>e</sub> is also easy to install.

#### **ASSORTMENT**

Edge detail	Module size (mm)	Weight (kg/m²)	MS* easy access (mm)	Installation system
A24	600 x 600 x 30 1200 x 600 x 30	5.0 5.0	150 150	System SY24
	600 x 600 x 30 1200 x 600 x 30	5.0 5.0	70 70	System D
E15	600 x 600 x 30 1200 x 600 x 30	5.0 5.0	150 150	System SY15
E24	600 x 600 x 30 1200 x 600 x 30	5.0 5.0	150 150	System SY24





#### SOUND INSULATION

The "room-to-room" sound insulation properties of Tropic dB 40 have been measured in a laboratory and it can provide a  $D_{n,f,w}$  (C; $C_{tt}$ ) of 40 dB (-2;-6).

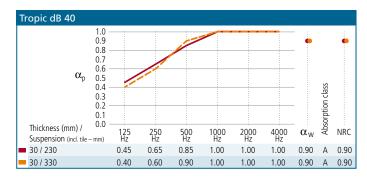
The sound insulation value has been measured in accordance with ISO 10848-2. The overall sound insulation for a building depends on several construction elements such as walls, ceilings, sealants, connections and penetrations.

The sound reduction index of Tropic dB 40 has been measured in a certified laboratory and can provide an  $R_w$  (C;C $_{tr}$ ) of 21 (-1;-2). The sound reduction index has been measured in accordance with ISO 140-3.



#### SOUND ABSORPTION

Sound absorption has been measured in accordance with ISO 354. Sound absorption data  $\alpha_p$ ,  $\alpha_w$  and absorption class are calculated in accordance with ISO 11654. Noise Reduction Coefficient (NRC) is calculated in accordance with ASTM C423.





#### FIRE PERFORMANCE

**General:** Rockfon ceiling tiles have a core of stone wool. Stone wool is non-combustible with a melting point of more than 1000°C.

Reaction to fire: Class A1 in accordance with EN 13501-1.

**Fire protection:** The fire resistant properties of stone wool ensure Rockfon ceiling tiles provide fire protection in construction. The fire protection properties of Rockfon ceilings have been tested and classified in accordance with European norm EN 13501-2 and/or national norms depending on requirements in national building codes.



#### THERMAL CONDUCTIVITY

Tropic dB 40 with a thickness equal to and exceeding 30mm has been measured in accordance with EN 12667 and has obtained the following value:  $\lambda_D = 40$  mW/mK.

Thermal resistance:  $R = 0.75 \text{ m}^2 \text{ k/W}$ .

### Tropic dB 42 offers a high level of sound insulation as well as absorption and is well-suited where confidentiality is important.

Tropic dB 42 is made of two sound absorbing layers of stone wool with a high performance membrane in between. The first stone wool layer (25mm) absorbs sound from the room itself and with the high-performance membrane, it reduces the transmission of sound from room to room. The stone wool layer on the back (15mm) absorbs sound in the ceiling void coming from adjacent rooms and the floor above.

This "sandwich" construction offers a high level of sound insulation as well as absorption and is well-suited where confidentiality is important.

Tropic dB 42 has an attractive smooth, mat white surface, is easy to cut, and with its light weight of 7,0 kg/m, is easy to install.

#### **ASSORTMENT**

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Edge detail	Module size (mm)	Weight (kg/m²)	MS* easy access (mm)	Installation system
A24	600 x 600 x 40	7.0	200	System SY24
	1200 x 600 x 40	7.0	200	
	600 x 600 x 40	7.0	80	System D
E15	600 x 600 x 40	7.0	200	System SY15
	1200 x 600 x 40	7.0	200	
E24	600 x 600 x 40	7.0	200	System SY24
	1200 x 600 x 40	7.0	200	

<sup>\*</sup> MS - Minimum Suspension



#### SOUND INSULATION

The "room-to-room" sound insulation properties of Tropic dB 42 have been measured in a laboratory and it can provide a  $D_{n,f,w}$  (C;C<sub>tr</sub>) of 42 dB (-1;-7).

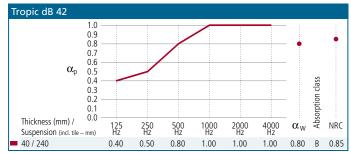
The sound insulation value has been measured in accordance with ISO 10848-2. The overall sound insulation for a building depends on several construction elements such as walls, ceilings, sealants, connections and penetrations.

The sound reduction index of Tropic dB 42 has been measured in a certified laboratory and can provide an  $R_w$  (C;C $_{tr}$ ) of 23 (-1;-4). The sound reduction index has been measured in accordance with ISO 140-3.



#### SOUND ABSORPTION

Sound absorption has been measured in accordance with ISO 354. Sound absorption data  $\alpha_p$ ,  $\alpha_w$  and absorption class are calculated in accordance with ISO 11654. Noise Reduction Coefficient (NRC) is calculated in accordance with ASTM C423.





#### FIRE PERFORMANCE

**General:** Rockfon ceiling tiles have a core of stone wool. Stone wool is non-combustible with a melting point of more than 1000°C.

**Reaction to fire:** Class A2-s1,d0 in accordance with EN 13501-1.

**Fire protection:** The fire resistant properties of stone wool ensure Rockfon ceiling tiles provide fire protection in construction. The fire protection properties of Rockfon ceilings have been tested and classified in accordance with European norm EN 13501-2 and/or national norms depending on requirements in national building codes.



#### THERMAL CONDUCTIVITY

Tropic dB 42 with a thickness equal to and exceeding 30 mm has been measured in accordance with EN 12667 and has obtained the following value:  $\lambda_D = 40$  mW/mK. **Thermal resistance:** R = 1.00 m<sup>2</sup> K/W.



Tropic dB 44 provides outstanding sound insulation as well as class A sound absorption with a micro-textured surface for areas where acoustic comfort is extremely important.

Tropic dB 44 is made of two sound absorbing layers of stone wool with a high-performance membrane in between. The first stone wool layer (30mm) absorbs sound from the room itself and with the high-performance membrane, it reduces the transmission of sound from room to room. The stone wool layer on the back (20mm) absorbs sound in the ceiling void coming from adjacent rooms and the floor above.

This 'sandwich' construction provides outstanding sound insulation as well as class A sound absorption that is necessary where confidentiality and acoustic comfort is very important.

Tropic dB 44 has an attractive smooth, mat white surface, is easy to cut, and with its light weight of 8.5 kg/m<sub>e</sub> is easy to install.

#### **ASSORTMENT**

Edge detail	Module size (mm)	Weight (kg/m²)	MS* easy access (mm)	Installation system
A24	600 x 600 x 50 1200 x 600 x 50	8.5 8.5	200 200	System SY24
	600 x 600 x 50	8.5	100	System D-XL
E15	600 x 600 x 50 1200 x 600 x 50	8.5 8.5	200 200	System SY15
E24	600 x 600 x 50 1200 x 600 x 50	8.5 8.5	200 200	System SY24





#### SOUND INSULATION

The "room-to-room" sound insulation properties of Tropic dB 44 have been measured in a laboratory and it can provide a  $D_{n,f,w}$  (C; $C_{tr}$ ) of 44 dB (-1;-7).

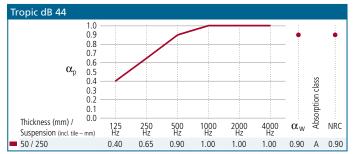
The sound insulation value has been measured in accordance with ISO 10848-2. The overall sound insulation for a building depends on several construction elements such as walls, ceilings, sealants, connections and penetrations.

The sound reduction index of Tropic dB 44 has been measured in a certified laboratory and can provide an  $R_w$  (C;C<sub>tt</sub>) of 27 (-1;-4). The sound reduction index has been measured in accordance with ISO 140-3.



#### SOUND ABSORPTION

Sound absorption has been measured in accordance with ISO 354. Sound absorption data  $\alpha_p$ ,  $\alpha_w$  and absorption class are calculated in accordance with ISO 11654. Noise Reduction Coefficient (NRC) is calculated in accordance with ASTM C423.





#### FIRE PERFORMANCE

**General:** Rockfon ceiling tiles have a core of stone wool. Stone wool is non-combustible with a melting point of more than 1000°C.

**Reaction to fire:** Class A2-s1,d0 in accordance with EN 13501-1.

**Fire protection:** The fire resistant properties of stone wool ensure Rockfon ceiling tiles provide fire protection in construction. The fire protection properties of Rockfon ceilings have been tested and classified in accordance with European norm EN 13501-2 and/or national norms depending on requirements in national building codes.



#### THERMAL CONDUCTIVITY

Tropic dB 44 with a thickness equal to and exceeding 30 mm has been measured in accordance with EN 12667 and has obtained the following value:  $\lambda_D = 40$  mW/mK. **Thermal resistance:** R = 1.25 m² k/W.

### **ACTIVATE YOUR CEILING**

Rockfon® develop intelligent ceiling solutions which actively address a number of important issues in modern buildings and renovation projects.

Rockfon products are known for their design, aesthetics and ease of installation; coupled with the key performance features of superior fire resistance and acoustics.

This ensures that our ceiling solutions are among the highest performing, most cost effective and time efficient in today's interiors market.

The comprehensive ceiling solution portfolio from Rockfon ensures that our customers are able to actively add value to the construction process, by ultimately creating superior interior environments.

That is why we say "ACTIVATE YOUR CEILING".

March 2011

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