

# ACOUSTIVIBE CDC, WDC and NAS

# SOUNDPROOFING

# SOUNDPROOFING ANCHORS FOR SUSPENDED CEILING



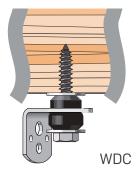
ACOUSTIVIBE CDC, WDC and NAS anchors are used on structures other than wooden girders or joists. They dissociate the suspended ceiling from the structure to which it is attached. Hence, they have a vital role in an effective acoustic performance.

Using these anchors prevents the transmission of vibrations from the structure to the suspended ceiling. The usual way to install a suspended ceiling is to attach it to the structure using various mechanical anchors and wires. For ACOUSTIVIBE CDC, WDC and NAS, the wires are attached to the anchors instead of onto conventional mechanical anchors in order to obtain better acoustic performance by stopping the transmission of vibrations.











# **ACOUSTIVIBE** CDC, WDC and NAS

SOUNDPROOFING ANCHORS FOR SUSPENDED CEILING

# **BENEFITS**

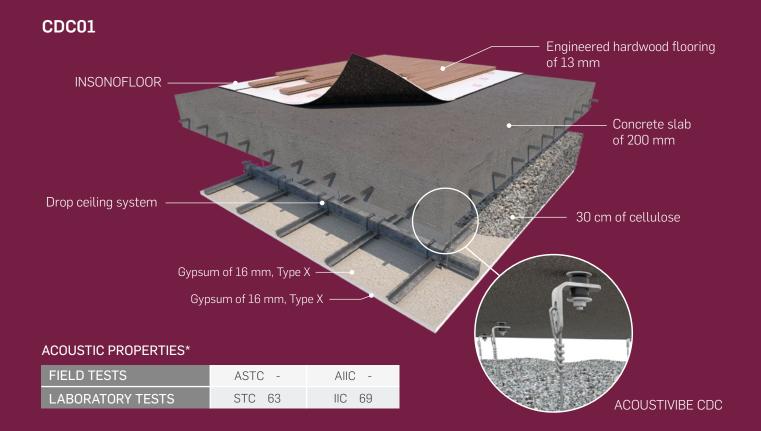
- Easy to install
- Heavy-duty
- Prevention of the transmission of vibrations

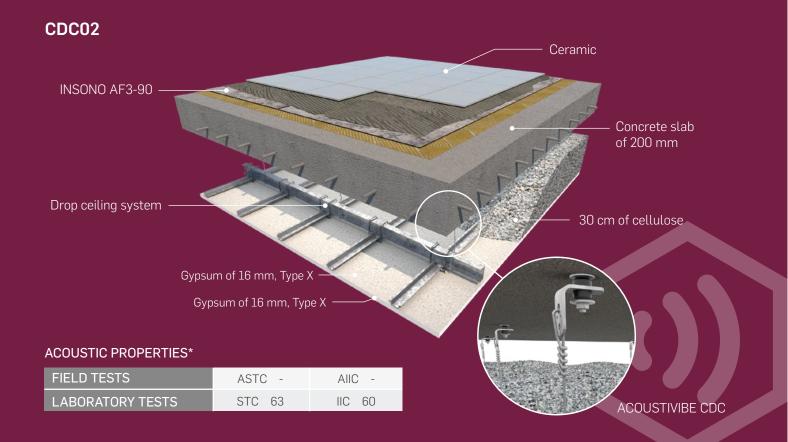
# **PRODUCT FEATURES**

ACOUSTIVIBE CDC,WDC and NAS		
COMPOSITION	Galvanized steel	
OPTIMAL LOAD	66 lb (30 kg)	
INDICATIVE CONSUMPTION*	9 to 11 ft² (0.8 to 1.0 m²) per ACOUSTIVIBE CDC, WDC or NAS	
QUANTITY PER PACKAGE	Box of 100 units (drill bit included with ACOUSTIVIBE CDC)	

\*Note: On an indicative basis, two layers of 5/8 in (16 mm) gypsum weigh about 4 lb/ft2 (19 kg/m2). So an ACOUSTIVIBE anchor positioned every 9 ft2 (0.84 m2) will amount to a gypsum load of 36 lb (16.3 kg) per ACOUSTIVIBE, and an ACOUSTIVIBE positioned every 11 ft2 (1.02 m2) will represent a load of 44 lb (20.0 kg) per ACOUSTIVIBE.

# SOUNDPROOFING SYSTEMS FOR SUSPENDED CEILING







# PERFORMANCE COMPARISON WITH AND WITHOUT ACOUSTIVIBE CDC

# Assembly No. 1

ASSEMBLY WITHOUT ACOUSTIVIBE CDC	ASSEMBLY <b>WITH</b> ACOUSTIVIBE CDC
<ul> <li>Concrete slab of 200 mm</li> <li>Standard drop ceiling</li> <li>No insulation</li> <li>Gypsum of 16 mm, type X</li> </ul>	<ul> <li>Concrete slab of 200 mm</li> <li>Drop ceiling with ACOUSTIVIBE CDC</li> <li>No insulation</li> <li>Gypsum of 16 mm, type X</li> </ul>
STC = 58; IIC = 41	STC = 62; IIC = 46

ASTC: Apparent Sound Transmission Class Tests conducted in compliance with ASTM E336 and ASTM E413 methods

AIIC: Apparent Impact Insulation Class Tests conducted in compliance with ASTM E1007 and ASTM E989 methods

\*The AIIC and ASTC results are presented for information purposes only and may vary. They are based on the average of results obtained. Equivalent performance cannot be guaranteed by SOPREMA.

# Assembly No. 2

ASSEMBLY WITHOUT ACOUSTIVIBE CDC	ASSEMBLY <b>WITH</b> ACOUSTIVIBE CDC
<ul> <li>Linoleum</li> <li>Concrete slab of 225 mm</li> <li>Standard drop ceiling</li> <li>R-20 fibreglass insulation</li> <li>Gypsum of 12 mm</li> </ul>	<ul> <li>Linoleum</li> <li>Concrete slab of 225 mm</li> <li>Drop ceiling with ACOUSTIVIBE CDC</li> <li>R-20 fibreglass insulation</li> <li>Gypsum of 12 mm</li> </ul>
ASTC=60 ; AIIC=61	ASTC=65; AIIC=68

# Assembly No. 3

ASSEMBLY WITHOUT ACOUSTIVIBE CDC	ASSEMBLY WITH ACOUSTIVIBE CDC
<ul> <li>Engineered hardwood flooring of 12 mm</li> <li>INSONOFLOOR</li> <li>Concrete slab of 10.16 cm (5.08 + 5.08 in the flute)</li> <li>Hambro D500 system</li> <li>Standard drop ceiling</li> <li>Cavity height filled at 50% with cellulose</li> <li>Gypsum of 16 mm, type X</li> </ul>	<ul> <li>Engineered hardwood flooring of 12 mm</li> <li>INSONOFLOOR</li> <li>Concrete slab of 10.16 cm (5.08 + 5.08 in the flute)</li> <li>Hambro D500 system</li> <li>Drop ceiling with ACOUSTIVIBE CDC</li> <li>Cavity height filled at 50% with cellulose</li> <li>Gypsum of 16 mm, Type X</li> </ul>
ASTC=58; AIIC=53	ASTC=60; AIIC=62

## SURFACE PREPARATION

As ACOUSTIVIBE CDC, WDC and NAS anchors replace conventional mechanical anchors, there is no specific surface preparation required other than to ensure that the structure is ready to hold the suspended ceiling.

### INSTALLATION METHOD

## **ACOUSTIVIBE WDC**

The ACOUSTIVIBE WDC anchor is designed for full-surface wooden structures of mill floor or CLT types on which the ceiling is suspended.

ACOUSTIVIBE WDC can also be used with wooden girders or joists when using a suspended ceiling with acoustical tiles. If the suspended ceiling is made of gypsum, use the conventional ACOUSTIVIBE system with metal furring (see the ACOUSTIVIBE data sheet).

ACOUSTIVIBE WDC is installed every 48 in (122 cm) in both directions. The first row of ACOUSTIVIBE WDC must be installed as close as possible to the wall. Screw the ACOUSTIVIBE WDC wood screw into the wood decking (Fig. 1).



Figure 1

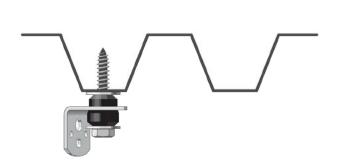
# **ACOUSTIVIBE NAS**

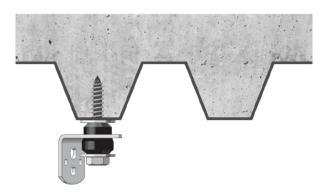
ACOUSTIVIBE NAS anchors are designed for structures made of steel with concrete or Hambro-type structures.

ACOUSTIVIBE NAS anchors are installed every 48 in (122 cm) in both directions. The first row of anchors must be placed as close as possible to the wall.

ACOUSTIVIBE NAS is installed in the steel deck before pouring concrete (Fig.2). If ACOUSTIVIBE NAS anchors were not installed before the pouring, use ACOUSTIVIBE CDC (Fig.7).

Note: For ACOUSTIVIBE NAS, the screws are supplied by the customer.





# **INSTALLATION METHOD (SUITE)**

### **ACOUSTIVIBE CDC**

ACOUSTIVIBE CDC anchors are designed for structures made of concrete structural slabs, steel with concrete, Hambro® type, or any structures other than wood with concrete on which the ceiling is suspended.

ACOUSTIVIBE CDC is installed every 48 in (122 cm) in both directions. The first row of ACOUSTIVIBE CDC must be installed as close as possible to the wall. First, drill a hole with the ACOUSTIVIBE CDC drill bit (Fig. 3).

The ACOUSTIVIBE CDC drill bit is already calibrated to provide the correct dimension and length if the drilling is done until the drill bit shoulder reaches the perforated surface. Then place ACOUSTIVIBE CDC in the cleaned hole and complete the installation by tapping the bottom of the pin using a hammer or an impact drill while the installation tool (Fig. 4) is placed on the drill bit (Fig. 5).

Ensure that the pin is sufficiently tapped in so that the punch enters inside the pin's upper part in the concrete (Fig. 6). The punch then opens the pin, fixing it in the concrete (Fig. 7).



## FOR ACOUSTIVIBE CDC, WDC AND NAS

Attach the wires of the suspended ceiling to the ACOUSTIVIBE CDC, WDC or NAS perforated leg. To level the ceiling, use the same method as a traditional suspended ceiling by adjusting the length of the wires.

# **WARRANTY**

SOPREMA soundproofing products are guaranteed against all manufacturing defects and to be suitable for all stated uses. SOPREMA's liability under this guarantee is limited to replacing or refunding the purchase price of SOPREMA soundproofing products found to be defective.

If you have any questions about this product or its installation, please contact your SOPREMA representative.

