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# Stravilink DCH-S

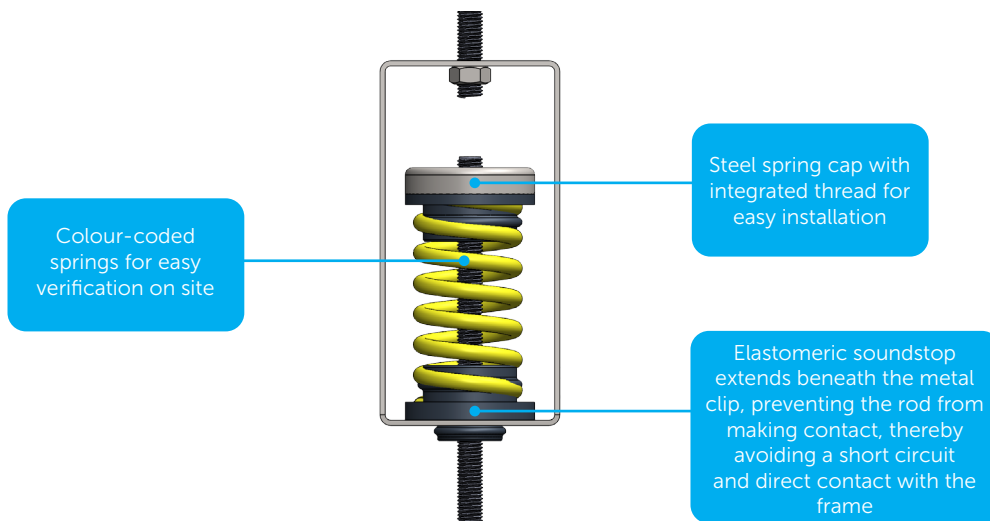
## Datasheet



Stravilink DCH-S is a Drop Ceiling Hanger using Springs, designed to fit most ceiling voids and seamlessly integrate with all ceiling types. It maximises sound insulation between vertically stacked rooms, ensuring optimal acoustic performance.

### FEATURES

- Suitable for installation on various structures, including concrete and cross-laminated timber (CLT) slabs
- Equipped with springs featuring a natural frequency of 4 Hz at design load
- Available in different spring options, supporting loads from 4 to 59 kg
- Colour-coded springs are available for different load ranges, making it easy to verify on-site that the correct spring is used
- Interfaces seamlessly with all ceiling types
- Compact frame (104 mm) allows installation in most acoustic suspended ceiling voids
- Supports variable void depths
- Elastomeric soundstop extends beneath the metal clip, preventing the rod from making contact, thereby avoiding a short circuit and direct contact with the frame
- Simple and fast installation process
- Suitable for supporting low to medium-load ductwork, pipes, and speakers



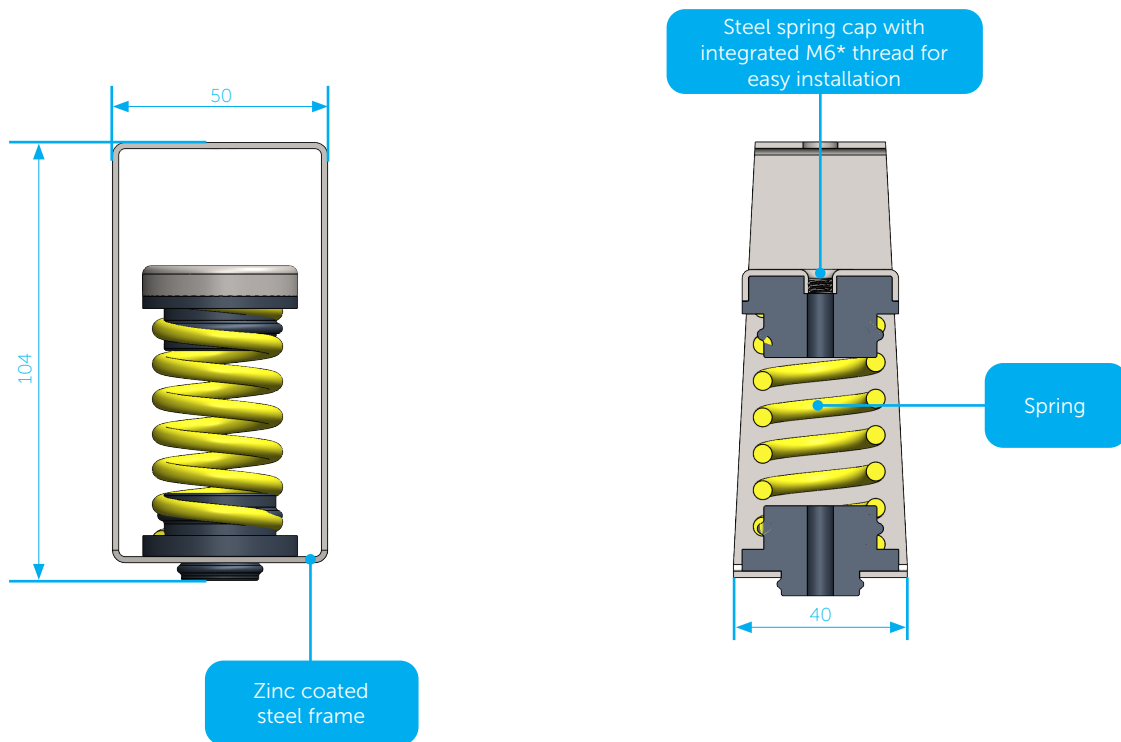
### PACKAGING

Model	Reference	Quantity per Box	Weight per Box [kg]	Dimension of Box [cm]
Stravilink DCH-S75	001983	24	5.64	23 x 15 x 17.3
Stravilink DCH-S150	001984	24	6.06	23 x 15 x 17.3
Stravilink DCH-S230	001985	24	5.40	23 x 15 x 17.3
Stravilink DCH-S340	001986	24	6.72	23 x 15 x 17.3
Stravilink DCH-S455	001987	24	6.90	23 x 15 x 17.3



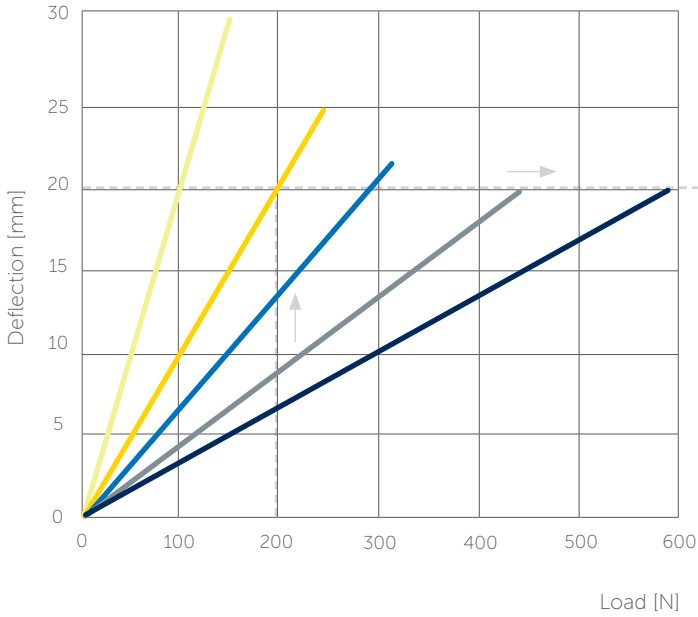
Model	Design Load		Resonance Frequency at Design Load	Load Range (per Hanger)		Spring Colour
	kg	N	Hz	kg	N	
Stravilink DCH-S75	7.5	75	< 4	4 - 14.5	40 - 145	Light Ivory
Stravilink DCH-S150	15	150	< 4	7.5 - 24	75 - 240	Zinc Yellow
Stravilink DCH-S230	23	230	< 4	11.5 - 31.5	115 - 315	Sky Blue
Stravilink DCH-S340	34	340	< 4	17 - 44	170 - 440	Silver Grey
Stravilink DCH-S455	45.5	455	< 4	23 - 59	230 - 590	Pearl Night Blue

Notes:  
 Admissible load of steel elements: 1234 N.  
 Products are suited up to a C2 environment (atmosphere with little or no degree of pollution).  
 The temperature range of use is between -30°C and 70°C.  
 To assess which type is appropriate the following information is needed:  
 1) The weight and construction of the supported ceiling - this will determine the type of hanger;  
 2) The weights and support locations of any items hung from the ceiling.

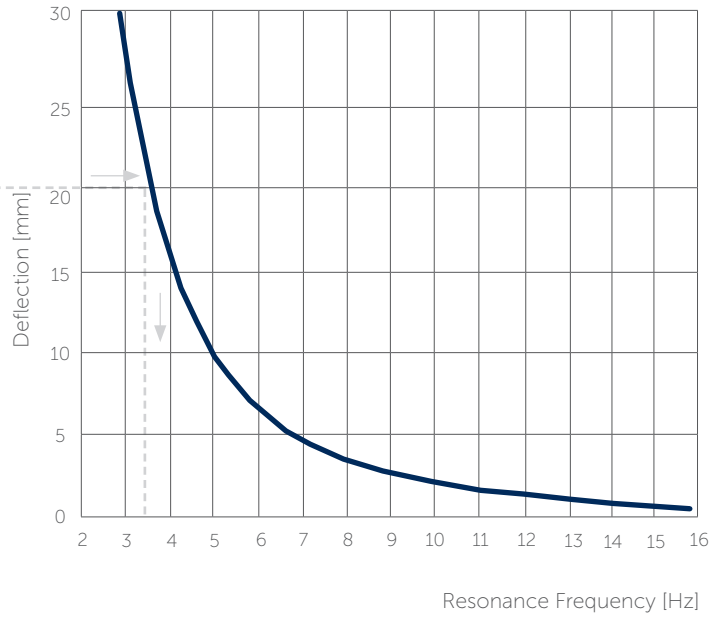


Notes:  
 All dimensions in millimeters (mm).  
 \*Available in M8, upon request.

Deflection as Function of Load

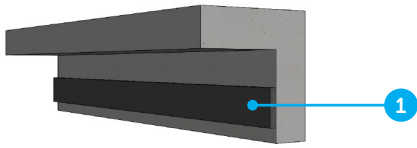


Relationship between Deflection and Resonance Frequency



- Stravilink DCH-S75
- Stravilink DCH-S150
- Stravilink DCH-S230
- Stravilink DCH-S340
- Stravilink DCH-S455

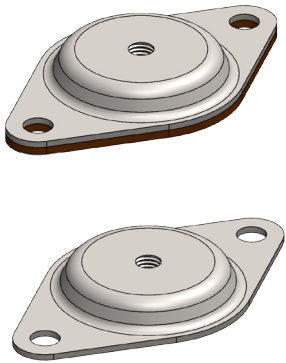
The resonance frequency of a Stravilink hanger can be determined by its load. To start the calculation use the graph "deflection as function of load" this will provide the deflection at the specified load. Then moving horizontally to the right hand side plot "deflection as function of frequency" on which the corresponding resonance frequency can be found. As an example, the resonance frequency of a Stravilink DCH-S150 loaded with 200 N is determined. The corresponding deflection is 20 mm. The resonance frequency of a spring at 20 mm deflection is 3.5 Hz.



**Perimeter Strip**

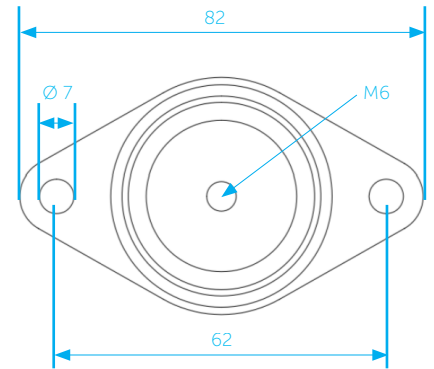
1. Self-adhesive perimeter strip 10 mm thick to isolate the ceiling from the adjacent walls.

Note: Standard widths of 50 mm, 100 mm, and 150 mm are available in 10 lm rolls.



**M6 anchor plate**

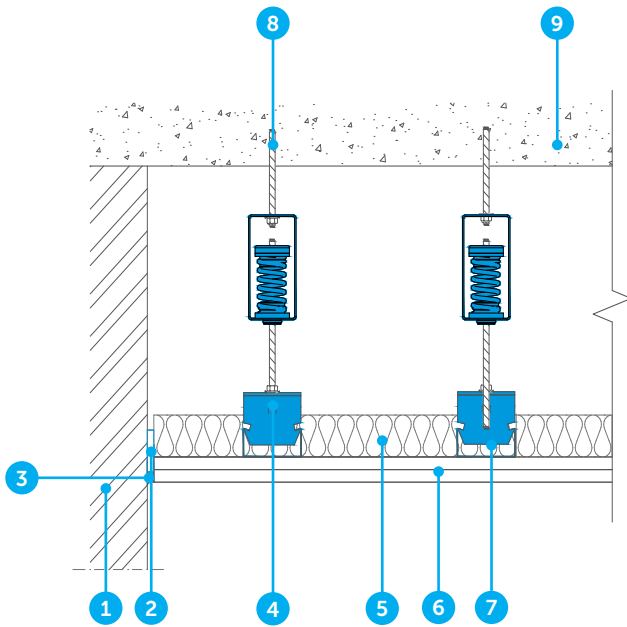
Available with (for settlement on rough surfaces) or without rubber (2 mm)  
 Material: DX51D+S275  
 Admissible load of steel element: 3090 N



Note: All dimensions in millimeters (mm).



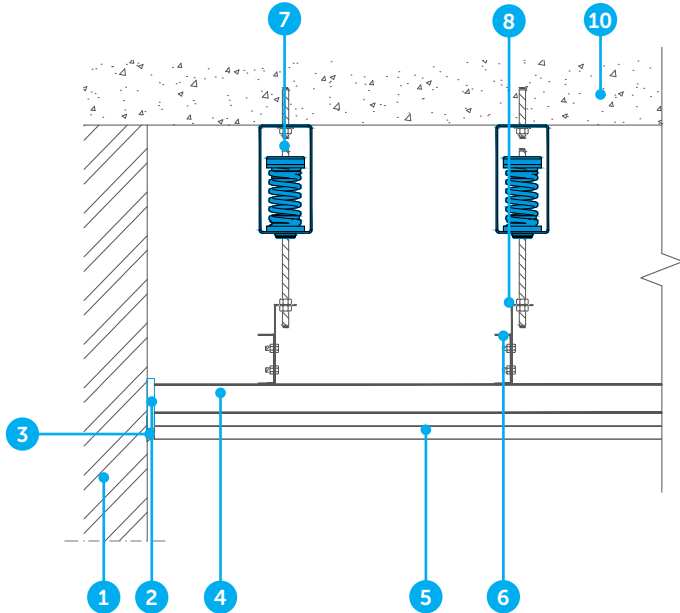
### 47/60 mm channel



1. Wall
2. Perimeter Strip
3. Elastic caulk
4. C Clip
5. Absorption layer
6. Plasterboards, gypsum board or dry lining
7. 47/60 mm channel
8. Stravilink DCH-S
9. Concrete Slab

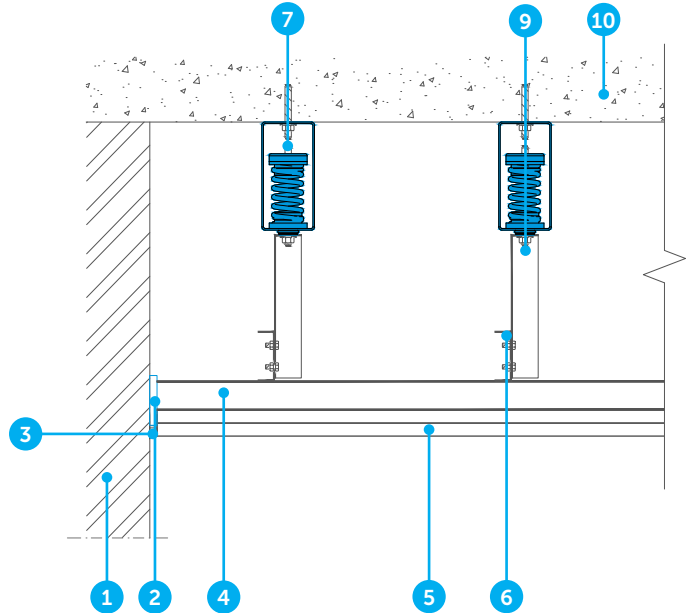
### MF grid

#### Option 1



1. Wall
2. Perimeter Strip
3. Elastic caulk
4. British gypsum MF5 secondary channel
5. Plasterboards, gypsum board or dry lining

#### Option 2



6. British gypsum MF7 primary channel
7. Stravilink DCH-S
8. Pre-formed angle bracket
9. British gypsum FEA1 angle
10. Concrete Slab

**Test Setup**

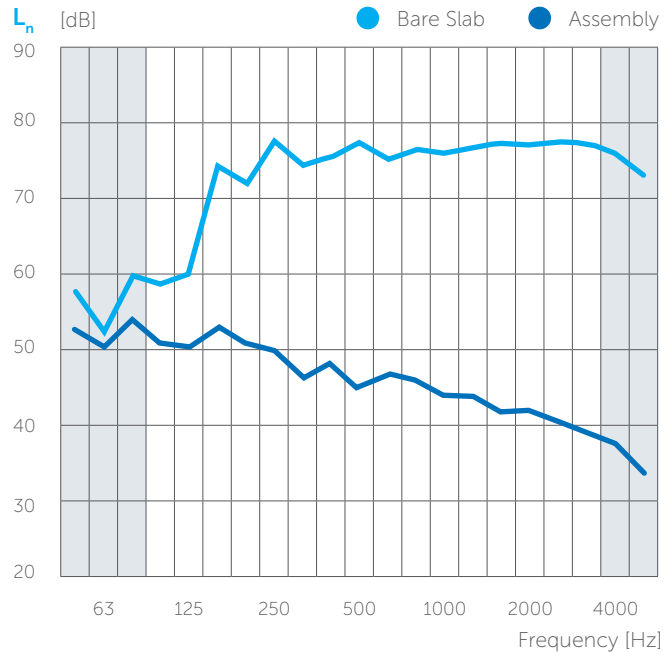
1. 140 mm concrete base slab
2. 220 mm void
3. Stravilink DCH-S directly fixed to concrete [on grid of 567.5 x 1200 mm]
4. 60 mm mineral wool
5. 2x layers 12.5 mm gypsum boards

Setup	$L_{n,w}(C_i)$	$\Delta L_w(C_i)$	$R_w(C,C_{tr})$
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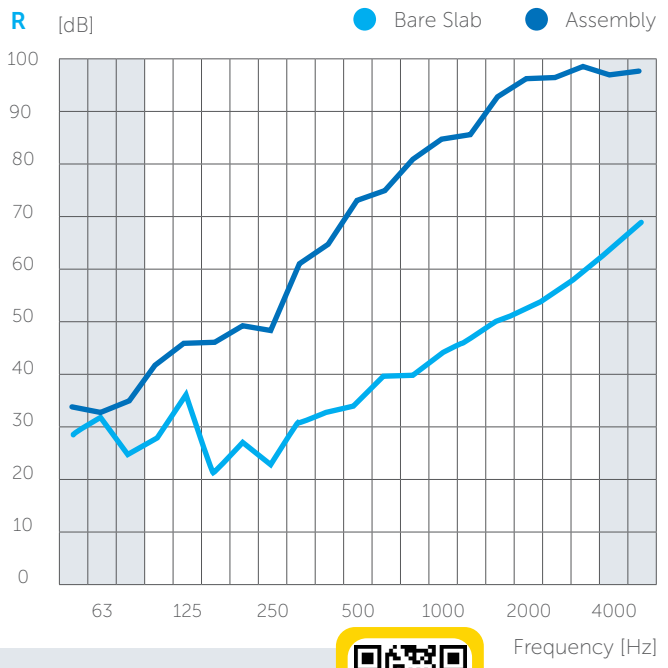
Assembly	49 (-4)	31 (-11)	75 (-3, -8)
Bare Slab	83 (-10)		52 (-1,-5)

Laboratory report available upon request  
Test report numbers TS-25-586-06 & TS-25-586-12

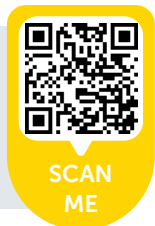
Frequency [Hz]	$L_n$ [dB]	
	Bare Slab	Assembly
50	57,9	52,9
63	52,6	50,6
80	59,9	54,3
100	59	51,4
125	60,4	50,9
160	74,4	53,4
200	71,8	51,4
250	77,4	50,4
315	74,2	46,6
400	75,3	48,8
500	77,3	45,6
630	75,2	47,2
800	76,4	46,3
1000	75,8	44,6
1250	76,7	44,1
1600	77,2	42,3
2000	76,9	42,3
2500	77,3	41
3150	77	39,8
4000	76	38,1
5000	73	34,4



Frequency [Hz]	R [dB]	
	Bare Slab	Assembly
50	42,6	46,4
63	45,3	45,9
80	39,3	47,5
100	41,8	53,1
125	48,2	56,3
160	36,5	56,4
200	41,2	58,9
250	37,8	58,3
315	44,1	68,7
400	46,1	71,5
500	46,9	77,9
630	51,3	79,5
800	51,6	84
1000	54,7	87,3
1250	57,1	88
1600	59,9	93,8
2000	61,7	96,8
2500	64	96,8
3150	67	98,2
4000	70,6	97,2
5000	74,9	97,7



Scan the QR code to access Stravi-dB acoustic data, including reports and editable CSV files.  
<https://stravi-db.com/>



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