Ceiling Hanger for Barrier Ceilings

6mm to 33mm Total Static Deflection, Spring/Rubber Elements

APPLICATION

A ceiling hanger with load rating up to 250kg for barrier ceilings under mechanical plant rooms offering a high degree of isolation efficiency.

The BC brackets are designed for fixing to the underside of concrete slabs.

FEATURES

- SHSB, RSHSB for capacity up to 200kg with varied degrees of isolation efficiency
- RHB2 capacity up to 250kg
- Static deflection ranges from 6mm to 33mm depending on isolator used
- The active element is colour coded for easy identification of load range
- Sturdy, galvanised heavy duty steel cage bracket
- If mechanical or fire damage occurs, metal plates in the hanger element interlock so that complete loss of support is less likely

SHSB / RSHSB PRODUCT GUIDE

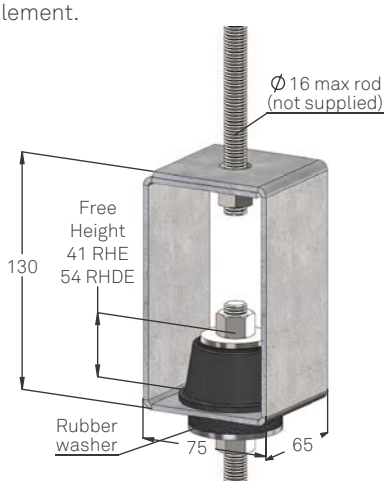
Type	Max Load kg	Static Deflection mm	Spring Constant kg/mm	Spring Colours
SHSB-9	10	33	0.3	Yellow
SHSB-10	15	33	0.45	Brown
SHSB-11	30	33	0.9	Blue
SHSB-12	50	28	1.8	Black
SHSB-13	75	25	3	Red
SHSB-14	125	25	5	Green
SHSB-16	175	20	8.8	Grey
SHSB-17	200	15	13.3	Orange
RSHSB-9	10	34	0.3	Yellow
RSHSB-10	15	34	0.45	Brown
RSHSB-11	30	34	0.9	Blue
RSHSB-12	50	32	1.8	Black
RSHSB-13	75	31	3	Red
RSHSB-14	125	29	5	Green
RSHSB-16	175	26	8.8	Grey
RSHSB-17	200	20	13.3	Orange

RHB2 PRODUCT GUIDE

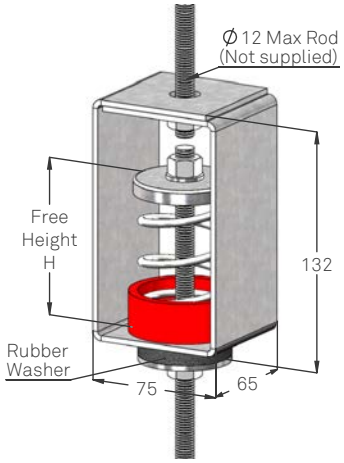
Rubber Element	Rubber Element Colour	Max Load kg	Dynamic Factor	Static Deflection mm		Height Rubber Element mm	
				RHE2	RHDE2	RHE2	RHDE2
RHE2, RHDE2	White	70	1.1	6	10	41	54
	Red	100	1.2				
	Green	160	1.4				
	Grey	250	1.5				

SPECIAL FEATURES

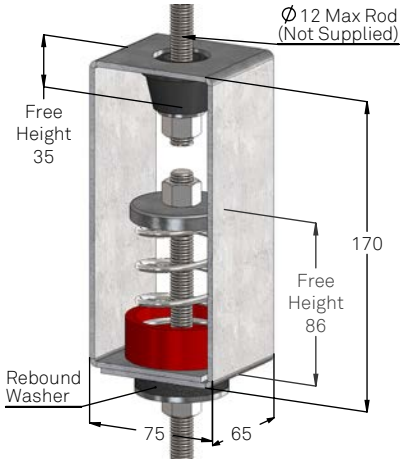
Rebound washer is used to ensure that there is no dislocation of rubber/spring element.



RHB2 DIMENSIONS



SHSB DIMENSIONS



RSHSB DIMENSIONS

DYNAMIC CHARACTERISTICS – RUBBER ELEMENT

Rubber mounts differ from spring mounts in that the natural frequency is a function not only of deflection, but also of the rubber hardness (durometer), an indication of rubber's damping capabilities.

The natural frequency is usually greater than indicated by static deflection alone. For effective assessment of natural frequency, multiply natural frequency obtained from static deflection by the dynamic factor given in the table.

ACOUSTICAL ISOLATION – RUBBER ELEMENT

Spring hangers incorporate a high frequency rubber cup isolator. The standard SHS unit is theoretically 92-95% effective in isolation of audible frequencies when loaded and installed correctly. For higher levels of isolation, RSHS units are to be used.

PERFORMANCE CHARACTERISTICS

Axial loads: See table – for rubber elements load deflection is close to linear from 10% to 100% load. For spring hangers load deflection is linear.

Creep for rubber element: Maximum 4% deflection per decade of time (ref 1 minute).

HANGER SELECTION

When selecting hangers, it is recommended that the calculated mass of the ceiling is overestimated by 10-20% to avoid overloading of any element. If maximum rated deflections are required, then ceiling should be weighed and an accurate assessment of loads made.

INSTALLATION

Hangers may be fastened directly to the slab or inserted in the hanger rod. Springs should ideally be pre-compressed to 50% of rated load to prevent the ceiling falling too far during installation.

TECHNICAL ASSISTANCE

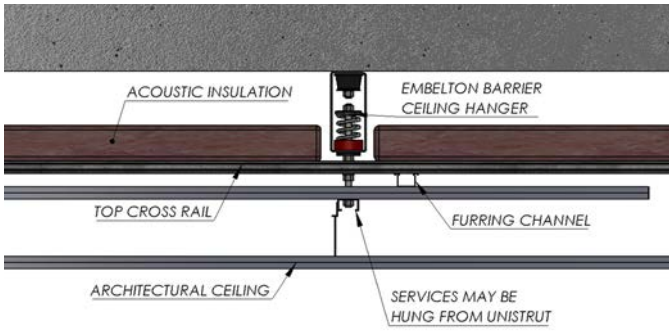
All Embelton offices can provide detailed technical assistance on the use of this product in specific applications.

CONDITIONS OF SALE

These products are sold subject to the published Embelton General Conditions of Sale, copies of which may be inspected on request.

SPECIFICATION

Barrier ceiling hangers may either be rubber, spring or rubber/spring combination, colour coded for easy identification of load capacity with deflection under rated load of 5mm to 33mm. System has capability of interlocking in the event of fire or mechanical damage. They shall be type BC-RHB, -SHSB, -RSHSB as supplied by Embelton.



BARRIER CEILING INSTALLATION ASSEMBLY

BARRIER CEILING INSTALLATION WITH INSULATION INFILL