

Seismic Sway Brace System

Through the use of aircraft cable with swivel anchors, piping, ductwork and suspended equipment can be safely prevented from swinging out of control during earthquakes or when exposed to wind.

SCB- Seismic Cable Brace Swivel Anchor with All Parts Electro-Galvanized

TYPE SCB ASSEMBLY RATINGS AS CONTROLLED BY CABLE BREAK STRENGTH*

Size	Cable Dia. (in) (mm)	OSHPD Max. Ratings (lbs) (kgs)
SCB-0	1/16" 1.6	235 107
SCB-0	3/32" 2.4	460 209
SCB-0	3/32" 2.4	500 227
SCB-1	1/8" 3.0	975 442
SCB-2	3/16" 4.5	2050 930
SCB-3 & -3-2B	1/4" 6.0	3150 1429
SCB-4	3/8" 9.0	6875 3118

* 7 x 7 Strand Core

TYPE SCB ANCHOR DIMENSIONS (inches mm)

Size	A	B	C	D	E	F	G	H
SCB-0	15/16	1 1/2	3/4	15/16	13/4	-	7/16	1/2
SCB-1	13/8	2	1	15/16	33/8	1 1/2	9/16	1/2
SCB-2	1 3/8	2 3/4	1 3/8	1 3/16	4 3/8	1 3/4	1 1/16	5/8
SCB-3	2	3 1/2	1 3/4	1 7/16	4 3/4	2	1 3/16	3/4
SCB-3-2B	2	4 3/4	1	1 7/16	4 3/4	2	1 3/16	3/4
SCB-4	3 1/8	5	2 1/2	1 15/16	5 3/4	2 1/4	1 5/16	1

SSBS- Seismic Solid Brace Strut Anchor

TYPE SSBS RATINGS

OSHPD Rated Capacity (lbs) (kgs)	Torque on 1/2" Dia. Bolt (ft-lbs) (N-m)
3000 1365	50 68

† Attachment nuts must have stamped teeth to achieve these values.

TYPE SSBS DIMENSIONS

Size	A (in) (mm)	For Rod Sizes (lbs) (kgs)
SSBS-12	1 7/32 13	3/8 & 1/2 9 & 13
SSBS-20	2 5/32 20	5/8 & 3/4 16 & 19
SSBS-25	1 11/32 26	7/8 & 1 22 & 25

Finish: All parts are Zinc Electro Plated.

SSB- Seismic Solid Brace Swivel Anchor with All Parts Electro-Galvanized. Angle or Channel is substituted for Cable.

Swivel ended anchors simplify installations as braces do not have to be cut to exact length. The anchor will swivel to provide solid anchorage when bolting.

TYPE SSB ANCHOR RATINGS*

Size	OSHPD Max. Ratings (lbs) (kgs)
SSB-3	5000 2268
SSB-4	8750 3967

TYPE SSB ANCHOR DIMENSIONS (inches mm)

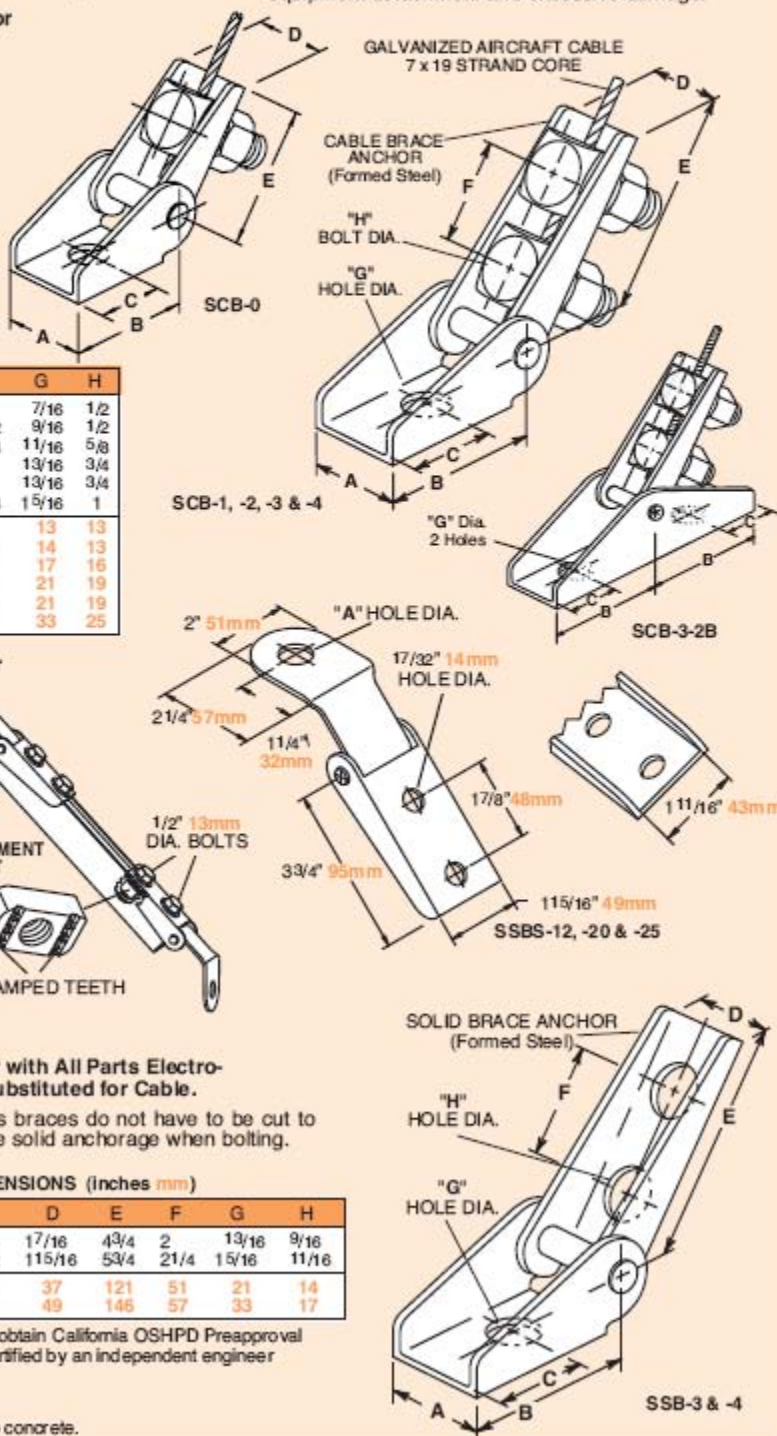
Size	A	B	C	D	E	F	G	H
SSB-3	2	3 1/2	1 3/4	1 7/16	4 3/4	2	1 3/16	9/16
SSB-4	3 1/8	5	2 1/2	1 15/16	5 3/4	2 1/4	1 5/16	1 1/16

* Ratings are from test data and calculations used to obtain California OSHPD Preapproval Number OPA-0349. Testing was supervised and certified by an independent engineer registered in the state of California.

Ratings are based on attachment to steel.

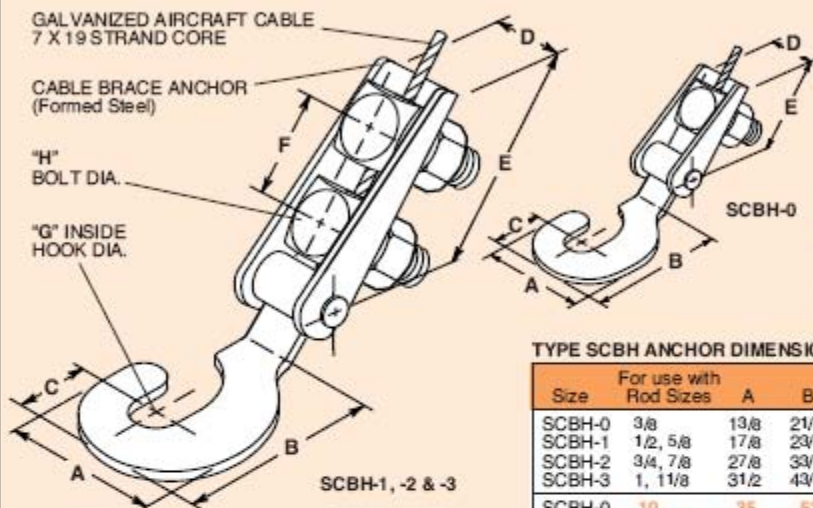
Ratings will be controlled by attachment methods to concrete.

Cable braces are designed so when they are installed with sufficient slack they do not interfere with neoprene or spring isolator function but effectively control movement, preventing equipment detachment and excessive damage.



SCBH– Seismic Cable Brace Hook Anchor and Assembly

Cables can only be used in tension so a hook does not slide off. A hooked end provides for quick attachment to hanger rods without removing clevis bolts or trapeze rods.



TYPE SCBH ASSEMBLY RATINGS AS CONTROLLED BY CABLE BREAK STRENGTH

Size	Cable Dia. (in) (mm)	OSHPD Max. Ratings (lbs) (kgs)
SCB-0	1/16* 1.6	235 107
SCB-0	3/32* 2.4	460 209
SCB-0	3/32 2.4	500 227
SCBH-1	1/8 3.0	975 442
SCBH-2	3/16 4.5	2050 930
SCBH-3	1/4 6.0	3150 1429

* 7 x 7 Strand Core

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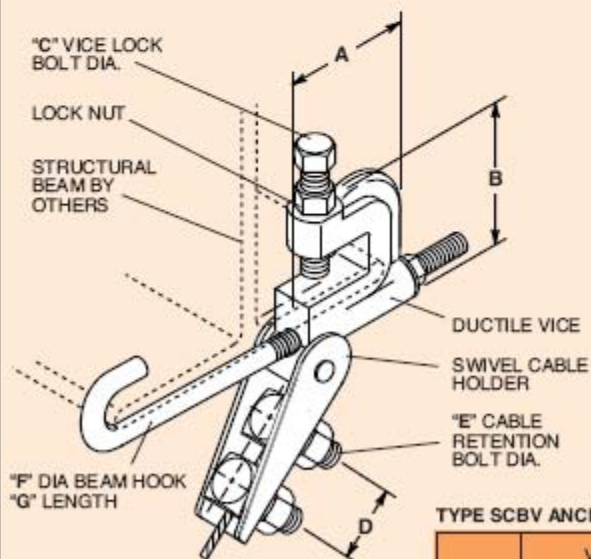
Ratings are based on attachment to steel. SCBH assemblies will fit rod sizes as tabulated. Preferred installation angle is 45°. Maximum variation ±15°.

TYPE SCBH ANCHOR DIMENSIONS (inches mm)

Size	For use with Rod Sizes	Dimensions (inches mm)								
		A	B	C	D	E	F	G	H	
SCBH-0	3/8	13/8	21/16	11/16	15/16	13/4	–	3/8	1/2	
SCBH-1	1/2, 5/8	17/8	23/8	1	1	33/8	1 1/2	5/8	1 1/2	
SCBH-2	3/4, 7/8	27/8	33/4	13/8	13/16	43/8	13/4	7/8	5/8	
SCBH-3	1, 1 1/8	31/2	43/4	13/4	17/16	43/4	2	1 1/8	3/4	
SCBH-0	10	35	52	17	24	44	–	10	13	
SCBH-1	13, 16	48	60	25	25	86	38	16	13	
SCBH-2	19, 22	73	95	35	30	111	44	22	16	
SCBH-3	25, 28	89	121	44	37	121	51	29	19	

SCBV– Seismic Cable Brace Vise Anchor and Assembly

The SCBV can be used with either an SCB or SCBH on the other end. Clamping to beam flanges eliminates drilling or welding and generally presents a cost savings.



TYPE SCBV ASSEMBLY RATINGS AS CONTROLLED BY CABLE BREAK STRENGTH

Size	Cable Dia. (in) (mm)	OSHPD Max. Ratings (lbs) (kgs)
SCBV-1	1/8 3.0	975 442
SCBV-2	3/16 4.5	2050 930
SCBV-3	1/4 6.0	3150 1429

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Ratings are based on attachment to steel beams. SCBV assemblies will fit beam flanges as tabulated. Preferred installation angle is 45°. Maximum variation ±15°.

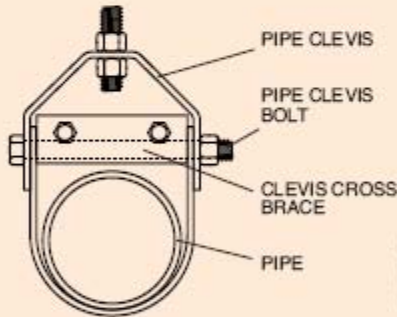
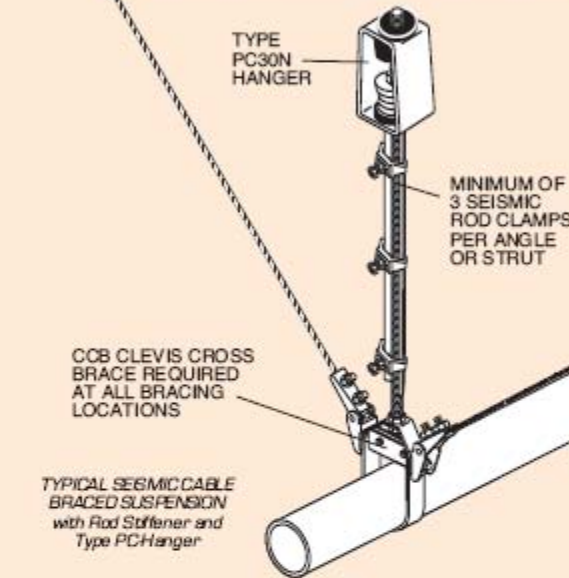
TYPE SCBV ANCHOR DIMENSIONS (inches mm)

Size	VICE JAW			Beam Flange Width Range								
	Width	Clearance	Depth	A	B	C	D	E	F	G	Width Range	
SCBV-1	11/16	11/16	15/16	17/8	23/8	7/16	11/2	1/2	3/8	10	31/2 - 81/2	
SCBV-2	7/8	11/16	11/16	27/8	3	1/2	13/8	5/8	3/8	12	31/2 - 10	
SCBV-3	1 1/16	11/8	115/16	33/8	33/4	5/8	2	3/4	1/2	12	4 - 91/2	
SCBV-1	17	17	33	48	60	11	38	13	9	254	89 - 216	
SCBV-2	22	27	27	73	76	13	44	16	9	305	89 - 254	
SCBV-3	27	29	49	86	95	16	51	19	13	305	102 - 241	

NOTE: Not to be used as a vertical hanger for equipment, ductwork or piping. To be used as a seismic restraint only.

SCBA Assembly– Two SCB Swivel Anchors attached to Galvanized Aircraft Cable 7 x 19 Strand Core

Controlling sway is frequently not enough to insure safety. Rod stiffeners such as angle attached with seismic rod clamps (SRC) or strut channel attached with seismic rod clamps (UC) prevent suspended rods from buckling from vertical movements. Mason isolation hangers which have vertical limit stops should be used to minimize travel and reduce damage due to excessive acceleration. These vertical limit stops are standard on all Mason precompressed (PC-prefixed) isolation hangers.

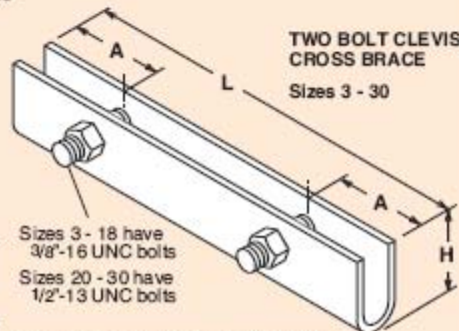
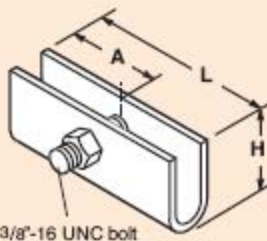


CCB has California OSHPD Anchorage Preapproval number OPA-0349.

CCB– Clevis Cross Brace

SINGLE BOLT CLEVIS CROSS BRACE

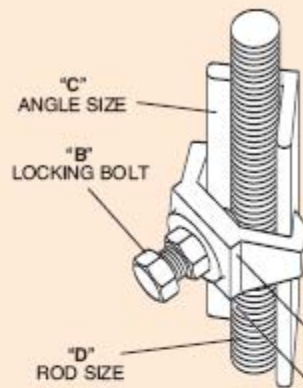
Sizes 1 1/2 - 2 1/2



Sizes 3 - 18 have 3/8"-16 UNC bolts
 Sizes 20 - 30 have 1/2"-13 UNC bolts

CCB has California OSHPD Anchorage Preapproval number OPA-0349.

SRC– Seismic Rod Clamp with Plated Nut and Bolt and Painted Clamp

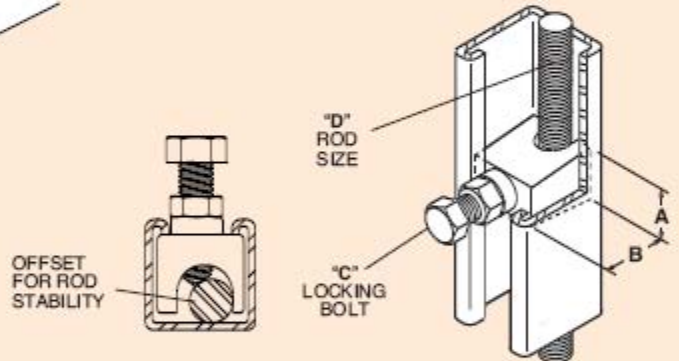


SRC has California OSHPD Anchorage Preapproval number OPA-0349.

SRC DIMENSIONS (Inches mm)

Type & Size	A	B	C	D	Acceptable Rod Sizes
SRC-1	1 3/8 35	1/2 13	1x1x1/4	3/8 - 5/8	10 - 16
SRC-1 1/2	1 9/16 40	5/8 16	1 1/2 x 1 1/2 x 1/4	3/8 - 1	10 - 25
SRC-2	1 3/4 44	5/8 16	2 x 2 x 1/4	3/8 - 1 1/4	10 - 32

UC– Seismic Rod Clamp for Strut Channel



UC DIMENSIONS (Inches mm)

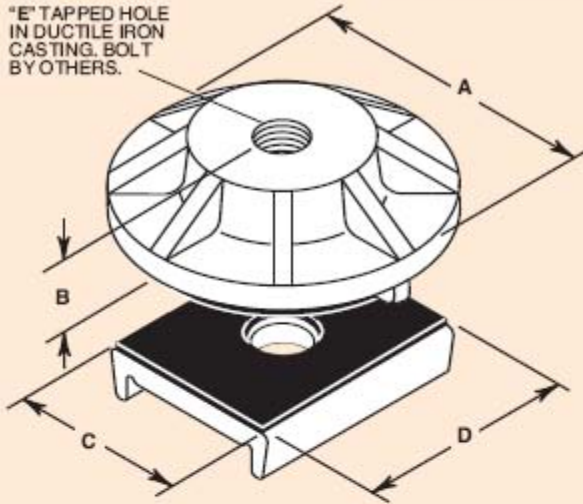
Size	A	B	C	D	Fits Rod Sizes
UC-1	1 25	1 1/8 28	3/8"-16 UNC	3/8	to 1/2" 10 to 13
UC-2	1 1/4 32	1 1/8 28	1/2"-13 UNC	5/8	to 3/4" 16 to 19

TYPE CCB DIMENSIONS (Inches mm)

Size	L	H	A
CCB-1 1/2	17/8 48	1 25	15/16 24
CCB-2	23/8 60	1 25	13/16 30
CCB-2 1/2	27/8 73	1 1/8 29	17/16 37
CCB-3	3 1/2 89	1 1/8 29	3/4 19
CCB-4	4 1/2 114	1 1/8 29	1 25
CCB-5	5 9/16 141	1 5/16 33	1 25
CCB-6	6 5/8 168	1 5/16 33	1 1/2 38
CCB-8	8 5/8 219	1 7/16 37	2 51
CCB-10	10 3/4 273	1 9/16 40	2 1/2 64
CCB-12	12 3/4 324	1 9/16 40	3 76
CCB-14	14 356	1 11/16 42	3 1/2 89
CCB-16	16 406	1 7/8 48	4 102
CCB-18	18 457	2 51	4 1/2 114
CCB-20	20 508	2 1/2 64	5 127
CCB-24	24 610	2 1/2 64	6 152
CCB-30	30 762	2 1/2 64	7 1/2 191

JAH- Joist Attachment Hardware

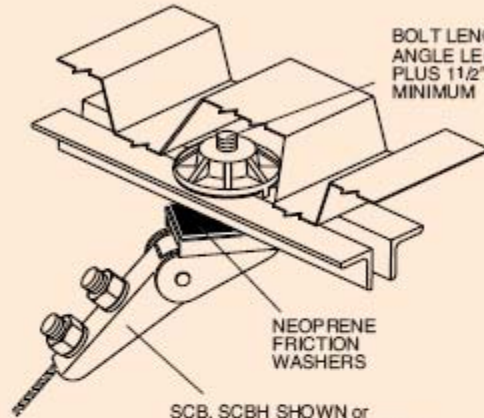
The JAH is used to attach solid or cable braces to the top cord of bar joists. Attachment to the lower cord is not recommended.



SCB ATTACHED TO TOP OF JOIST WITH JAH



BOLT LENGTH IS ANGLE LEG LENGTH PLUS 1 1/2" 40mm MINIMUM

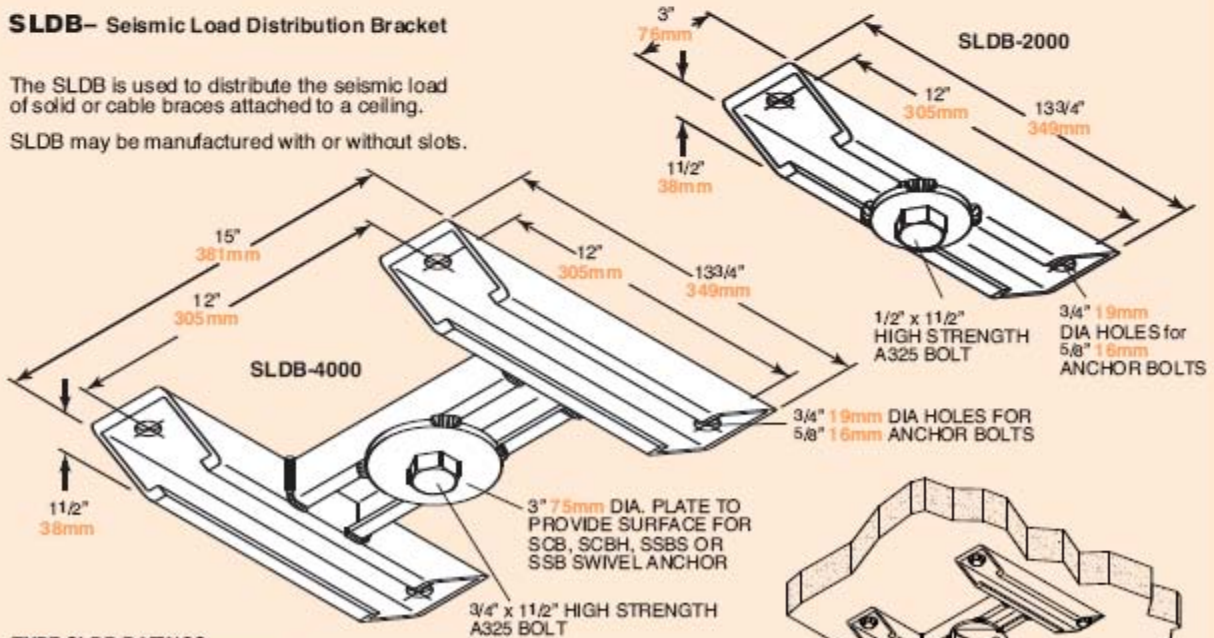


TYPE JAH DIMENSIONS (inches mm)

Size	SCB, SCBH, SSBS & SSB Size	A	B	C	D	E	Max. Load (lbs)(kgs)		
							SCB&SCBH	SSBS/SSB	
JAH-1	SCB, SCBH, SSBS-12	3 7/8	3/4 19	17 1/8 48	21 1/4 57	1 1/2-13UNC	975	442	3000 1361
JAH-2	SCB, SCBH, SSBS-20	3 7/8	3/4 19	21 1/8 54	3 7/8 96	5/8-11UNC	2050	930	3000 1361
JAH-3	SCB, SCBH, SSB-3	3 7/8	3/4 19	21 1/2 64	3 3/4 95	3/4-10UNC	3150	1429	5000 2268

SLDB- Seismic Load Distribution Bracket

The SLDB is used to distribute the seismic load of solid or cable braces attached to a ceiling. SLDB may be manufactured with or without slots.



TYPE SLDB RATINGS

Size	Capacity (lbs) (kgs)
SLDB-2000	2000 907
SLDB-4000	4000 1814

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SCB attached to ceiling with SLDB-4000

