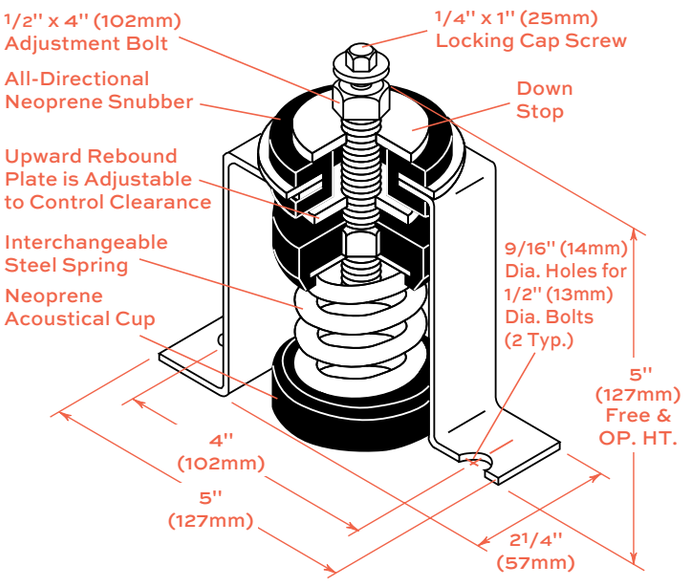
X SPRING SERIES SEISMIC MOUNTS

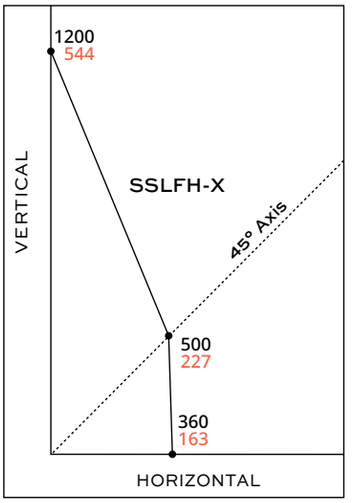
SSLFH-X

SSLFH-X 1" (25mm) Deflection X Spring Series



OSHPD OPA-0199

RATED LOAD CURVES (LB KG)†



†For kN divide kg by 102

Horizontal and Vertical plotted Ratings are California OSHPD approved values having the OSHPD Anchorage Preapproval Number OPA-0199. Testing and calculations were performed to meet OSHPD criteria.

To use OSHPD submitted rated load curves:

1. Calculate Vertical and Horizontal Forces on mountings including translations and overturning moments.
2. Plot Horizontal Load vs Vertical Load. The point must fall within the area below the OSHPD curve.

TYPE SSLFH RATINGS

Type & Size	Rated Capacity (lb)	(kg)	Rated Defl. (in)	(mm)	Mount Constant (lb/in)	(kg/mm)	Max. Horiz. Static G Rating*	Spring Color
SSLFH-X-12	12	5	1.05	27	10	0.19	29.8	Orange
SSLFH-X-23	23	10	1.30	33	18	0.31	15.7	Brown
SSLFH-X-33	33	15	1.10	28	30	0.54	10.9	Red
SSLFH-X-54	54	25	1.20	30	45	0.82	6.7	White
SSLFH-X-76	76	35	1.02	26	73	1.33	4.7	Black
SSLFH-X-113	113	51	1.00	25	113	2.05	3.2	Yellow
SSLFH-X-130	130	59	1.00	25	130	2.36	2.8	Purple
SSLFH-X-175	175	79	1.00	25	175	3.20	2.1	Silver
SSLFH-X-210	210	95	1.00	25	210	3.82	1.7	Blue

*Horizontal G Ratings are for quick reference only– Use OSHPD Rated Load Curves.

SPRING CHARACTERISTICS

Spring Size	Spring OD (in)	(mm)	Free Height (in)	(mm)	Ratio (Kx/Ky)	Ratio (OD/OH)
12 - 130	1 1/2	38	2 3/8	60	0.86 - 1.00	1.09 - 1.40
175 - 210	1 1/2	38	2 5/8	66	0.75	0.92 - 1.00

INSTALLATION INSTRUCTIONS

1. Remove locking cap screws and place mountings under holes in equipment base.
2. Shim mountings level before securing.
3. In all mounting locations, pass cap screws through holes in equipment base and screw loosely into leveling bolts.
4. Take two full counterclockwise turns on each leveling bolt and continue even adjustment of all mounts until all springs are loaded and mountings are back to Free and Operating Height.
5. Take no more than two additional counterclockwise turns on any leveling bolt to level equipment.
6. Tighten cap screws to secure equipment.
7. Adjust plates so there is 1/8" (3mm) clearance between top of plate and underside of all-directional neoprene cushion. Turn rebound plates clockwise to lower or counterclockwise to raise.

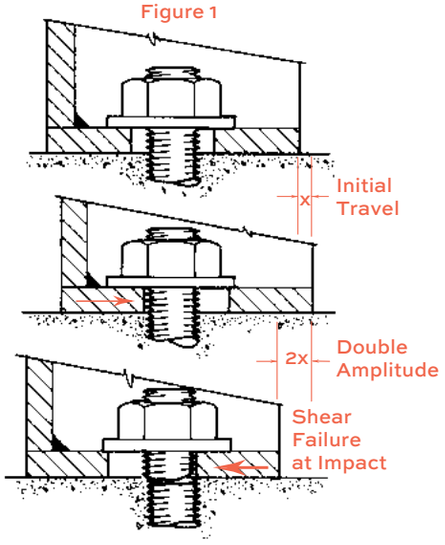
HOLE CLEARANCE FILLER
for SEISMIC & BLAST APPLICATIONS

HCF

When there is excessive clearance between anchor bolts and equipment holes, the equipment has a tendency to shear off the anchor bolts during earthquakes or bomb blasts at accelerations as low as 0.2 g. The reason as explained in figure 1 is a velocity buildup because of sliding. What was initially analyzed as a static system becomes dynamic.

IMPACT SHEAR FAILURE

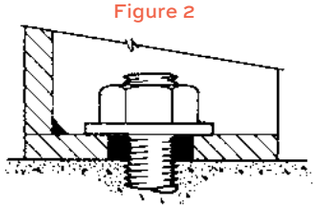
Figure 1



Type HCF Hole Clearance Filler provides a quick solution as it fills this clearance created by practical tolerances, off center bolts or the extreme situation where holes are enlarged on the jobsite by drilling or burning.

HCF REMEDY

Figure 2



HCF is a hand-kneadable, non-rusting, steel-reinforced epoxy that mixes in one minute to provide fast, permanent bonds to items made of ferrous and aluminum metals. After mixing, HCF has the consistency of clay and can be forced into the clearance with any tool similar to a putty knife or small scraper.

PACKAGING

HCF is packed in a clear plastic reusable tube with a plastic friction top.

COLOR

Black after cure.

HEALTH PRECAUTIONS

HCF has been proven to be non-toxic and non-skin irritating when tested in accordance with the Federal Hazardous Substances Labeling Act. However HCF contains epoxy resins and amine which may cause irritation to sensitive skin. Wear protective plastic gloves to be safe and wash your hands and any exposed skin with soap and warm water after use.

In case of eye contact, flush with water and consult a physician. It may be harmful if swallowed. Keep out of the reach of children.

WARRANTY

All recommendations, statements and technical data contained herein are based on tests we believe to be reliable and correct.

PERFORMANCE DATA

WORKING LIFE	3 1/2 – 5 minutes
SHELF STABILITY	12 months min. @ 75°F (24°C)
SHORE D HARDNESS	80 after 24 hours
TEMPERATURE LIMITATIONS	250°F (121°C) continuous; 300°F (148°C) intermittent
CHEMICAL RESISTANCE	Resistant to hydrocarbons, ketones, alcohols, esters, halocarbons, aqueous salt solutions, and dilute acids and bases.
SHRINKAGE	Less than 1%
COMPRESSIVE STRENGTH	12,000 psi (844 kg/cm^2)

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

In order to achieve optimum adhesion, surfaces must be cleaned free of grease.

MIXING

Twist or cut off required amount. To mix, knead with fingers to a uniform color. If mixing is difficult, warm HCF to room temperature or slightly above.

FILLING

Shape into an oversized doughnut and force into equipment bolt hole with a putty knife. Insert cap screw through washer and doughnut and tighten before hardening begins (within two minutes of mixing). Strike off excess material, preferably with a tool wetted with clean water. HCF sets up in 30 minutes and the cure time is 24 hours.