HANGERS PIPING ANCHORS AND GUIDES SECTION

30° SWING, SPRING HANGERS:

W30

Ceiling Hangers shall be fail safe and include a steel frame containing a nominal 1" deflection steel spring seated in an AASHTO Bridge Bearing Quality Low Dynamic Stiffness Rubber Cup with a rubber bushing extending through the box to prevent metal to metal contact between the steel suspension rod and the frame. Dynamic Stiffness of the cup shall not exceed 1.4. The ID of the bushing must allow a 30° swing from side to side before rod contact. Springs shall be factory pre-compressed to 70% of the assigned deflection. Hangers shall be Mason Industries 30CC for 1-1/2" x 1/2" channel, W30 for wire, W30CC for wire and 1-1/2" x 1/2" channel. Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to deflection.

30N

Hangers shall consist of rigid steel frame containing a minimum 1-1/4" (32mm) thick LDS rubber element at the top and a steel spring with general characteristics as in specification B seated in a steel washer reinforced LDS rubber cup on the bottom. The LDS rubber element and the cup shall have molded bushings projecting through the steel box. In order to maintain stability the boxes shall not be articulated as clevis hangers nor the LDS rubber element stacked on top of the spring. Spring and hanger lower hole diameters shall be large enough to permit the hanger rod to swing through a 30° arc from side to side before contacting the cup bushing and short circuiting the spring. Submittals shall include a hanger drawing showing the 30° capability. Hangers shall be type 30N as manufactured by Mason Industries, Inc.

PC30N

Hangers shall be as described in 30N spec, but they shall be pre-compressed and locked at the rated deflection by means of a resilient seismic up stop to keep the piping or equipment at a fixed elevation during installation. The hangers shall be designed with a release mechanism to free the spring after the installation is complete and the hanger is subjected to its full load. Deflection shall be clearly indicated by means of a scale. Submittals shall include a drawing of the hanger showing the 30 degree capability. Hangers shall be type PC30N as manufactured by Mason Industries, Inc.

RW30N

Hangers shall be as described in 30N spec, but they shall be supplied with a combination rubber and steel rebound washer as the seismic up stop for suspended piping, ductwork, equipment and electrical cable trays. Rubber thickness shall be a minimum of 1/4” (6mm). Submittals shall include a drawing of the hanger showing the installation of the rebound washer. Hangers shall be type RW30N as manufactured by Mason Industries, Inc.

W30N

Ceiling Hangers shall be fail safe and include a steel frame containing an AASHTO Bridge Bearing Quality LDS Rubber Element at the top and a nominal 1” deflection steel spring at the bottom. Springs shall be seated in an LDS cup with a rubber bushing extending through the box to prevent metal to metal contact between the steel suspension rod and the frame. Dynamic Stiffness of Cup and Element shall not exceed 1.4. The ID of the bushing must allow a 30° swing from side to side before rod contact. Springs shall be factory pre-compressed to 70% of the assigned deflection. Hangers shall be Mason Industries 30NCC for 1-1/2” x 1/2" channel, W30N for wire, or W30NCC for wire and channel. Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to deflection.

PC30, PC30S, PC30NS, RW30

Please contact us for more information regarding this product.

SPRING HANGERS

HS, PCHS, PCHSS, RWHS, WHS, IM
Please contact us for more information regarding this product.

SPRING & NEOPRENE HANGERS

DNHS
PCDNHS
PCDHNSS
RWDNHS
WDNHS

DNHS, PCDNHS, PCDNHSS, RWDNHS, WDNHS
Please contact us for more information regarding this product.

ARCHITECTURAL CEILING HANGERS
CH-620H BULLETIN
(Spec's from Catalog Page)

30NCC, W30NCC SPECIFICATION

Ceiling Hangers shall be fail safe and include a steel frame containing an AASHTO Bridge Bearing Quality LDS Rubber Element at the top and a nominal 1" deflection steel spring at the bottom. Springs shall be seated in an LDS cup with a rubber bushing extending through the box to prevent metal to metal contact between the steel suspension rod and the frame. Dynamic Stiffness of Cup and Element shall not exceed 1.4. The ID of the bushing must allow a 30° swing from side to side before rod contact. Springs shall be factory pre-compressed to 70% of the assigned deflection. Hangers shall be Mason Industries 30NCC for 1-1/2" x 1/2" channel, W30N for wire, or W30NCC for wire and channel. Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to deflection.

30CC, W30NCC SPECIFICATION

Ceiling Hangers shall be fail safe and include a steel frame containing a nominal 1" deflection steel spring seated in an AASHTO Bridge Bearing Quality Low Dynamic Stiffness Rubber Cup with a rubber bushing extending through the box to prevent metal to metal contact between the steel suspension rod and the frame. Dynamic Stiffness of the cup shall not exceed 1.4. The ID of the bushing must allow a 30° swing from side to side before rod contact. Springs shall be factory pre-compressed to 70% of the assigned deflection. Hangers shall be Mason Industries 30CC for 1-1/2" x 1/2" channel, W30 for wire, W30CC for wire and 1-1/2" x 1/2" channel. Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to deflection.

30CSCH SPECIFICATION

Ceiling Hangers shall have a steel frame formed to minimize height by supporting 1-1/2" x 1/2" ceiling

channels on either side of a 1" nominal deflection centered spring. The spring shall be seated in an AASHTO Bridge Bearing Quality LDS Rubber Cup with a rubber bushing extending through the frame to prevent metal to metal contact between the steel suspension rod and the frame. Rubber Dynamic Stiffness shall not exceed 1.4. The ID of the bushing must allow a 30° swing from side to side before rod contact. Springs shall be factory pre-compressed to 70% of the assigned deflection. Hangers shall be Mason Industries 30CSCH. Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to deflection.

W30SM or 30SMCC SPECIFICATION

Ceiling Hangers shall consist of a side attachment steel angle gusseted on each side to prevent bending. The gussets shall protect a 1" nominal deflection steel spring seated in a Bridge Bearing Quality LDS Rubber Cup with a rubber bushing extending through the horizontal leg to prevent metal to metal contact between the steel suspension rod and the frame. Rubber Dynamic Stiffness shall not exceed 1.4. The ID of the bushing must allow a 30° swing from side to side before rod contact. Springs shall be factory pre-compressed to 70% of the assigned deflection. Hangers shall be Mason Industries W30SM for ceiling wire attachment or 30SMCC if 1-1/2" x 1/2" ceiling channels are used. Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to spring deflection.

HDCC, WHD or WHDCC SPECIFICATION

Ceiling Hangers shall be fail safe and include a steel frame containing an AASHTO Bridge Bearing Quality LDS Rubber Element molded with an integral lock in grommet at the bottom to prevent steel rod to housing contact. Dynamic Stiffness shall not exceed 1.4 or the corrected frequency 8 Hz. Housing configurations shall be offered to accommodate bolting to structure and simple attachment to 1-1/2" x 1/2" channel, 12 gauge wire top and bottom or 12 gauge wire on top and 1-1/2" x 1/2" channel on the bottom. Ceiling hangers shall be Mason Industries type HDCC, WHD or WHDCC as required. Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to frequency.

WHR SPECIFICATION

Ceiling Hangers shall be fail safe and consist of opposed washers sandwiching an AASHTO Bridge Bearing Quality LDS Rubber Element 1-1/8" thick. Dynamic Stiffness shall not exceed 1.4" nor the corrected frequency 12 Hz. Connections shall be made with 12 gauge wire top and bottom passing through hairpin loops attached to the opposing washers. Ceiling Hangers shall be Mason Industries type WHR. Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to frequency.

CRCH SPECIFICATION

Ceiling Hangers shall have a steel frame formed to minimize height by holding a 1-1/2" x 1/2" ceiling channel on either side of an AASHTO Bridge Bearing Quality LDS Rubber Element molded with an integral lock in grommet at the bottom to prevent steel rod to housing contact. Dynamic Stiffness shall not exceed 1.4 nor the corrected frequency 8 Hz. Ceiling Hangers shall be Mason Industries CRCH.

Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to frequency.

HDSMCC or WHDSM SPECIFICATION

Ceiling Hangers shall consist of a side attachment steel angle gusseted on each side to prevent bending. The gussets shall protect an AASHTO Bridge Bearing Quality LDS Rubber Element molded with an integral lock in grommet at the bottom to prevent steel rod to housing acoustical short circuiting. Dynamic Stiffness shall not exceed 1.4 nor the corrected frequency 8 Hz. Housing configurations shall be offered for simple attachment to 1-1/2" x 1/2" channels or 12 gauge wire. Ceiling Hangers shall be Mason Industries HDSMCC or WHDSM. Submittals shall confirm AASHTO Quality and Dynamic Stiffness in addition to frequency.

PIPE DATA
DS-500-1.1 BULLETIN
No specs

ADA & VSG DS-510-3
(Spec's from VCS-100-13)

ADA SPECIFICATION

All-directional acoustical pipe anchors consist of two sizes of steel tubing separated by a minimum 1/2" (13mm) thickness of 60 Duro or softer neoprene. Vertical restraint shall be provided by similar material arranged to prevent up or down vertical travel. Allowable loads on the isolation material shall not exceed 500 psi (3.45 N/mm^2) and the design shall be balanced for equal resistance in any direction. All-directional anchors shall be type ADA as manufactured by Mason Industries, Inc

VSG SPECIFICATION

Pipe guides shall consist of a telescopic arrangement of two sizes of steel tubing separated by a minimum 1/2" (13mm) thickness of 60 durometer or softer neoprene. The height of the guides shall be preset with a set screw to allow vertical motion due to pipe expansion or contraction. Guides shall be capable of ±1-5/8" (41mm) motion, or to meet location requirements. Pipe guides shall be type VSG as manufactured by Mason Industries, Inc.

SEISMIC SWAY BRACE SYSTEM DS-602-3
(Spec's from SRG)

SCB, SCBH, SCBV SPECIFICATION

Seismic Cable Restraints shall consist of galvanized steel aircraft cables sized to resist seismic loads with a minimum safety factor of two and arranged to provide all directional restraint. Cables must be pre-stretched to achieve a certified minimum modulus of elasticity. Cable end connections shall be steel assemblies that swivel to final installation angle and utilize two clamping bolts to provide proper cable engagement. Cables must not be allowed to bend across sharp edges. Cable assemblies shall have an OPA preapproval from OSHPD in the State of California verifying the maximum certified load ratings. Cable assemblies shall be type SCB at the ceiling and at the clevis bolt, SCBH between the hanger rod nut and the clevis or equipment, or SCBV if clamped to a beam, all as manufactured by Mason Industries, Inc.

SSB, SSBS SPECIFICATION

Seismic solid braces shall consist of steel angles or channels to resist seismic loads with a minimum safety factor of 2 and arranged to provide all directional restraint. Seismic solid brace end connectors shall be steel assemblies that swivel to the final installation angle and utilize two through bolts to provide proper attachment. Seismic solid brace assembly shall have an OPA Preapproval from OSHPD in the state of California verifying the maximum certified load ratings. Solid seismic brace assemblies shall be type SSB or SSBS as manufactured by Mason Industries, Inc. **Note:** Specifications 12 – 14 apply to trapeze as well as clevis hanger locations. At trapeze anchor locations piping must be clamped to the trapeze. Specifications apply to hanging equipment as well.

SRC, UCC SPECIFICATION

Steel angles, sized to prevent buckling, shall be clamped to pipe or equipment rods utilizing a minimum of three ductile iron clamps at each restraint location when required. Welding of support rods is not acceptable. Rod clamp assemblies shall have an OPA Preapproval from OSHPD in the State of California. Rod clamp assemblies shall be type SRC or UCC as manufactured by Mason Industries, Inc.

CCB SPECIFICATION

Pipe clevis cross bolt braces are required in all restraint locations. They shall be special purpose preformed channels deep enough to be held in place by bolts passing over the cross bolt. Clevis cross braces shall have an OPA Preapproval from OSHPD in the State of California. Clevis cross brace shall be type CCB as manufactured by Mason Industries, Inc.

WBI & WBD DS-207H-2.1

(Spec from SRG)

The horizontal thrust restraint shall consist of a spring element in series with a neoprene molded cup as described in specification 5 with the same deflection as specified for the mountings or hangers. The spring element shall be designed so it can be preset for thrust at the factory and adjusted in the field to

allow for a maximum of 1/4" (6mm) movement at start and stop. The assembly shall be furnished with 1 rod and angle brackets for attachment to both the equipment and the ductwork or the equipment and the structure. Horizontal restraints shall be attached at the centerline of thrust and symmetrical on either side of the unit. Horizontal thrust restraints shall be type WBI/WBD as manufactured by Mason Industries, Inc.

(Spec from DS-207H-2.1)

When total air thrust exceeds 10% of the isolated weight, floor mounted or suspended air handling equipment shall be protected against excessive displacement by the use of horizontal thrust restraints. The restraint shall consist of a modified Specification B spring mounting. Restraint springs shall have the same deflection as the isolator springs. The assembly shall be pre-set at the factory and fine-tuned in the field to allow for a maximum of 1/4" 6mm movement from stop to maximum thrust. The assemblies shall be furnished with rod and angle brackets for attachment to both the equipment and duct work or the equipment and the structure. Restraints shall be attached at the center line of thrust and symmetrically on both sides of the unit. Horizontal thrust restraints shall be WB as manufactured by Mason Industries, Inc.