



NOVIA

A DIVISION OF CARPENTER & PATERSON

PRODUCT CATALOG

About Novia

Novia was founded in 1990 as Novia Associates, Inc. and our headquarters are in Salem, NH. In April 2015, Novia was purchased by Carpenter & Paterson, Inc., an industry leading pipe support and pipe hanger provider for commercial and industrial applications for over 100 years founded in the greater Boston, MA area. In partnership with Carpenter & Paterson, Novia now has a presence in many of the major markets across the US and Canada.

We specialize in providing custom, engineered vibration isolation and seismic



restraint systems to the HVAC industry with a complete line of spring and rubber mountings, isolation hangers, inertia bases, roof curbs, seismic restraints, and equipment support systems. With over 25

years of experience in designing and fabricating solutions to the HVAC industry, we have become an industry leader in vibration isolation, seismic, and sound control. Novia also has the ability to provide project-specific engineering on seismic and wind-load requirements that utilize the local and IBC codes with a PE stamp for the state in which your project resides.

For ordering information please call Novia at (603) 898-8600 or email us at sales@cp-novia.com.

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CLIENT PORTAL

As a partner of Novia we want to offer you an easily accessible Client Portal to product information, submittal pages, and IOMs on Novia's products and services. Please feel free to use these documents in planning your jobs and providing submittals to your customers and partners in time sensitive situations. Please visit our website at **www.cp-novia.com** and use the link for our Client Portal to sign up for an account.

These documents can be downloaded for use on each and every project where Novia products are needed. Just download the document, print, and write in any pertinent information that will help us guide you through the submittal and order processes. Send the finished document to Novia via fax or email to your salesman. Thank you for your continued partnership and we look forward to serving your needs!

- Novia Team

SPEC INFORMATION

Novia provides a base line vibration isolation, seismic and wind restraint, and thermal expansion specification through MasterSpec and the American Institute of Architects. Your engineering firm does not need to be a MasterSpec subscriber; the Novia MasterSpec is available for download through our website and is fully editable. With the inclusion of a few pieces of information from the structural drawings the specification can be used as a boilerplate for most typical projects. The specification is also fully customizable for your unique needs and special projects. Regardless of whether you choose to use the Novia specification you can always contact Novia for technical advice regarding code issues such as seismic and wind restraint compliance or with acoustical and noise control concerns. At Novia we do not consider ourselves just another vendor; we consider ourselves part of our client's team.

Link to Novia specifications on MasterSpec:

www.productmasterspec.com/Profile/Novia_A_Division_of_CP/69211

ENGINEERING SERVICES

At Novia, our decades of experience allow us to use our knowledge to our customers’ advantage. We have a number of engineering services available that will ensure projects are designed and installed as efficiently and cost-effectively as possible.

Some of the technical services we provide include:

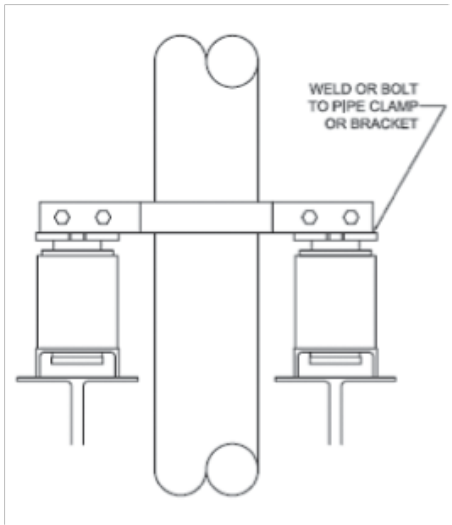
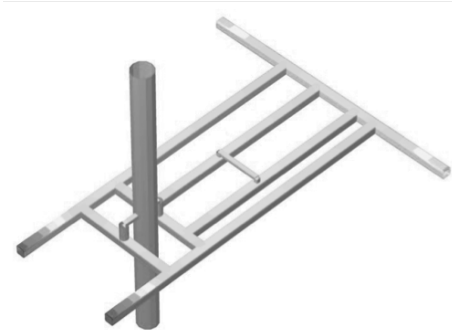
Lunch & Learn Seminars. Training focused on different vibration isolation and seismic restraint related subjects such as proper selection of vibration isolation products; isolated roof curbs; proper support and control of riser piping; selection and installation of anchors, guides and expansion joints; rooftop equipment support applications; and seismic bracing of piping systems.

Vibration Isolation & Seismic Restraint Installation Training. Contractor focused training to allow for labor savings on installation by a combination of selection of cost effective standard products and efficient installation sequence; incorporation of seismic bracing at time of hanger installation; and techniques used in modular construction.

Engineering Calculations & PE Certifications. Novia’s technical staff can provide a variety of calculations often called out in project specifications. Examples include determining correct seismic and wind loads to apply to equipment and systems; equipment attachment loads on structures; anchor bolt calculations; riser piping thermal expansion movements and loads; and expansion joint anchor calculations. We have Professional Engineers in-house to provide stamped drawings, calculations and submittals in a timely manner.

Pipe Riser Engineering. Often project specifications require submission of a computerized piping analysis to verify that the piping system will not be overstressed and that piping loads transferred to the building structure are properly distributed while meeting both vibration isolation and seismic control requirements. The example below shows a typical riser shaft frame model utilizing Novia’s “All Directional Anchors (ADA)” to transfer the piping loads to the frame and building structure.

Consulting services on optimized equipment support frame design and standardization. How to create standard structural steel equipment support brackets and frames to be used on multiple projects and to modularize installation by the use of related equipment skids.



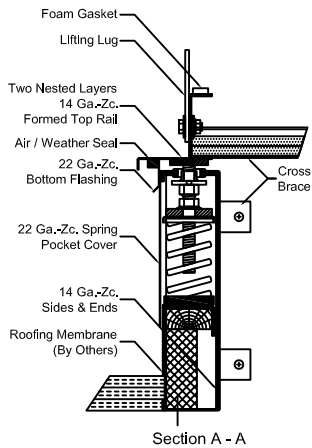
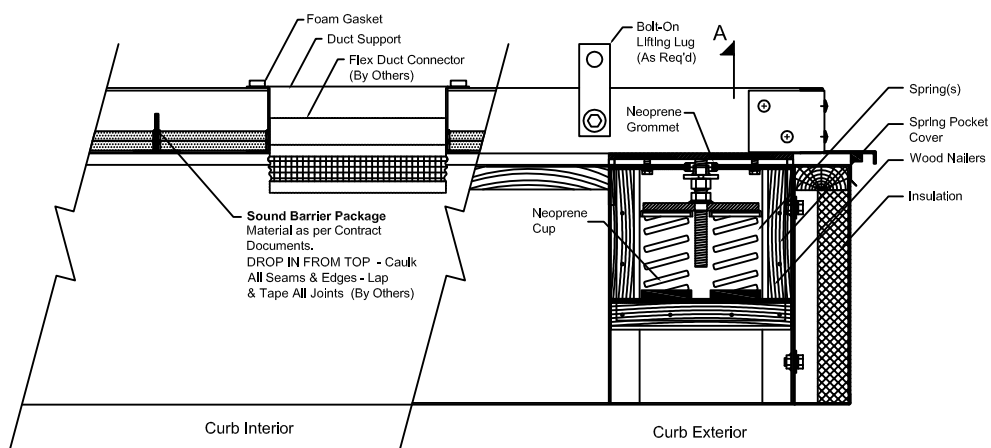
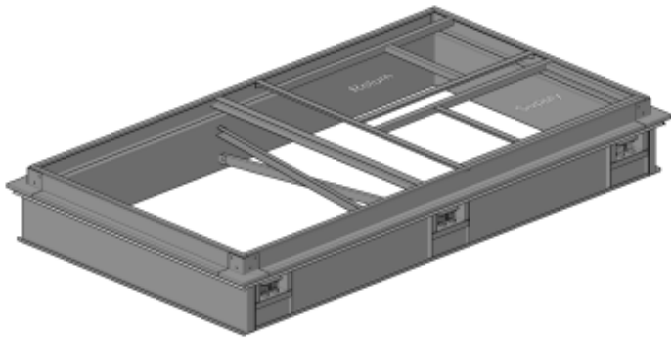
CUSTOM PRODUCT INFORMATION

ROOF CURBS

Novia designs and manufactures roof curb solutions for your roof-mounted HVAC equipment including custom air handling units, packaged rooftop units, VRF systems, and much more. The Novia roof curb line can be manufactured as insulated or uninsulated and all roof curbs are available with a plethora of options varying from duct supports to sound attenuators. All roof curbs are available fully assembled or knocked-down. We use fully welded seams on the curb panels and offer a detachable pipe enclosure that can be insulated on the inside or outside. Fabrication is completed using G90 galvanized steel in a variety of gauges based on the specific requirements of each project.

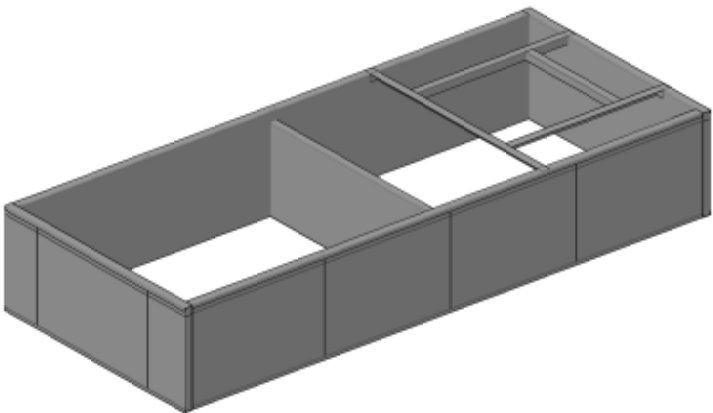
VIBCURBS

Vibration isolation roof curbs (VibCurbs) are designed to customer’s specifications and built to attach to the manufacturer’s unit. VibCurbs are offered in a variety of heights and can be restrained and PE stamped for wind and/or seismic loading. The VibCurb is available with 1”, 2”, or 3” deflection springs that are accessible for removal, replacement, and adjustment. The Novia VibCurb offers an innovative construction with springs fully enclosed within the curb walls, avoiding a floating rail and flexible flashing.



SEISCURBS

Prefabricated roof curbs built to the latest code standards are available for both seismic and/or wind-load applications. These curbs come with internal bracing, heavy gauge construction, tie-down restraints, and are PE stamped based on the local building code. Each SeisCurb is engineered specifically for the project requirements, not based on generic seismic and wind-load standards. Our SeisCurbs include a detailed seismic or wind-load calculation certifying the detailed attachment requirements. Concrete and steel attachments are provided as the standard. Other attachment options for wood and other surfaces are also available.

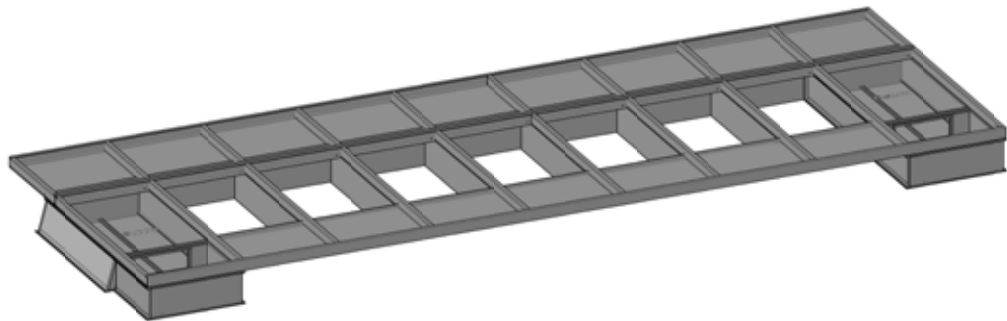


SPECIALTY CURBS

At Novia, we specialize in custom roof curb options for many applications. All options are available with the Novia VibCurb and/or SeisCurb product lines. **We offer:**

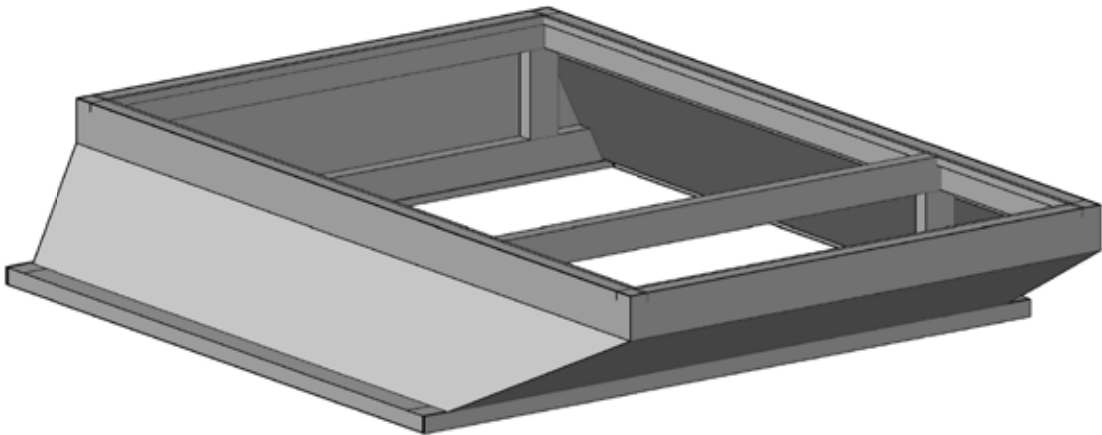
- Sound barrier packages
- Sound attenuators
- Fully insulated or uninsulated floor pans
- Double-wall perforated insulated walls
- Smoke dampers
- Plenum curbs
- VRF curbs with piping enclosure
- Catwalks/Service Platforms
- Turning vanes
- Filter curbs
- Metal Building Curbs
- And many other options!

Custom options are available to suit the needs of a special project as required.



ADAPTER CURBS

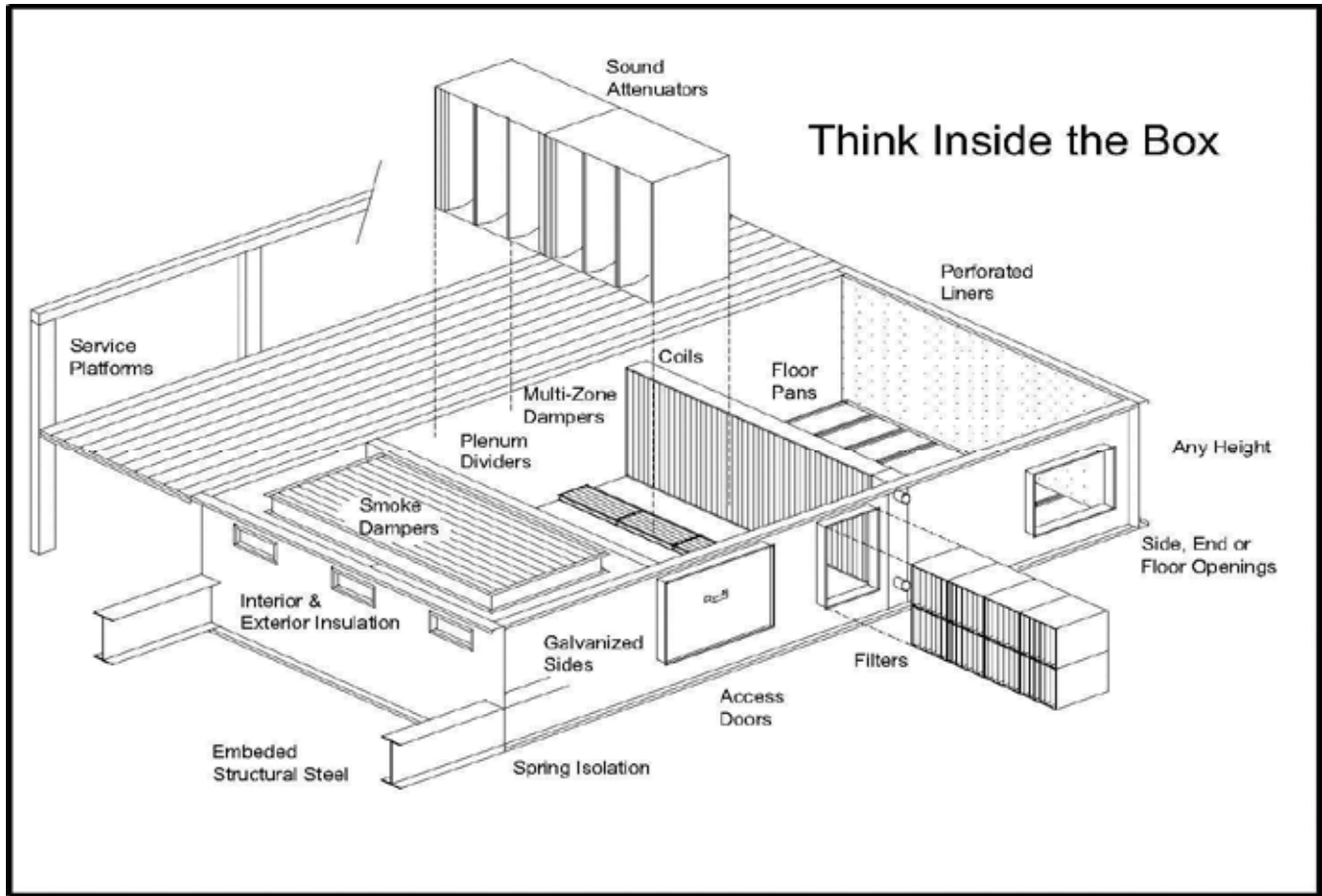
Novia offers a full line of adapter curbs for any existing to new rooftop equipment when the footprints of the units and the duct drop locations do not match. Our offerings include pipe chase adapters, catwalks, full plenums to seal off return and supply airflow, and any other needs as required by your project. Adapter curbs offer significant project savings on costly construction and eliminates much of the labor costs involved with replacing existing equipment. From small to large equipment and standard units to custom units, we are your one stop shop for adapter curbs.



When appropriate, a qualified Novia representative can come to your jobsite to perform measurements on your existing roof curb. After the jobsite visit our engineering staff will design the adapter curb to optimize connection from your new equipment to the existing ductwork.

CUSTOM ROOF CURB APPLICATIONS

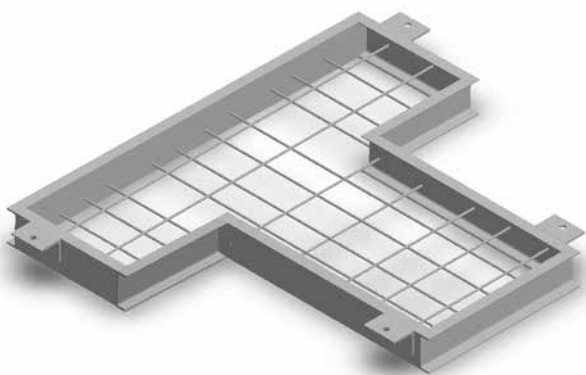
Whatever your roof curb needs may be, Novia has the solution to even your most complex projects. Call our sales team today to discuss how we can help you meet your budget and time line.



INERTIA BASES

Novia offers a variety of standard and custom Inertia Bases to reduce vibration and start-up torque for HVAC equipment. Novia Inertia Bases are designed to be partnered with our isolation mounts in order to properly distribute the load while providing the maximum vibration isolation efficiency. We custom engineer our bases to your project-specific needs.

For fast-paced projects we offer (6) stock Inertia Base sizes (see pages 53 -58). Given the specifications of the equipment that will be placed on the base, Novia will perform the appropriate calculations to provide the correct stock Inertia Base size and isolators.



Air compressors –An Inertia Base lowers the center of gravity of an air compressor in order to stabilize the equipment and uniformly load the isolators. The Inertia Base will double the frequency, which increases the efficiency of arresting the vibration frequency of the equipment.

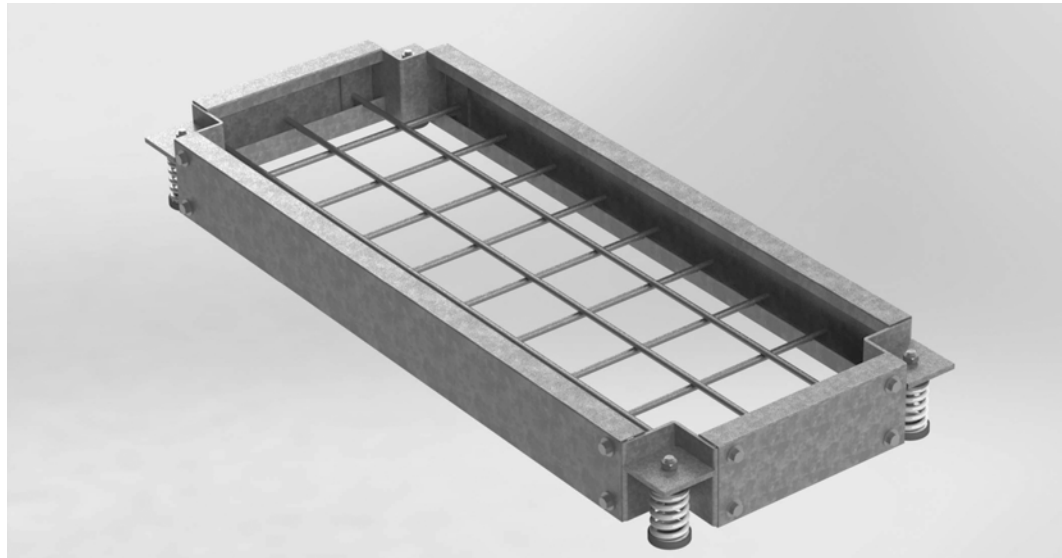
Pumps – Most pump manufacturers require the base frame of the pump to be grouted to the attachment location. Using a Novia Inertia Base will provide isolation and maintain the pump manufacturer’s warranty requirements.

We also provide Inertia Bases for:

- Chillers
- Air Handling Units
- Utility-Style Fans
- Centrifugal Fans
- Plenum Fans
- Condensers
- And any other equipment as required for your project.

KNOCKED-DOWN INERTIA BASE

Beginning in 2017 we are excited to offer a new knocked-down, spring-isolated concrete Inertia Base.

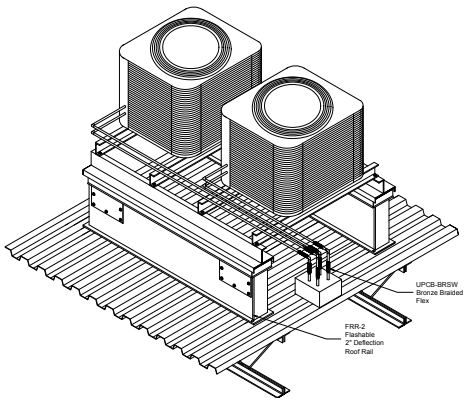


Our quick and easy to assemble equipment base is both sturdy and economical. It has been designed to ship virtually anywhere in the world via UPS. The knocked-down Inertia Base’s compact shipping configuration allows it to be carried to where it is needed on your jobsite, which can be difficult in some cases with the standard heavy welded bases.

- KD- Bases are available in (6) stock sizes for use with our 1” or 2” deflection spring mounts.
- KD- Bases have a galvanized steel design for use in most applications.
- Snubbers may be added to satisfy seismic restraint requirements for your project.
- Spring-mount floor attachment plates may also be purchased for projects that require them.

CUSTOM SUPPORT SYSTEMS FOR ROOF MOUNTED EQUIPMENT

Novia specializes in a wide range of support systems for roof-mounted HVAC equipment designed and engineered to provide roof structure attachment in compliance with your local and IBC codes. These support systems are offered in a variety of options to meet your specific project requirements. Each assembly is engineered to properly support and provide positive attachment to your specific equipment based on the equipment location and unique building structure.

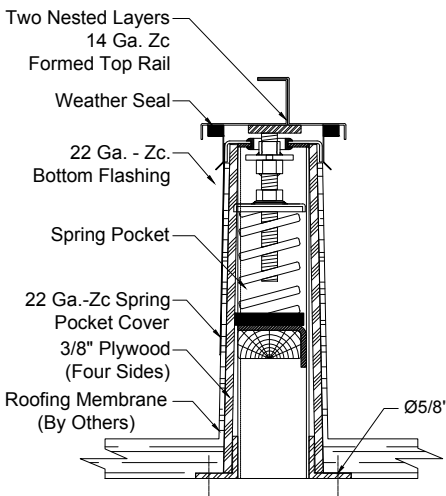
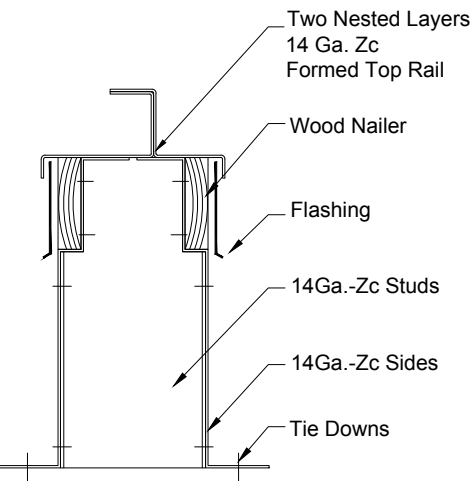


Flashable Roof Rails (FRR)

Each project has its own individual challenges for supporting rooftop equipment. Our FRR systems are individually designed for your project’s needs. These systems are offered in any height and length and are designed to be flashed in by your roof membrane. The FRRs attach to your building structure so that your equipment is properly supported to meet the structural requirements of the project.

Some of the most frequent uses of the FRR are:

- Rooftop Packaged Units
- Rooftop Air Handling Units
- Condensers
- VRF Systems
- Fans
- Compressors
- Chillers
- Cooling Towers
- Solar Panels

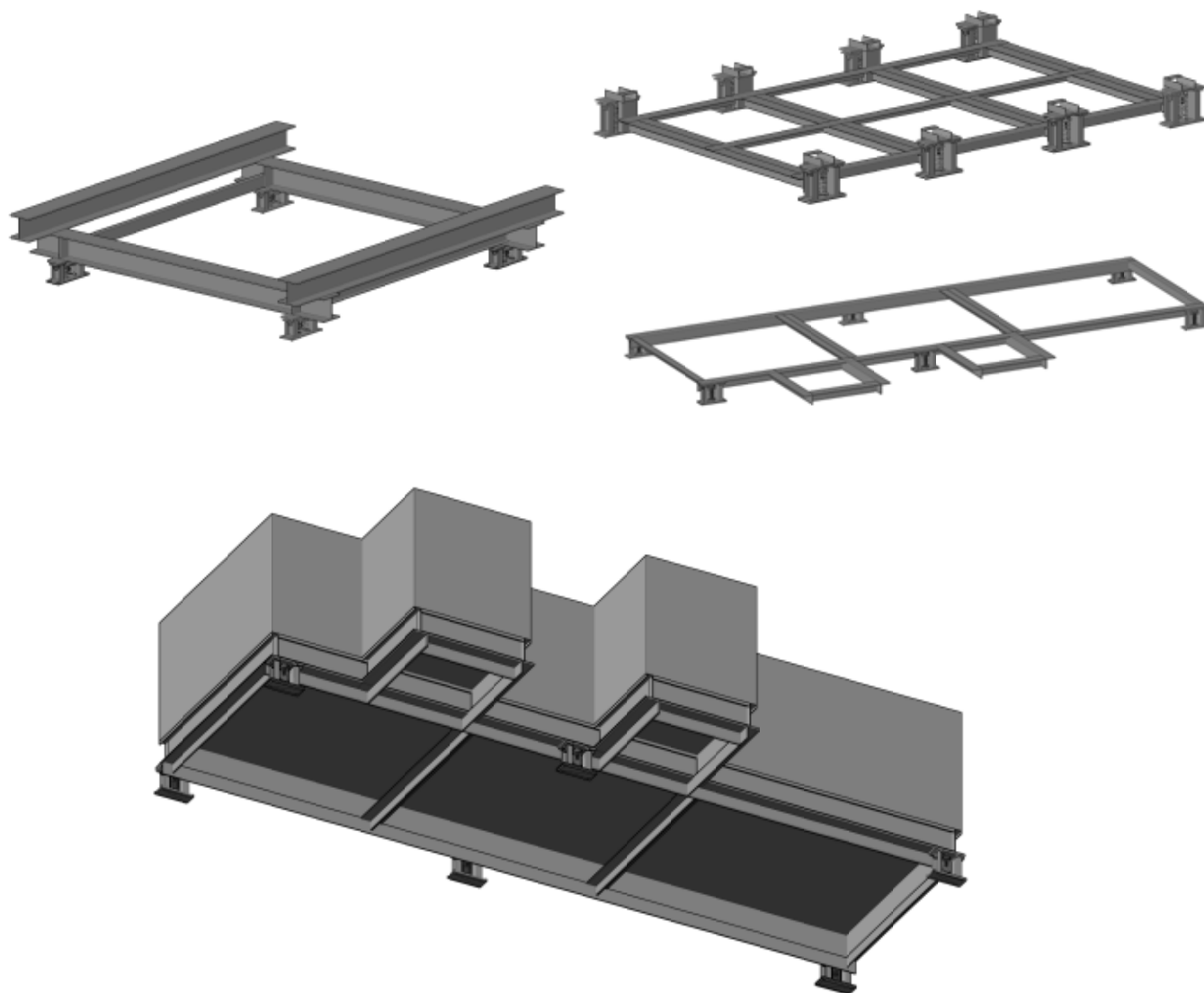


Flashable Roof Rails with Vibration Isolation

Similar to the Novia VibCurb, we also offer our FRR systems with the addition of our Novia Curb Wall Spring Pocket Technology. Just like the VibCurb, the isolated FRR is available in 1”, 2” and 3” deflection models, all with accessible spring pockets. This option provides uniform support for the equipment along with an effective means of vibration isolation while complying with wind-load and/or seismic restraint requirements. These systems can include a PE stamp for the state in which your project resides.

CUSTOM STEEL SUPPORT SYSTEMS

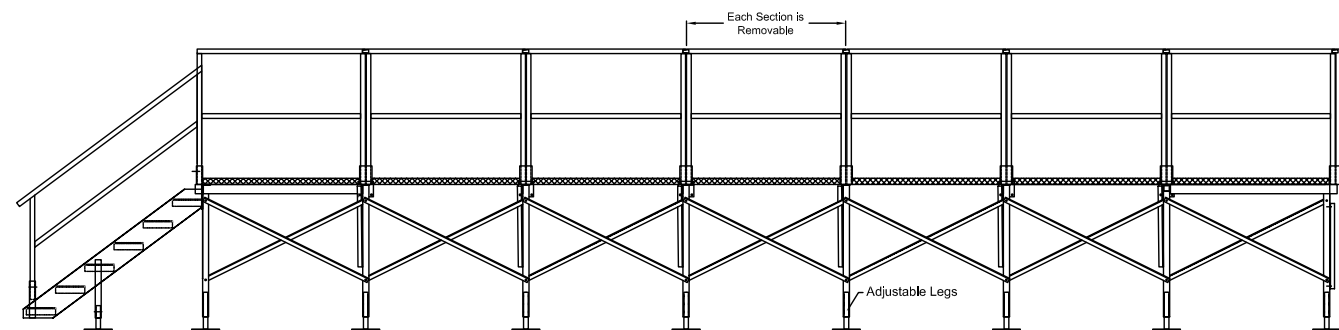
Whether your equipment is indoor or outdoor, Novia has the innovative design to fabricate an isolated or non-isolated custom steel support system. Our structural steel bases will be designed to meet all project specifications for equipment steel support bases and provide a rigid mounting and anchoring system for vibration isolated or non-isolated mechanical equipment.



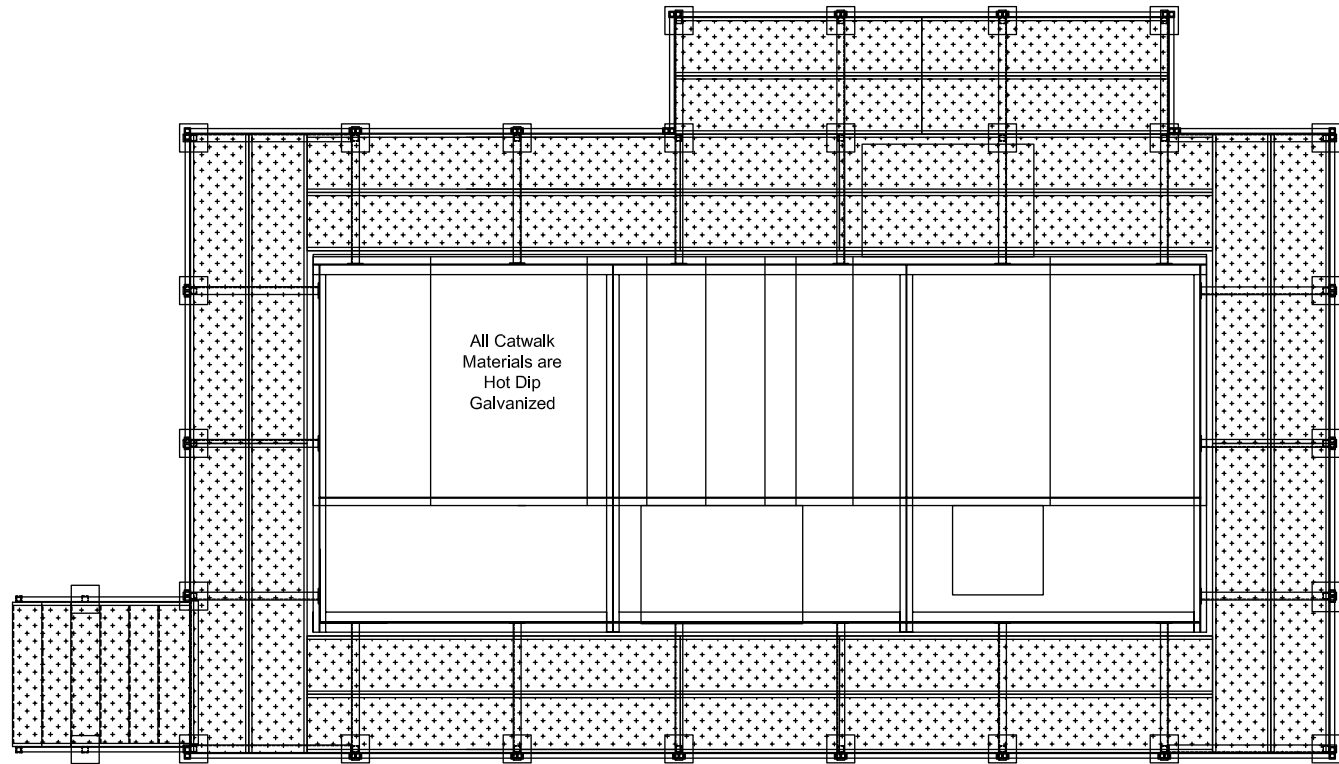
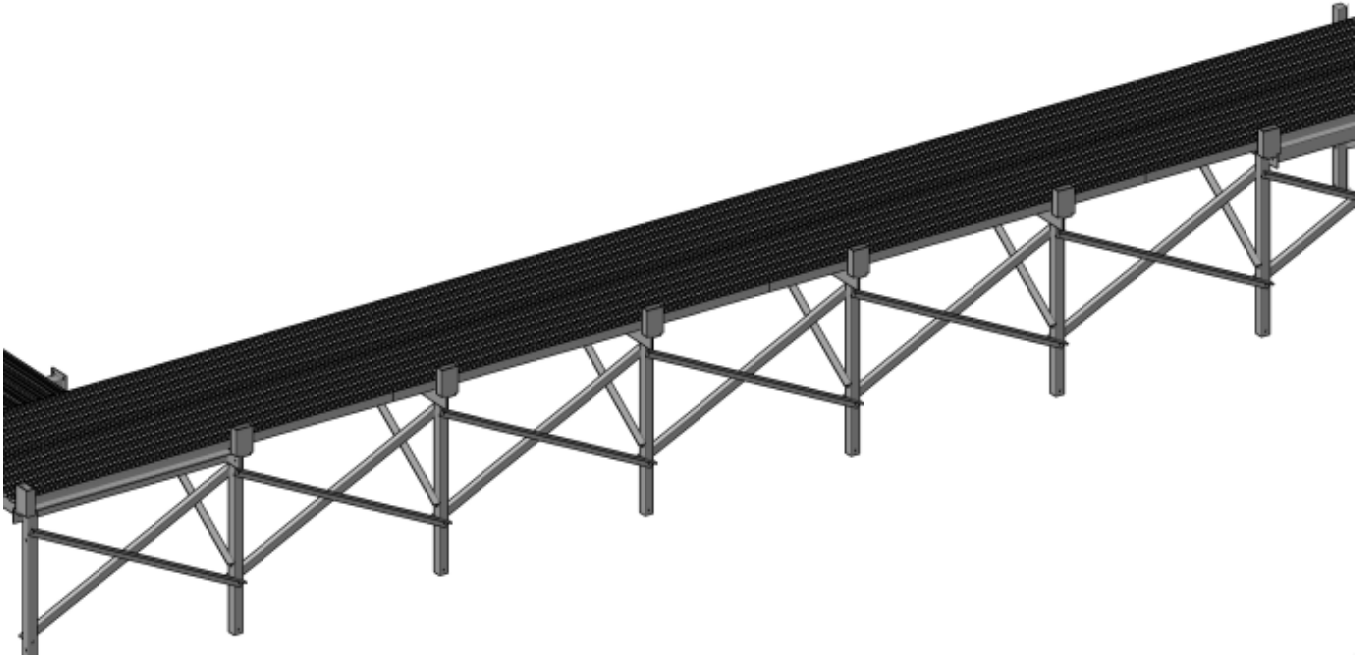
CATWALKS AND SERVICE PLATFORMS

Novia catwalks and service platforms give technicians a safe and easy way to access the unit for service, repair and maintenance. They are custom manufactured to meet the needs of the customer. The construction that is dependent on the building structure, and not on the roof curb, gives more flexibility on the application of the catwalk or service platform and can significantly reduce project costs.

- Our products are designed to meet OSHA Requirements.
- Catwalks and service platforms can be free standing, roof curb mounted (to Novia roof curbs only), or can be custom fit to attach to units.
- Our products include removable safety railings.
- Catwalks and service platforms are custom fit and designed for each project.
- Offerings include adjustable feet with a variety of footings that can be provided.
- Catwalks will be shipped knocked down on pallets with all necessary hardware and ready for assembly in the field.
- When used with roof curbs, the roof curbs are built with tube steel stub outs on the outside walls to transfer load of catwalk onto the roof curb.
- Structural steel joist and leg assemblies are provided with a hot dipped galvanized finish and attached to the roof curb stub outs with 3/8" x 2 1/2" hex bolts.
- Galvanized Gripstrut Grating is provided for all walkways and stair/ ladder treads. The walkways are provided in a 12Ga or 14Ga thickness to meet structural standards.
- We realize not all jobs are the same and we strive to provide a service platform that best meets the customer's need.



CATWALKS AND SERVICE PLATFORMS

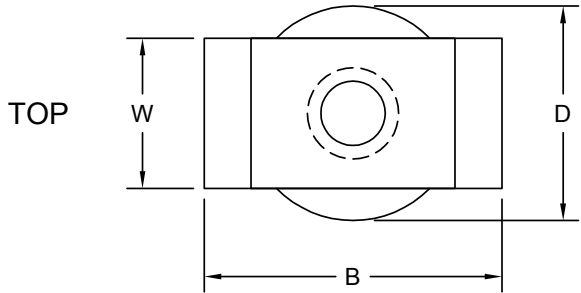
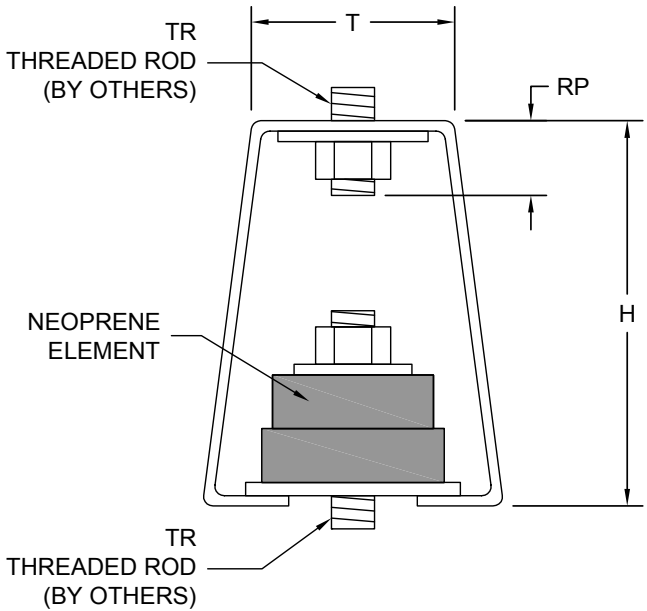


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PROJECT: _____
CUSTOMER: _____

NH

NEOPRENE
HANGER
NH 100 07/28/16

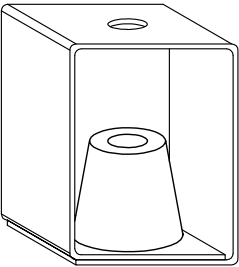


NEOPRENE ELEMENT DATA

SIZE	COLOR	DURO-METER	RATED CAPAC (LBS)	RATED DEFL (IN)
A-59	BLUE	40	59	0.35
A-103	GREEN	50	103	0.35
A-136	RED	60	136	0.35
A-200	BLACK	70	200	0.35
B-261	BLUE	40	261	0.40
B-371	GREEN	50	371	0.40
B-731	RED	60	731	0.40
B-908	BLACK	70	908	0.40

NH DIMENSIONS (IN)

SIZE	H	W	B	T	D	RP	TR
A	3 3/8	2	2 1/2	2 1/2	N/A	13/16	1/2
B	4 1/2	2	3 1/2	2 3/8	2 1/2	7/8	3/4



A-SIZE
BOX

Standard Finish: Galvanized Steel

CERTIFICATION DATA

BY:

DATE:

DWG#:

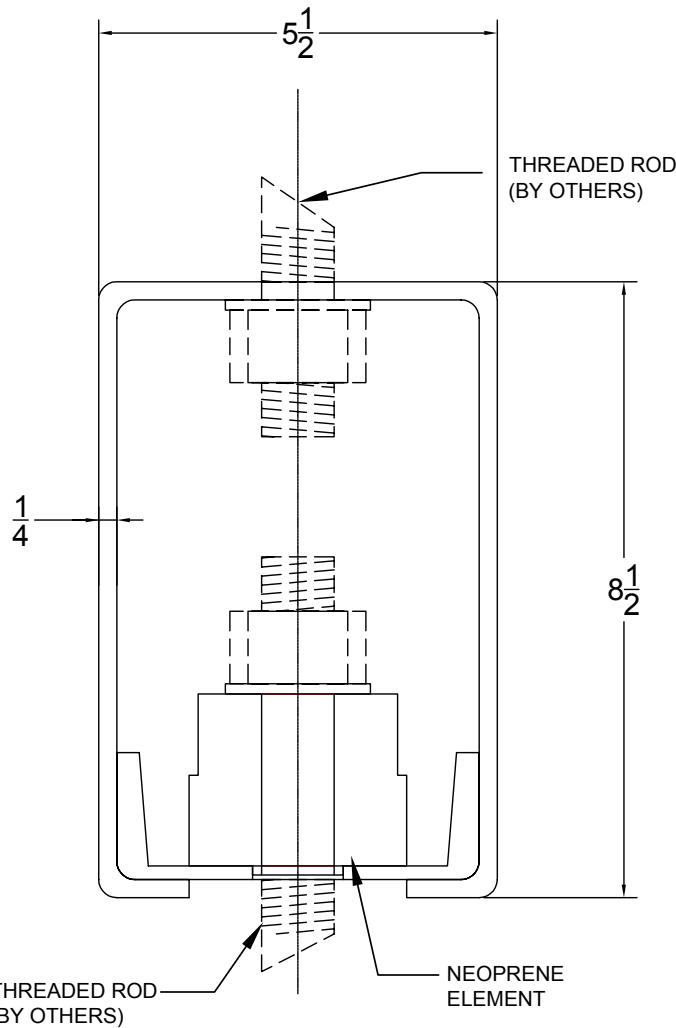


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PROJECT: _____
CUSTOMER: _____

NH-C

NEOPRENE
HANGER
NH 100 07/28/16



NEOPRENE ELEMENT DATA

SIZE	COLOR	DURO-METER	RATED CAPAC (LBS)	RATED DEFL (IN)
C-1000	BLUE	40	1000	0.50
C-1500	GREEN	50	1500	0.50
C-2000	RED	60	2000	0.50
C-2450	BLACK	70	2450	0.50

Standard Finish: Painted
Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____

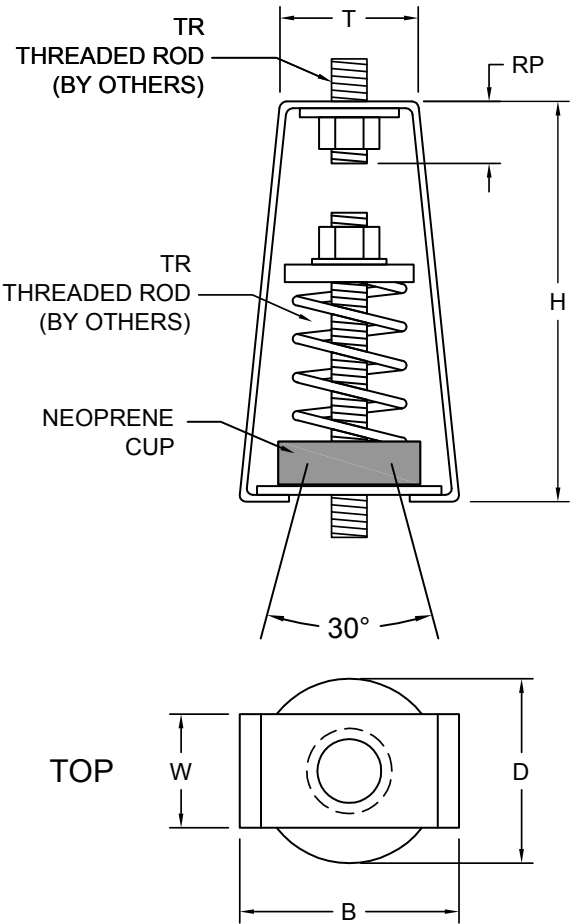


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PROJECT: _____
CUSTOMER: _____

SH

1" DEFLECTION
SPRING HANGER
SH 100 09/29/16



SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
A-29	29	1.16	25	ORG
A-59	59	1.18	50	RED
A-75	75	1.00	75	BLUE
A-103	103	1.03	100	GRN
A-136	136	1.01	135	BLK
A-200	200	1.00	200	GRAY
B-261	261	1.04	250	ORG
B-371	371	1.24	300	RED
B-640	640	1.28	500	BLUE
B-731	731	1.04	700	BLK
B-908	908	1.01	900	GRAY
C-1061	1061	1.06	1000	ORG
C-1268	1268	1.01	1250	RED
C-1608	1608	1.07	1500	BLUE
C-1811	1811	1.03	1750	GRN
C-2000	2000	1.00	2000	BLK
C-2450 ²	2450	1.00	2450	GRAY

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
A	1.50"	2.500"	1.00 - 1.13
B	2.00"	3.375"	0.84 - 0.96
C	3.00"	4.375"	0.89 - 0.91

SH DIMENSIONS (IN)

SIZE	H	W	B	T	D	RP	TR
A	5 1/8	2	2 1/2	2 1/2	N/A	1 1/16	1/2
B	7 1/8	2	3 7/8	2 7/16	3 1/4	1 3/8	3/4
C	9 3/4	2 1/2	5 1/2	4 3/8	4 3/4	2	1

¹Springs have a 50% overload capacity.
²Published ratings allow for 30% additional travel to solid. For 50% additional travel, multiply Rated Capacity and Rated Deflection by 0.841.

Standard Finish: A,B - Galvanized Steel
C - Painted

Available Finish: C - Hot Dip Galvanized

Available Option: Pre-compressed

Note: B & C housing shown A housing differs slightly. See table for dimensions.

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____

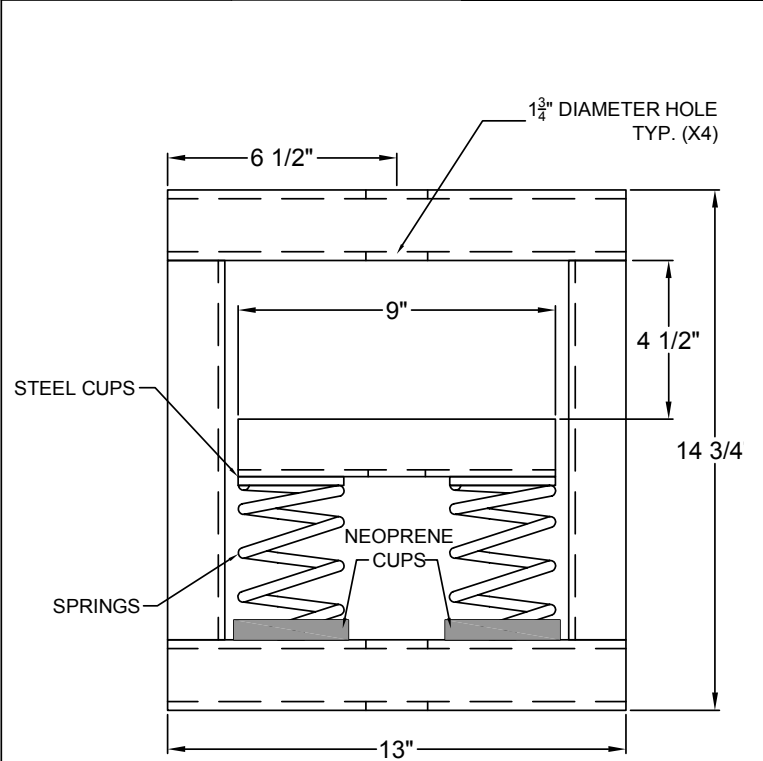


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PROJECT: _____
CUSTOMER: _____

SH-C2

1" DEFLECTION
SPRING HANGER
DUAL SH 100 09/29/16



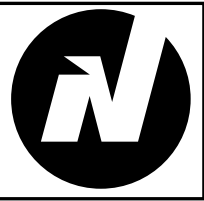
NOTE: PREDRILLED HOLE SIZE FOR 1 1/4" ROD WILL BE 1 1/2" - HANGER CAN ALSO BE USED WITH 1 1/2" ROD AND WILL NEED A 1 3/4" CLEARANCE HOLE. USE HOLE SIZES AS CALLED OUT FOR BOTH CASES

SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
C2-2536	2536	1.01	2500	RED
C2-3216	3216	1.07	3000	BLUE
C2-3622	3622	1.03	3500	GREEN
C2-4000	4000	1.00	4000	BLACK
C2-4900 ²	4900	1.00	4900	GRAY
C2-5500	5500	1.00	5500	BLACK*
C2-6000	6000	1.00	6000	BLACK**
C2-6400	6400	1.00	6400	GRAY*
C2-6900 ²	6900	1.00	6900	GRAY**
CORE SPRING: *750 RED; **1043 GREEN				
SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH	
C	3.00"	4.375"	0.89 - 0.91	

¹Springs have a 50% overload capacity.
²Published ratings allow for 30% additional travel to solid. For 50% additional travel, multiply Rated Capacity and Rated Deflection by 0.841.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

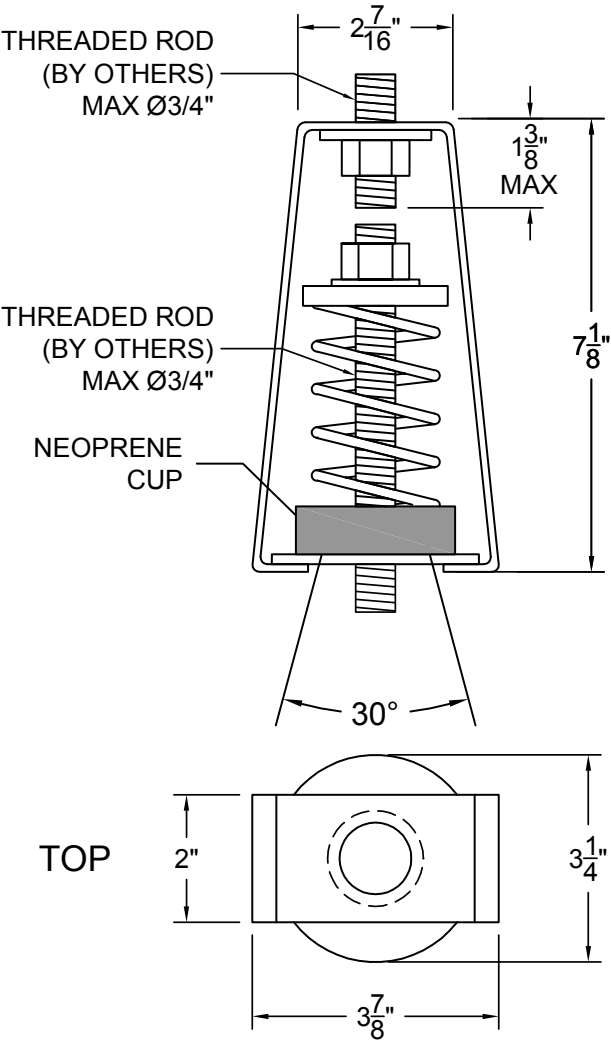


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PROJECT: _____
CUSTOMER: _____

SH-2B

2" DEFLECTION
SPRING HANGER
SH-2B 110 09/29/16



SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
2B-23	22.5	2.00	11.25	RED
2B-45	45	2.00	22.5	BLU
2B-90	90	2.00	45	GRN
2B-140	140	2.00	70	BLK
2B-200	200	2.00	100	GRAY
SPRING O.D.	FREE HGT		RATIO OD/OH	
2.00"	3.68"		1.19 MIN	

¹Springs have a 50% overload capacity.
Standard Finish: Galvanized Steel
Available Option: Pre-compressed

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

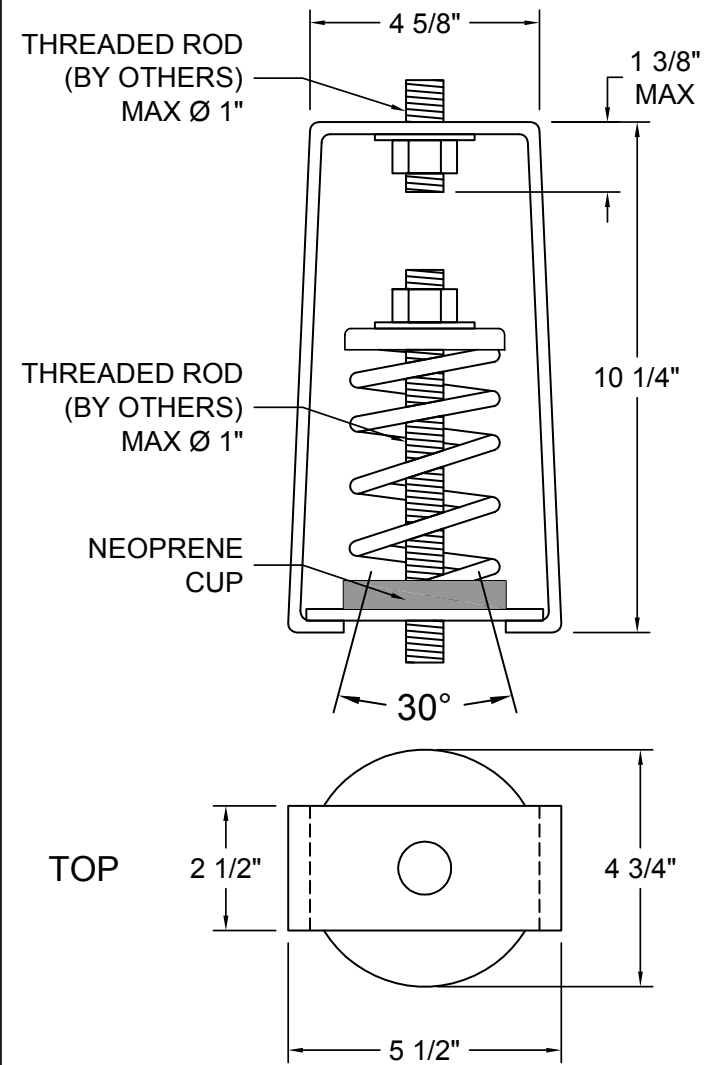


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PROJECT: _____
CUSTOMER: _____

SH-D

2" DEFLECTION
SPRING HANGER
SH-D 100 09/29/16



SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
D-236	236	2.36	100	ORNG
D-352	352	2.35	150	RED
D-410	410	2.00	200	BLUE
D-624	624	2.08	300	GRN
D-840	840	2.00	420	BLK
D-1000	1000	2.00	500	GRAY
SPRING O.D.	FREE HGT		RATIO OD/OH	
3.00"	5.375"		0.88 - 0.99	

¹Springs have a 50% overload capacity.
Standard Finish: Painted
Available Finish: Hot Dipped Galvanized
Available Option: Precompressed

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

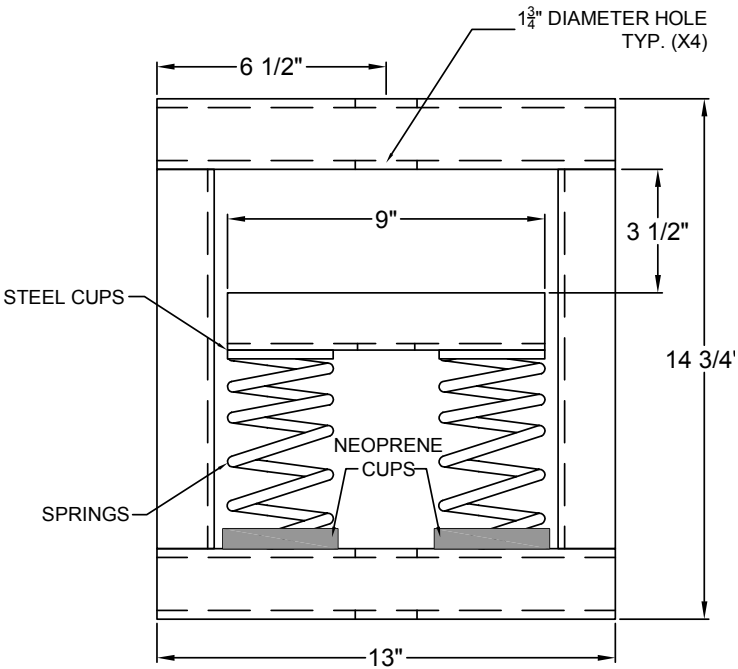


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PROJECT: _____
CUSTOMER: _____

SH-D2

2" DEFLECTION
SPRING HANGER
DUAL SH 100 09/29/16



NOTE: PREDRILLED HOLE SIZE FOR 1 1/4" ROD WILL
BE 1 1/2" - HANGER CAN ALSO BE USED WITH 1 1/2" ROD
AND WILL NEED A 1 3/4" CLEARANCE HOLE.
USE HOLE SIZES AS CALLED OUT FOR BOTH
CASES

SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
D2-1248	1248	2.00	624	GREEN
D2-1680	1680	2.00	840	BLACK
D2-2000	2000	2.00	1000	GRAY
D2-2400	2400	2.00	1200	BLACK*
D2-2720	2720	2.00	1360	GRAY*
D2-3280	3280	2.00	1640	BLACK**
D2-3600	3600	2.00	1800	GRAY**
CORE SPRING: *360 RED; **800 BLUE				
SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH	
D	3.00"	5.375"	0.89 - 0.99	

¹Springs have a 50% overload capacity.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

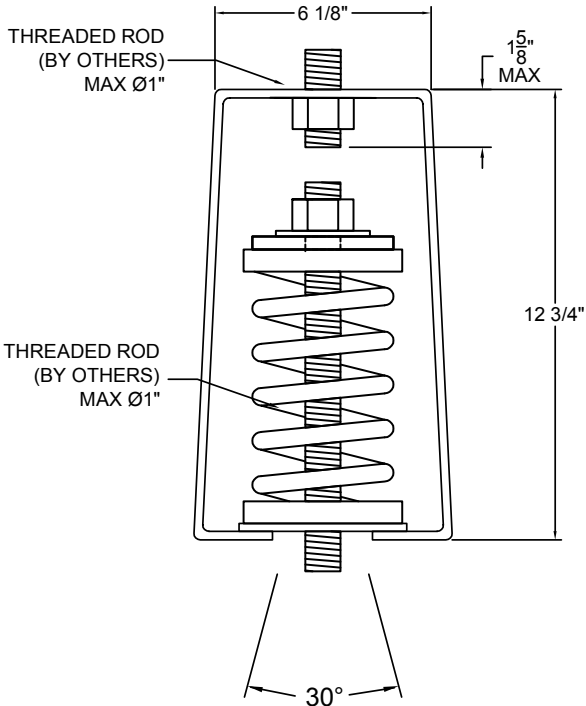


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PROJECT: _____
CUSTOMER: _____

SH-E

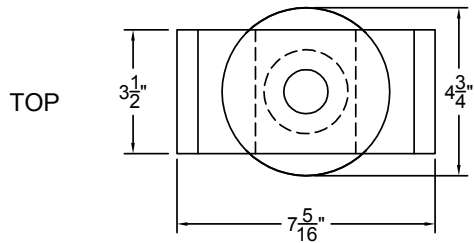
3" DEFLECTION
SPRING HANGER
SH-E 100 09/29/16



SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
E-311	311	3.34	93	ORG
E-410	410	3.20	128	RED
E-608	608	3.38	180	BLUE
E-774	774	3.23	240	GRN
E-1002	1002	3.46	290	BLK
E-1240	1240	3.02	410	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
4.00"	7.62"	0.89 - 0.91

¹Springs have a 50% overload capacity.
Standard Finish: Galvanized Steel
Available Option: Pre-compressed



CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

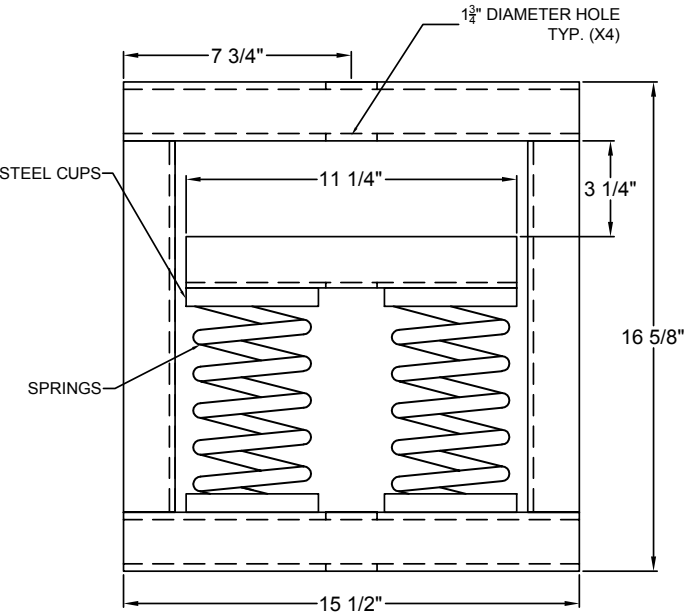


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PROJECT: _____
CUSTOMER: _____

SH-E2

3" DEFLECTION
SPRING HANGER
DUAL SH 100 09/29/16



SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
E2-1548	1548	3.23	480	GREEN
E2-2004	2004	3.46	580	BLACK
E2-2480	2480	3.03	820	GRAY
E2-2914	2914	3.08	946	GREEN*
E2-3370	3370	3.22	1046	BLACK*
E2-3798	3798	3.09	1230	GREEN**
E2-4254	4254	3.20	1330	BLACK**
E2-4730	4730	3.03	1570	GRAY**

CORE SPRING: *638 RED; **1,125 GREEN

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
E	4.00"	7.625"	0.89 - 0.91

¹Springs have a 50% overload capacity.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized

NOTE: PREDRILLED HOLE SIZE FOR 1 1/4" ROD WILL BE 1 1/2" - HANGER CAN ALSO BE USED WITH 1 1/2" ROD AND WILL NEED A 1 3/4" CLEARANCE HOLE. USE HOLE SIZES AS CALLED OUT FOR BOTH CASES

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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PROJECT: _____

CUSTOMER: _____

SNH

1" DEFLECTION

SPRING & NEOPRENE

HANGER

SNH 100 09/29/16

TR

THREADED ROD

(BY OTHERS)

NEOPRENE

ELEMENT

NEOPRENE CUP

TR

THREADED ROD

(BY OTHERS)

T

RP

H

30°

TOP

W

D

B

Standard Finish:

A,B - Galvanized Steel

C - Painted

Available Finish:

C - Hot Dip Galvanized

Available Option:

Pre-compressed

Note: B & C housing shown A housing differs slightly. See table for dimensions.

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
A-29	29	1.51	25	ORG
A-59	59	1.53	50	RED
A-75	75	1.35	75	BLUE
A-103	103	1.38	100	GRN
A-136	136	1.36	135	BLK
A-200	200	1.35	200	GRAY
B-261	261	1.44	250	GRN
B-371	371	1.64	300	ORG
B-640	640	1.68	500	BLUE
B-731	731	1.44	700	BLK
B-908	908	1.41	900	GRAY
C-1061	1061	1.56	1000	ORG
C-1268	1268	1.51	1250	RED
C-1608	1608	1.57	1500	BLUE
C-1811	1811	1.53	1750	GRN
C-2000	2000	1.50	2000	BLK
C-2450 ³	2450	1.50	2450	GRAY

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
A	1.50"	2.500"	1.00 - 1.13
B	2.00"	3.375"	0.84 - 0.96
C	3.00"	4.375"	0.89 - 0.91

SNH DIMENSIONS (IN)

SIZE	H	W	B	T	D	RP	TR
A	6 3/8	2	2 1/2	2 1/2	N/A	1 13/16	1/2
B	8 3/8	2	3 7/8	3 1/8	3 1/4	2 1/4	3/4
C	11	2 1/2	5 1/2	4 5/8	4 3/4	3 7/8	1

¹Springs have a 50% overload capacity.

²Rated Deflection combines spring and neoprene element deflection.

³Published ratings allow for 30% additional travel to solid. For 50% additional travel, multiply Rated Capacity and Rated Deflection by 0.841.

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____



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PROJECT: _____

CUSTOMER: _____

SNH-C2

1" DEFLECTION

SPRING HANGER

DUAL SNH 100

09/29/16

NEOPRENE ELEMENTS

STEEL CUPS

SPRINGS

6 1/2"

4 1/2"

9"

13"

1 3/4" DIAMETER HOLE TYP. (X4)

3 1/4"

17 1/2"

NOTE: PREDRILLED HOLE SIZE FOR 1 1/4" ROD WILL BE 1 1/2" - HANGER CAN ALSO BE USED WITH 1 1/2" ROD AND WILL NEED A 1 3/4" CLEARANCE HOLE. USE HOLE SIZES AS CALLED OUT FOR BOTH CASES

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
C2-2536	2536	1.51	2500	RED
C2-3216	3216	1.57	3000	BLUE
C2-3622	3622	1.53	3500	GREEN
C2-4000	4000	1.50	4000	BLACK
C2-4900 ³	4900	1.50	4900	GRAY

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
C	3.00"	4.375"	0.89 - 0.91

¹Springs have a 50% overload capacity.

²Rated Deflection combines spring and neoprene element deflection.

³Published ratings allow for 30% additional travel to solid. For 50% additional travel, multiply Rated Capacity and Rated Deflection by 0.841.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____



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PROJECT: _____

CUSTOMER: _____

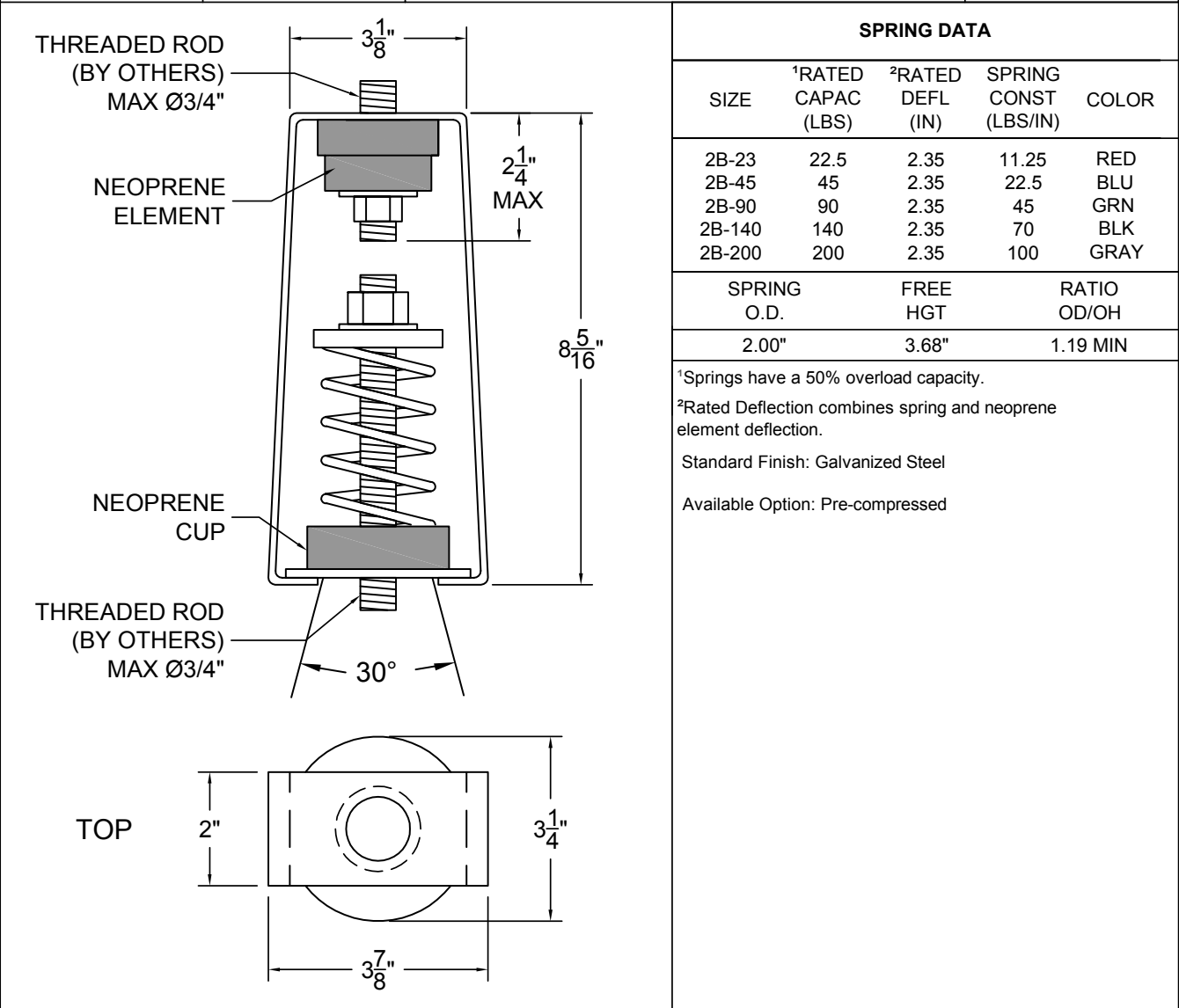
SNH-2B

2" DEFLECTION

SPRING & NEOPRENE

HANGER

SNH-2B 110 09/29/16



CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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PROJECT: _____

CUSTOMER: _____

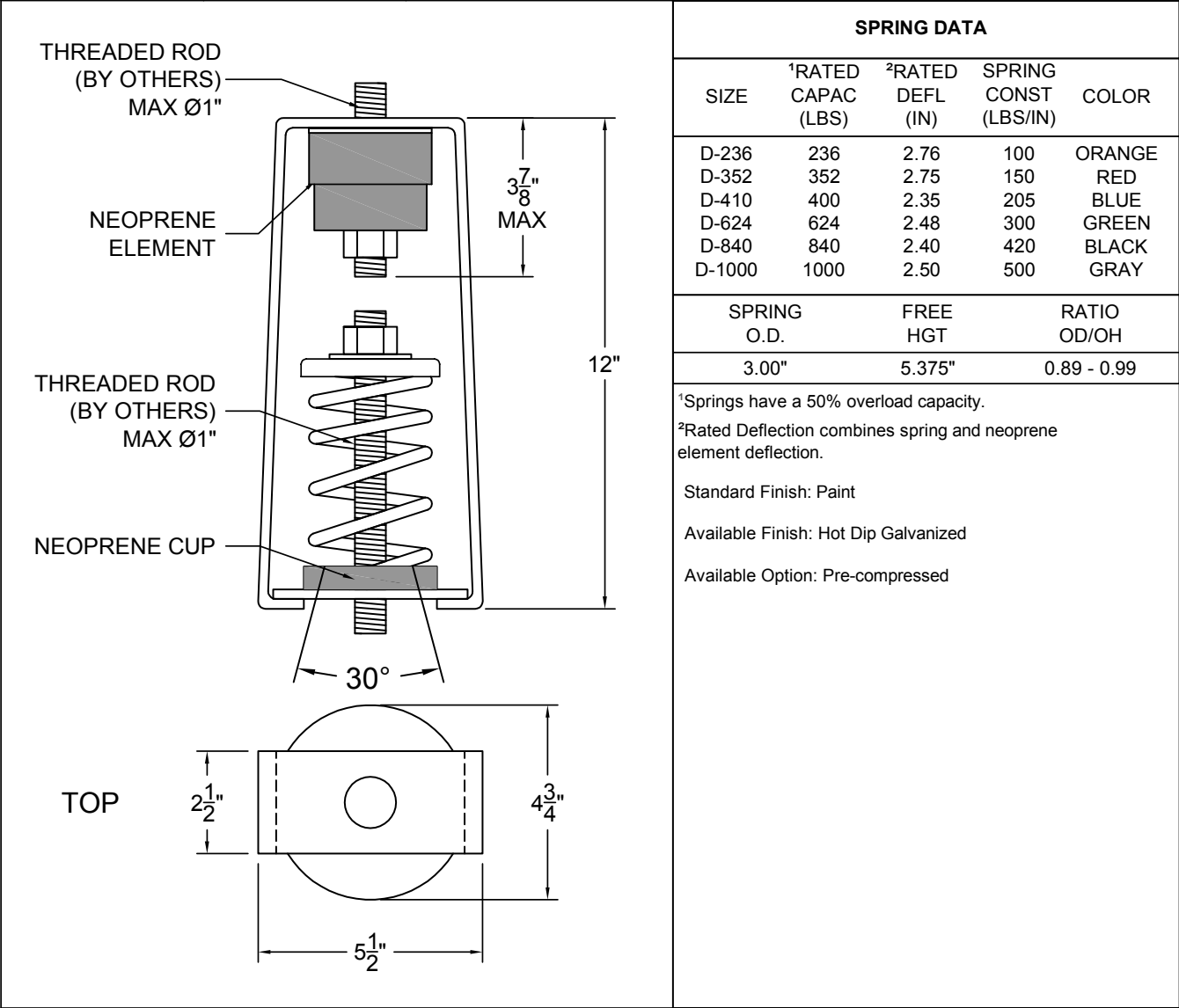
SNH-D

2" DEFLECTION

SPRING & NEOPRENE

HANGER

SNH-D 100 09/29/16



CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

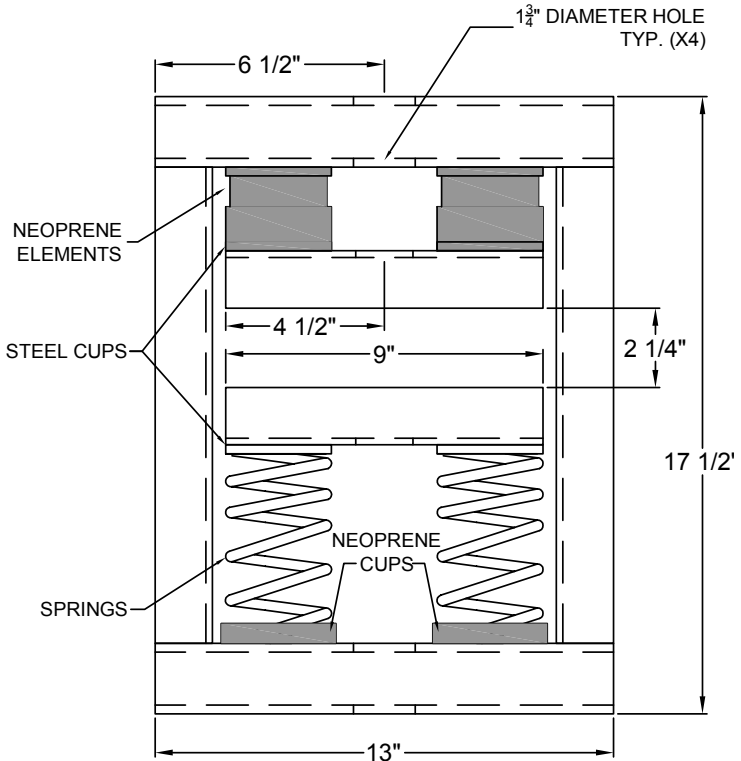


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PROJECT: _____
CUSTOMER: _____

SNH-D2

2" DEFLECTION
SPRING HANGER
DUAL SNH 100
09/29/16



NOTE: PREDRILLED HOLE SIZE FOR 1 1/4" ROD WILL BE 1 1/2" - HANGER CAN ALSO BE USED WITH 1 1/2" ROD AND WILL NEED A 1 3/4" CLEARANCE HOLE. USE HOLE SIZES AS CALLED OUT FOR BOTH CASES

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
D2-1248	1248	2.40	624	GREEN
D2-1680	1680	2.40	840	BLACK
D2-2000	2000	2.50	1000	GRAY
D2-2400	2400	2.50	1200	BLACK*
D2-2720	2720	2.50	1360	GRAY*
D2-3280	3280	2.50	1640	BLACK**
D2-3600	3600	2.50	1800	GRAY**

CORE SPRING: *360 RED; **800 BLUE

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
D	3.00"	5.375"	0.89 - 0.99

¹Springs have a 50% overload capacity.
²Rated Deflection combines spring and neoprene element deflection.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

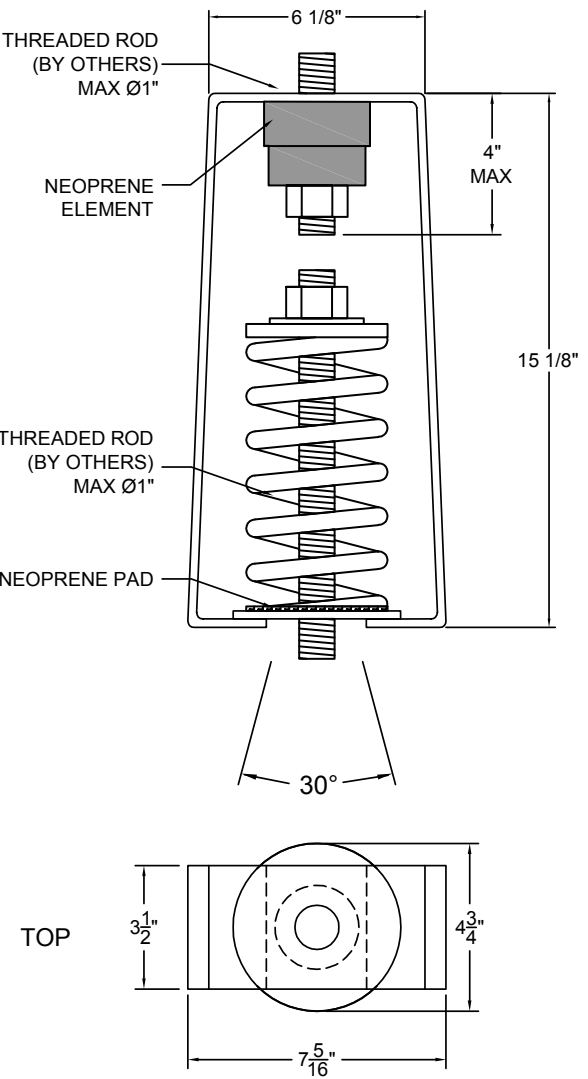


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PROJECT: _____
CUSTOMER: _____

SNH-E

3" DEFLECTION
SPRING & NEOPRENE
HANGER
SNH-E 100 09/29/16



TOP

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
E-311	311	3.74	93	ORG
E-410	410	3.60	128	RED
E-608	608	3.78	180	BLUE
E-774	774	3.63	240	GRN
E-1002	1002	3.96	290	BLK
E-1240	1240	3.52	410	GRAY

SPRING O.D. 4.00" FREE HGT 7.62" RATIO OD/OH 0.89 - 0.91

¹Springs have a 50% overload capacity.
²Rated Deflection combines spring and neoprene element deflection.
Standard Finish: Galvanized Steel
Available Option: Pre-compressed

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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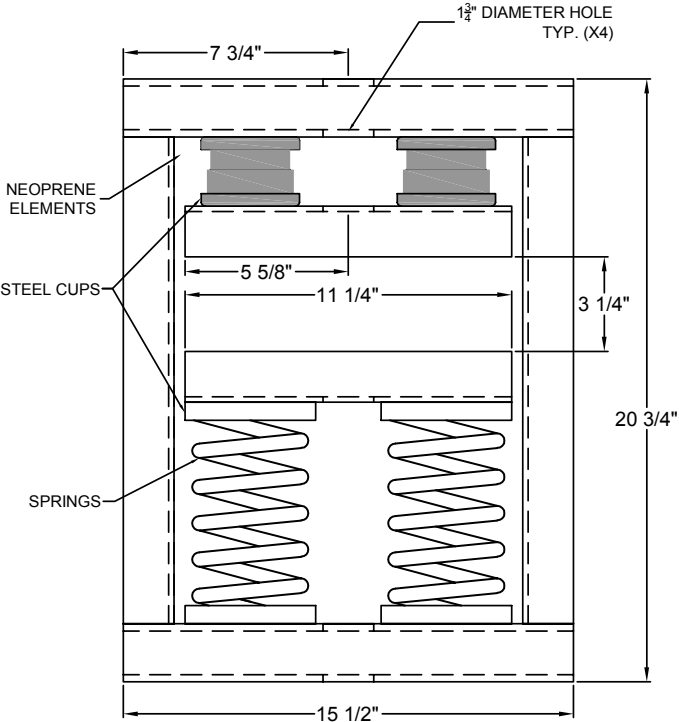
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PROJECT: _____

CUSTOMER: _____

SNH-E2

3" DEFLECTION
SPRING HANGER
DUAL SNH 100
09/29/16



NOTE: PREDRILLED HOLE SIZE FOR 1 1/4" ROD WILL BE 1 1/2" - HANGER CAN ALSO BE USED WITH 1 1/2" ROD AND WILL NEED A 1 3/4" CLEARANCE HOLE. USE HOLE SIZES AS CALLED OUT FOR BOTH CASES

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
E2-1548	1548	3.73	480	GREEN
E2-2004	2004	3.96	580	BLACK
E2-2480	2480	3.53	820	GRAY
E2-2914	2914	3.58	946	GREEN*
E2-3370	3370	3.72	1046	BLACK*
E2-3798	3798	3.59	1230	GREEN**
E2-4254	4254	3.70	1330	BLACK**
E2-4730	4730	3.53	1570	GRAY**

CORE SPRING: *638 RED; **1,125 GREEN

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
E	4.00"	7.625"	0.89 - 0.91

¹Springs have a 50% overload capacity.
²Rated Deflection combines spring and neoprene element deflection.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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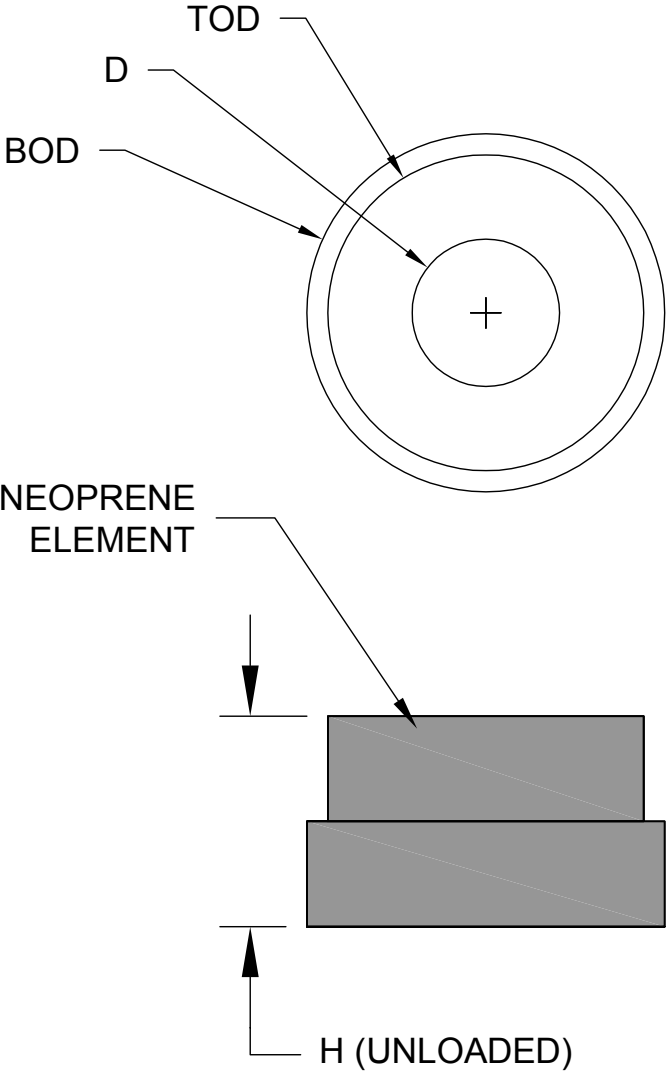
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PROJECT: _____

CUSTOMER: _____

NM

RESILIENT MOUNT
NM 100 07/28/16



NEOPRENE ELEMENT DATA

SIZE-COLOR	DURO-METER	RATED CAPAC (LBS)	RATED DEFL (IN)	COLOR
A-59	40	59	0.35	BLUE
A-103	50	103	0.35	GREEN
A-136	60	136	0.35	RED
A-200	70	200	0.35	BLACK
B-261	40	261	0.40	BLUE
B-371	50	371	0.40	GREEN
B-731	60	731	0.40	RED
B-908	70	908	0.40	BLACK
C-1000	40	1000	0.50	BLUE
C-1500	50	1500	0.50	GREEN
C-2000	60	2000	0.50	RED
C-2450	70	2450	0.50	BLACK

NM DIMENSIONS (IN)

SIZE	H	D	TOD	BOD
A	1 1/4	5/8	1 1/8	1 1/2
B	1 1/4	7/8	1 7/8	2 1/8
C	2 3/8	7/8	2 3/4	3

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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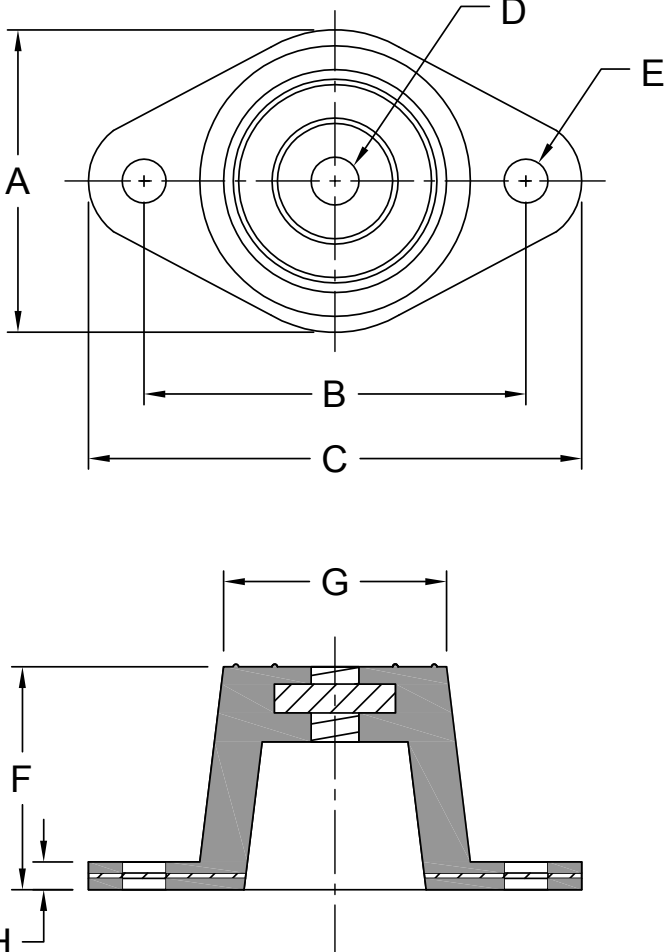
PROJECT: _____

CUSTOMER: _____

FMD

NEOPRENE MOUNTING

FMD 100 07/28/16



MOUNT DATA

SIZE	MAX CAPAC. (LBS)	RATED DEFL. (IN)	COLOR
A-1	30	3/8	BLUE
A-2	40	3/8	RED
A-3	70	3/8	GREEN
A-4	115	3/8	BLACK
B-1	130	1/2	BLUE
B-2	165	1/2	RED
B-3	235	1/2	GREEN
B-4	375	1/2	BLACK
E-3	400	1/2	GREEN
E-4	500	1/2	BLACK
F-1	750	1/2	BLUE
F-2	1000	1/2	RED
F-3	1500	1/2	GREEN
F-4	2200	1/2	BLACK

FMD DIMENSIONS (IN)

SIZE	A	B	C	D	E	F	G	MB
A	1-3/4	2 3/8	3-1/8	1/4	11/32	1-1/4	1-3/8	5-16
B	2-3/8	3	3-7/8	3/8	11/32	1-3/4	1-3/4	1-7/32
E	2-3/8	3-1/8	4	3/8	1/2	2	1-3/4	1/4
F	3-5/8	4-3/4	5-7/8	1/2	9/16	3-1/2	2-3/4	3/8

NOTES:

FMD-E & FMD-F HAVE RECTANGULAR BASES.

FEATURES:

* ANTI-SKID TOP & BOTTOM SURFACES

* MOUNTING HOLES

* EMBEDDED STEEL PLATES FOR UNIFORM LOADING

* OIL & WATER RESISTANT

* HIGH DEFLECTION, LOW NATURAL FREQUENCY

* COLOR CODED

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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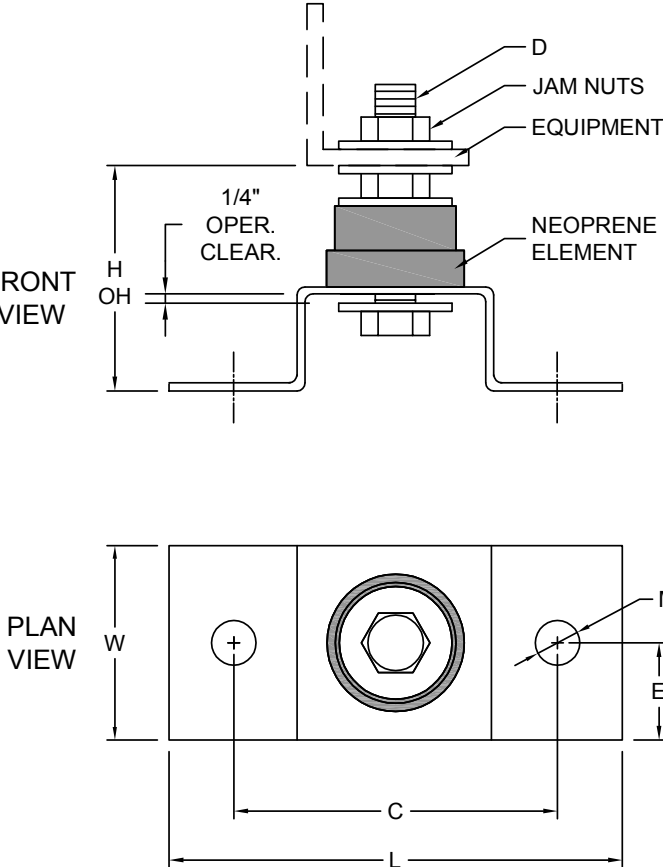
PROJECT: _____

CUSTOMER: _____

RNM

RESTRAINED NEOPRENE MOUNTING

RNM 100 07/28/16



NEOPRENE ELEMENT DATA

SIZE	DURO-METER	RATED CAPAC. (LBS)	RATED DEFL. (IN)	COLOR
A-59	40	59	0.35	BLU
A-103	50	103	0.35	GRN
A-136	60	136	0.35	RED
A-200	70	200	0.35	BLK
B-261	40	261	0.40	BLU
B-371	50	371	0.40	GRN
B-731	60	731	0.40	RED
B-908	70	908	0.40	BLK
C-1000	40	1000	0.50	BLU
C-1500	50	1500	0.50	GRN
C-2000	60	2000	0.50	RED
C-2450	70	2450	0.50	BLK

RNM DIMENSIONS (IN)

SIZE	H	OH	W	L	C	D	E	MB
A	2 3/4	2 3/8	2 1/4	4 1/4	3 3/8	3/8	1	3/8
B	3 1/2	3 1/8	3	7	5 1/2	5/8	1 1/2	5/8
C	4 5/8	4 1/8	3	7	5 1/2	5/8	1 1/2	5/8

H = UNLOADED HEIGHT

OH = OPERATING HEIGHT

NOTE: LONGER "D" BOLT MAY BE FIELD SUBSTITUTED IF REQUIRED.

Standard Finish:

A - Galvanized Steel

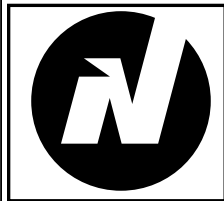
B,C - Painted

Available Finish:

B,C - Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

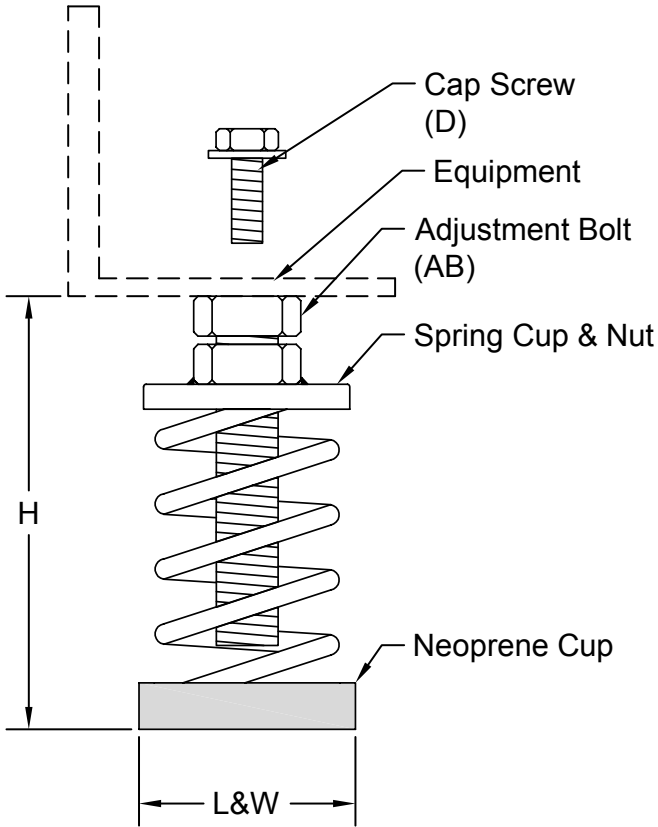


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PROJECT: _____
CUSTOMER: _____

SM-A

1" DEFLECTION
SPRING MOUNTING
SM 100 09/29/16



SPRING DATA					
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR	
A-29	29	1.16	25	ORG	
A-59	59	1.18	50	RED	
A-75	75	1.00	75	BLUE	
A-103	103	1.03	100	GRN	
A-136	136	1.01	135	BLK	
A-200	200	1.00	200	GRAY	
SPRING SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH		
A	1.50"	2.50"	1.00 - 1.13		
SM DIMENSIONS (IN)					
SIZE	L	W	H	AB	D
A	1 3/4	1 3/4	3 1/2	1/2	1/4
H = FREE & OPERATING HEIGHT					

¹Springs have a 50% overload capacity.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

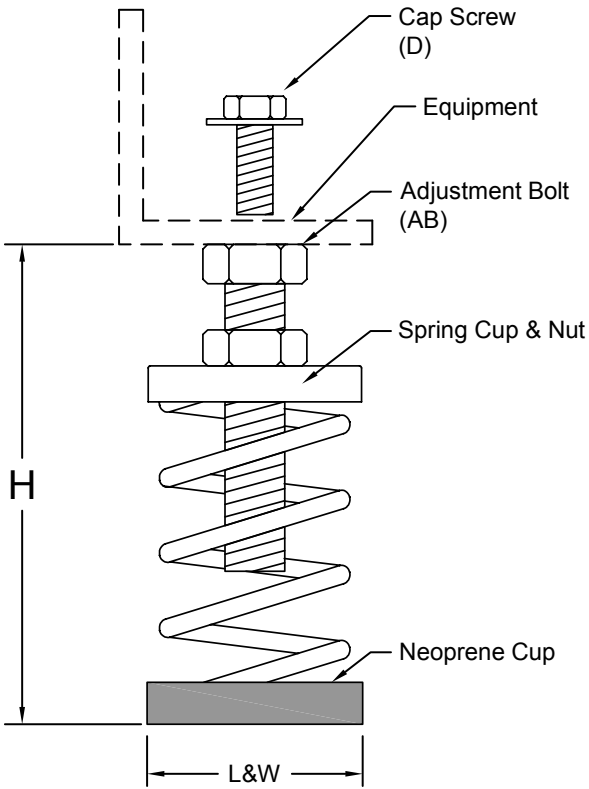


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PROJECT: _____
CUSTOMER: _____

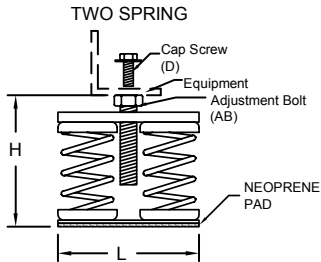
SM-B

1" DEFLECTION
SPRING MOUNTING
SM 100 09/29/16



SPRING DATA					
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR	
B-261	261	1.04	250	GRN	
B-371	371	1.24	300	ORG	
B-640	640	1.28	500	BLUE	
B-731	731	1.04	700	BLK	
B-908	908	1.01	900	GRAY	
B-1044	1044	1.04	1000	BLK*	
B-1221	1221	1.02	1200	GRAY*	
B2-1462	1462	1.04	1400	BLK	
B2-1816	1816	1.01	1800	GRAY	
B2-2088	2088	1.04	2000	BLK*	
B2-2442	2442	1.02	2400	GRAY*	
SPRING SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH		
B	2.00"	3.375"	0.84 - 0.96		
* 313 RED CORE SPRING					
B = 1 SPRING B2 = 2 SPRINGS					
SM DIMENSIONS (IN)					
SIZE	L	W	H	AB	D
B	2 1/4	2 1/4	5	5/8	3/8
B2	5 3/8	2 1/4	5	5/8	3/8
H = FREE & OPERATING HEIGHT					

¹Springs have a 50% overload capacity.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized



CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



Novia

A Division of C&P

1 Northwestern Dr.

Salem, NH 03079

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Fax: 603-898-2755

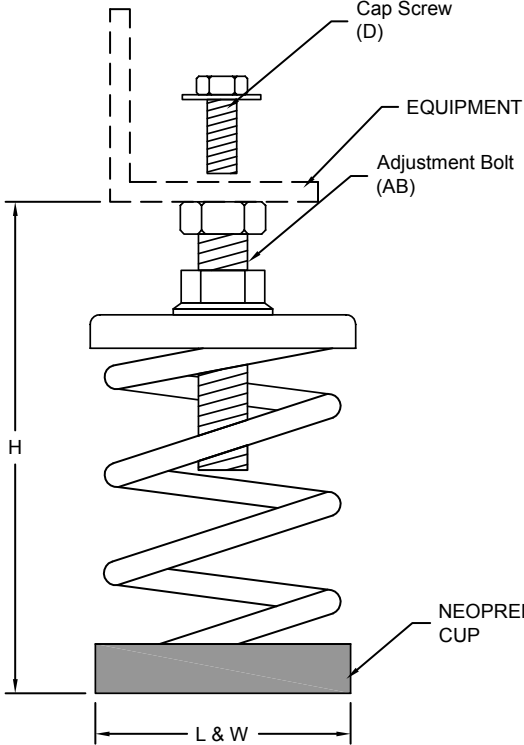
sales@cp-novia.com

PROJECT: _____

CUSTOMER: _____

SM-C

1" DEFLECTION
SPRING MOUNTING
SM-C 100 09/29/16



SPRING DATA					
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR	
C-1061	1061	1.06	1000	ORG	
C-1268	1268	1.01	1250	RED	
C-1608	1608	1.07	1500	BLUE	
C-1811	1811	1.03	1750	GRN	
C-2000	2000	1.00	2000	BLK	
C-2450 ²	2450	1.00	2450	GRAY	
C-2750	2750	1.00	2750	BLK*	
C-3000	3000	1.00	3000	BLK**	
C-3450 ²	3450	1.00	3450	GRAY**	
C2-4000	4000	1.00	4000	BLK	
C2-4900 ²	4900	1.00	4900	GRAY	
C2-5500	5500	1.00	5500	BLK*	
C2-6000	6000	1.00	6000	BLK**	
C2-6400 ²	6400	1.00	6400	GRAY*	
C2-6900 ²	6900	1.00	6900	GRAY**	

CORE SPRINGS: *750 RED; **1000 GREEN
C = 1 SPRING C2 = 2 SPRINGS

SPRING O.D.	FREE HGT	RATIO OD/OH
3.00"	4.375"	0.89 - 0.91

SM DIMENSIONS (IN)

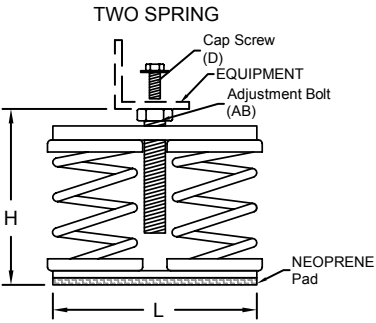
SIZE	L	W	H	AB	D
C	3 3/8	3 3/8	6-1/4	5/8	3/8
C2	7 5/8	3 3/8	6-1/4	3/4	3/8

H = FREE & OPERATING HEIGHT

¹Springs have a 50% overload capacity.
²Published ratings allow for 30% additional travel to solid.
For 50% additional travel, multiply Rated Capacity and
Rated Deflection by 0.841.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized



CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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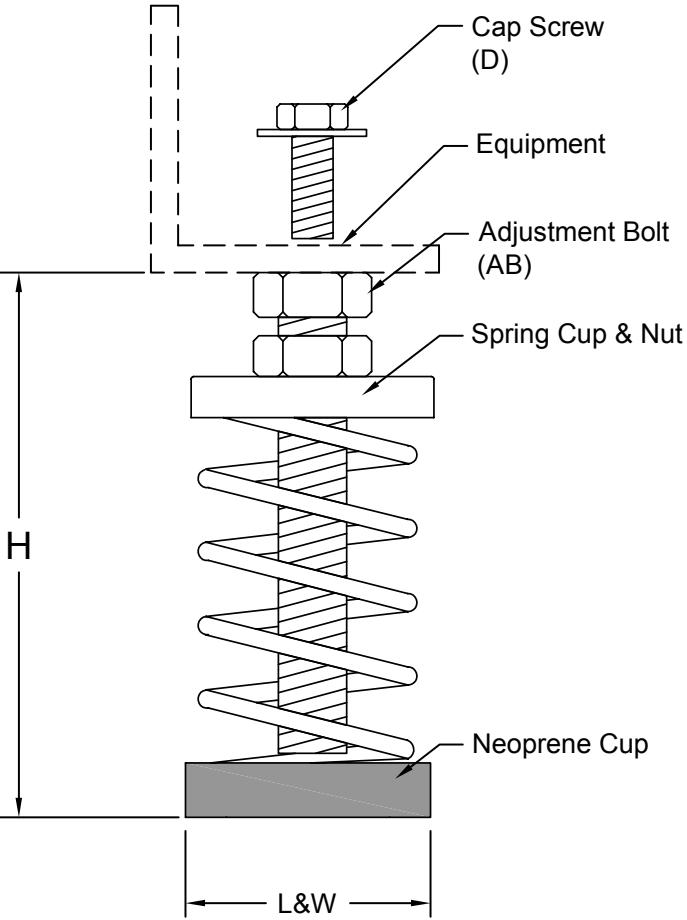
sales@cp-novia.com

PROJECT: _____

CUSTOMER: _____

SM-2B

2" DEFLECTION
SPRING MOUNTING
SM-2B 110 09/29/16



SPRING DATA					
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR	
2B-23	23	2.04	11.25	RED	
2B-45	45	2.00	22.5	BLUE	
2B-90	90	2.00	45	GREN	
2B-140	140	2.00	70	BLACK	
2B-200	200	2.00	100	GRAY	

SPRING O.D.	FREE HGT	RATIO OD/OH
2.00"	3.68"	1.19 MIN

SM-2B DIMENSIONS (IN)

SIZE	L	W	H	AB	D
2B	2-1/4	2-1/4	5	5/8	3/8

H = FREE & OPERATING HEIGHT

¹Springs have a 50% overload capacity.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

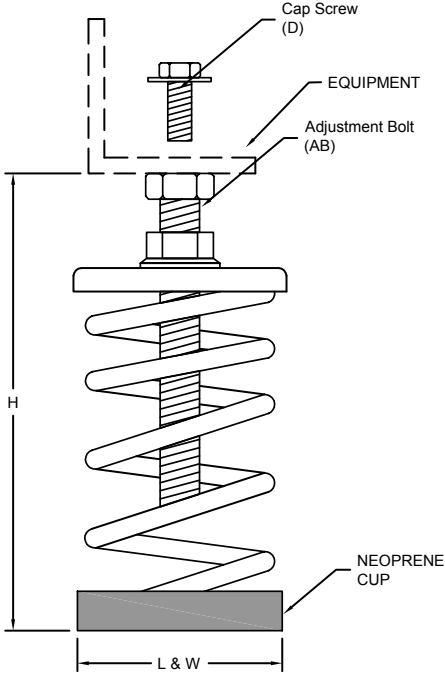


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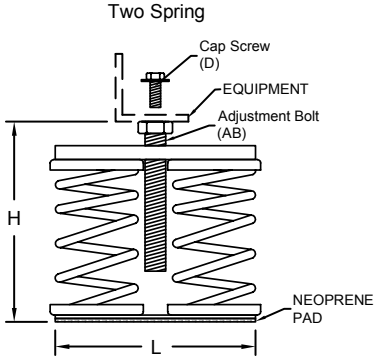
PROJECT: _____
CUSTOMER: _____

SM-D

2" DEFLECTION
SPRING MOUNTING
SM-D 100 09/29/16



SPRING DATA					
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR	
D-236	236	2.36	100	ORG	
D-352	352	2.35	150	RED	
D-410	410	2.00	205	BLUE	
D-624	624	2.08	300	GREEN	
D-840	840	2.00	420	BLACK	
D-1000	1000	2.00	500	GRAY	
D-1200	1200	2.00	600	BLACK*	
D-1360	1360	2.00	680	GRAY*	
D-1640	1640	2.00	820	BLACK**	
D-1800	1800	2.00	900	GRAY**	
CORE SPRINGS: *360 RED; **800 BLUE					
D = 1 SPRING D2 = 2 SPRINGS					
SPRING O.D.	FREE HGT		RATIO OD/OH		
3.00"	5.375"		0.89 - 0.99		
SM DIMENSIONS (IN)					
SIZE	L	W	H	AB	D
D	3-1/4	3-1/4	7-1/4	5/8	3/8
D2	7-5/8	3-3/8	7-1/4	3/4	3/8
H = FREE & OPERATING HEIGHT					



Two Spring

¹Springs have a 50% overload capacity.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

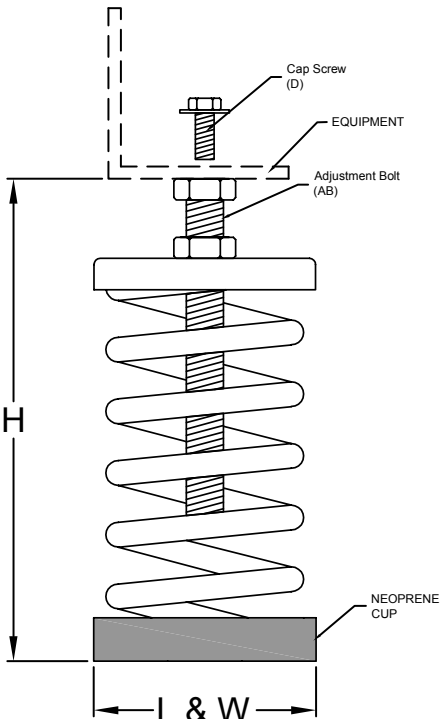


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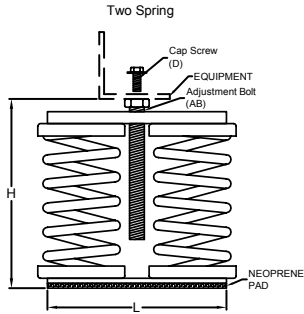
PROJECT: _____
CUSTOMER: _____

SM-E

3" DEFLECTION
SPRING MOUNTING
SM-E 100 09/29/2016



SPRING DATA					
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR	
E-311	311	3.34	93	ORANGE	
E-410	410	3.20	128	RED	
E-608	608	3.38	180	BLUE	
E-774	774	3.22	240	GREEN	
E-1002	1002	3.46	290	BLACK	
E-1240	1240	3.02	410	GRAY	
E-1457	1457	3.08	473	GREEN*	
E-1685	1685	3.22	523	BLACK*	
E-1923	1923	3.00	643	GRAY*	
E-2365	2365	3.01	785	GRAY**	
E2-2914	2914	3.08	946	GREEN*	
E2-3370	3370	3.22	1046	BLACK*	
E2-3798	3798	3.09	1230	GREEN**	
E2-4254	4254	3.20	1330	BLACK**	
E2-4730	4730	3.01	1570	GRAY**	
SPRINGS E = 1, E2 = 2					
SPRING O.D.	FREE HGT		RATIO OD/OH		
4.00"	7.625"		0.86 - 0.96		
SM DIMENSIONS (IN)					
SIZE	L	W	H	AB	D
E	4-1/2	4-1/2	9-3/4	3/4	3/8
E2	10-1/4	4-1/2	9-3/4	3/4	3/8
H = FREE & OPERATING HEIGHT					



Two Spring

¹Springs have a 50% overload capacity.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

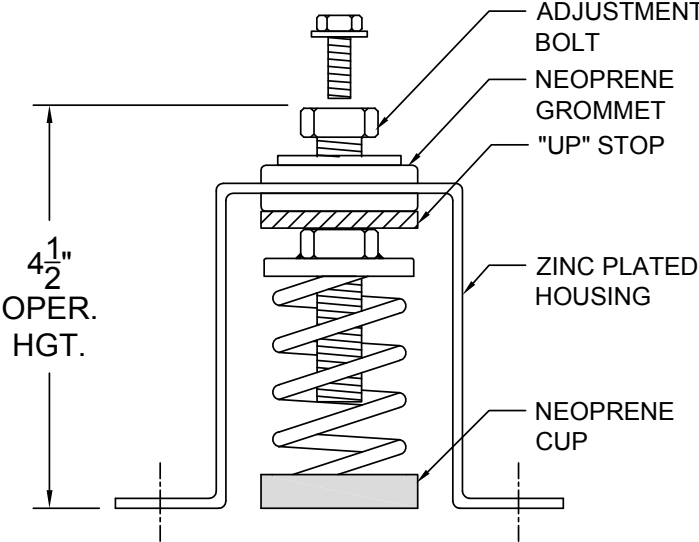


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PROJECT: _____
CUSTOMER: _____

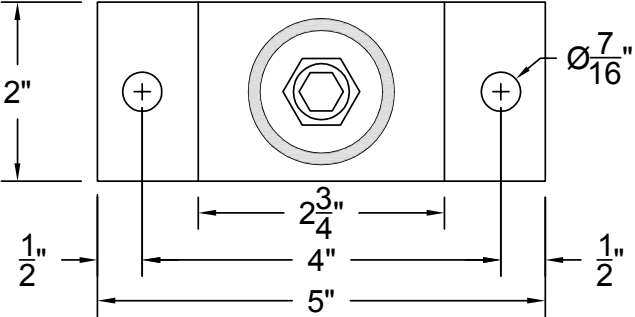
RSM-A

1" DEFLECTION
RESTRAINED SPRING
MOUNTING
RSM-A 100 09/29/16



ADJUSTMENT BOLT
NEOPRENE GROMMET
"UP" STOP
ZINC PLATED HOUSING
NEOPRENE CUP

4 1/2" OPER. HGT.



2"
1 1/2"
3/4"
4"
5"
1/2"
Ø 7/16"

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
A-29	29	1.16	25	ORG
A-59	59	1.18	50	RED
A-75	75	1.00	75	BLUE
A-103	103	1.03	100	GRN
A-136	136	1.01	135	BLK
A-200	200	1.00	200	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
1.50"	2.50"	1.00 - 1.13

¹Springs have a 50% overload capacity.
Standard Finish: Galvanized Steel

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

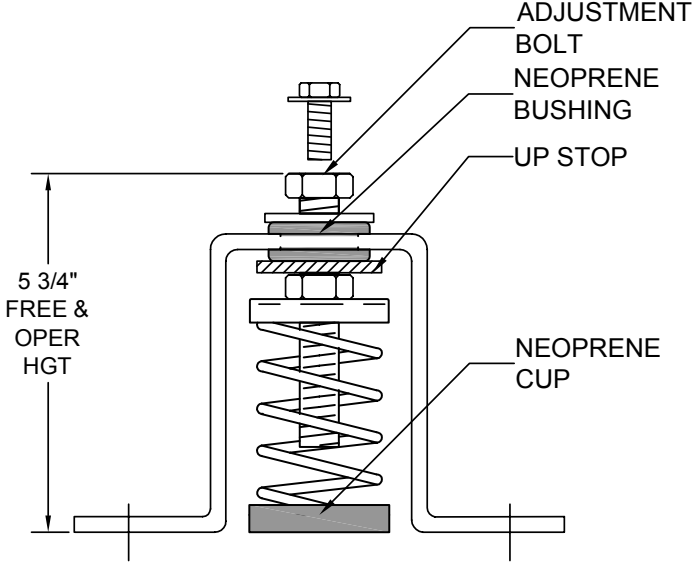


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PROJECT: _____
CUSTOMER: _____

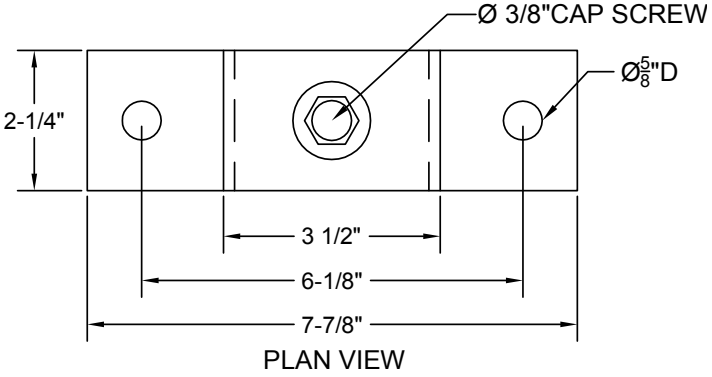
ERSM-B

1" DEFLECTION
RESTRAINED SPRING
MOUNTING
ERSM-B 100 09/29/16



ADJUSTMENT BOLT
NEOPRENE BUSHING
UP STOP
NEOPRENE CUP

5 3/4" FREE & OPER HGT



2-1/4"
3 1/2"
6-1/8"
7-7/8"
Ø 3/8" CAP SCREW
Ø 5/8" D

PLAN VIEW

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
B-261	261	1.04	250	GRN
B-371	371	1.24	300	ORG
B-640	640	1.28	500	BLUE
B-731	731	1.04	700	BLK
B-908	908	1.01	900	GRAY
B-1044	1044	1.04	1000	BLK*
B-1221	1221	1.02	1200	GRAY*

CORE SPRING: * 313 RED

SPRING O.D.	FREE HGT	RATIO OD/OH
2.00"	3.375"	0.84 - 0.96

¹Springs have a 50% overload capacity.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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PROJECT: _____

CUSTOMER: _____

RSM-BW

1" DEFLECTION

RESTRAINED SPRING

MOUNTING

RSM-BW 100 09/29/16

TOP

TW

FRONT

BASE

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
BW-261	261	1.04	250	GRN
BW-371	371	1.24	300	ORG
BW-640	640	1.28	500	BLUE
BW-731	731	1.04	700	BLK
BW-908	908	1.01	900	GRAY
BW-1044	1044	1.04	1000	BLK*
BW-1221	1221	1.02	1200	GRAY*
BW2-1462	1462	1.04	1400	BLK
BW2-1816	1816	1.01	1800	GRAY
BW2-2088	2088	1.04	2000	BLK*
BW2-2442	2442	1.02	2400	GRAY*
BW4-2924	2924	1.04	2800	BLK
BW4-3632	3632	1.01	3600	GRAY
BW4-4176	4176	1.04	4000	BLK*
BW4-4844	4844	1.01	4800	GRAY*

* 313 RED CORE SPRING

BW = 1 SPRING, BW2 = 2 SPRINGS,

BW-4 = 4 SPRINGS

SPRING O.D.	FREE HGT	RATIO OD/OH
2.00"	3.375"	0.84 - 0.96

RSM DIMENSIONS (IN)

SIZE	BL	BW	TH	TL	TW	HCL	HCW	RB
BW	8 5/8	4	1	7 7/8	4	7 3/8	2 3/4	2
BW2	11 3/4	4	1-3/8	11	4	10 1/2	2 3/4	2
BW4	11 3/4	5	1-3/8	11	5	10 1/2	3 3/4	4

¹Springs have a 50% overload capacity.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

TOP

TW

FRONT

BASE

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
C-1061	1061	1.06	1000	ORG
C-1268	1268	1.01	1250	RED
C-1608	1608	1.07	1500	BLUE
C-1811	1811	1.03	1750	GRN
C-2000	2000	1.00	2000	BLK
C-2450 ²	2450	1.00	2450	GRAY
C-2750	2750	1.00	2750	BLK*
C-3000	3000	1.00	3000	BLK**
C-3450 ²	3450	1.00	3450	GRAY**
C2-4000	4000	1.00	4000	BLK
C2-4900 ²	4900	1.00	4900	GRAY
C2-5500	5500	1.00	5500	BLK*
C2-6000	6000	1.00	6000	BLK**
C2-6400 ²	6400	1.00	6400	GRAY*
C2-6900 ²	6900	1.00	6900	GRAY**
C4-8000	8000	1.00	8000	BLK
C4-9800 ²	9800	1.00	9800	GRAY
C4-11244	11244	1.02	11000	GRN**
C4-12800 ²	12800	1.00	12800	GRAY*
C4-13800 ²	13800	1.00	13800	GRAY**

CORE SPRINGS: *750 RED; **1000 GREEN

C = 1 SPRING C2 = 2 SPRINGS C4 = 4 SPRINGS

SPRING O.D.	FREE HGT	RATIO OD/OH
3.00"	4.375"	0.89 - 0.91

RSM DIMENSIONS (IN)

SIZE	BL	BW	TL	TW	HCL	HCW	MBD	D	E
C	10 1/4	4	9 1/2	4	9	2 3/4	11/16	5/8-11	1 3/8
C2	14 1/4	4	13 1/2	4	13	2 3/4	11/16	5/8-11	1 3/8
C4	14	7	12 3/4	6	12 1/2	4	3/4	3/4-9	1 3/4

¹Springs have a 50% overload capacity.

²Published ratings allow for 30% additional travel to solid.

For 50% additional travel, multiply Rated Capacity and Rated Deflection by 0.841.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

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NOVIA | **PAGE 45**



Novia

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PROJECT: _____

CUSTOMER: _____

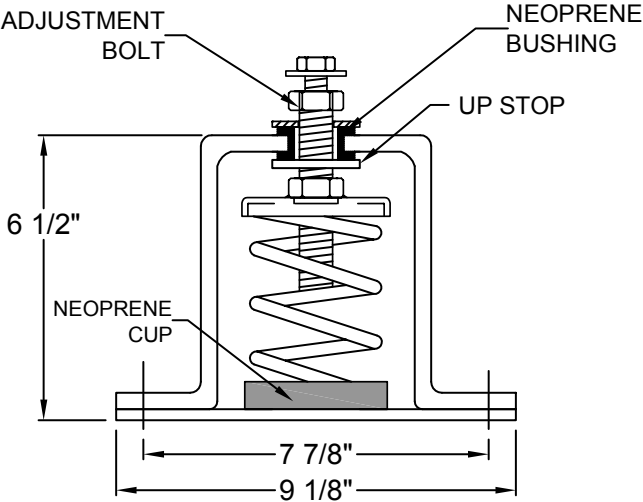
ERSM-C

1" DEFLECTION

RESTRAINED SPRING

MOUNTING

ERSM-C 100 09/29/16



ADJUSTMENT BOLT

NEOPRENE BUSHING

UP STOP

NEOPRENE CUP

6 1/2"

7 7/8"

9 1/8"

SPRING DATA

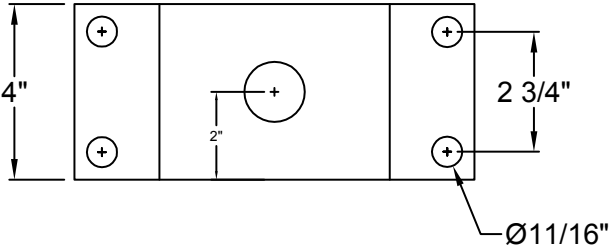
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
C-1061	1061	1.06	1000	ORG
C-1268	1268	1.01	1250	RED
C-1608	1608	1.07	1500	BLUE
C-1811	1811	1.03	1750	GRN
C-2000	2000	1.00	2000	BLK
C-2450 ²	2450	1.00	2450	GRAY
C-2750	2750	1.00	2750	BLK*
C-3000	3000	1.00	3000	BLK**
C-3450 ²	3450	1.00	3450	GRAY**

CORE SPRINGS: *750 RED; **1000 GREEN

SPRING O.D.	FREE HGT	RATIO OD/OH
3.00"	4.375"	0.89 - 0.91

¹Springs have a 50% overload capacity.
²Published ratings allow for 30% additional travel to solid. For 50% additional travel, multiply Rated Capacity and Rated Deflection by 0.841.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized

PLAN VIEW - FORMED TOP



4"

2 3/4"

2"

Ø11/16"

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____



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PROJECT: _____

CUSTOMER: _____

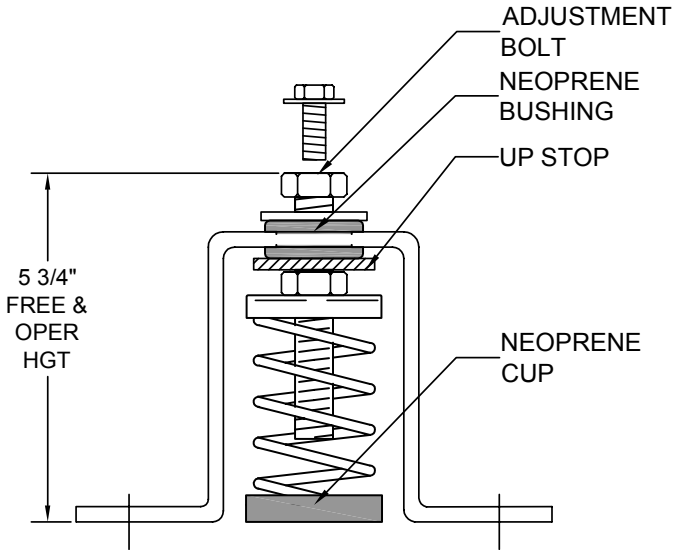
ERSM-2B

2" DEFLECTION

RESTRAINED SPRING

MOUNTING

ERSM-2B 110 09/29/16



ADJUSTMENT BOLT

NEOPRENE BUSHING

UP STOP

NEOPRENE CUP

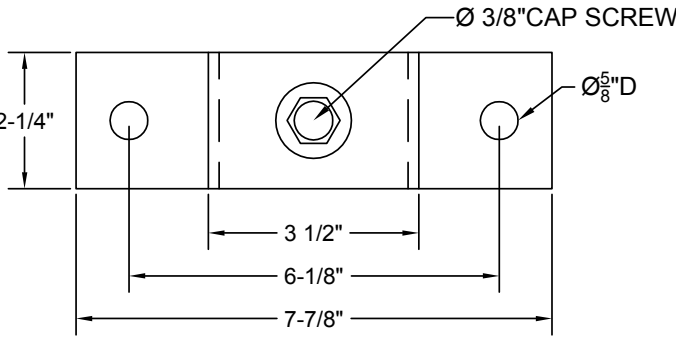
5 3/4" FREE & OPER HGT

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
2B-23	23	2.00	11.5	SILV/RED
2B-45	45	2.00	22.5	SILV/BLU
2B-90	90	2.00	45	SILV/GRN
2B-140	140	2.00	70	SILV/BLK
2B-200	200	2.00	100	SILV/GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
2.00"	3.375"	0.84 - 0.96

¹Springs have a 50% overload capacity.
Standard Finish: Painted
Available Finish: Hot Dip Galvanized



Ø 3/8" CAP SCREW

2-1/4"

3 1/2"

6-1/8"

7-7/8"

PLAN VIEW

Ø5/8"D

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____



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PROJECT: _____

CUSTOMER: _____

RSM-2BW

2" DEFLECTION

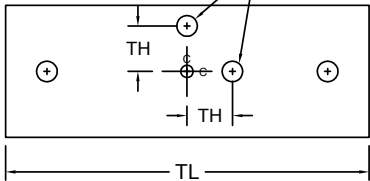
RESTRAINED SPRING

MOUNTING

RSM-2BW 100 09/29/16

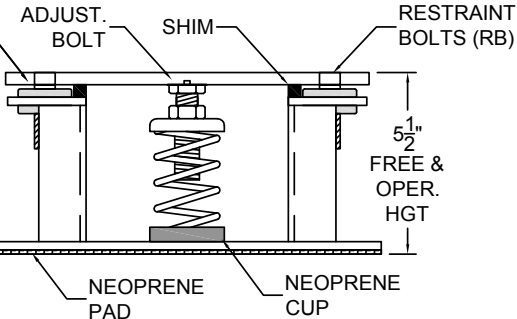
TOP

TW



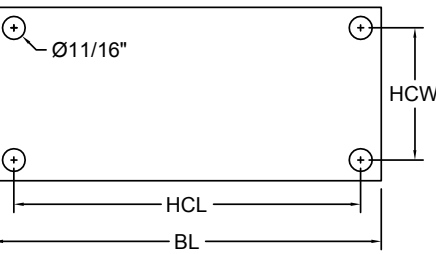
TL

FRONT



BASE

BW



HCL

BL

HCW

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
2BW-23	23	2.00	11.5	SILV/RED
2BW-45	45	2.00	22.5	SILV/BLUE
2BW-90	90	2.00	45	SILV/GRN
2BW-140	140	2.00	70	SILV/BLK
2BW-200	200	2.00	100	SILV/GRAY

SPRING
O.D.

FREE
HGT

RATIO
OD/OH

2.00"

3.375"

0.84 - 0.96

RSM DIMENSIONS (IN)

SIZE	BL	BW	TH	TL	TW	HCL	HCW	RB
2BW	8 5/8	4	1	7 7/8	4	7 3/8	2 3/4	2

¹Springs have a 50% overload capacity.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

TAG _____

UNIT _____

BY: _____

DATE: _____

DWG#: _____



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Salem, NH 03079

Ph: 603-898-8600

Fax: 603-898-2755

sales@cp-novia.com

PROJECT: _____

CUSTOMER: _____

RSM-D

2" DEFLECTION

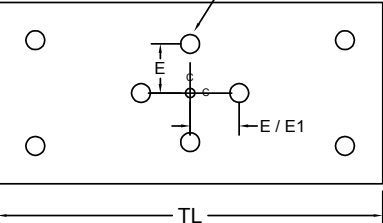
RESTRAINED SPRING

MOUNTING

RSM-D 100 09/29/16

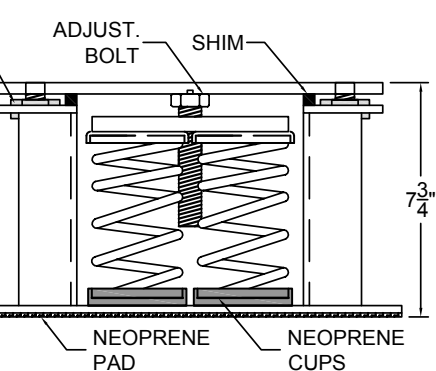
TOP

TW



TL

FRONT



BASE

BW



HCL

BL

HCW

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
D-236	236	2.36	100	ORG
D-352	352	2.35	150	RED
D-410	410	2.00	205	BLUE
D-624	624	2.08	300	GRN
D-840	840	2.00	420	BLK
D-1000	1000	2.00	500	GRAY
D-1200	1200	2.00	600	BLK*
D-1360	1360	2.00	680	GRAY*
D-1640	1640	2.00	820	BLK**
D-1800	1800	2.00	900	GRAY**
D2-2000	2000	2.00	1000	GRAY
D2-2400	2400	2.00	1200	BLK*
D2-2720	2720	2.00	1360	GRAY*
D2-3280	3280	2.00	1640	BLK**
D2-3600	3600	2.00	1800	GRAY**
D4-4000	4000	2.00	2000	GRAY
D4-4800	4800	2.00	2400	BLK*
D4-5440	5440	2.00	2720	GRAY*
D4-5696	5696	2.00	2848	GRN**
D4-6560	6560	2.00	3280	BLK**
D4-7200	7200	2.00	3600	GRAY**
D6-8160	8160	2.00	4080	GRAY*
D6-9840	9840	2.00	4920	BLK**
D6-10800	10800	2.00	5400	GRAY**

SPRING O.D.

FREE HGT

RATIO OD/OH

3.00"

5.375"

0.89 - 0.99

RSM DIMENSIONS (IN)

SIZE	BL	BW	TL	TW	HCL	HCW	E / E1
D	10 1/4	4	9 1/2	4	9	2 3/4	1 3/8
D2	14 1/4	4	13 1/2	4	13	2 3/4	1 3/8
D4	14	7	12 3/4	6	12 1/2	4	1 5/8
D6	17 1/2	7	15 3/4	6	16 3/8	4	1 5/8 / 3

¹Springs have a 50% overload capacity.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

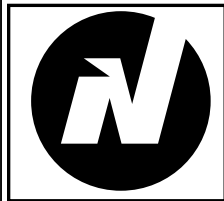
BY: _____

DATE: _____

DWG#: _____

VISIT US AT **CP-NOVIA.COM** FOR MORE INFORMATION.

NOVIA | **PAGE 49**

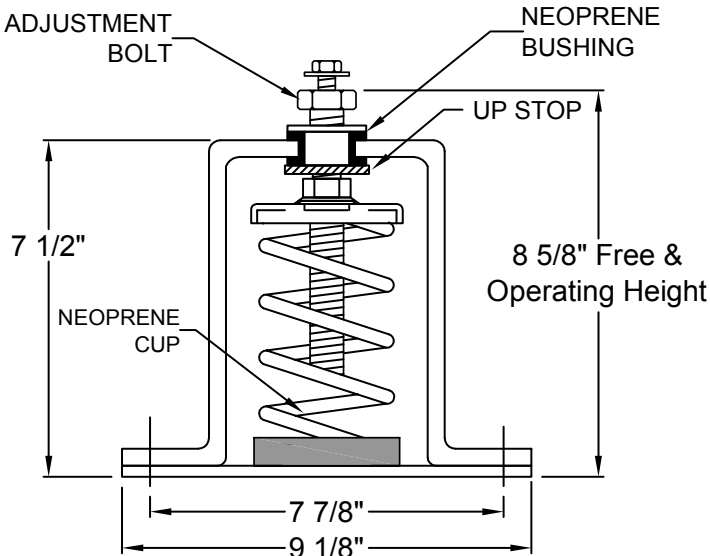


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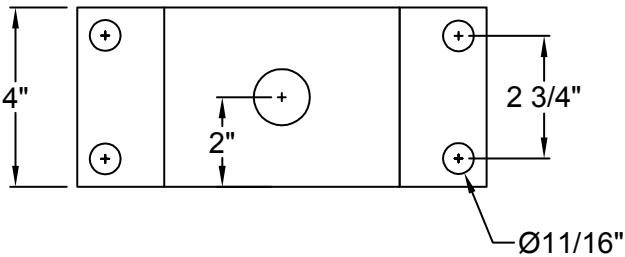
PROJECT: _____
CUSTOMER: _____

ERSM-D

2" DEFLECTION
RESTRAINED SPRING
MOUNTING
ERSM-D 100 09/29/16



PLAN VIEW



SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
D-236	236	2.36	100	ORAGNE
D-352	352	2.35	150	RED
D-410	410	2.00	205	BLUE
D-624	624	2.08	300	GREEN
D-840	840	2.00	420	BLACK
D-1000	1000	2.00	500	GRAY
D-1200	1200	2.00	600	BLACK*
D-1360	1360	2.00	680	GRAY*
D-1640	1640	2.00	820	BLACK**
D-1800	1800	2.00	900	GRAY**

CORE SPRINGS: *360 RED; **800 BLUE

SPRING O.D.	FREE HGT	RATIO OD/OH
3.00"	5.375"	0.89 - 0.99

¹Springs have a 50% overload capacity.

Standard Finish: Painted

Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

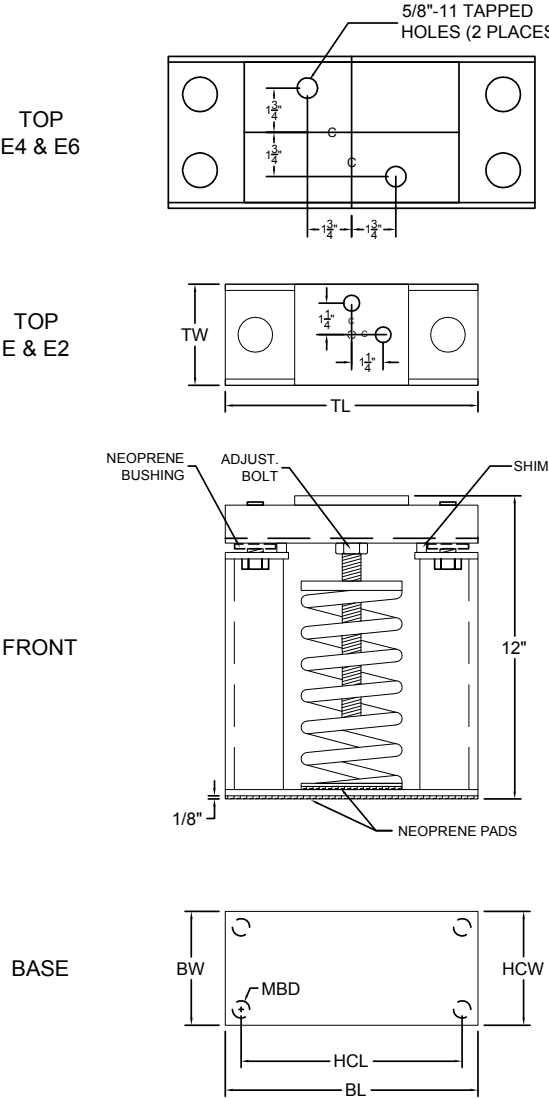


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PROJECT: _____
CUSTOMER: _____

RSM-E

3" DEFLECTION
RESTRAINED SPRING
MOUNTING
RSM-E 100 09/29/16



SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
E-311	311	3.34	93	ORG
E-410	410	3.20	128	RED
E-608	608	3.38	180	BLUE
E-774	774	3.22	240	GRN
E-1002	1002	3.46	290	BLK
E-1240	1240	3.02	410	GRAY
E-1457	1457	3.08	473	GRN*
E-1685	1685	3.22	523	BLK*
E-1923	1923	3.00	643	GRAY*
E-2365	2365	3.01	785	GRAY**
E2-2914	2914	3.08	946	GRN*
E2-3370	3370	3.22	1046	BLK*
E2-3798	3798	3.09	1230	GRN**
E2-4254	4254	3.20	1330	BLK**
E2-4730	4730	3.01	1570	GRAY**
E4-5828	5828	3.08	1892	GRN*
E4-6740	6740	3.22	2092	BLK*
E4-7692	7692	3.00	2572	GRAY*
E4-8508	8508	3.20	2660	BLK**
E4-9460	9460	3.01	3140	GRAY**
E6-10110	10110	3.22	3138	BLK*
E6-11538	11538	3.00	3858	GRAY*
E6-12762	12762	3.20	3990	BLK**
E6-14190	14190	3.01	4710	GRAY**

CORE SPRINGS: *683 RED; **1125 GREEN
SPRINGS: E-1 (1) E2 (2) E4 (4) E6 (6)

SPRING O.D.	FREE HGT	RATIO OD/OH
4.00"	7.62"	0.89 - 0.91

RSM DIMENSIONS (IN)

SIZE	BL	BW	TL	TW	HCL	HCW	MBD
E	10	4 1/2	10	4	8 3/4	3 1/4	11/16
E2	14 7/8	4 1/2	14-7/8	4	13 5/8	3 1/4	11/16
E4	16	9	14-1/2	6	14 1/2	7 1/2	3/4
E6	20 1/2	9	19	6	19	7 1/2	3/4

¹Springs have a 50% overload capacity.

Standard Finish: Painted Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

TAG _____
UNIT _____

BY: _____ DATE: _____ DWG#: _____

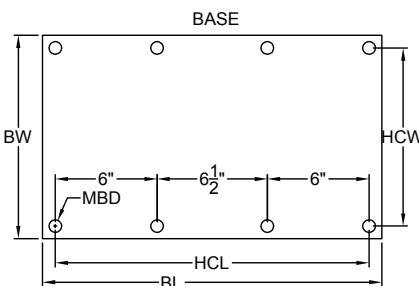
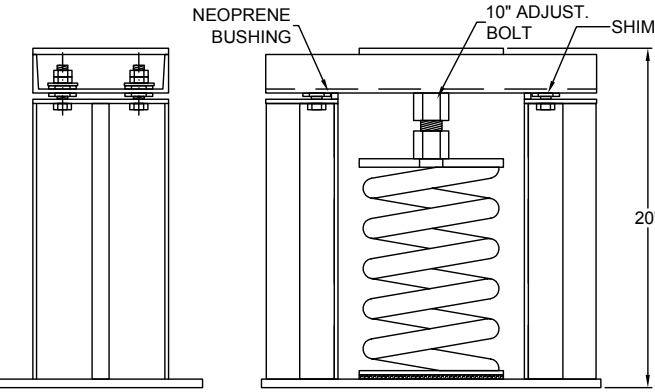
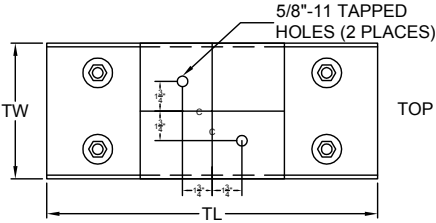


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Salem, NH 03079
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Fax: 603-898-2755
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PROJECT: _____
CUSTOMER: _____

RSM-F

4" DEFLECTION
RESTRAINED SPRING
MOUNTING
RSM-F 100 07/28/16



SPRING DATA

SIZE	RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
CUSTOM SPRINGS				

RSM DIMENSIONS (IN)

SIZE	BL	BW	TL	TW	HCL	HCW	MBD
F	20	12	19 1/2	8	18 1/2	10 1/2	3/4

Standard Finish: Painted
Available Finish: Hot Dip Galvanized

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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Fax: 603-898-2755
sales@cp-novia.com

PROJECT: _____
CUSTOMER: _____

CIB

CONCRETE INERTIA
BASE - CUSTOM
CIB 100 06/24/15

TAG: _____
MFG: _____ HP: _____
QTY: _____

WEIGHTS

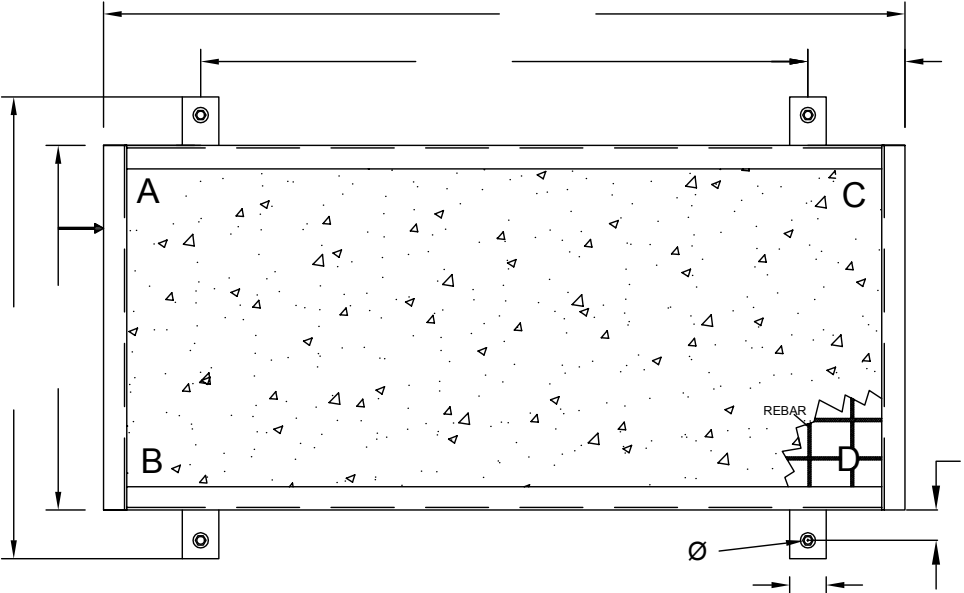
PUMP: _____
BASE: _____
CONCRETE: _____
TOTAL: _____

MATERIALS

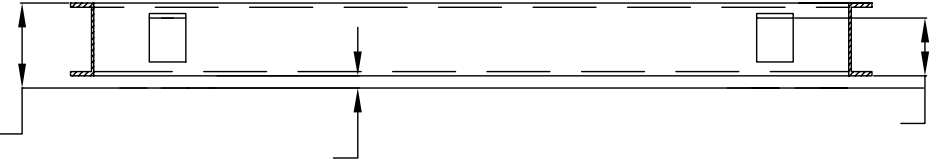
BASE: _____
REBAR: 3/8" DIAM 8" OCBW
H/S BKTS: L4"x4"x3/8" (LONG)
FINISH: STANDARD - PAINT
OPTIONAL - GALVANIZED

ISOLATORS

A: _____
B: _____
C: _____
D: _____
REF.: _____



MINIMUM HOUSEKEEPING PAD SIZE: _____



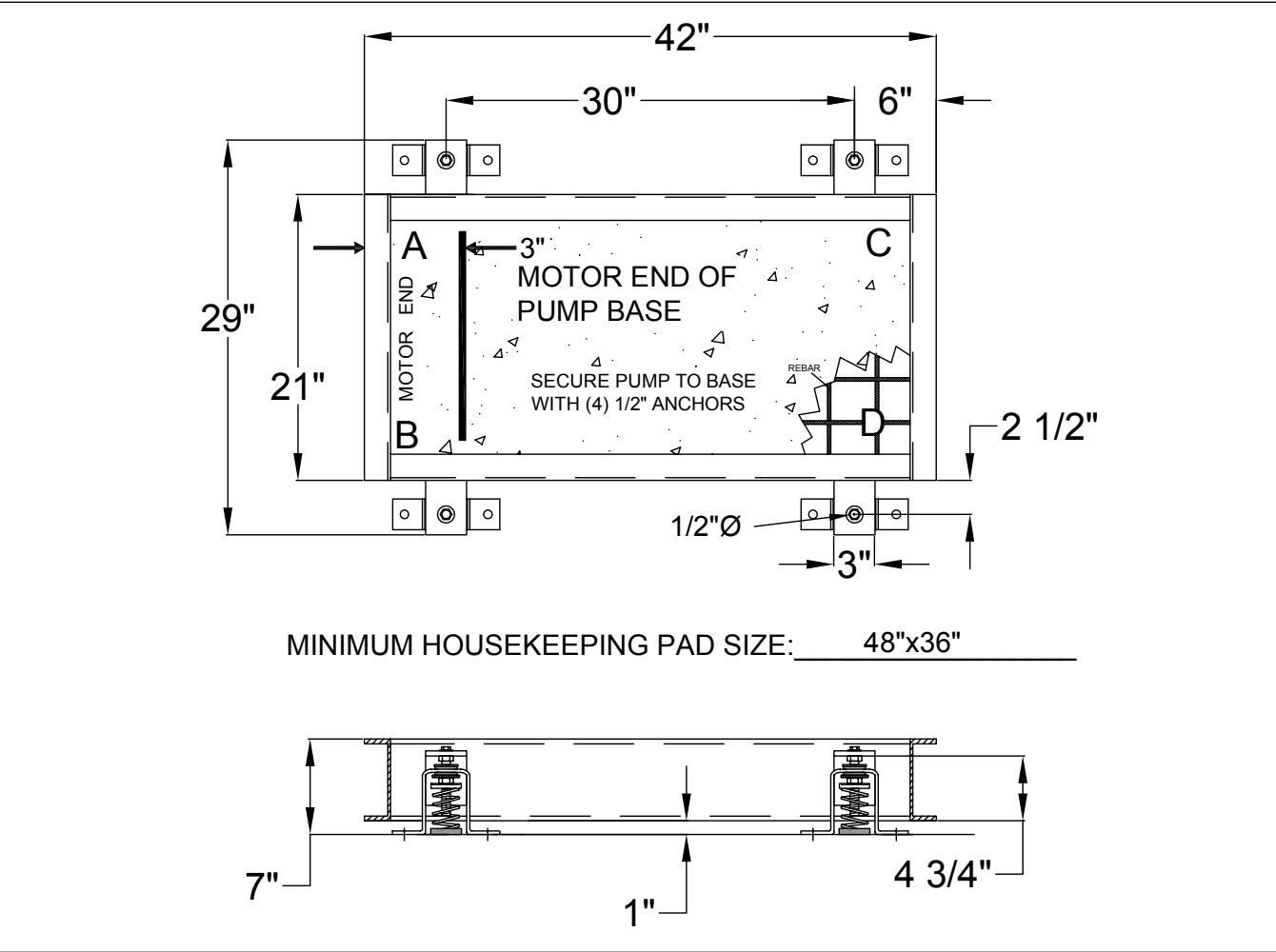
BY: _____ DATE: _____ DWG#: _____

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NOVIA | **PAGE 53**

	Novia A Division of C&P 1 Northwestern Dr. Salem, NH 03079 Ph: 603-898-8600 Fax: 603-898-2755 sales@cp-novia.com	PROJECT: _____ CUSTOMER: _____	CIB-ERSM CONCRETE INERTIA BASE CIB-ERSM 100 06/24/15
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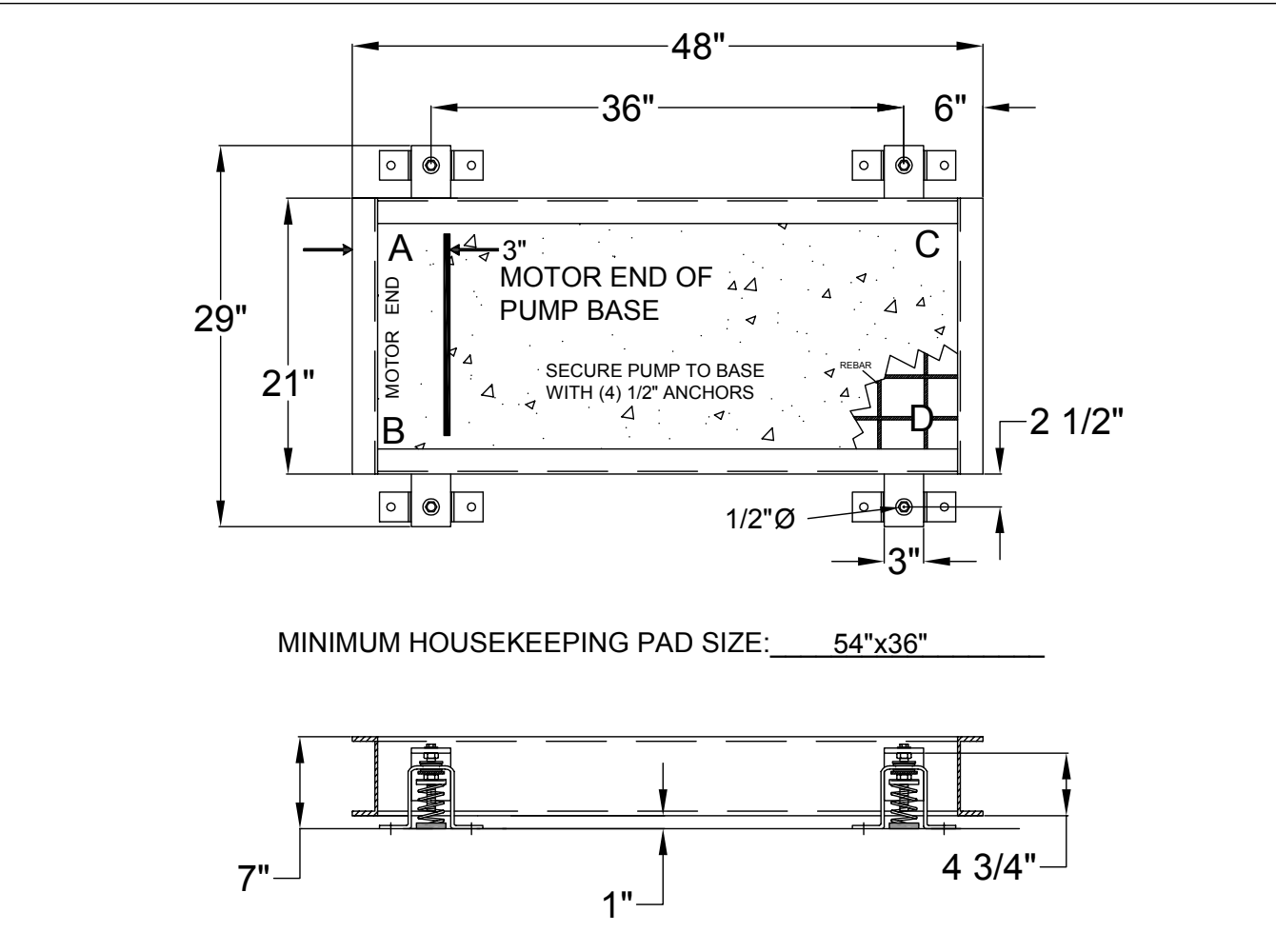
TAG: _____		
MFG: _____		HP: _____
QTY: _____		
<u>WEIGHTS</u>	<u>MATERIALS</u>	<u>ISOLATORS</u>
PUMP: _____	BASE: <u>C6"x8.2#</u>	A: <u>ERSM-</u>
BASE: <u>100#</u>	REBAR: <u>3/8" DIAM 8" OCBW</u>	B: <u>ERSM-</u>
CONCRETE: <u>460#</u>	H/S BKTS: <u>L4"x4"x3/8" (3" LONG)</u>	C: <u>ERSM-</u>
TOTAL: _____	FINISH: <u>STANDARD - PAINT</u> <u>OPTIONAL - GALVANIZED</u>	D: <u>ERSM-</u>
		REF.: _____



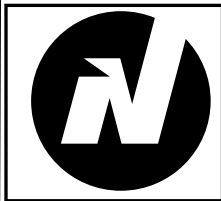
BY: _____	DATE: _____	DWG#: _____
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	Novia A Division of C&P 1 Northwestern Dr. Salem, NH 03079 Ph: 603-898-8600 Fax: 603-898-2755 sales@cp-novia.com	PROJECT: _____ CUSTOMER: _____	CIB-ERSM CONCRETE INERTIA BASE CIB-ERSM 100 06/24/15
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TAG: _____		
MFG: _____		HP: _____
QTY: _____		
<u>WEIGHTS</u>	<u>MATERIALS</u>	<u>ISOLATORS</u>
PUMP: _____	BASE: <u>C6"x8.2#</u>	A: <u>ERSM-</u>
BASE: <u>105#</u>	REBAR: <u>3/8" DIAM 8" OCBW</u>	B: <u>ERSM-</u>
CONCRETE: <u>525#</u>	H/S BKTS: <u>L4"x4"x3/8" (3" LONG)</u>	C: <u>ERSM-</u>
TOTAL: _____	FINISH: <u>STANDARD - PAINT</u> <u>OPTIONAL - GALVANIZED</u>	D: <u>ERSM-</u>
		REF.: _____



BY: _____	DATE: _____	DWG#: _____
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Fax: 603-898-2755
sales@cp-novia.com

PROJECT: _____
CUSTOMER: _____

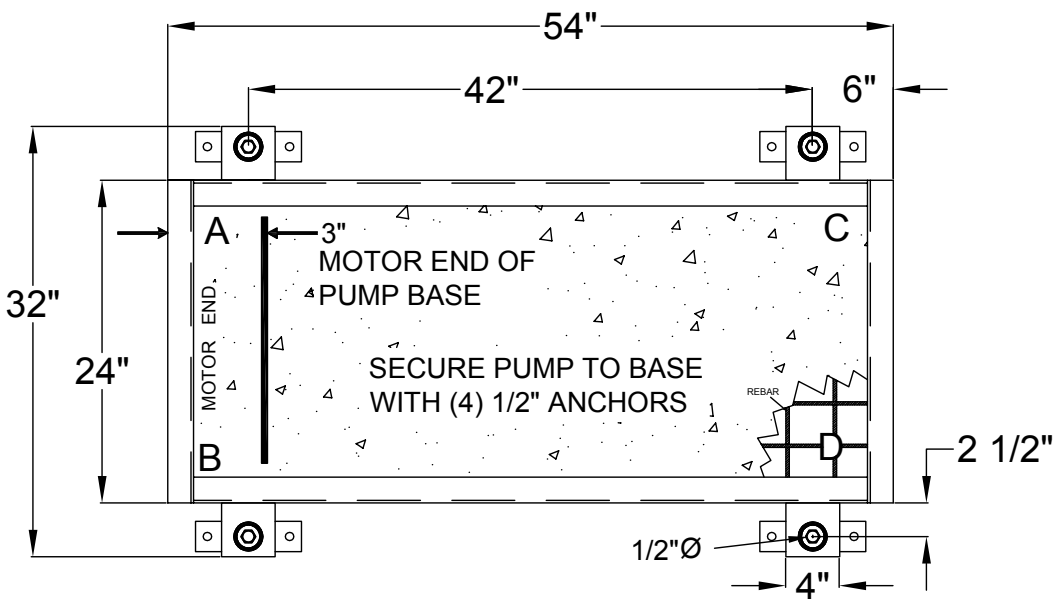
CIB-ERSM

CONCRETE INERTIA
BASE
CIB-ERSM 100 06/24/15

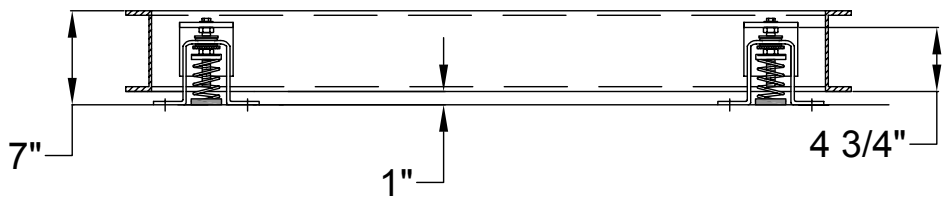
TAG: _____
MFG: _____ HP: _____
QTY: _____

WEIGHTS	MATERIALS
PUMP: _____	BASE: C6"x8.2#
BASE: 125#	REBAR: 3/8" DIAM 8" OCBW
CONCRETE: 675#	H/S BKTS: L4"x4"x3/8" (4" LONG)
TOTAL: _____	FINISH: STANDARD - PAINT OPTIONAL - GALVANIZED

ISOLATORS
A: ERSM- _____
B: ERSM- _____
C: ERSM- _____
D: ERSM- _____
REF.: _____



MINIMUM HOUSEKEEPING PAD SIZE: 60"x40"



BY: _____ DATE: _____ DWG#: _____



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PROJECT: _____
CUSTOMER: _____

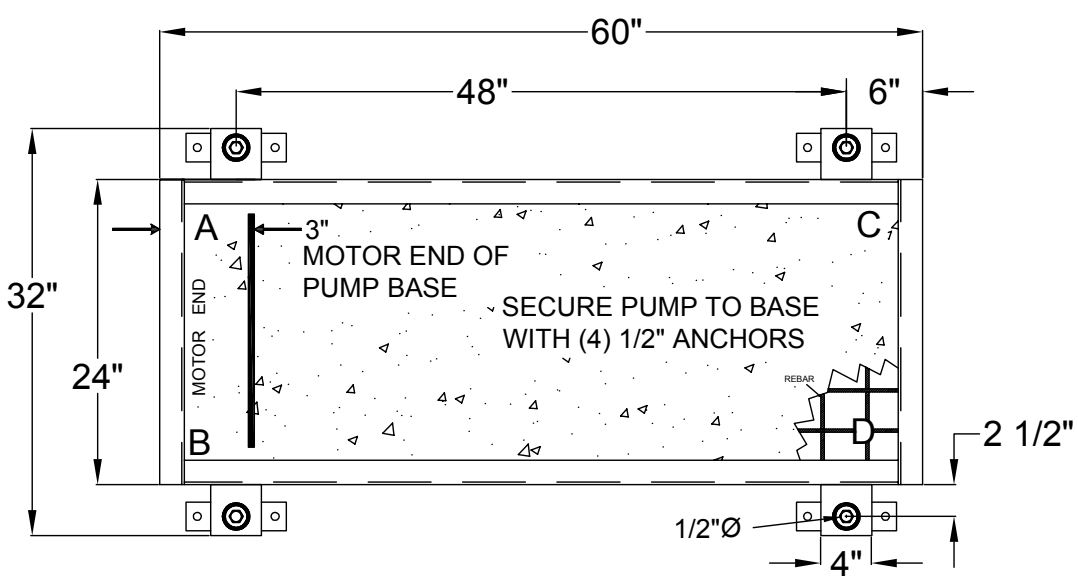
CIB-ERSM

CONCRETE INERTIA
BASE
CIB-ERSM 100 06/24/15

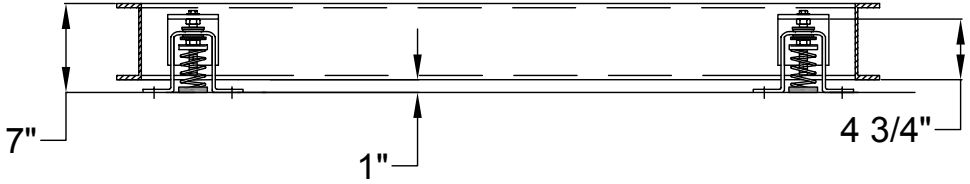
TAG: _____
MFG: _____ HP: _____
QTY: _____

WEIGHTS	MATERIALS
PUMP: _____	BASE: C6"x8.2#
BASE: 135#	REBAR: 3/8" DIAM 8" OCBW
CONCRETE: 750#	H/S BKTS: L4"x4"x3/8" (4" LONG)
TOTAL: _____	FINISH: STANDARD - PAINT OPTIONAL - GALVANIZED

ISOLATORS
A: ERSM- _____
B: ERSM- _____
C: ERSM- _____
D: ERSM- _____
REF.: _____



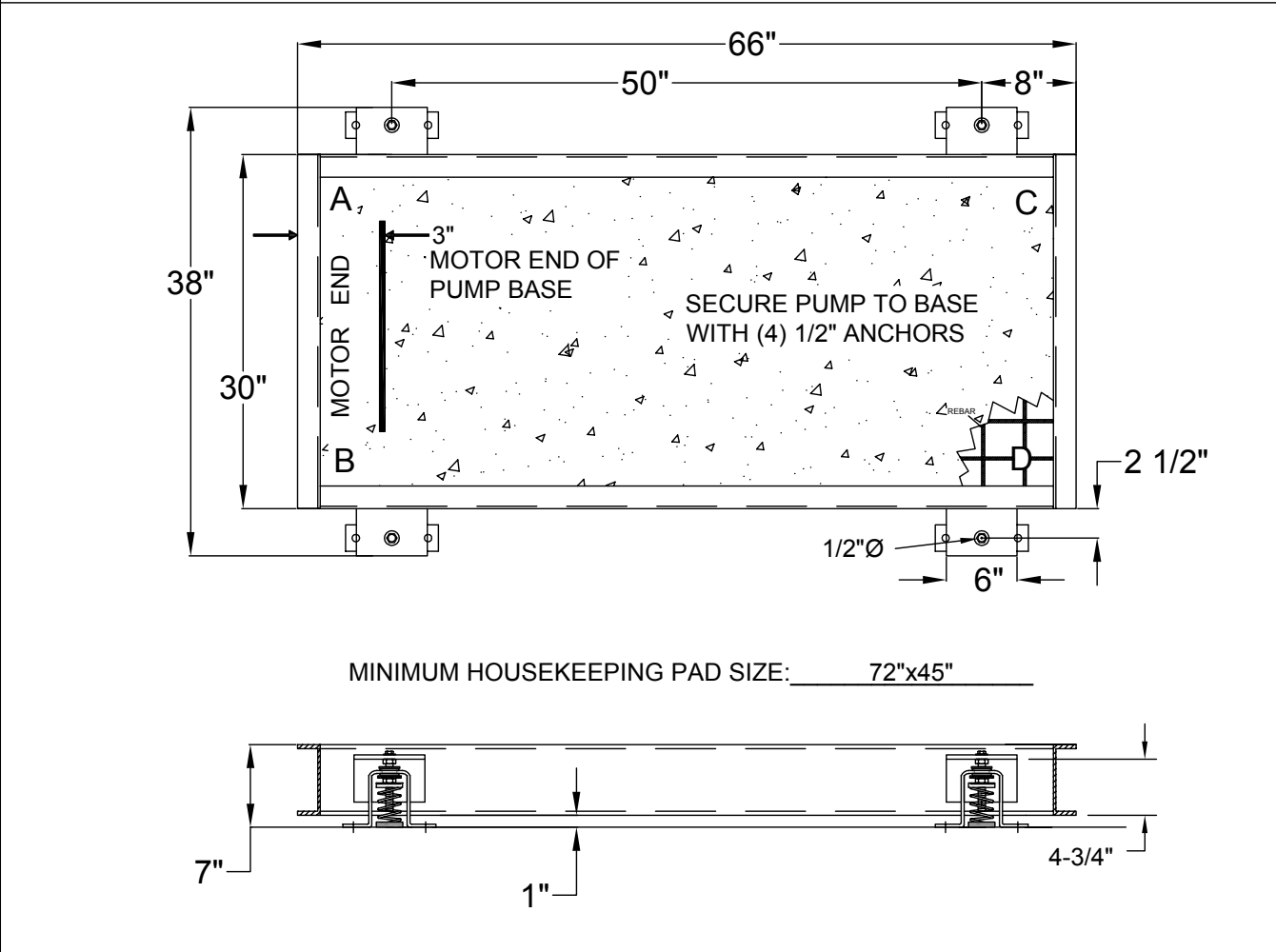
MINIMUM HOUSEKEEPING PAD SIZE: 66"x40"



BY: _____ DATE: _____ DWG#: _____

	Novia A Division of C&P 1 Northwestern Dr. Salem, NH 03079 Ph: 603-898-8600 Fax: 603-898-2755 sales@cp-novia.com	PROJECT: _____	CIB-ERSM CONCRETE INERTIA BASE CIB-ERSM 100 06/24/15
		CUSTOMER: _____	

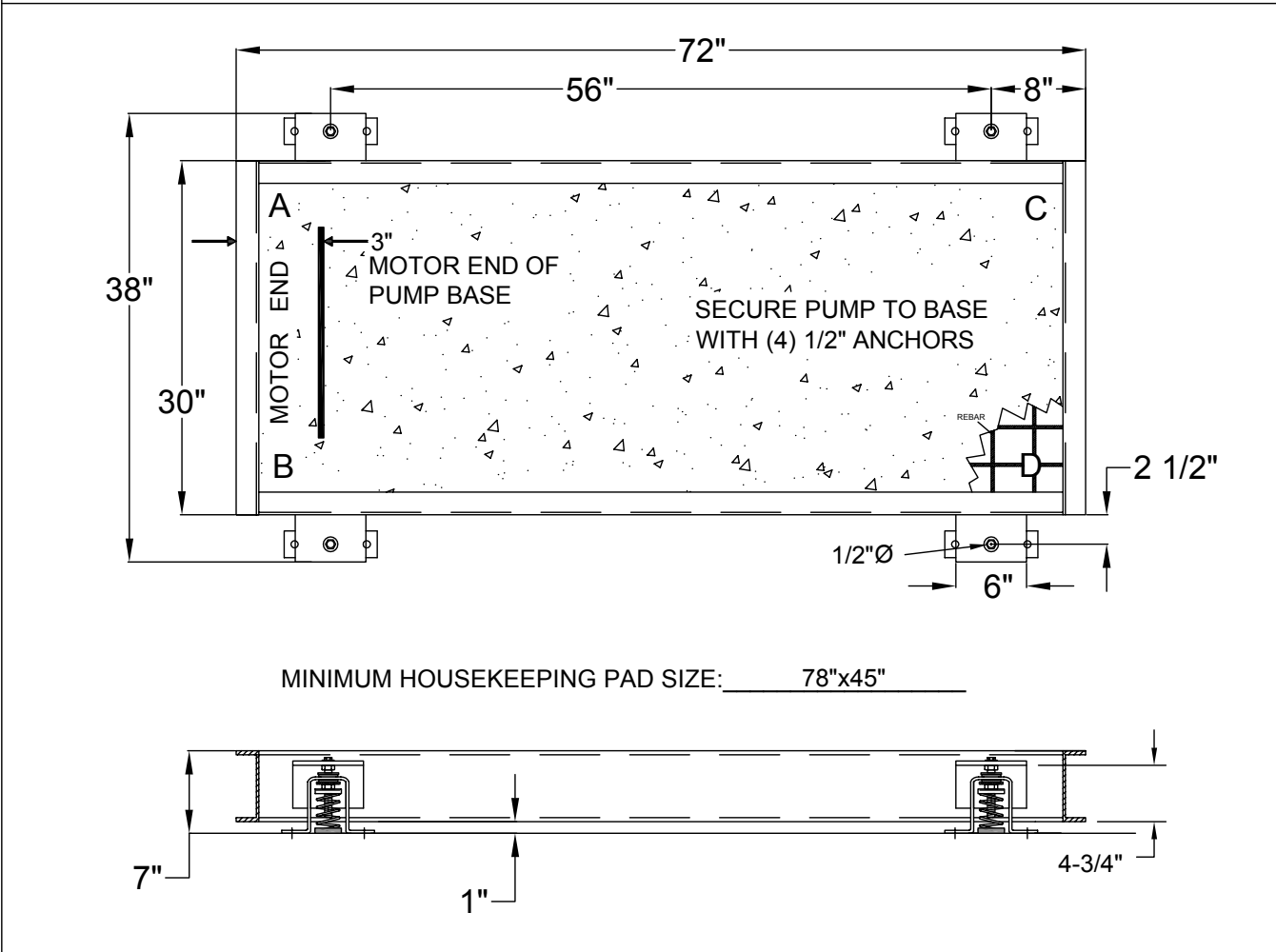
TAG: _____		
MFG: _____	HP: _____	
QTY: _____	ISOLATORS	
WEIGHTS		A: ERS-
PUMP: _____	MATERIALS	B: ERS-
BASE: 150#	BASE: C6"x8.2#	C: ERS-
CONCRETE: 1,040#	REBAR: 3/8" DIAM 8" OCBW	D: ERS-
TOTAL: _____	H/S BKTS: L4"x4"x3/8" (6" LONG)	REF.: _____
	FINISH: STANDARD - PAINT	
	OPTIONAL - GALVANIZED	



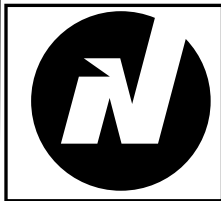
BY: _____	DATE: _____	DWG#: _____
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	Novia A Division of C&P 1 Northwestern Dr. Salem, NH 03079 Ph: 603-898-8600 Fax: 603-898-2755 sales@cp-novia.com	PROJECT: _____	CIB-ERSM CONCRETE INERTIA BASE CIB-ERSM 100 06/24/15
		CUSTOMER: _____	

TAG: _____		
MFG: _____	HP: _____	
QTY: _____	ISOLATORS	
WEIGHTS		A: ERS-
PUMP: _____	MATERIALS	B: ERS-
BASE: 160#	BASE: C6"x8.2#	C: ERS-
CONCRETE: 1,125#	REBAR: 3/8" DIAM 8" OCBW	D: ERS-
TOTAL: _____	H/S BKTS: L4"x4"x3/8" (6" LONG)	REF.: _____
	FINISH: STANDARD - PAINT	
	OPTIONAL - GALVANIZED	



BY: _____	DATE: _____	DWG#: _____
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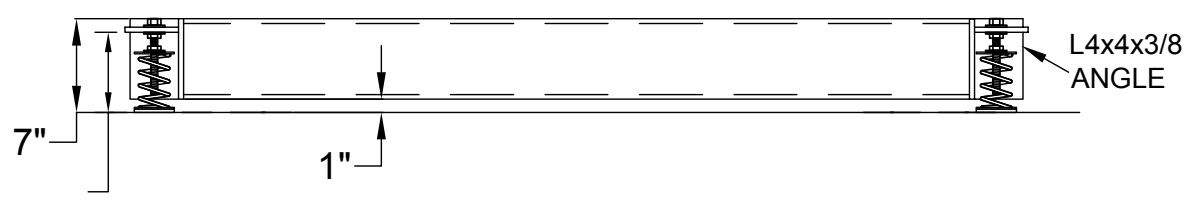
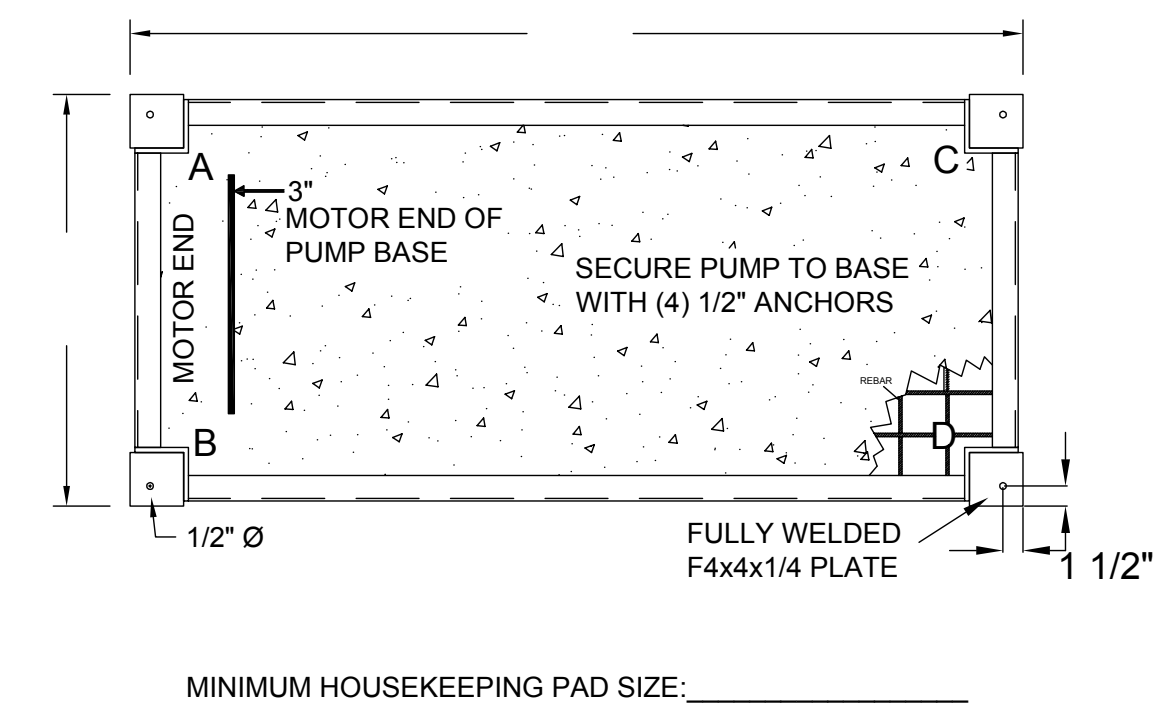
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Salem, NH 03079
Ph: 603-898-8600
Fax: 603-898-2755
sales@cp-novia.com

PROJECT: _____
CUSTOMER: _____

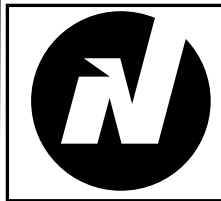
CIB-SM
CONCRETE INERTIA
BASE INBOUND
CIB-SM 100 06/24/15

TAG: _____
MFG: _____ HP: _____
QTY: _____

WEIGHTS		MATERIALS		ISOLATORS	
PUMP:	_____	BASE: C6"x8.2#	_____	A: SM-	_____
BASE:	_____	REBAR: 3/8" DIAM 8" OCBW	_____	B: SM-	_____
CONCRETE:	_____	H/S BKTS: F4"x4"x1/4"	_____	C: SM-	_____
TOTAL:	_____	FINISH: STANDARD - PAINT	_____	D: SM-	_____
		OPTIONAL - GALVANIZED	_____	REF.:	_____



BY: _____ DATE: _____ DWG#: _____



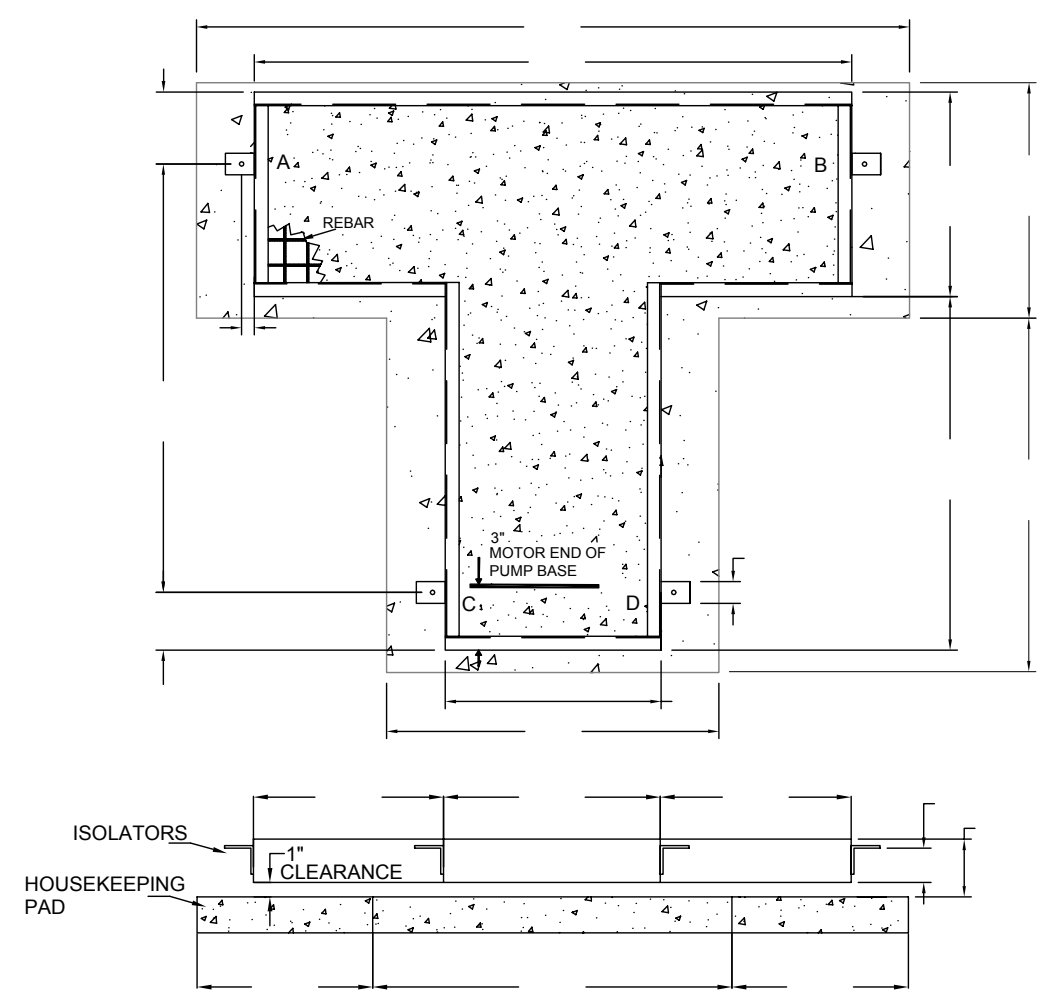
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Salem, NH 03079
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Fax: 603-898-2755
sales@cp-novia.com

PROJECT: _____
CUSTOMER: _____

T-CIB
CONCRETE INERTIA
BASE
T-CIB 06/24/15

TAG: _____
MFG: _____ HP: _____
QTY: _____

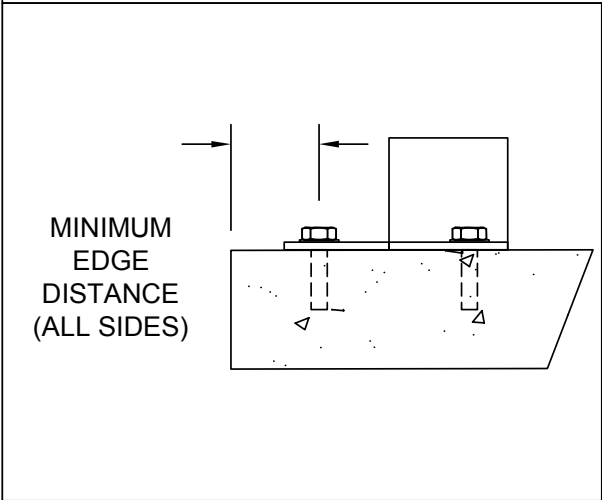
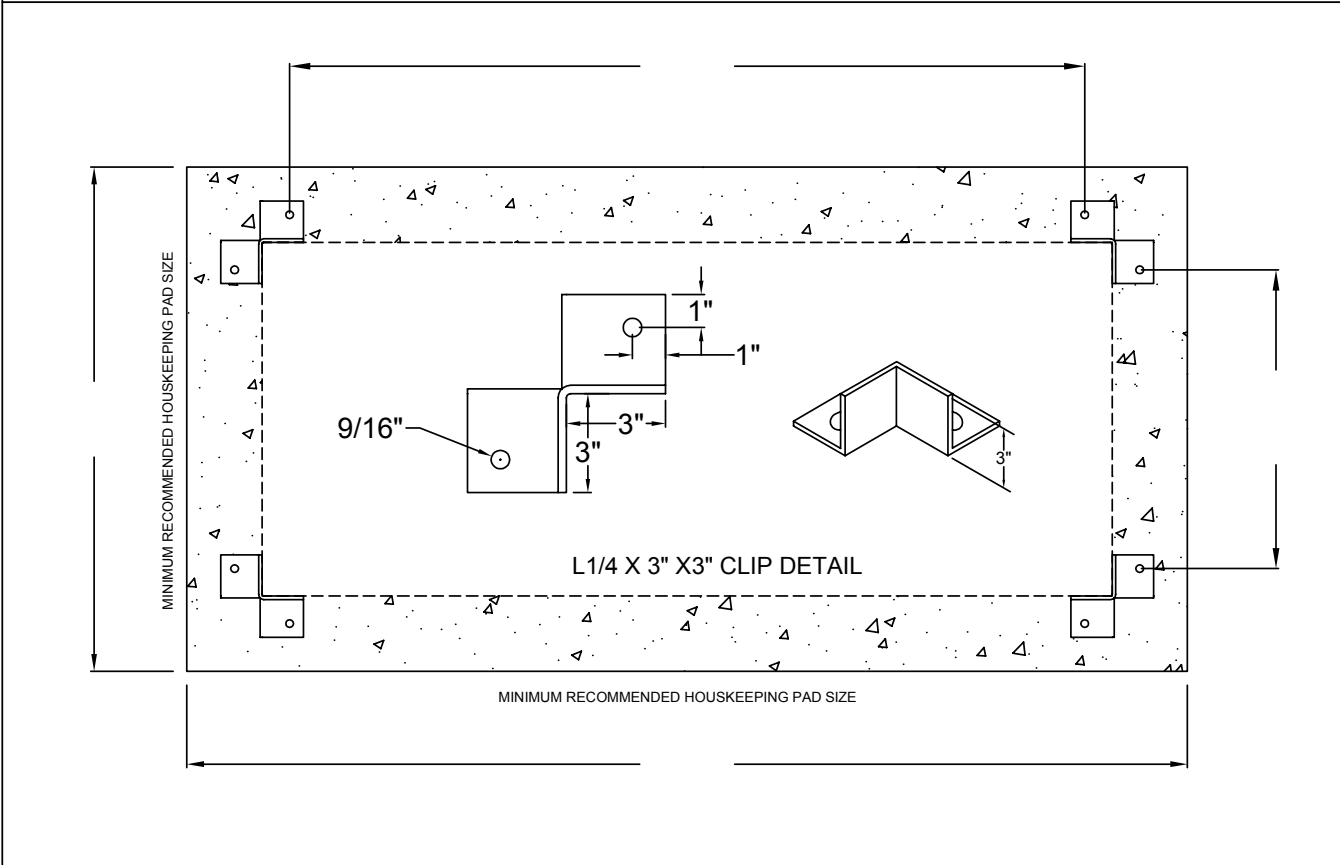
WEIGHTS		MATERIALS		ISOLATORS	
PUMP:	_____	BASE: C6"x8.2#	_____	A: _____	_____
BASE:	_____	REBAR: 3/8" DIAM 8" OCBW	_____	B: _____	_____
CONCRETE:	_____	H/S BKTS: L4"x4"x3/8"	_____	C: _____	_____
TOTAL:	_____	FINISH: STANDARD - PAINT	_____	D: _____	_____
		OPTIONAL - GALVANIZED	_____	REF.:	_____



BY: _____ DATE: _____ DWG#: _____

	Novia A Division of C&P 1 Northwestern Dr. Salem, NH 03079 Ph: 603-898-8600 Fax: 603-898-2755 sales@cp-novia.com	PROJECT: _____	BOILER SEISMIC ANCHORAGE DETAIL SD B CLIP 6/16/15
		CUSTOMER: _____	

TAG _____
UNIT _____

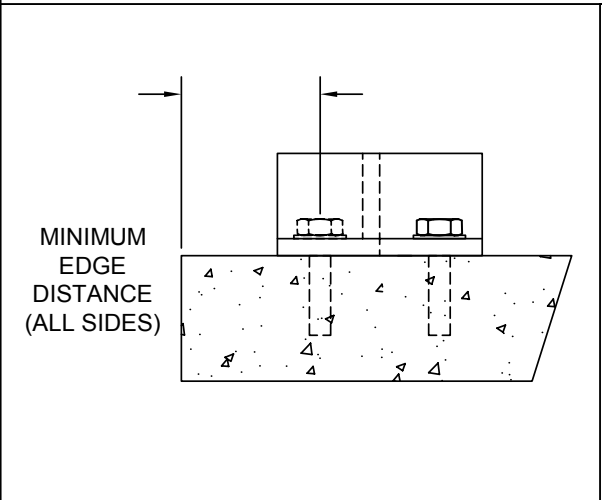
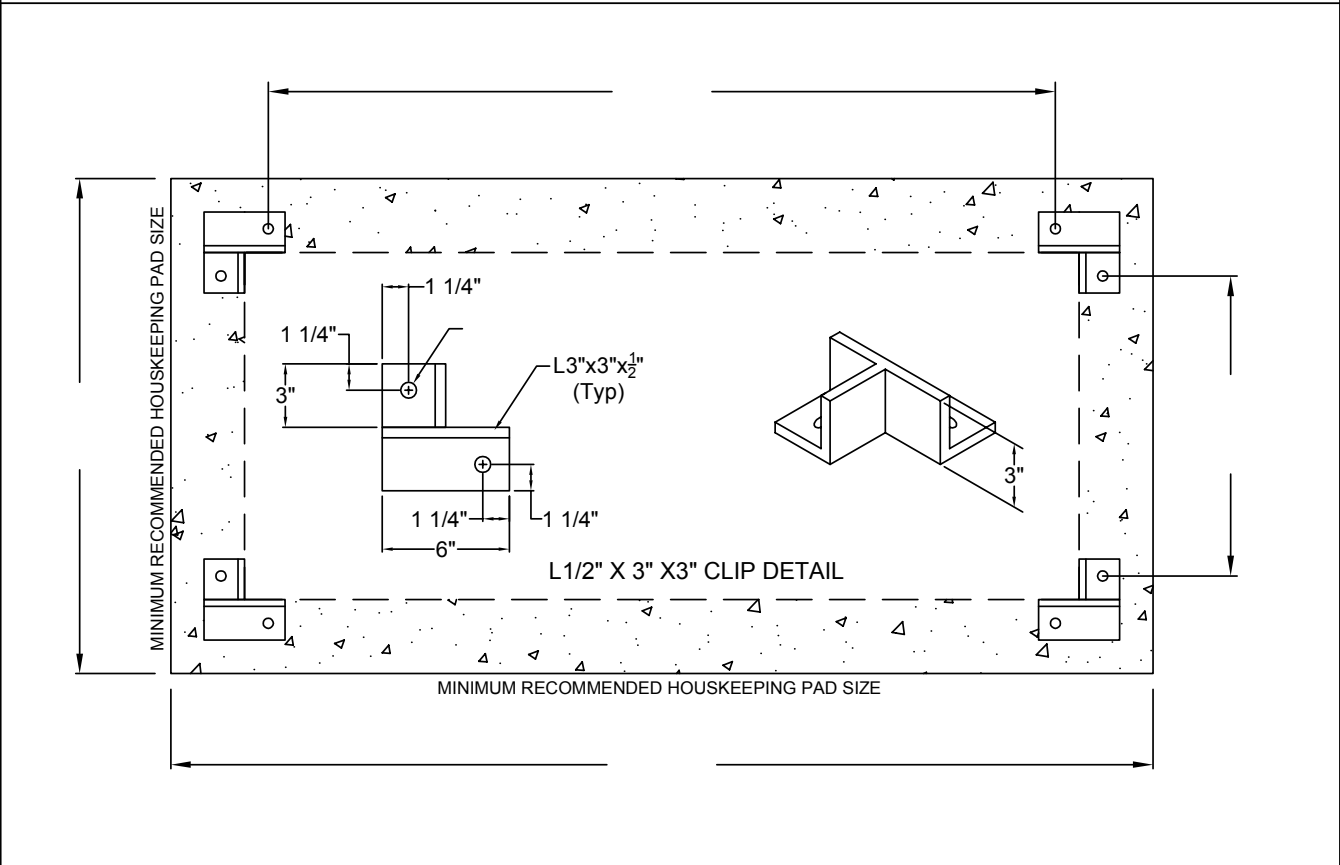


ATTACHMENT OPTIONS

BY: _____	DATE: _____	DWG#: _____
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	Novia A Division of C&P 1 Northwestern Dr. Salem, NH 03079 Ph: 603-898-8600 Fax: 603-898-2755 sales@cp-novia.com	PROJECT: _____	BOILER SEISMIC ANCHORAGE DETAIL SD B-HD CLIP 6/16/15
		CUSTOMER: _____	

TAG _____
UNIT _____

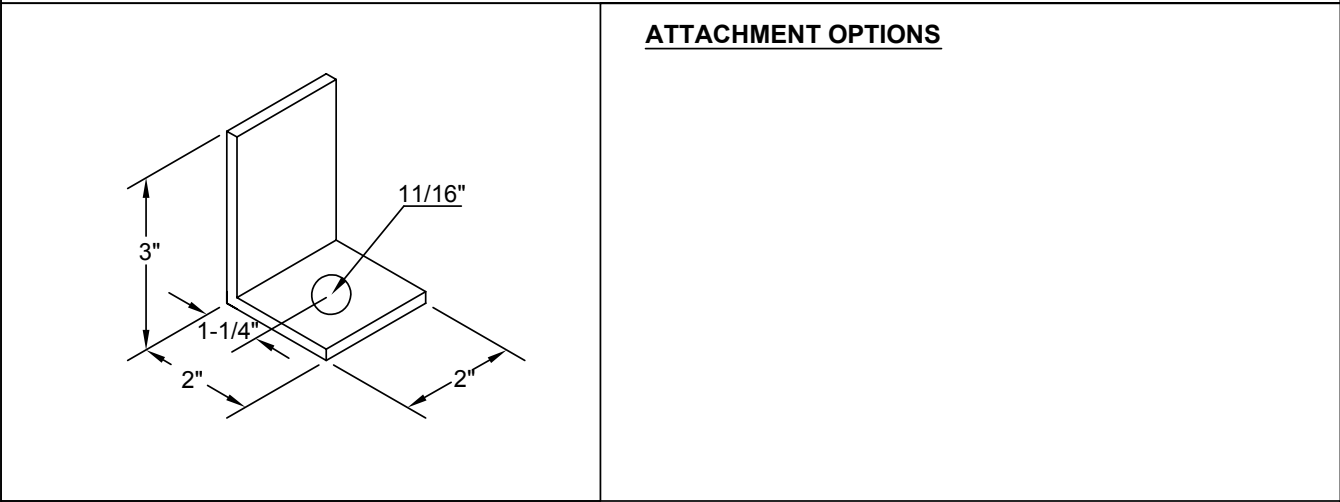
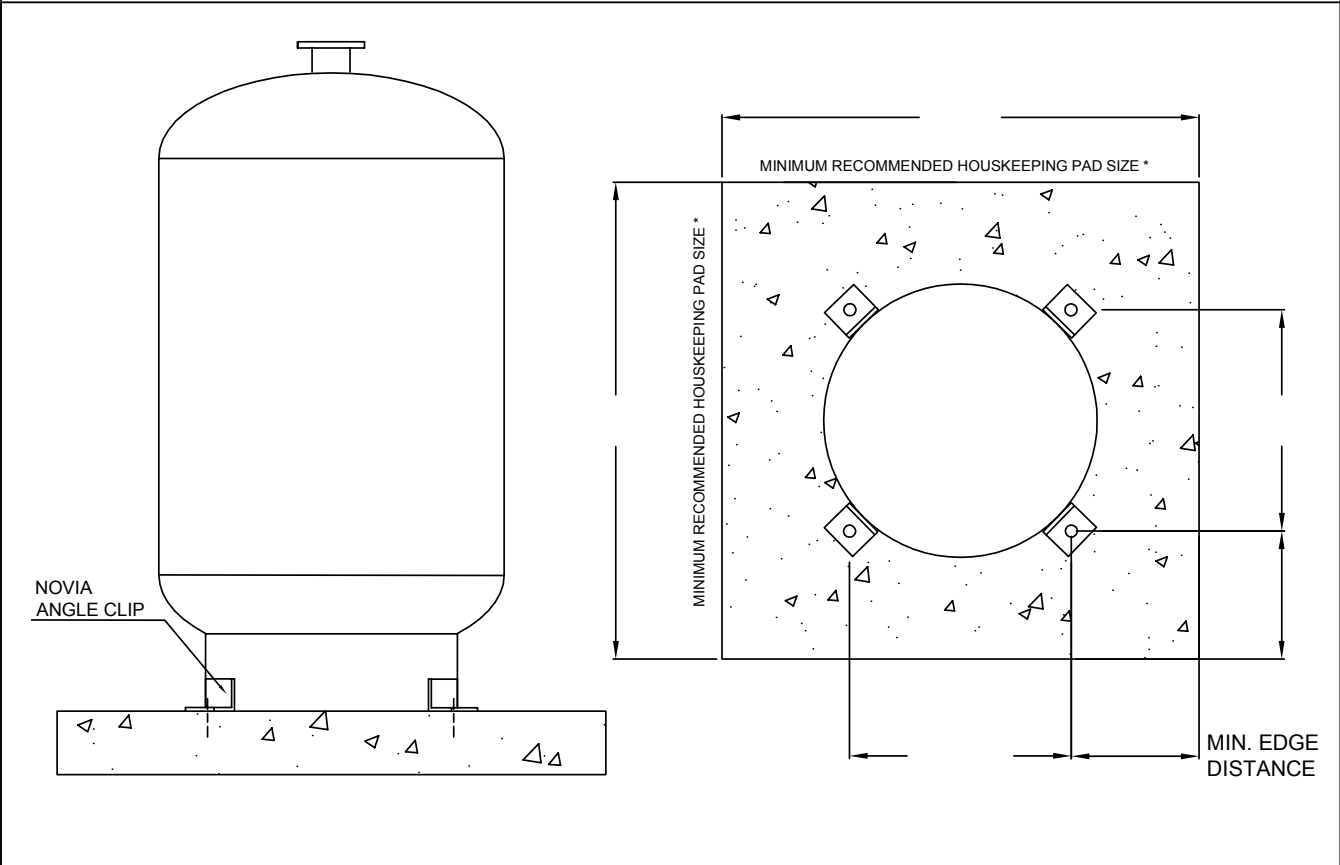


ATTACHMENT OPTIONS

BY: _____	DATE: _____	DWG#: _____
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	Novia A Division of C&P 1 Northwestern Dr. Salem, NH 03079 Ph: 603-898-8600 Fax: 603-898-2755 sales@cp-novia.com	PROJECT: _____	SEISMIC ANCHORAGE DETAIL SD ET 4PT 06/16/15
		CUSTOMER: _____	

TAG _____
 UNIT _____

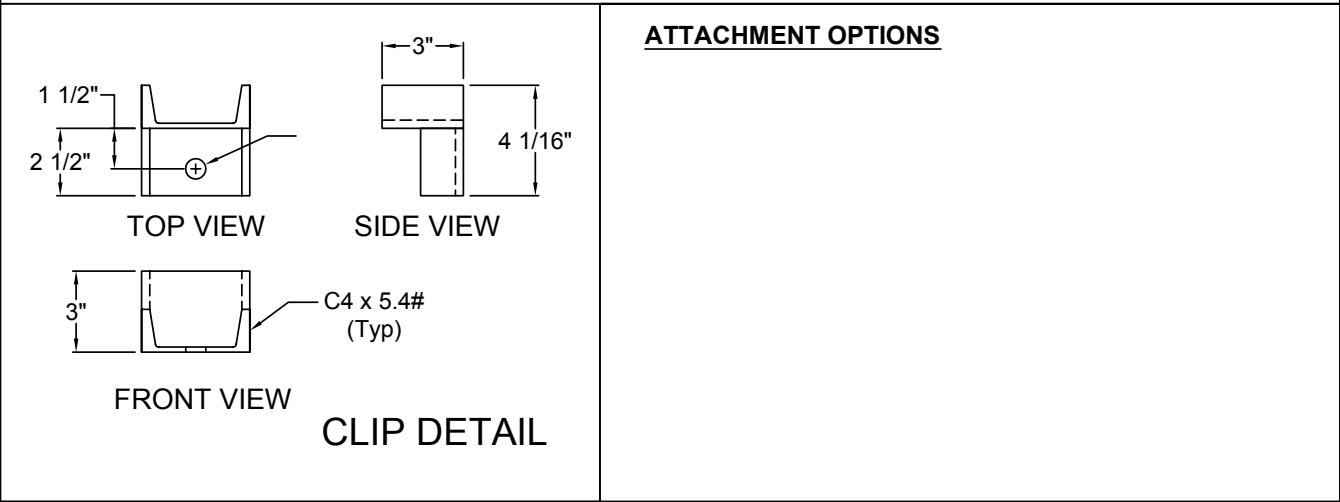
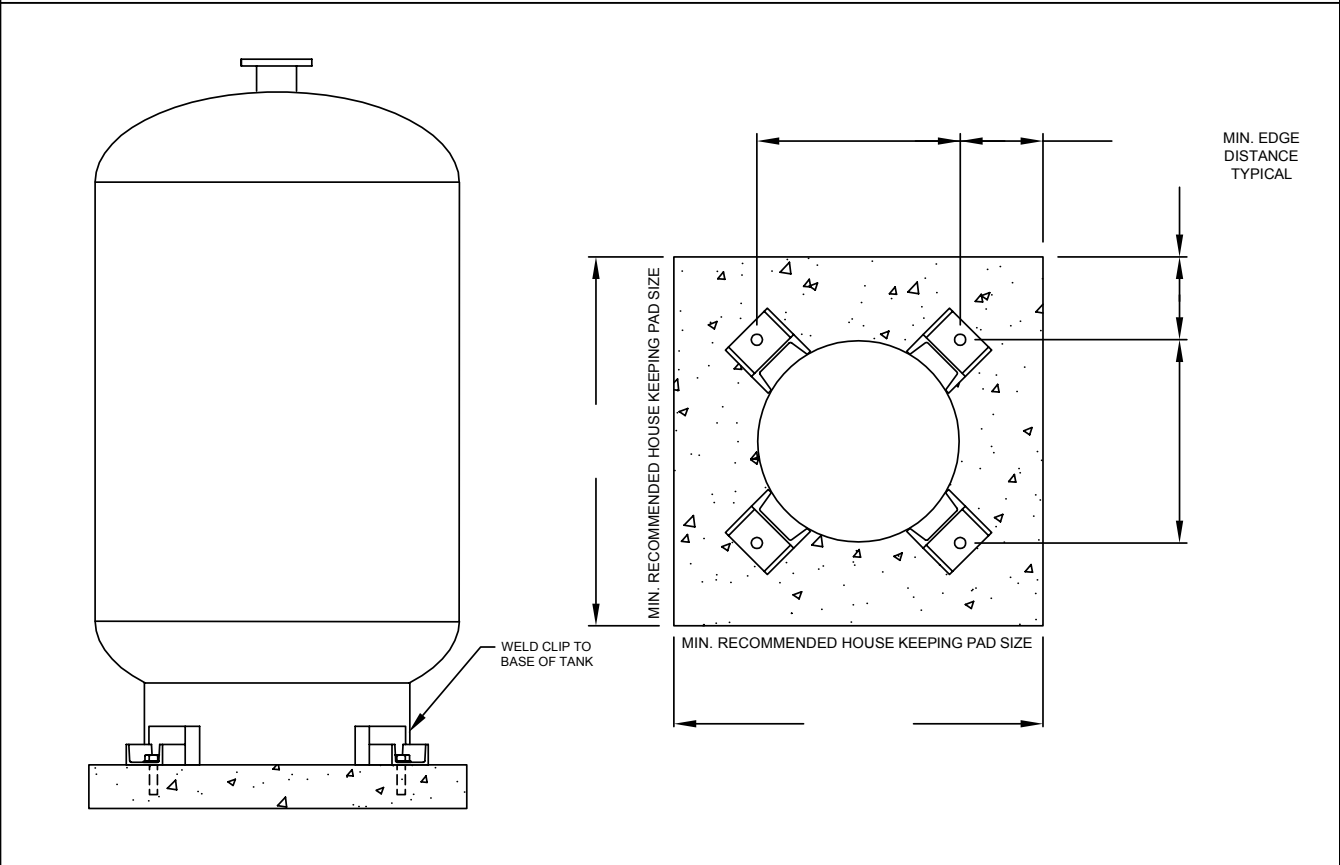


BY: _____

DATE: _____
 DWG#: _____

	Novia A Division of C&P 1 Northwestern Dr. Salem, NH 03079 Ph: 603-898-8600 Fax: 603-898-2755 sales@cp-novia.com	PROJECT: _____	SEISMIC ANCHORAGE DETAIL SD ET-HD 4PT 06/24/15
		CUSTOMER: _____	

TAG _____
 UNIT _____



BY: _____

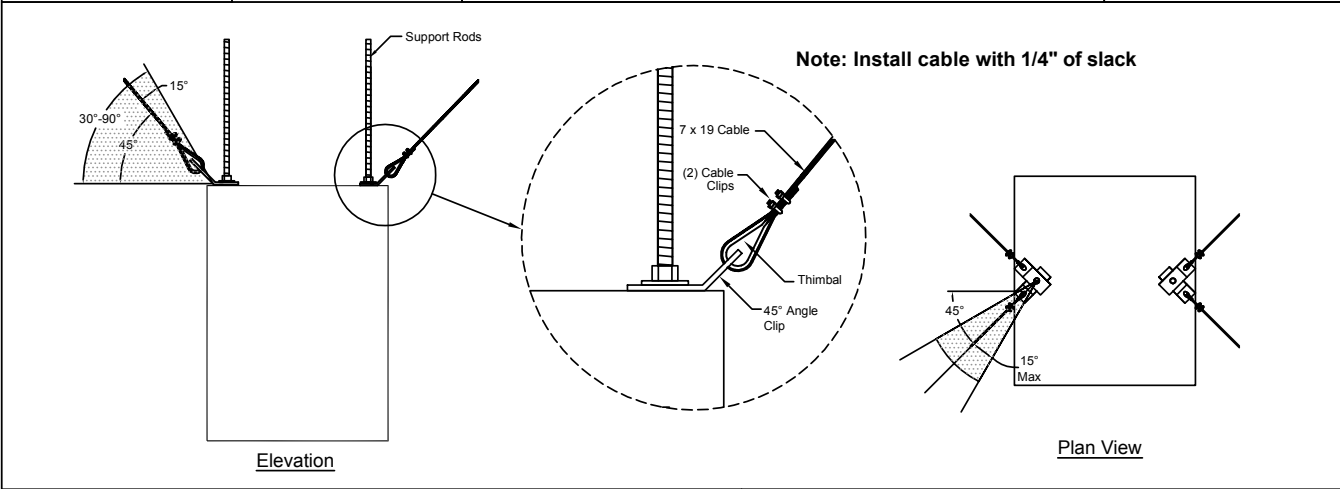
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 DWG#: _____



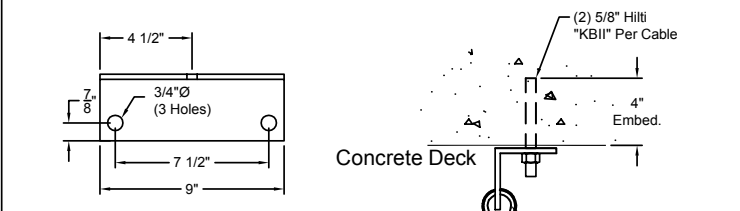
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Salem, NH 03079
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Fax: 603-898-2755
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PROJECT: _____
CUSTOMER: _____

**CEILING HUNG
EQUIPMENT
Seismic
Restraint**
SD-2PT 06/16/15



Notes:
1) For Restraint Type EQ-9 use (4) L3 x 3 x 9"
1/4" Angles at connections to structure instead of
45° angle clips



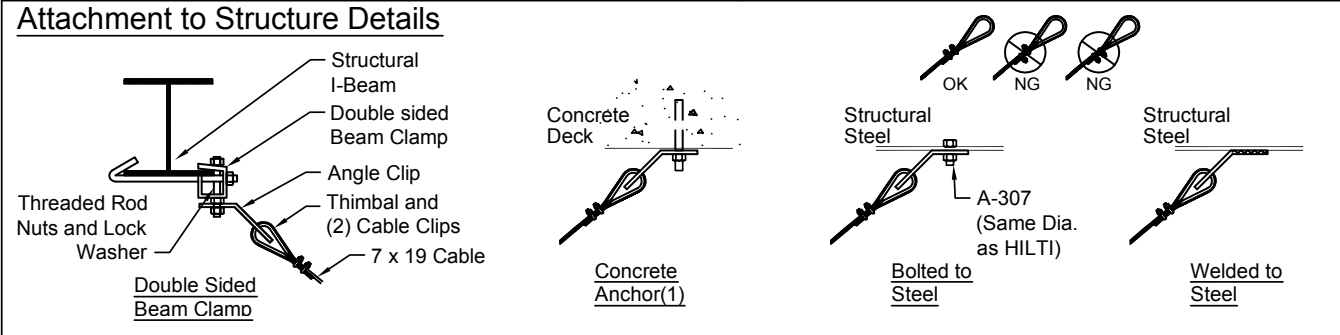
*** By Others**
Hilti's, Nuts, Bolts,
Washers, & Beam Clamps

Type EQ-9

SEISMIC RESTRAINT TYPES				
Type	Cable	Concrete Anchor	Embed. (in.)	Weld Length*
EQ-7	1/8"	3/8" HILTI	2 1/2	2
EQ-8	1/8"	5/8" HILTI	4	2
EQ-9	1/4"	(2) - 5/8" HILTI	4	2

* Weld length per angle clip are given as an optional attachment method - in lieu of concrete anchors should field conditions dictate.

EQUIPMENT TAG	Restraint type	Sets



BY: _____

DATE: _____

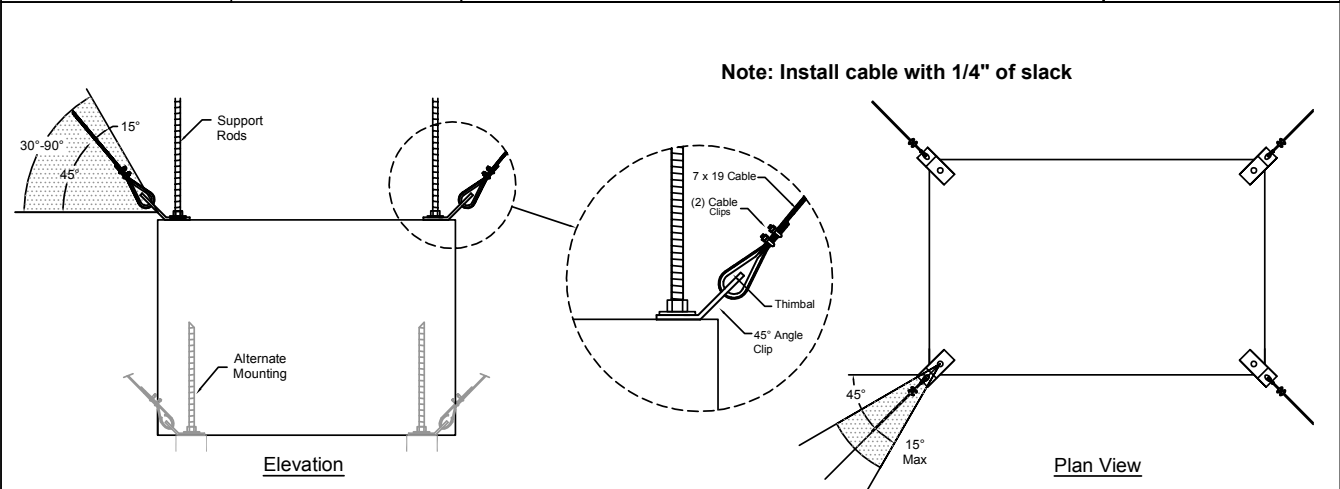
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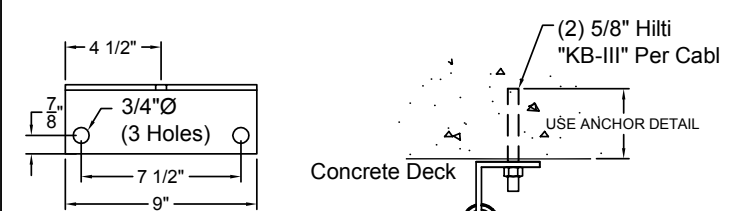
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PROJECT: _____
CUSTOMER: _____

**CEILING HUNG
EQUIPMENT
Seismic
Restraint**
SD-4PT 06/16/15



Notes:
1) For Restraint Type EQ-9 use (4) L3 x 3 x 9"
1/4" Angles at connections to structure instead of
45° angle clips



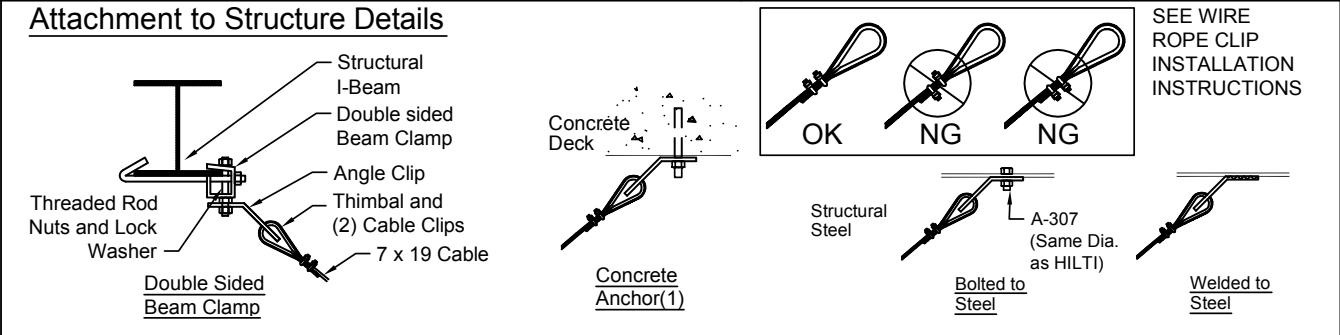
*** By Others**
Hilti's, Nuts, Bolts,
Washers, & Beam Clamps

Type EQ-9

SEISMIC RESTRAINT TYPES				
Type	Cable	Anchor Qty - Diam	Embed. (in.)	Weld Length
EQ-7	1/8"	(1) - 3/8"	2 1/2	2
EQ-8	1/8"	(1) - 5/8"	4	2
EQ-9	1/4"	(2) - 5/8"	4	2

Conc: Hilti KB-III (or equal), Steel: A307 Steel Bolt or 1/4" Fillet Weld. Use type appropriate for structure, contact NAI if required.

EQUIPMENT TAG	Restraint type	Sets



BY: _____

DATE: _____

DWG#: _____



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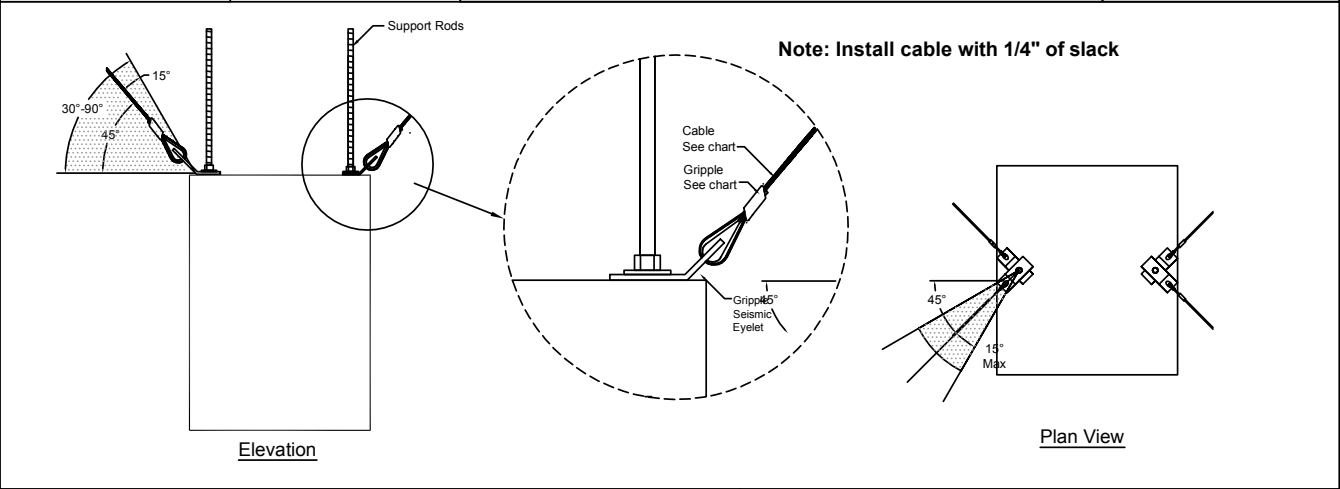
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PROJECT: _____

CUSTOMER: _____

CEILING HUNG
EQUIPMENT
Gripple
Restraint

SD-2PT 06/16/15



Gripple Restraint Chart

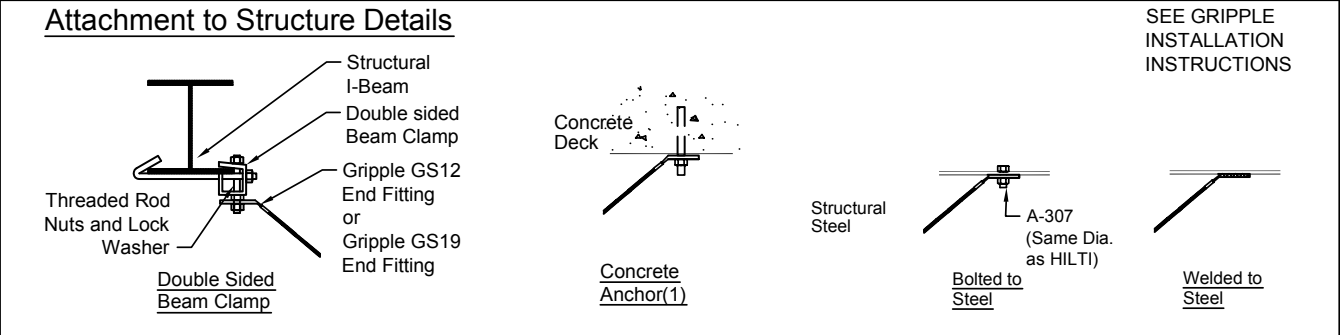
GS-12 SET: (4) GS-12 GRIPPLES, (4) GS-12 END FITTINGS WITH 20' OF 1/8" CABLE, AND (4) GS-12 EYELETS.

GS-19 SET: (4) GS-19 GRIPPLES, (4) GS-19 END FITTINGS WITH 20' OF 3/16" CABLE, AND (4) GS-19 EYELETS.

SEISMIC RESTRAINT TYPES				
Type	Cable	Concrete Anchor	Embed. (in.)	Weld Length*
GS-12	1/8"	3/8" HILTI	2 1/2"	2"
GS-19	3/16"	5/8" HILTI	4"	2"

* Weld length per angle clip are given as an optional attachment method - in lieu of concrete anchors should field conditions dictate.

EQUIPMENT TAG	Restraint type	Sets



BY: _____

DATE: _____

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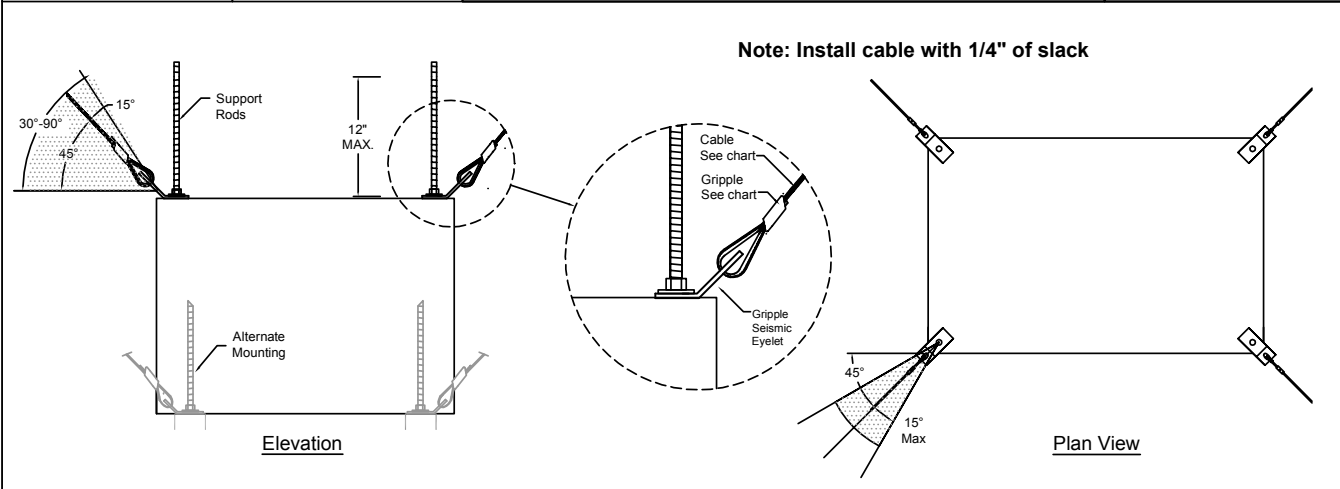
sales@cp-novia.com

PROJECT: _____

CUSTOMER: _____

CEILING HUNG
EQUIPMENT
Gripple
Restraint

SD-4PT 06/16/15



Gripple Restraint Chart

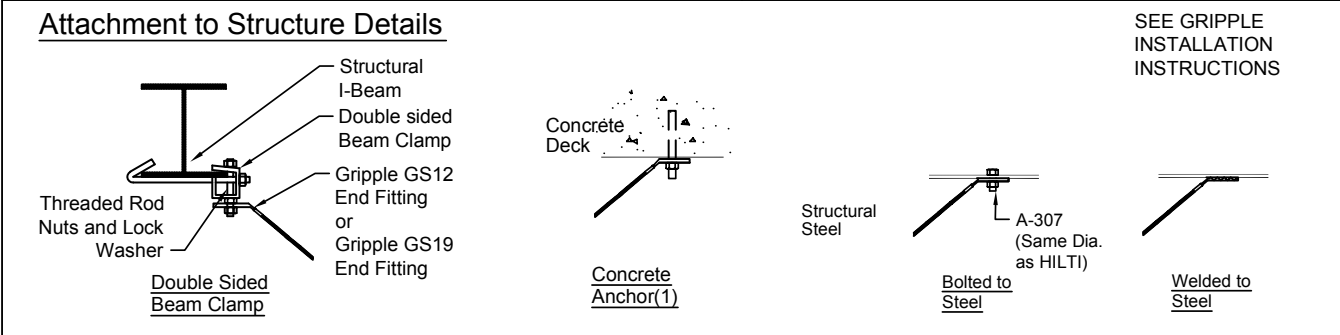
GS-12 SET: (4) GS-12 GRIPPLES, (4) GS-12 END FITTINGS WITH 20' OF 1/8" CABLE, AND (4) GS-12 EYELETS.

GS-19 SET: (4) GS-19 GRIPPLES, (4) GS-19 END FITTINGS WITH 20' OF 3/16" CABLE, AND (4) GS-19 EYELETS.

SEISMIC RESTRAINT TYPES				
Type	Cable	Concrete Anchor	Embed. (in.)	Weld Length*
GS-12	1/8"	3/8" HILTI	2 1/2"	2"
GS-19	3/16"	5/8" HILTI	4"	2"

* Weld length per angle clip are given as an optional attachment method - in lieu of concrete anchors should field conditions dictate.

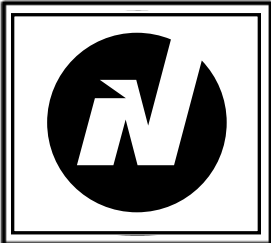
EQUIPMENT TAG	Restraint type	Sets



BY: _____

DATE: _____

DWG#: _____



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SSD-2001

SEISMIC RESTRAINT TYPE KEY			
1st Field	2nd Field	3rd Field	4th Field
TRADE	MULTIPLE	TYPE	ORIENTATION
S = SHEETMETAL	MAY BE LEFT BLANK When "M" is designated, two or more pipes, conduit, etc. will be tied together then restrained with a single restraint.	See Table below for listing of nine Types. Note: if Type is preceded by (2) this indicates two restraints are to be used at one location.	T = Transverse (Perpendicular to pipe/duct run)
M = MECHANICAL			L = Longitudinal (Along pipe run axis)
E = ELECTRICAL			
F = FIRE PROTECTION			
P = PLUMBING			

Coordinated (or contract drawings) will be marked-up with this symbol which dedsignates the restraint required at a particular location.

SEE PAGES 2, 3, & 4 OF DRAWINGS SSD-2001 FOR INSTALLATION DETAILS

1st - 2nd - 3rd - 4th

T - M - X - O
LOCATION

T/L= Transverse & longitudinal (Both ways)
Note: T/L restraints may be used in either a "T" or "L" orientation to increase the load holding capacity.

SEISMIC RESTRAINT TYPES				
TYPE	RESTRAINT TYPE	CONCRETE ANCHOR	EMBED (in.)	WELD LENGTH (in.)
1	1/8" DIA. CABLE BRACE	3/8" HILTI KBIII	2-1/2"	2"
2	1/8" DIA. CABLE BRACE	5/8" HILTI KBIII	4	2"
3	1/4" DIA. CABLE BRACE	(2) 5/8 HILTI KBIII	4	2"
4	SINGLE ARM STRUT BRACE	3/8" HILTI KBIII	2-1/2"	2"
5	SINGLE ARM STRUT BRACE	5/8" HILTI KBIII	4	2"
6	SINGLE ARM STRUT BRACE	(2) 5/8 HILTI KBIII	4	2"

HILTI KBIII KWIK BOLTS ARE THE STANDARD ANCHOR.
1/4" FILLET WELD LENGTHS ARE GIVEN AS AN OPTIONAL ATTACHMENT METHOD TO STRUCTURAL STEEL IN LIEU OF CONCRETE ANCHORS SHOULD FIELD CONDITIONS REQUIRE.
THE SAME DIAMETER A-307 BOLTS MAY BE USED FOR ATTACHMENT TO STEEL.

N:\SEISMIC\CALCS\Calc Certifications\SSD2001.docx



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SSD-2001

2 - Cable Seismic Restraint

Types 1, 2, & 3

SD PIPE 1, 2, 3 12/06/06

Transverse Types:
1T, 2T & 3T

Longitudinal Types:
1L, 2L & 3L

Multiple (Restrained by a single restraint)

Attachment to Structure Details

Notes:
1) For Restraint Type 3 use (2) L3 x 3 x 9" 1/4" Angles at connections to structure instead of 45° angle clips

*** By Others**
Hilti's, Nuts, Bolts, Washers, & Beam Clamps

Type 3



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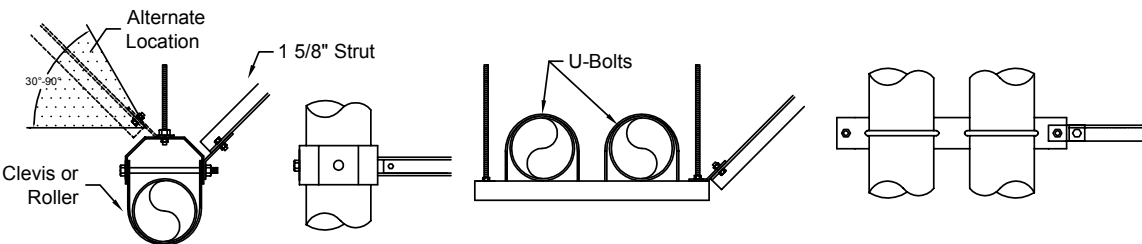
SSD-2001

Single Strut Seismic Restraint

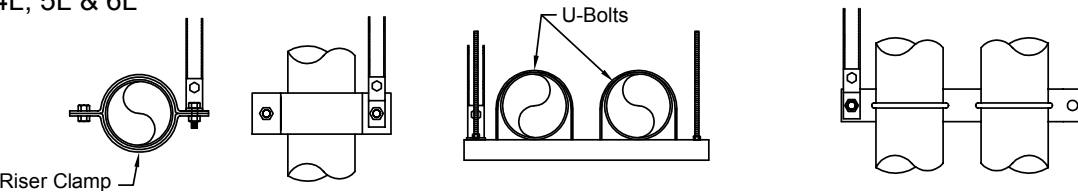
Types 4, 5, & 6

SD PIPE 4, 5, 6 12/06/06

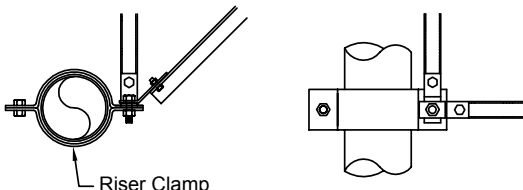
Transverse Types:
4T, 5T & 6T



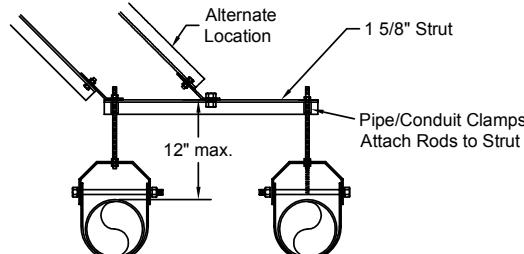
Longitudinal Types:
4L, 5L & 6L



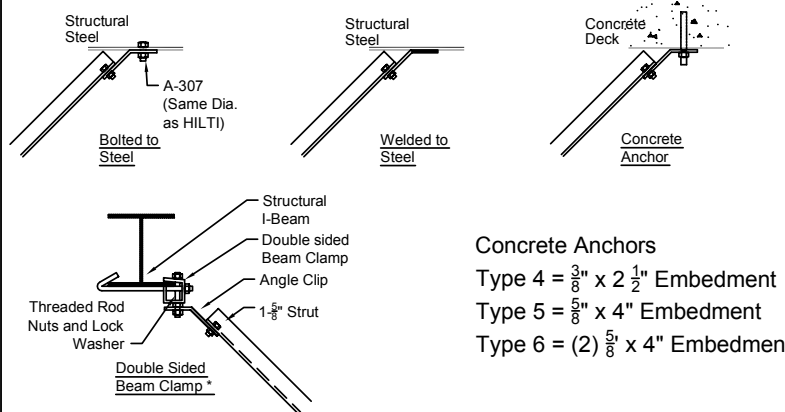
Transverse & Longitudinal Types:
4T/L, 5T/L & 6T/L



Multiple (Restrained by a single restraint)

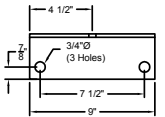


Attachment to Structure Details

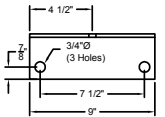


Concrete Anchors
Type 4 = $\frac{3}{8}$ " x 2 $\frac{1}{2}$ " Embedment
Type 5 = $\frac{5}{8}$ " x 4" Embedment
Type 6 = (2) $\frac{5}{8}$ " x 4" Embedmen

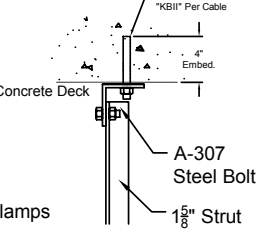
Notes:
1) For Restraint Type 6 use (1) L3 x 3 x 9" $\frac{1}{4}$ " Angle at connection to structure instead of 45° angle clip.
2) Maximum Strut Length = 10'-0"
3) Strut to Clip Bolt Dia.
Type 4 & 5 = $\frac{1}{2}$ "
Type 6 = $\frac{5}{8}$ "



*** By Others**
Hilti's, Nuts, Bolts, Washers, & Beam Clamps



Type 6



BY: RR DATE: 12/06/06 Page: 3 of 4 DWG#: SSD-2001



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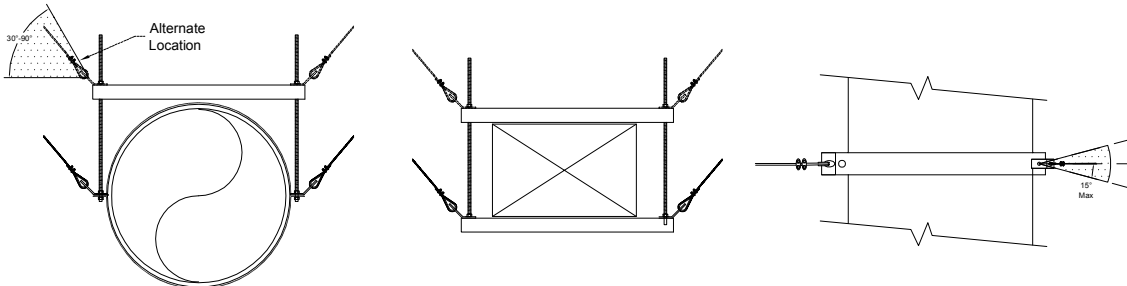
SSD-2001

2 - Cable Seismic Restraint

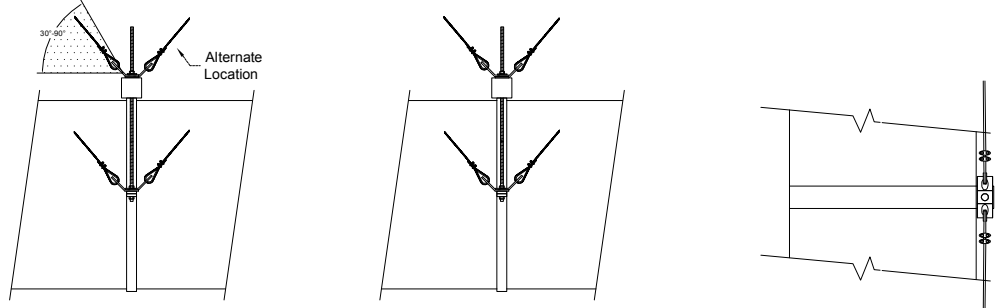
Types 1, 2, & 3

SD DUCT 1, 2, 3 12/06/06

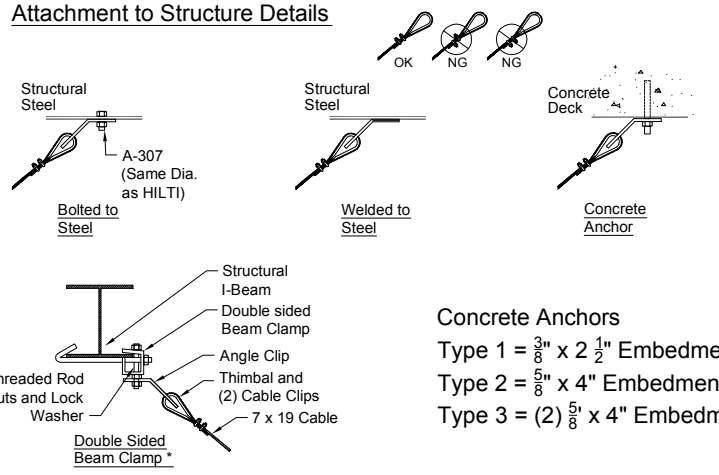
Transverse Types:
1T, 2T & 3T



Longitudinal Types:
1L, 2L & 3L

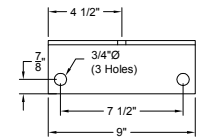


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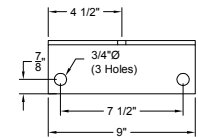


Concrete Anchors
Type 1 = $\frac{3}{8}$ " x 2 $\frac{1}{2}$ " Embedment
Type 2 = $\frac{5}{8}$ " x 4" Embedment
Type 3 = (2) $\frac{5}{8}$ " x 4" Embedment

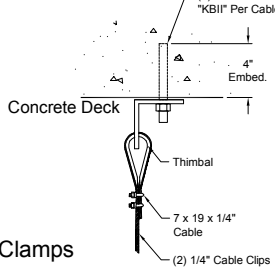
Notes:
1) For Restraint Type 3 use (2) L3 x 3 x 9" $\frac{1}{4}$ " Angles at connections to structure instead of 45° angle clips



*** By Others**
Hilti's, Nuts, Bolts, Washers, & Beam Clamps



Type 3



BY: RR DATE: 12/06/06 Page: 2 of 4 DWG#: SSD-2001

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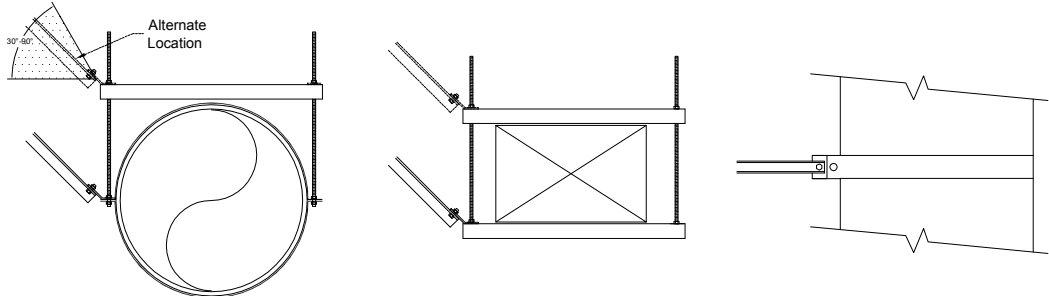
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sales@cp-novia.com

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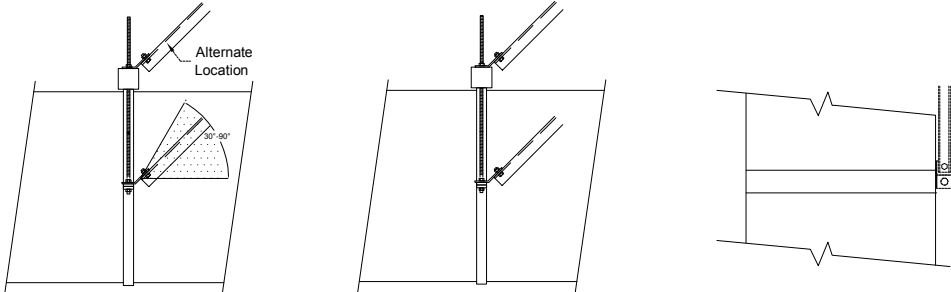
Single Strut Seismic Restraint Types 4, 5, & 6

SD DUCT 4, 5, 6 12/06/06

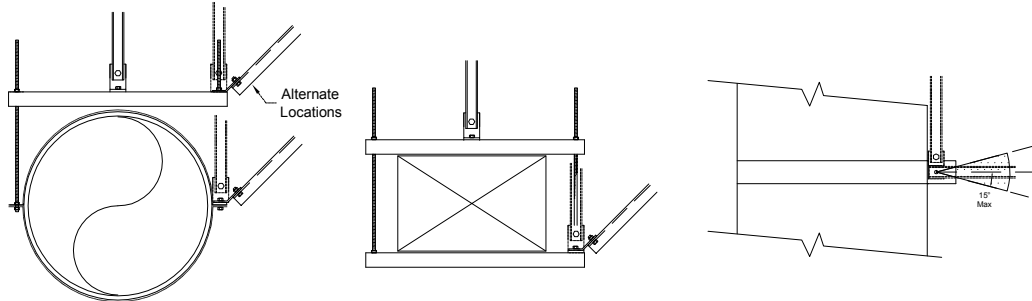
Transverse Types:
4T, 5T & 6T



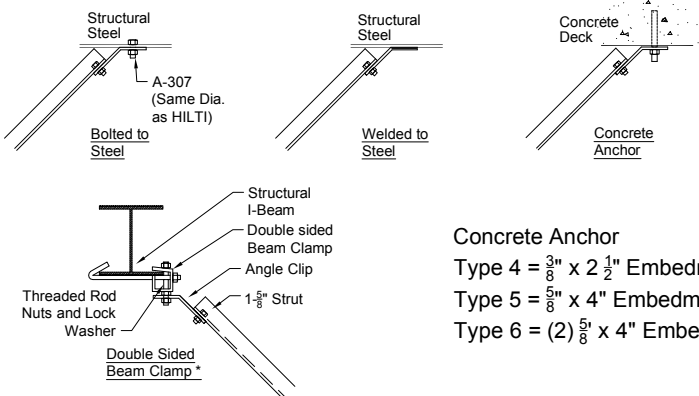
Longitudinal Types:
4L, 5L & 6L



Transverse & Longitudinal Types:
4T/L, 5T/L & 6T/L

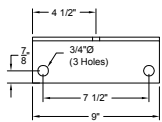


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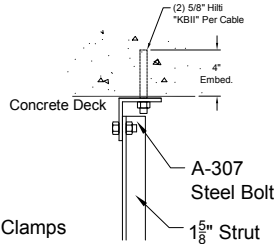


Concrete Anchor
Type 4 = $\frac{3}{8}$ " x 2 $\frac{1}{2}$ " Embedment
Type 5 = $\frac{5}{8}$ " x 4" Embedment
Type 6 = (2) $\frac{5}{8}$ " x 4" Embedment

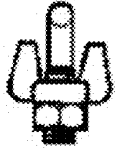
Notes:
1) For Restraint Type 6 use (1) L3 x 3 x 9"
 $\frac{1}{4}$ " Angles at connections to structure instead of 45° angle clips.
2) Maximum Strut Length = 10'-0"
3) Strut to Clip Bolt Dia.
Type 4 & 5 = $\frac{1}{2}$ "
Type 6 = $\frac{5}{8}$ "



*** By Others**
Hilti's, Nuts, Bolts,
Washers, & Beam Clamps

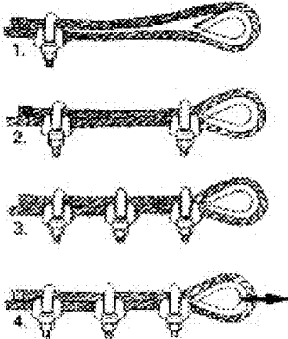


Type 6

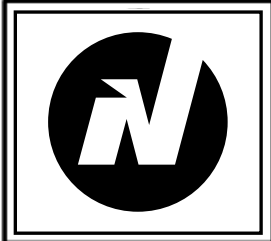
CORRECT METHOD OF INSTALLING U-BOLT WIRE ROPE CLIPS

- Turn back specified length of rope from thimble and apply first clip one saddle width from seized dead end. Tighten nuts evenly to specified torque. Important: seat "live end" of wire rope (load carrying part) in saddle and position u-bolt over "dead end."
- Apply second clip close to the thimble without binding on it. Turn on nuts firmly but do not tighten yet to recommended torque.
- Apply all other clips, equally spaced between first two clips.
- Apply **light** tension and tighten all nuts evenly to specified torque.



1/8" ROPE CLIPS:
TURN BACK LENGTH = 3-1/4"
QTY ROPE CLIPS = 2
TORQUE ON NUTS = 4.5 FT-LBS

1/4" ROPE CLIPS:
TURN BACK LENGTH = 4-3/4"
QTY ROPE CLIPS = 2
TORQUE ON NUTS = 15 FT-LBS



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SSD-2001G

SEISMIC RESTRAINT TYPE KEY

1st Field	2nd Field	3rd Field	4th Field
TRADE	MULTIPLE	TYPE	ORIENTATION
S = SHEETMETAL	MAY BE LEFT BLANK When "M" is designated, two or more pipes, conduit, etc. will be tied together then restrained with a single restraint.	See Table below for listing of nineTypes. Note: if Type is preceded by (2) this indicates two restraints are to be used at one location.	T = Transverse (Perpendicular to pipe/duct run)
M = MECHANICAL			L= Longitudinal (Along pipe run axis)
E = ELECTRICAL			
F = FIRE PROTECTION			
P = PLUMBING			

Coordinated (or contract drawings) will be marked-up with this symbol which dedsignates the restraint required at a particular location.

SEE PAGES 2, 3, & 4 OF DRAWINGS
SSD-2001G FOR INSTALLATION DETAILS

1st - 2nd - 3rd - 4th

T - M - X - O

LOCATION

T/L= Transverse & longitudinal (Both ways)
Note: T/L restraints may be used in either a "T" or " L" orientation to increase the load holding capacity.

SEISMIC RESTRAINT TYPES				
TYPE	RESTRAINT TYPE	CONCRETE ANCHOR	EMBED (in.)	WELD LENGTH (in.)
1	1/8" DIA. CABLE BRACE	3/8" HILTI KBIII	2-1/2"	2"
2	1/8" DIA. CABLE BRACE	5/8" HILTI KBIII	4	2"
3	1/4" DIA. CABLE BRACE	(2) 5/8 HILTI KBIII	4	2"
4	SINGLE ARM STRUT BRACE	3/8" HILTI KBIII	2-1/2"	2"
5	SINGLE ARM STRUT BRACE	5/8" HILTI KBIII	4	2"
6	SINGLE ARM STRUT BRACE	(2) 5/8 HILTI KBIII	4	2"
TYPE 1: (2) GS12 GRIPPLES, GS12 END FITTINGS WITH 20' OF 1/8" CABLE AND 92) GS12 EYELETS TYPE 2: (2) GS19 GRIPPLES, GS19 END FITTINGS WITH 20' OF 3/16" CABLE AND 92) GS19 EYELETS TYPE3: (2) 1/4" THIMBLES, (4) 1/4" WIRE ROPE CLIPS AND (2) L3"x3"x9" CLIPS (FOR CONCRTE TETE ANCHORS) HILTI KBIII KWIK BOLTS ARE THE STANDARD ANCHOR. 1/4" FILLET WELD LENGTHS ARE GIVEN AS AN OPTIONAL ATTACHMENT METHOD TO STRUCTURAL STEEL IN LIEU OF CONCRETE ANCHORS SHOULD FIELD CONDITIONS REQUIRE. THE SAME DIAMETER A-307 BOLTS MAY BE USED FOR ATTACHMENT TO STEEL.				



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SSD-2001G

2 - Cable Gripple Seismic Restraint

Types 1, 2, & 3

SD PIPE 1, 2, 3 12/06/06

Transverse Types:
1T, 2T & 3T

Longitudinal Types:
1L, 2L & 3L

Multiple(Restrained by a single restraint)

Attachment to Structure Details

Notes:

1) For Restraint Type 3 use (2) L3 x 3 x 9" 1/4" Angles at connections to structure instead of 45° angle clips

* By Others
Hilti's, Nuts, Bolts, Washers, & Beam Clamps

Type 3



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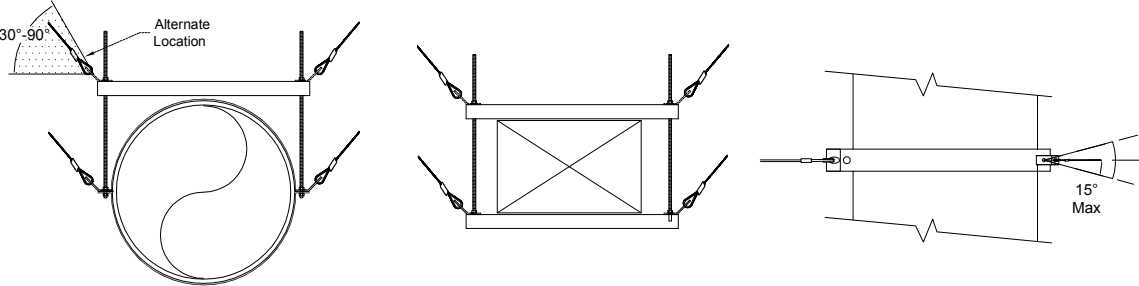
SSD-2001G

2 - Cable Gripple Seismic Restraint

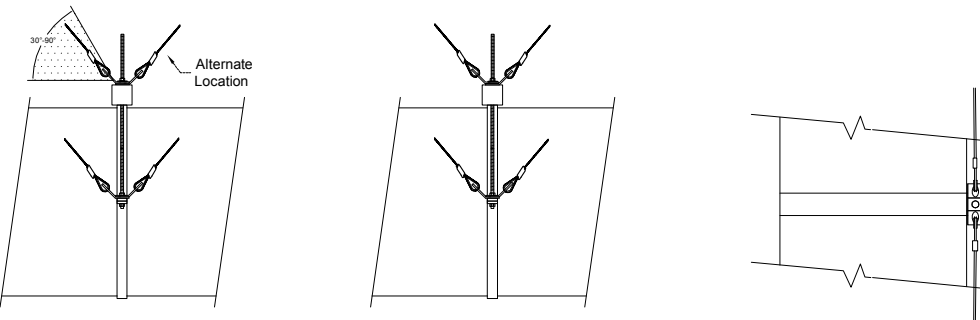
Types 1, 2, & 3

SD DUCT 1, 2, 3 12/06/06

Transverse Types:
1T, 2T & 3T

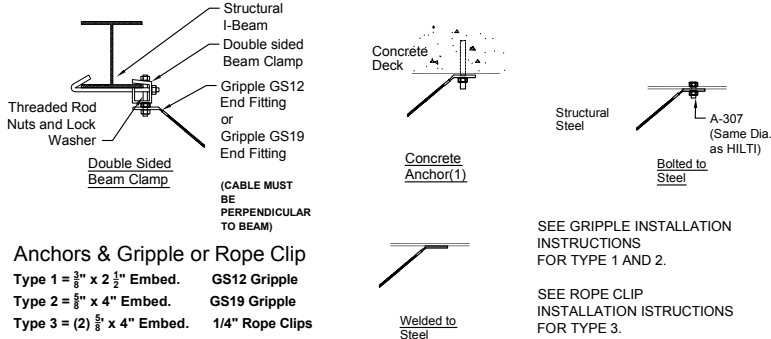


Longitudinal Types:
1L, 2L & 3L



NOTE: TYPE T/L COMBINES TYPE T AND TYPE L AT ONE LOCATION.

Attachment to Structure Details



Structural I-Beam
Double sided Beam Clamp
Threaded Rod Nuts and Lock Washer
Gripple GS12 End Fitting or Gripple GS19 End Fitting
(CABLE MUST BE PERPENDICULAR TO BEAM)

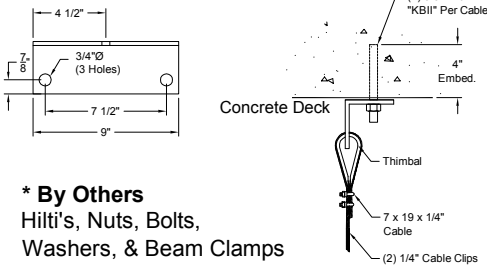
Concrete Deck
Concrete Anchor(1)
Welded to Steel

Structural Steel
A-307 (Same Dia. as HILTI)
Bolted to Steel

SEE GRIPPLE INSTALLATION INSTRUCTIONS FOR TYPE 1 AND 2.

SEE ROPE CLIP INSTALLATION ISTRUCTIONS FOR TYPE 3.

Notes:
1) For Restraint Type 3 use (2) L3 x 3 x 9" 1/4" Angles at connections to structure instead of 45° angle clips



4 1/2"
3/4" (3 Holes)
7 1/2"
9"

(2) 5/8" Hilti "KBLI" Per Cable
4" Embed.
Concrete Deck
Thimbal
7 x 19 x 1/4" Cable
(2) 1/4" Cable Clips

*** By Others**
Hilti's, Nuts, Bolts, Washers, & Beam Clamps

Type 3

BY: RR DATE: 12/06/06 Page: 2 of 4 DWG#: SSD-2001G

Submittal Data

SEISMIC CABLE BRACING

Cable Bracing Kit:

Gripple Seismic Cable:
Break strength certified, pre-stretched Gripple Seismic cable. Available in lengths of 10, 15, and 20 ft

End Fittings:
45° Eyelet, (E) Standard Bracket (S), or Double Bracket (DS)

Color Coded Tags:
Pre-assembled color coded tags for easy field verification of cable diameter: GS10=Red; GS12=Green; GS19=Yellow; GS25=Purple

Gripple Seismic Fasteners:
Design Strength (LRFD*): GS10=350 lbs; GS12=1,050 lbs; GS19=2,100 lbs, GS25=3,850 lbs
* Load and Resistance Factor Design

Loose Brackets:
Standard Bracket (GSS) or Retrofit Bracket (GSR)

APPLICATION EXAMPLES

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1611 Emily Lane | Aurora, IL 60502 | USA
Tel 1 866 474 7753 Fax 1 800 654 0689
Email grippleinc@gripple.com
www.gripple.com/us www.grippleseismic.com

SEIS-USA-SUBMIT

PRODUCT INFORMATION

FUNCTION - For bracing and securing suspended nonstructural equipment and components.
APPLICATION - Ideal for Transverse, Longitudinal, or 4-Way bracing of nonstructural components and equipment requiring seismic design, especially in essential facilities that are required for emergency operations in the aftermath of an earthquake. NOT suitable for use in chlorinated / swimming pool environments.

MATERIAL SPECIFICATION -

Cable: Break strength certified, pre-stretched Gripple Seismic cable. Manufactured to ASTM A1023, ASTM A931. Available in standard lengths of 10 ft, 15 ft, and 20 ft.

	GS10	GS12	GS19	GS25
Cable Diameter (in.)	5/64	1/8	3/16	1/4
Strand configuration	7 x 7	7 x 7	7 x 19	7 x 19
Design Strength (ASD*) (lbs)	244	734	1,468	2,692

End Fittings: 45° Eyelet - Zinc plated steel
Standard Bracket - AISI 1050 Steel minimum UTS 725MPa pre-attached to cable via a zinc plated copper ferrule
Double Bracket - AISI 1050 Steel minimum UTS 725MPa pre-attached to cable via a zinc plated copper ferrule

Seismic Fasteners: Housing - Type ZA2 Zinc
Wedge - Sintered steel hardened to min. 56 Rockwell C
Spring - Stainless Steel (Type 302)
End Cap - Type ZA2 Zinc
Screws - Stainless Steel (Type 304)

Loose Brackets: AISI 1050 Steel minimum UTS 725MPa

SIZE SPECIFICATIONS

Seismic Fastener Size	Dimensions		
	A	B	C
GS10	1 9/64"	2 15/16"	33/64"
GS12	1 9/64"	3 1/4"	35/64"
GS19	1 11/32"	3 3/4"	9/16"
GS25	1 23/32"	4 21/32"	11/16"

45° Eyelet Size	Dimensions				
	A	B	C Ø	D Ø	E
GSE4	1"	1 29/32"	53/64"	7/16"	1/8"

Hole in Eyelet accommodates a 3/8" fastener

Standard Bracket Size	Dimensions				
	A	B	C Ø	D Ø	E
GSS4	25/32"	1 9/16"	1 9/16"	7/16"	5/32"
GSS5	13/16"	1 9/16"	1 21/32"	9/16"	5/32"
GSS6	13/16"	1 9/16"	1 21/32"	11/16"	5/32"
GSS8	1"	1 31/32"	1 31/32"	13/16"	5/32"
GSS10	1 1/16"	1 31/32"	1 31/32"	1 5/64"	5/32"

Retrofit Bracket Size	Dimensions						
	A	B	C	D	E	F	G
GSR4	3 45/64"	2 9/16"	1 31/32"	7/16"	1 1/16"	45/64"	1/4"
GSR5	3 3/4"	4 5/8"	1 31/32"	9/16"	1 5/16"	45/64"	1/4"
GSR6	3 3/4"	4 5/8"	1 31/32"	11/16"	1 5/16"	45/64"	1/4"
GSR8	4 9/64"	3 1/8"	2 1/4"	13/16"	1 19/32"	55/64"	1/4"
GSR10	9 7/16"	3 5/16"	2 7/16"	1 1/16"	1 17/32"	29/32"	1/4"

VISIT US AT CP-NOVIA.COM FOR MORE INFORMATION.

NOVIA | PAGE 79



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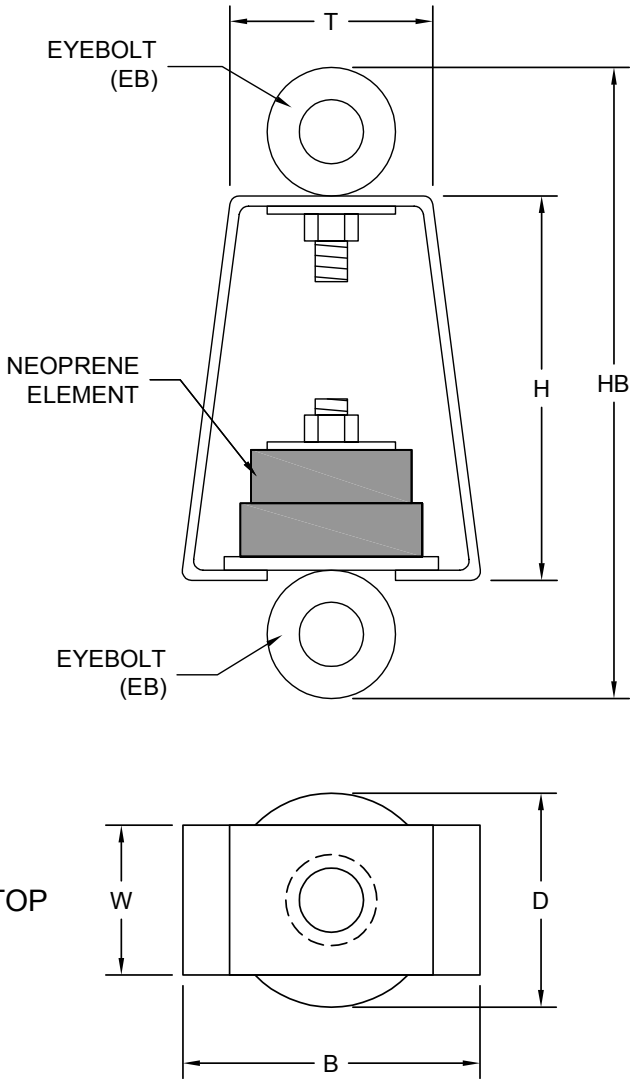
PROJECT: _____

CUSTOMER: _____

WNH

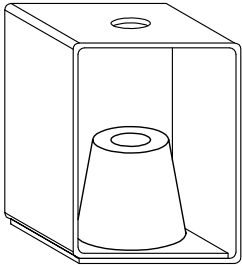
RESILIENT
HANGER

WNH 100 07/28/16



NEOPRENE ELEMENT DATA					
SIZE	COLOR	DURO-METER	RATED CAPAC (LBS)	RATED DEFL (IN)	
A-59	BLUE	40	59	0.35	
A-103	GREEN	50	103	0.35	
A-136	RED	60	136	0.35	
A-200	BLACK	70	200	0.35	
B-261	BLUE	40	261	0.40	
B-371	GREEN	50	371	0.40	
B-731	RED	60	731	0.40	
B-908	BLACK	70	908	0.40	

WNH DIMENSIONS (IN)							
SIZE	H	HB	W	B	T	D	EB
A	3 3/8	5 3/8	2	2 1/2	2 1/2	N/A	1/4
B	4 1/2	7 3/8	2	3 1/2	2 3/8	2 1/2	3/8



A-SIZE
BOX

Standard Finish: Galvanized Steel

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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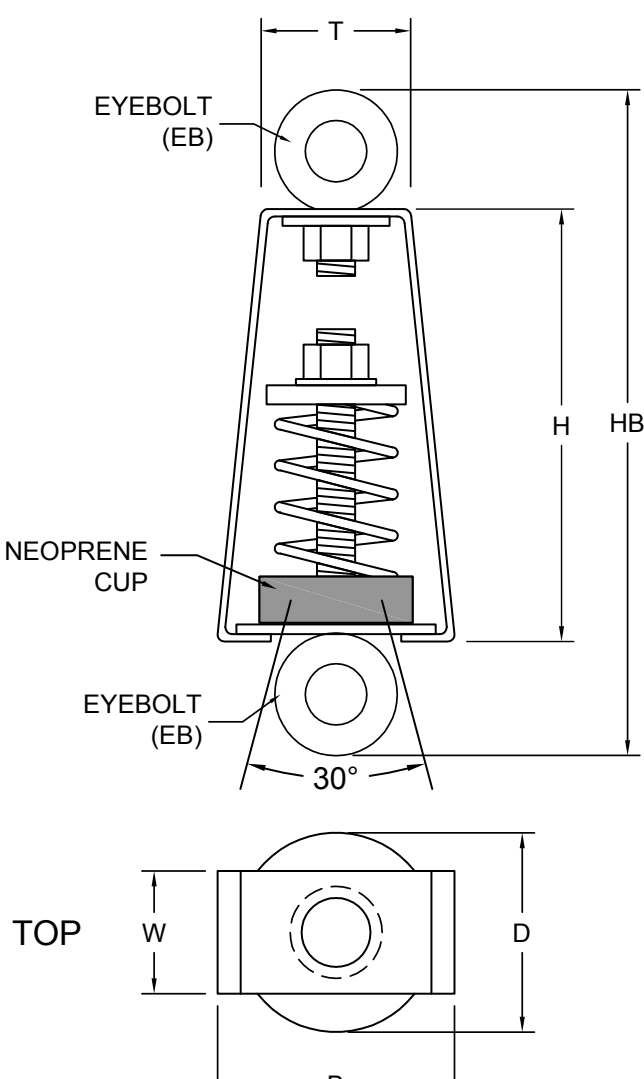
PROJECT: _____

CUSTOMER: _____

WSH

1" DEFLECTION
SPRING & NEOPRENE
HANGER

WSH 100 09/29/15



SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
A-29	29	1.16	25	ORG
A-59	59	1.18	50	RED
A-75	75	1.00	75	BLUE
A-103	103	1.03	100	GRN
A-136	136	1.01	135	BLK
A-200	200	1.00	200	GRAY
B-261	261	1.04	250	ORG
B-371	371	1.24	300	RED
B-640	640	1.28	500	BLUE
B-731	731	1.04	700	BLK
B-908	908	1.01	900	GRAY

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
A	1.50"	2.500"	1.00 - 1.13
B	2.00"	3.375"	0.84 - 0.96

WSH DIMENSIONS (IN)							
SIZE	H	HB	W	B	T	D	EB
A	5 1/8	7 1/8	2	2 1/2	2 1/2	N/A	1/4
B	7 1/8	10 7/8	2	3 7/8	2 7/16	3 1/4	1/2

¹Springs have a 50% overload capacity.
Standard Finish:
A,B - Galvanized Steel
C - Painted

Available Finish:
C - Hot Dip Galvanized

Note: B housing shown A housing differs slightly. See table for dimensions.

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

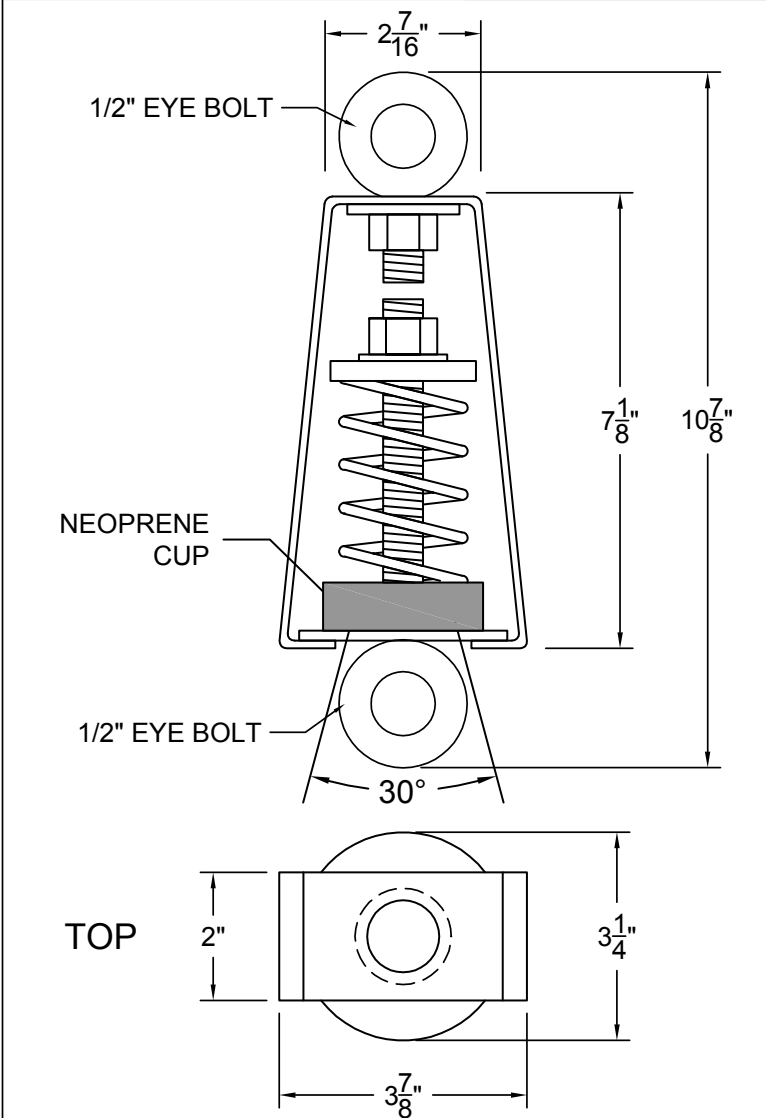


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PROJECT: _____
CUSTOMER: _____

WSH-2B

2" DEFLECTION
PRE-COMPRESSED
SPRING HANGER
WSH-2B 110 09/29/16



SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
2B-23	22.5	2.00	11.25	RED
2B-45	45	2.00	22.5	BLU
2B-90	90	2.00	45	GRN
2B-140	140	2.00	70	BLK
2B-200	200	2.00	100	GRAY
SPRING O.D.	FREE HGT		RATIO OD/OH	
2.00"	3.68"		1.19 MIN	

¹Springs have a 50% overload capacity.
Standard Finish: Galvanized Steel

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

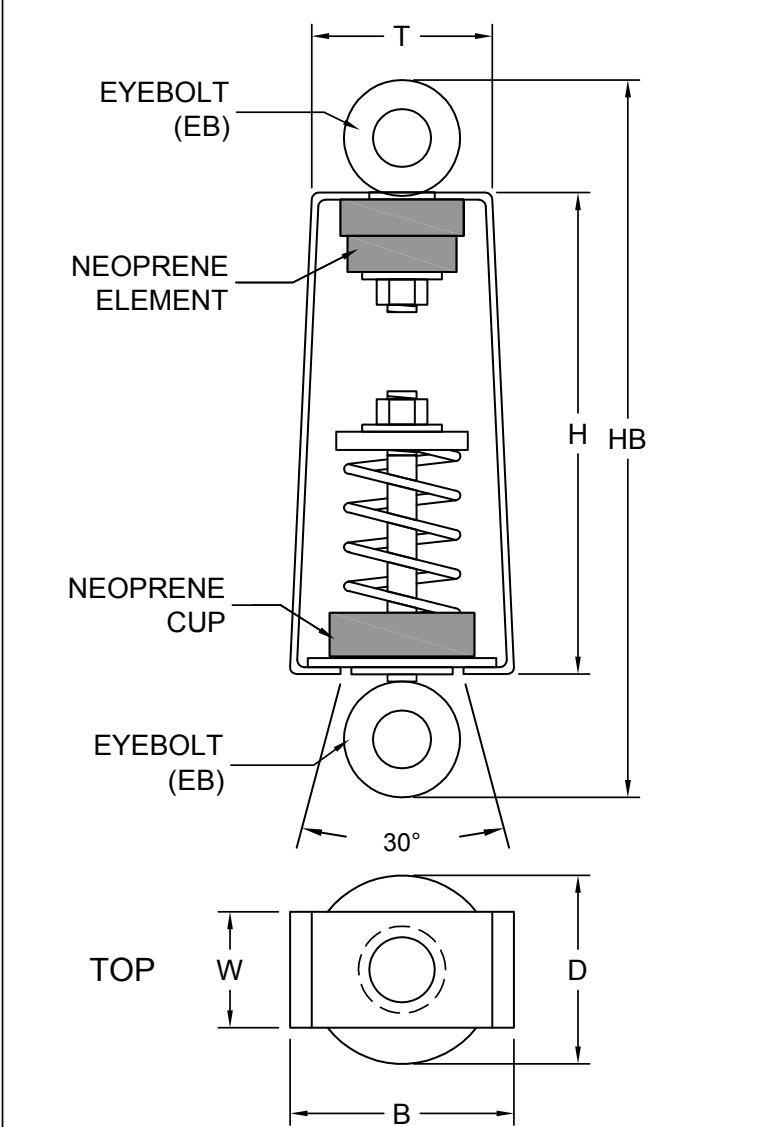


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CUSTOMER: _____

WSNH

1" DEFLECTION
SPRING & NEOPRENE
HANGER
WSNH 100 09/29/16



SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
A-29	29	1.51	25	ORG
A-59	59	1.53	50	RED
A-75	75	1.35	75	BLUE
A-103	103	1.38	100	GRN
A-136	136	1.36	135	BLK
A-200	200	1.35	200	GRAY
B-261	261	1.44	250	GRN
B-371	371	1.64	300	ORG
B-640	640	1.68	500	BLUE
B-731	731	1.44	700	BLK
B-908	908	1.41	900	GRAY

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
A	1.50"	2.500"	1.00 - 1.13
B	2.00"	3.375"	0.84 - 0.96

WSNH DIMENSIONS (IN)							
SIZE	H	HB	W	B	T	D	EB
A	6 3/8	8 7/16	2	2 1/2	2 1/2	N/A	1/4
B	8 3/8	12 3/8	2	3 7/8	3 1/8	3 1/4	1/2

¹Springs have a 50% overload capacity.
²Rated Deflection combines spring and neoprene element deflection.
Standard Finish:
A,B - Galvanized Steel

Note: B housing shown A housing differs slightly. See table for dimensions.

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

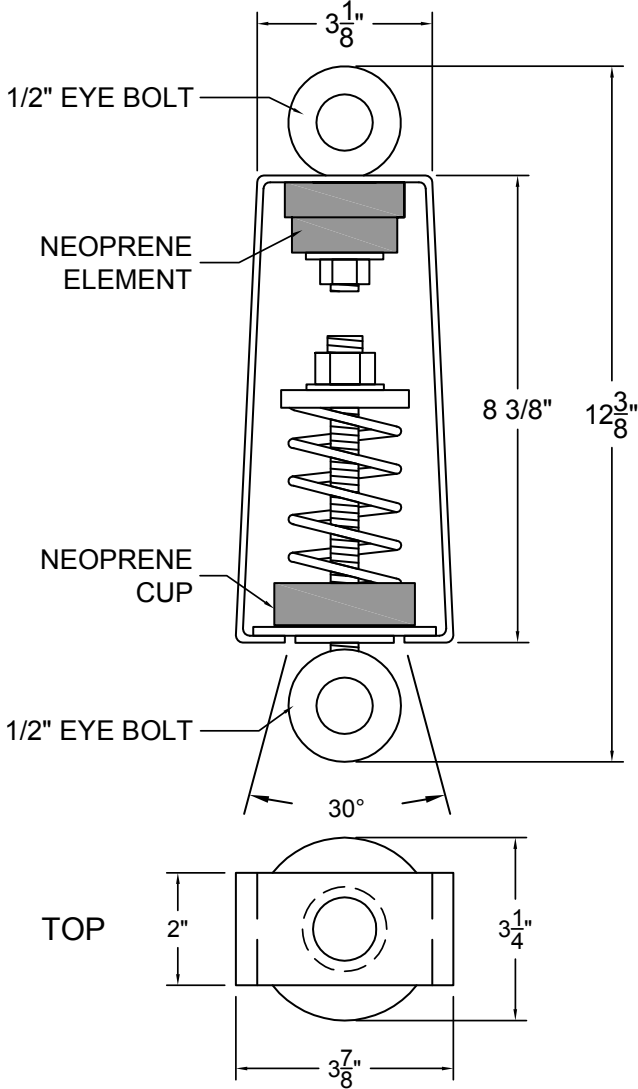


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PROJECT: _____
CUSTOMER: _____

WSNH-2B

2" DEFLECTION
SPRING & NEOPRENE
HANGER
WSNH-2B 110 09/29/16



1/2" EYE BOLT

NEOPRENE ELEMENT

NEOPRENE CUP

1/2" EYE BOLT

30°

TOP

2"

3 1/4"

3 7/8"

8 3/8"

12 3/8"

3 1/8"

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
2B-23	22.5	2.35	11.25	RED
2B-45	45	2.35	22.5	BLU
2B-90	90	2.35	45	GRN
2B-140	140	2.35	70	BLK
2B-200	200	2.35	100	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
2.00"	3.68"	1.19 MIN

¹Springs have a 50% overload capacity.
²Rated Deflection combines spring and neoprene element deflection.

Standard Finish: Galvanized Steel

Available Option: Pre-compressed

CERTIFICATION DATA
TAG _____
UNIT _____

BY: _____ DATE: _____ DWG#: _____

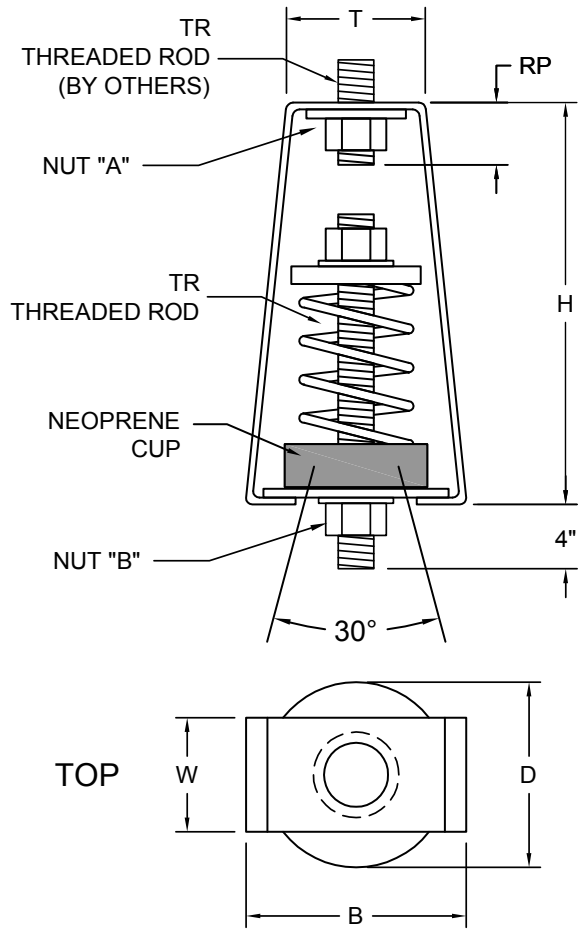


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PROJECT: _____
CUSTOMER: _____

RSH

1" DEFLECTION
SPRING HANGER
SH 100 09/29/16



TR
THREADED ROD (BY OTHERS)

NUT "A"

TR
THREADED ROD

NEOPRENE CUP

NUT "B"

30°

TOP

W

D

B

T

RP

H

4"

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
A-29	29	1.16	25	ORG
A-59	59	1.18	50	RED
A-75	75	1.00	75	BLUE
A-103	103	1.03	100	GRN
A-136	136	1.01	135	BLK
A-200	200	1.00	200	GRAY
B-261	261	1.04	250	ORG
B-371	371	1.24	300	RED
B-640	640	1.28	500	BLUE
B-731	731	1.04	700	BLK
B-908	908	1.01	900	GRAY
C-1061	1061	1.06	1000	ORG
C-1268	1268	1.01	1250	RED
C-1608	1608	1.07	1500	BLUE
C-1811	1811	1.03	1750	GRN
C-2000	2000	1.00	2000	BLK
C-2450 ²	2450	1.00	2450	GRAY

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
A	1.50"	2.500"	1.00 - 1.13
B	2.00"	3.375"	0.84 - 0.96
C	3.00"	4.375"	0.89 - 0.91

RSH DIMENSIONS (IN)

SIZE	H	W	B	T	D	RP	TR
A	5 1/8	2	2 1/2	2 1/2	N/A	1 1/16	1/2
B	7 1/8	2	3 7/8	2 7/16	3 1/4	1 3/8	3/4
C	9 3/4	2 1/2	5 1/2	4 3/8	4 3/4	2	1

¹Springs have a 50% overload capacity.
²Published ratings allow for 30% additional travel to solid. For 50% additional travel, multiply Rated Capacity and Rated Deflection by 0.841.

Standard Finish: A,B - Galvanized Steel C - Painted

Available Finish: C - Hot Dip Galvanized

Note: B & C housing shown A housing differs slightly. See table for dimensions.

CERTIFICATION DATA

Threated rod sizes shown will be used unless otherwise specified.

Hangers are pre-compressed to 65% of Rated Capacity. When hangers are under full operational load, springs should compress an additional 1/4" ±. Nut "B" and washer should be free. Loosen Nut "B" if it is not free. If pipe elevation changes (moves upwards) compensate by loosening Nut "A".

BY: _____ DATE: _____ DWG#: _____



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CUSTOMER: _____

RSH-2B

2" DEFLECTION
SPRING HANGER
RSH-2B 110 07/28/16

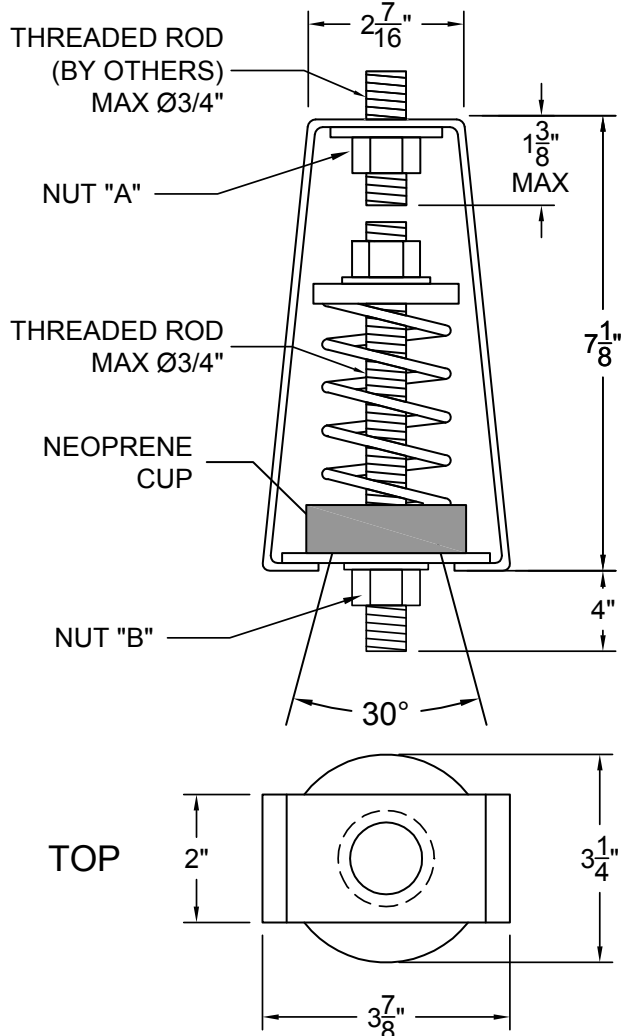


Diagram of RSH-2B Spring Hanger showing side and top views. Side view labels: THREADED ROD (BY OTHERS) MAX Ø3/4", NUT "A", THREADED ROD MAX Ø3/4", NEOPRENE CUP, NUT "B", 30°. Dimensions: 2 7/16", 1 3/8" MAX, 7 1/8", 4". Top view labels: TOP, 2", 3 1/4", 3 7/8".

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
2B-23	22.5	2.00	11.25	RED
2B-45	45	2.00	22.5	BLU
2B-90	90	2.00	45	GRN
2B-140	140	2.00	70	BLK
2B-200	200	2.00	100	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
2.00"	3.68"	1.19 MIN

¹Springs have a 50% overload capacity.
Standard Finish: Galvanized Steel
Available Option: Pre-compressed
Threaded rod sizes shown will be used unless otherwise specified.
Hangers are pre-compressed to 65% of Rated Capacity. When hangers are under full operational load, springs should compress an additional 1/4" ±. Nut "B" and washer should be free. Loosen Nut "B" if it is not free. If pipe elevation changes (moves upwards) compensate by loosening Nut "A".

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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PROJECT: _____
CUSTOMER: _____

RSH-D

2" DEFLECTION
SPRING HANGER
RSH-D 100 09/29/16

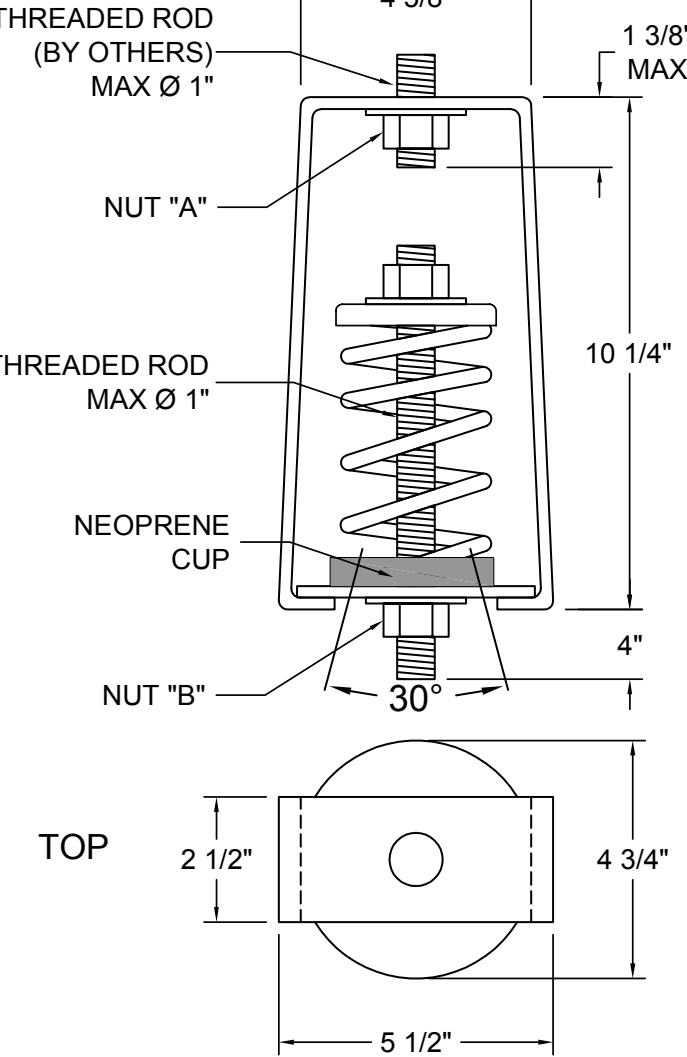


Diagram of RSH-D Spring Hanger showing side and top views. Side view labels: THREADED ROD (BY OTHERS) MAX Ø 1", NUT "A", THREADED ROD MAX Ø 1", NEOPRENE CUP, NUT "B", 30°. Dimensions: 4 5/8", 1 3/8" MAX, 10 1/4", 4". Top view labels: TOP, 2 1/2", 4 3/4", 5 1/2".

SPRING DATA

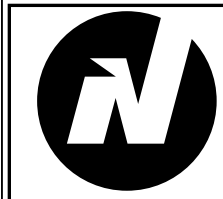
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
D-236	236	2.36	100	ORNG
D-352	352	2.35	150	RED
D-410	410	2.00	200	BLUE
D-624	624	2.08	300	GRN
D-840	840	2.00	420	BLK
D-1000	1000	2.00	500	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
3.00"	5.375"	0.88 - 0.99

¹Springs have a 50% overload capacity.
Standard Finish: Galvanized Steel
Available Option: Pre-compressed
Threaded rod sizes shown will be used unless otherwise specified.
Hangers are pre-compressed to 65% of Rated Capacity. When hangers are under full operational load, springs should compress an additional 1/4" ±. Nut "B" and washer should be free. Loosen Nut "B" if it is not free. If pipe elevation changes (moves upwards) compensate by loosening Nut "A".

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

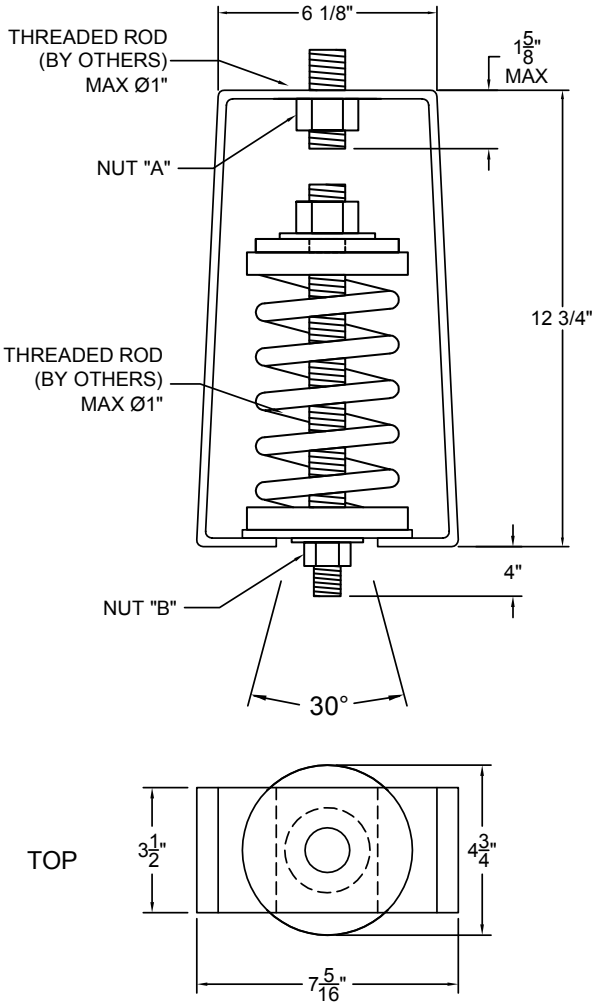


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PROJECT: _____
CUSTOMER: _____

RSH-E

3" DEFLECTION
SPRING HANGER
RSH-E 100 09/29/16

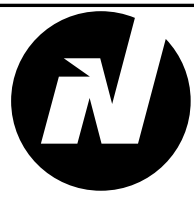


SPRING DATA				
SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
E-311	311	3.34	93	ORG
E-410	410	3.20	128	RED
E-608	608	3.38	180	BLUE
E-774	774	3.23	240	GRN
E-1002	1002	3.46	290	BLK
E-1240	1240	3.02	410	GRAY
SPRING O.D.	FREE HGT		RATIO OD/OH	
4.00"	7.62"		0.89 - 0.91	

¹Springs have a 50% overload capacity.
Standard Finish: Galvanized Steel
Available Option: Pre-compressed
Threaded rod sizes shown will be used unless otherwise specified.
Hangers are pre-compressed to 65% of Rated Capacity. When hangers are under full operational load, springs should compress an additional 1/4" ±. Nut "B" and washer should be free. Loosen Nut "B" if it is not free. If pipe elevation changes (moves upwards) compensate by loosening Nut "A".

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

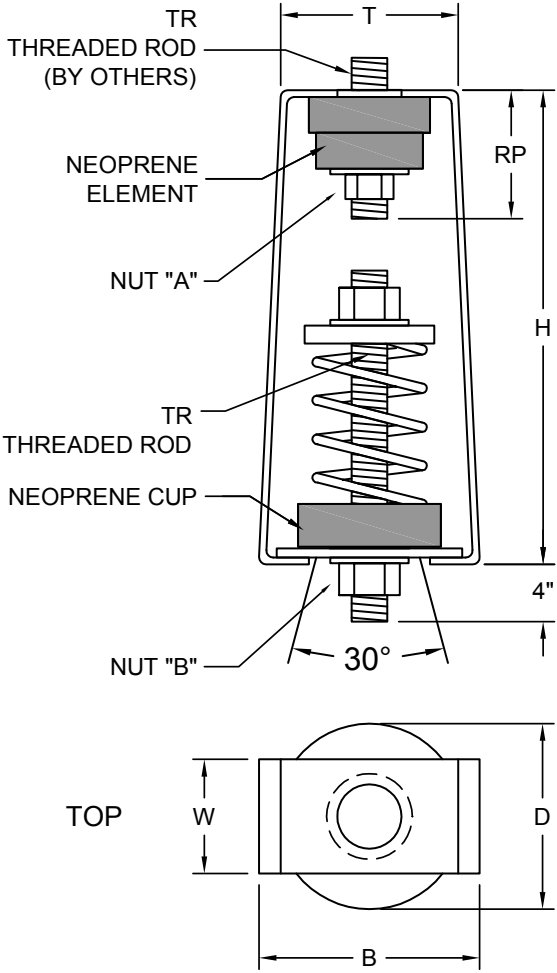


Novia
A Division of C&P
1 Northwestern Dr.
Salem, NH 03079
Ph: 603-898-8600
Fax: 603-898-2755
sales@cp-novia.com

PROJECT: _____
CUSTOMER: _____

RSNH

1" DEFLECTION
SPRING & NEOPRENE
HANGER
RSNH 100 09/29/16



Standard Finish:
A, B - Galvanized Steel
C - Painted
Available Finish:
C - Hot Dip Galvanized

Note: B & C housing shown A housing differs slightly. See table for dimensions.

SPRING DATA							
SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR			
A-29	29	1.51	25	ORG			
A-59	59	1.53	50	RED			
A-75	75	1.35	75	BLUE			
A-103	103	1.38	100	GRN			
A-136	136	1.36	135	BLK			
A-200	200	1.35	200	GRAY			
B-261	261	1.44	250	GRN			
B-371	371	1.64	300	ORG			
B-640	640	1.68	500	BLUE			
B-731	731	1.44	700	BLK			
B-908	908	1.41	900	GRAY			
C-1061	1061	1.56	1000	ORG			
C-1268	1268	1.51	1250	RED			
C-1608	1608	1.57	1500	BLUE			
C-1811	1811	1.53	1750	GRN			
C-2000	2000	1.50	2000	BLK			
C-2450 ³	2450	1.50	2450	GRAY			
SIZE	SPRING O.D.		FREE HGT	RATIO OD/OH			
A	1.50"		2.500"	1.00 - 1.13			
B	2.00"		3.375"	0.84 - 0.96			
C	3.00"		4.375"	0.89 - 0.91			
RSNH DIMENSIONS (IN)							
SIZE	H	W	B	T	D	RP	TR
A	6 3/8	2	2 1/2	2 1/2	N/A	1 13/16	1/2
B	8 3/8	2	3 7/8	3 1/8	3 1/4	2 1/4	3/4
C	11	2 1/2	5 1/2	4 5/8	4 3/4	3 7/8	1

¹Springs have a 50% overload capacity.
²Rated Deflection combines spring and neoprene element deflection.
³Published ratings allow for 30% additional travel to solid. For 50% additional travel, multiply Rated Capacity and Rated Deflection by 0.841.

CERTIFICATION DATA

Threaded rod sizes shown will be used unless otherwise specified.
Hangers are pre-compressed to 65% of Rated Capacity. When hangers are under full operational load, springs should compress an additional 1/4" ±. Nut "B" and washer should be free. Loosen Nut "B" if it is not free. If pipe elevation changes (moves upwards) compensate by loosening Nut "A".

BY: _____ DATE: _____ DWG#: _____



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PROJECT: _____

CUSTOMER: _____

RSNH-2B

2" DEFLECTION
SPRING & NEOPRENE
HANGER
RSNH-2B 110 09/29/16

THREADED ROD
(BY OTHERS)
MAX Ø3/4"

NEOPRENE
ELEMENT

NUT "A"

THREADED ROD
MAX Ø3/4"

NEOPRENE
CUP

NUT "B"

30°

4"

TOP

2"

3 1/4"

3 7/8"

3 1/8"

2 1/4" MAX

8 5/16"

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
2B-23	22.5	2.35	11.25	RED
2B-45	45	2.35	22.5	BLU
2B-90	90	2.35	45	GRN
2B-140	140	2.35	70	BLK
2B-200	200	2.35	100	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
2.00"	3.68"	1.19 MIN

¹Springs have a 50% overload capacity.

²Rated Deflection combines spring and neoprene element deflection.

Standard Finish: Galvanized Steel

Threaded rod sizes shown will be used unless otherwise specified.

Hangers are pre-compressed to 65% of Rated Capacity. When hangers are under full operational load, springs should compress an additional 1/4" ±.

Nut "B" and washer should be free. Loosen Nut "B" if it is not free. If pipe elevation changes (moves upwards) compensate by loosening Nut "A".

CERTIFICATION DATA

TAG _____

UNIT _____

BY: _____

DATE: _____

DWG#: _____



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PROJECT: _____

CUSTOMER: _____

RSNH-D

2" DEFLECTION
SPRING & NEOPRENE
HANGER
RSNH-D 100 09/29/16

THREADED ROD
(BY OTHERS)
MAX Ø1"

NEOPRENE
ELEMENT

NUT "A"

THREADED ROD
MAX Ø1"

NEOPRENE
CUP

NUT "B"

30°

4"

TOP

2 1/2"

4 3/4"

5 1/2"

3 7/8" MAX

12"

SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
D-236	236	2.76	100	ORANGE
D-352	352	2.75	150	RED
D-410	400	2.35	205	BLUE
D-624	624	2.48	300	GREEN
D-840	840	2.40	420	BLACK
D-1000	1000	2.50	500	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
3.00"	5.375"	0.89 - 0.99

¹Springs have a 50% overload capacity.

²Rated Deflection combines spring and neoprene element deflection.

Standard Finish: Paint

Available Finish: Hot Dip Galvanized

Threaded rod sizes shown will be used unless otherwise specified.

Hangers are pre-compressed to 65% of Rated Capacity. When hangers are under full operational load, springs should compress an additional 1/4" ±.

Nut "B" and washer should be free. Loosen Nut "B" if it is not free. If pipe elevation changes (moves upwards) compensate by loosening Nut "A".

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____



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PROJECT: _____

CUSTOMER: _____

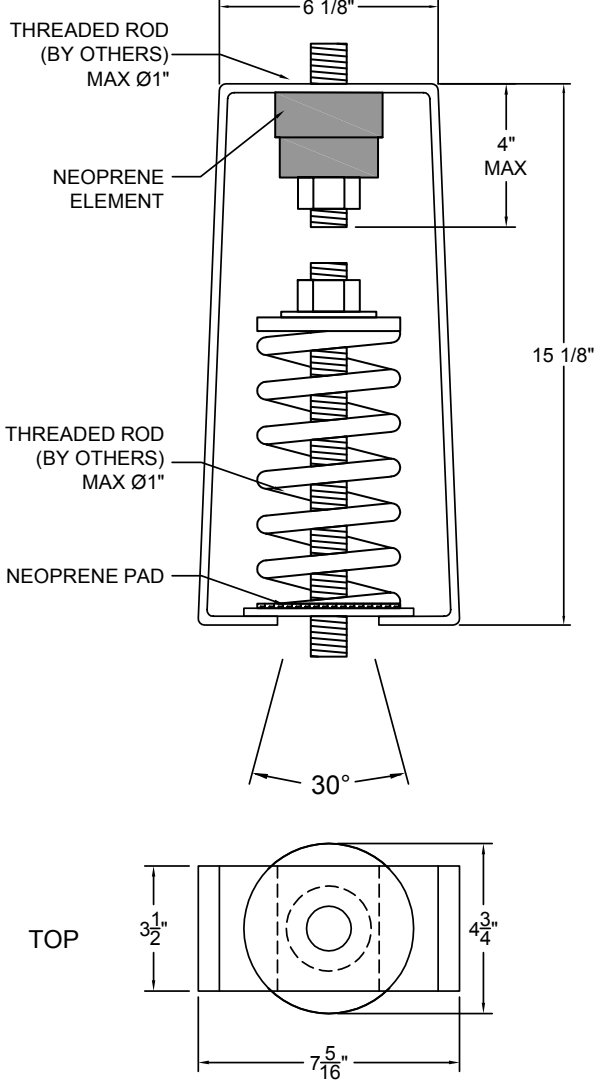
RSNH-E

3" DEFLECTION

SPRING & NEOPRENE

HANGER

SNH-E 100 09/29/16



SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	² RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
E-311	311	3.74	93	ORG
E-410	410	3.60	128	RED
E-608	608	3.78	180	BLUE
E-774	774	3.63	240	GRN
E-1002	1002	3.96	290	BLK
E-1240	1240	3.52	410	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
4.00"	7.62"	0.89 - 0.91

¹Springs have a 50% overload capacity.

²Rated Deflection combines spring and neoprene element deflection.

Standard Finish: Galvanized Steel

Threaded rod sizes shown will be used unless otherwise specified.

Hangers are pre-compressed to 65% of Rated Capacity. When hangers are under full operational load, springs should compress an additional $\frac{1}{4}$ " $\pm$.

Nut "B" and washer should be free. Loosen Nut "B" if it is not free. If pipe elevation changes (moves upwards) compensate by loosening Nut "A".

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____



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PROJECT: _____

CUSTOMER: _____

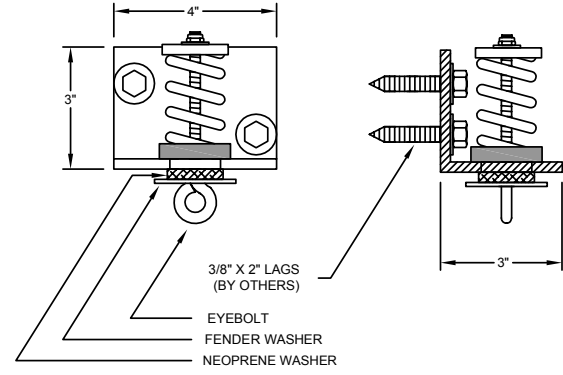
ACH

PRECOMPRESSED

CEILING HANGER

1" DEFLECTION

ACH 100 9/29/16



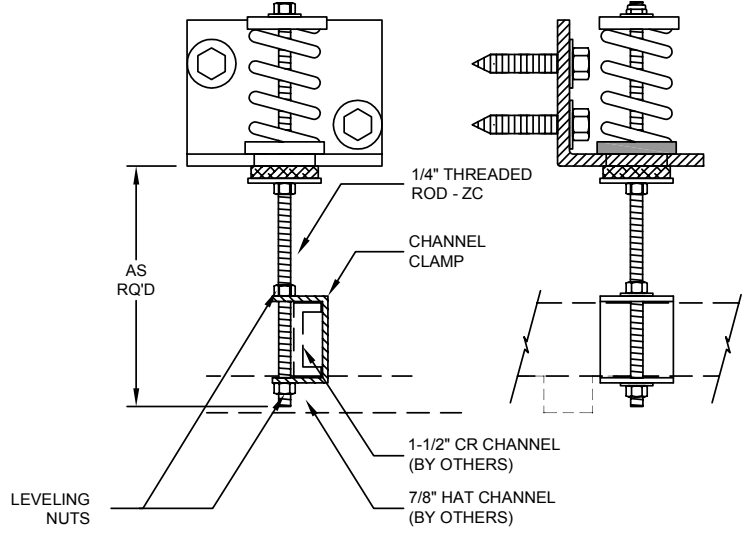
SPRING DATA

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
A-29	29	1.16	25	ORG
A-59	59	1.18	50	RED
A-75	75	1.00	75	BLUE
A-103	103	1.03	100	GRN
A-136	136	1.01	135	BLK
A-200	200	1.00	200	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
1.50"	2.50"	1.00 - 1.13

¹Springs have a 50% overload capacity.

Standard Finish: Galvanized Steel



ROD ATTACHMENT

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____

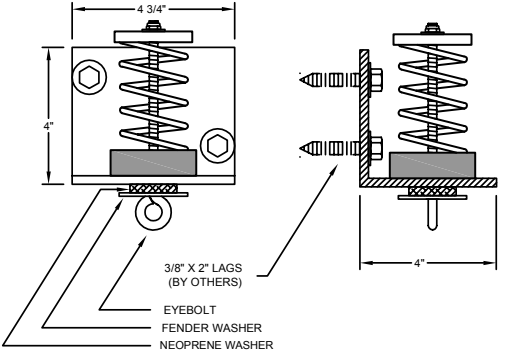


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PROJECT: _____
CUSTOMER: _____

ACH-2B

PRECOMPRESSED
CEILING HANGER
2" DEFLECTION
ACH 100 9/29/16

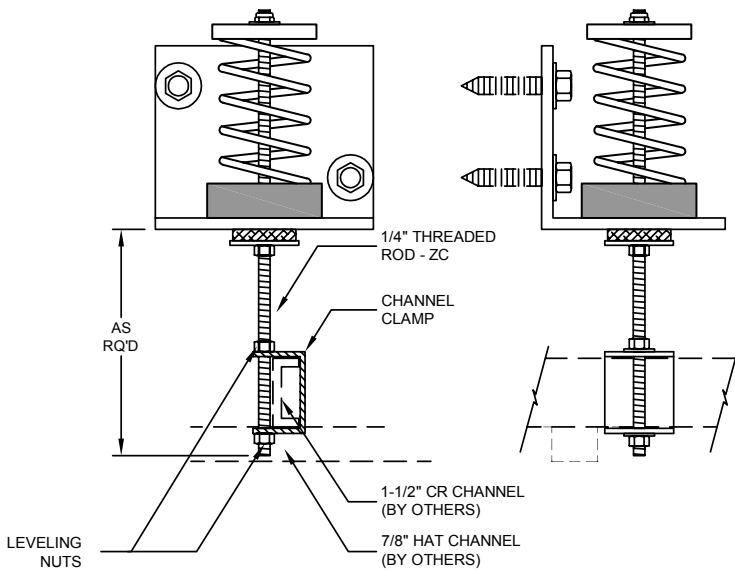


WIRE ATTACHMENT

SIZE	¹ RATED CAPAC (LBS)	RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
2B-23	22.5	2.00	11.25	RED
2B-45	45	2.00	22.5	BLU
2B-90	90	2.00	45	GRN
2B-140	140	2.00	70	BLK
2B-200	200	2.00	100	GRAY

SPRING O.D.	FREE HGT	RATIO OD/OH
2.00"	3.68"	1.19 MIN

¹Springs have a 50% overload capacity.
Standard Finish: Galvanized Steel



ROD ATTACHMENT

CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____

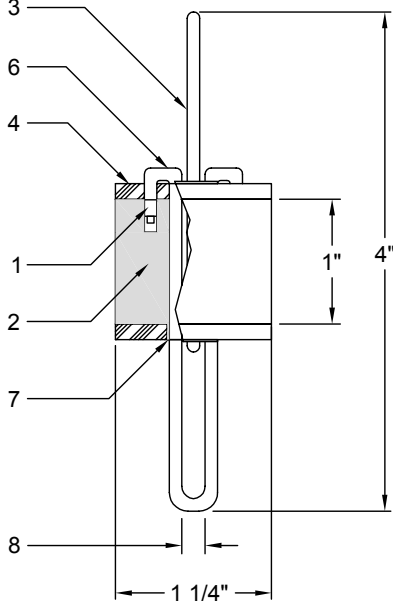


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PROJECT: _____
CUSTOMER: _____

ARH

RESILIENT
HANGER
ARH-100 7/28/16



RESILIENT ELEMENT DATA

SIZE	RATED CAPAC (LBS)	RATED DEFL (IN)	COLOR
1-20	65	0.313	RED
1-40	120	0.250	BLACK
1-70	200	0.188	BLUE

1. Ends of steel hooks interlocked and swaged in place to provide failsafe construction.

2. High tensile gum rubber insert with antizonant added for long life.

3. 11 gage cold drawn steel wire.

4. Wrought steel pressure plates.

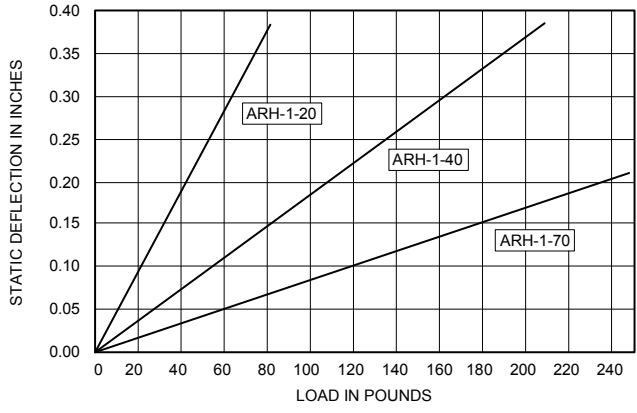
5. All metal parts zinc plated to prevent corrosion.

6. Gimbled construction for even load distribution.

7. Rubber collar prevents metal-to-metal contact.

8. Clearance for up to Ø3/16" rod.

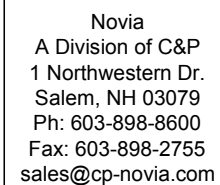
LOAD-DEFLECTION CURVES



LOAD IN POUNDS	ARH-1-20 DEFLECTION (IN)	ARH-1-40 DEFLECTION (IN)	ARH-1-70 DEFLECTION (IN)
0	0.00	0.00	0.00
20	0.0626	0.0208	0.0125
40	0.1252	0.0417	0.0250
60	0.1878	0.0625	0.0375
80	0.2504	0.0833	0.0500
100	0.3130	0.1042	0.0625
120	-	0.1250	0.0750
140	-	0.1458	0.0875
160	-	0.1667	0.1000
180	-	0.1875	0.1125
200	-	0.2083	0.1250
220	-	-	0.1375
240	-	-	0.1500

CERTIFICATION DATA

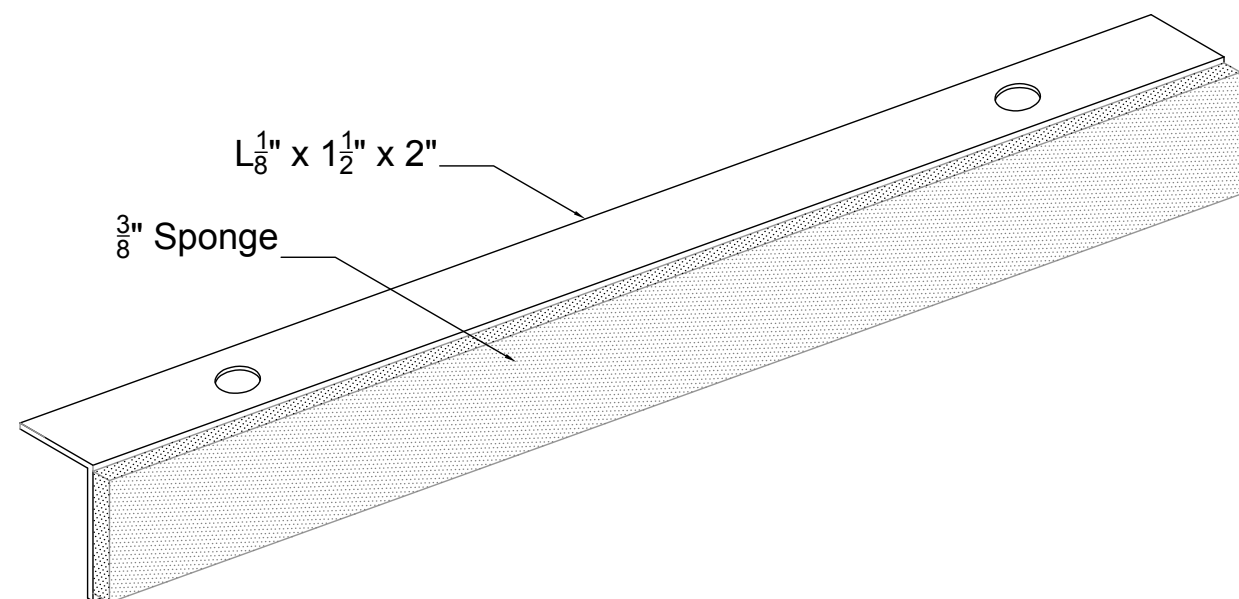
BY: _____ DATE: _____ DWG#: _____



PROJECT: _____

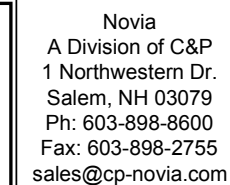
CUSTOMER: _____

ARCHITECTURAL
WALL SWAY
BRACE
WAB100 7/28/16



CERTIFICATION DATA

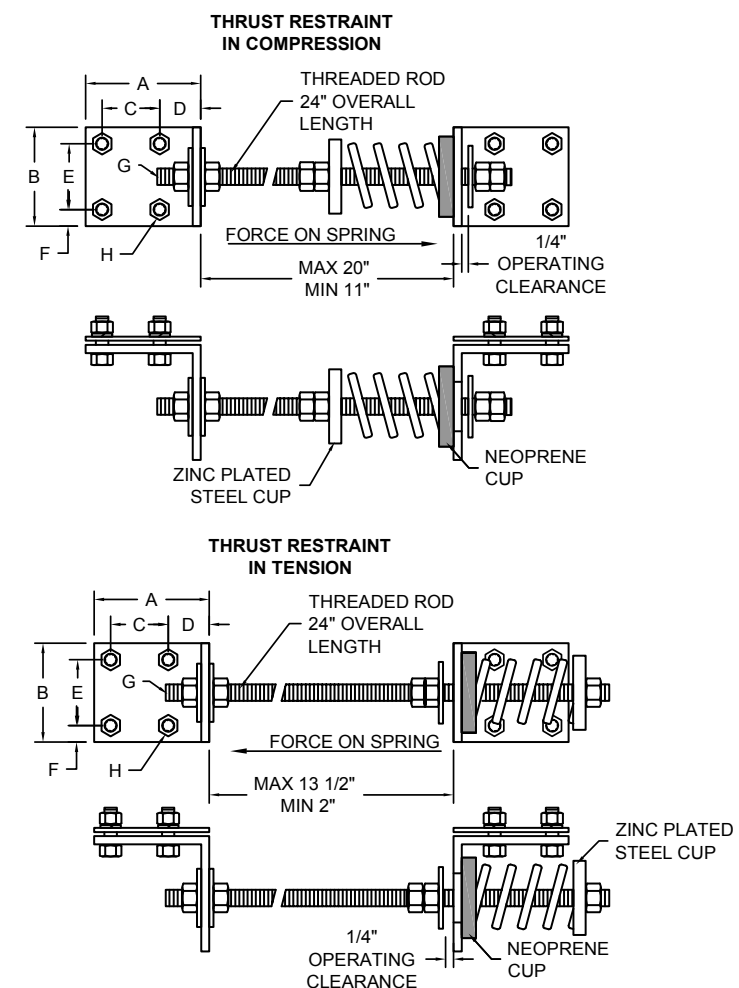
BY:	DATE:	DWG#:
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PROJECT: _____

CUSTOMER: _____

1" DEFLECTION
THRUST RESTRAINT
TR-1 100 9/29/16



SPRING DATA

SIZE	1 ^{RATED} CAPAC (LBS)		RATED DEFL (IN)	SPRING CONST (LBS/IN)	COLOR
	EACH	PAIR			
A-29	29	58	1.16	25	ORG
A-59	59	118	1.18	50	RED
A-75	75	150	1.00	75	BLUE
A-103	103	206	1.03	100	GRN
A-136	136	272	1.01	135	BLK
A-200	200	400	1.00	200	GRAY
B-261	261	522	1.04	250	GRN
B-371	371	742	1.24	300	ORG
B-640	640	1280	1.28	500	BLUE
B-731	731	1462	1.04	700	BLK
B-908	908	1816	1.01	900	GRAY

SIZE	SPRING O.D.	FREE HGT	RATIO OD/OH
A	1.50"	2.500"	1.00 - 1.13
B	2.00"	3.375"	0.84 - 0.96

TR DIMENSIONS (IN)

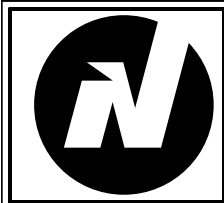
SIZE	A	B	C	D	E	F	G	H
TR-A	2 1/2	2 1/2	7/8	1 1/4	1 3/4	3/8	1/2	1/4
TR-B	3 1/2	3	1 3/4	1 1/4	2	1/2	5/8	3/8

¹Springs have a 50% overload capacity.

CERTIFICATION DATA

TAG _____
UNIT _____

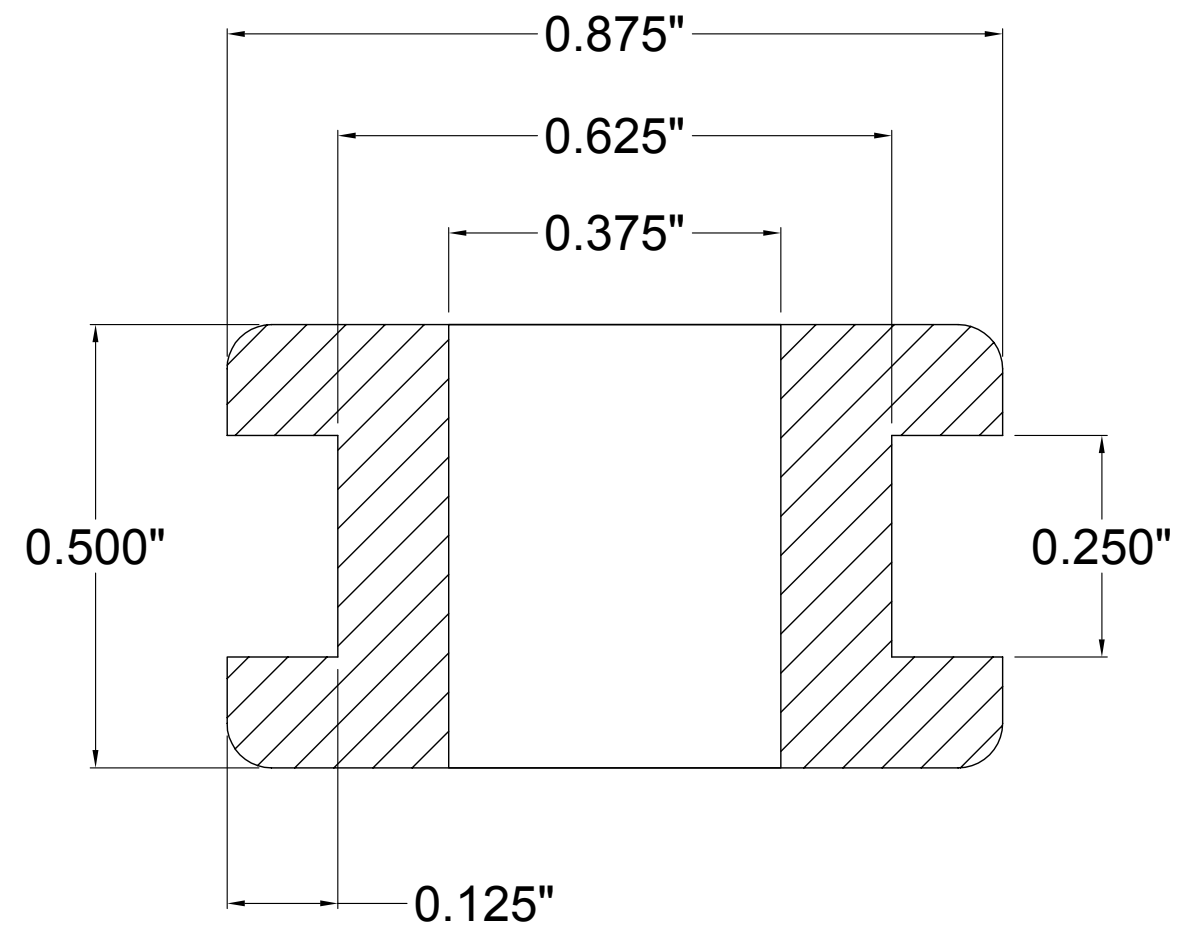
BY:	DATE:	DWG#:
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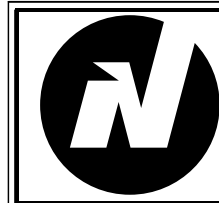
PROJECT: _____
CUSTOMER: _____

$\frac{3}{8}$ "
GROMMET
2558-A60
08/22/16



CERTIFICATION DATA

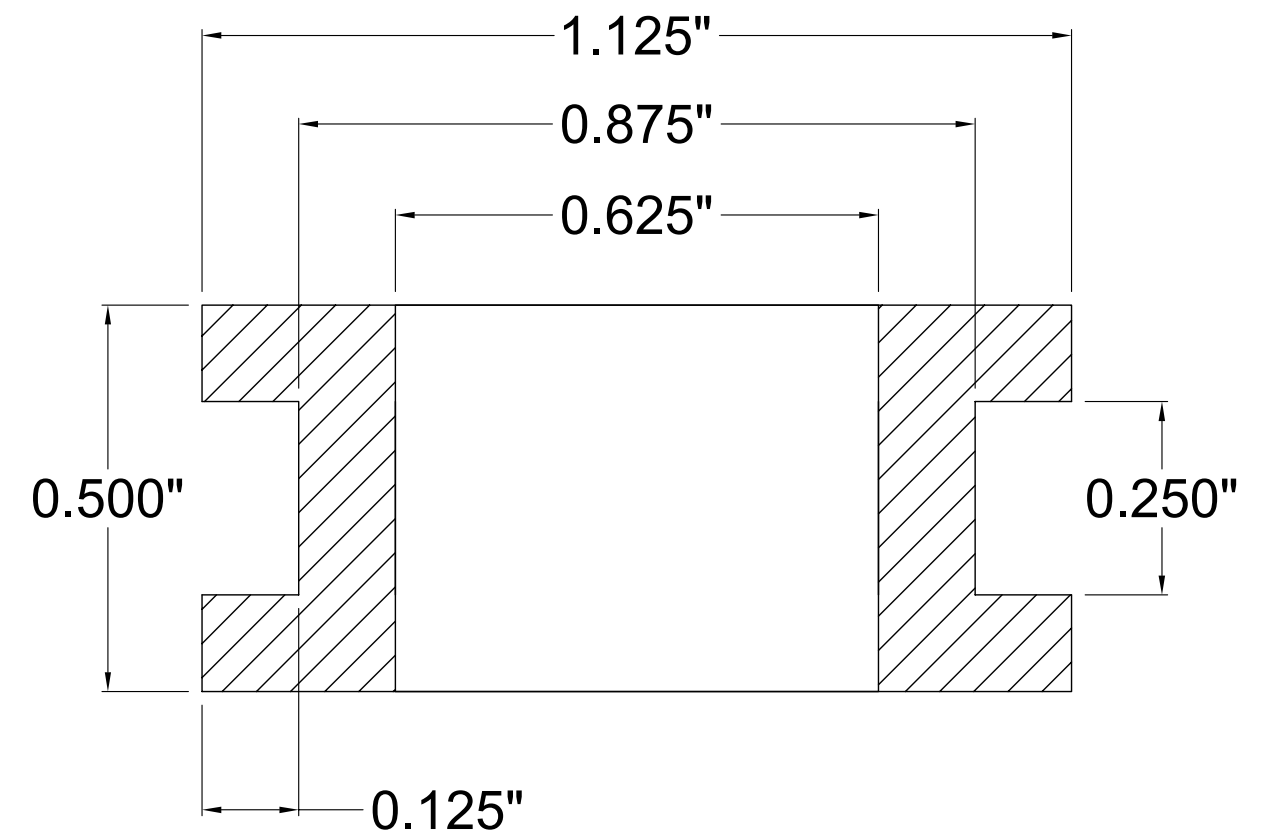
BY: _____ DATE: _____ DWG#: _____



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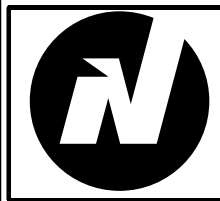
PROJECT: _____
CUSTOMER: _____

$\frac{5}{8}$ "
GROMMET
2564-A60
02/23/07



CERTIFICATION DATA

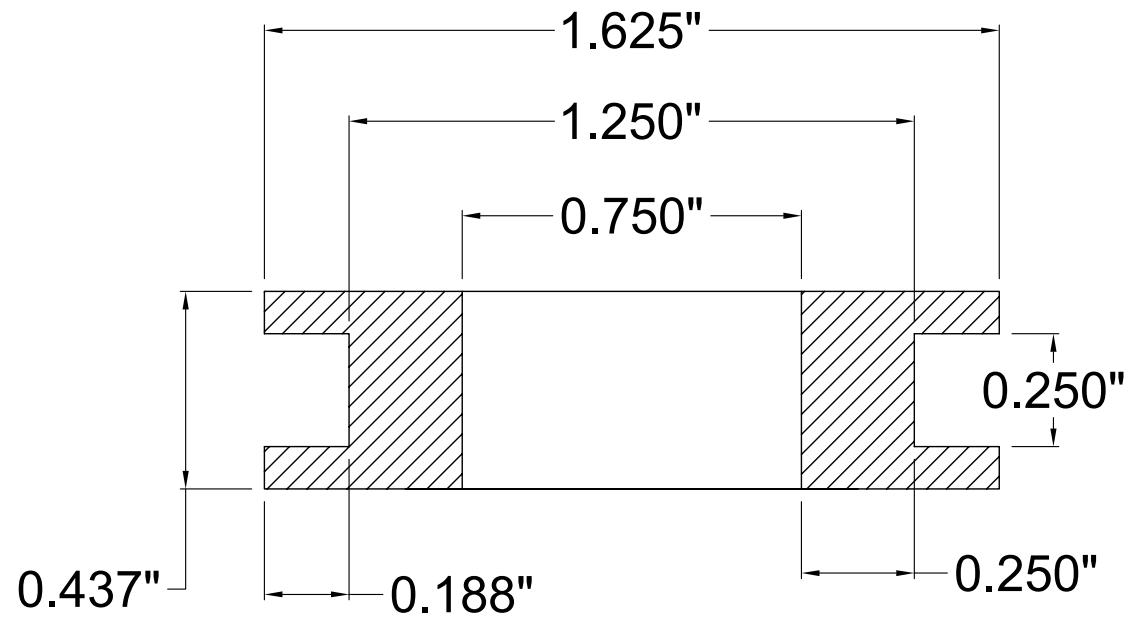
BY: _____ DATE: _____ DWG#: _____



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PROJECT: _____
CUSTOMER: _____

3/4"
GROMMET
2568
8/22/16

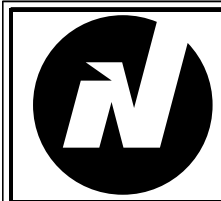


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BY:

DATE:

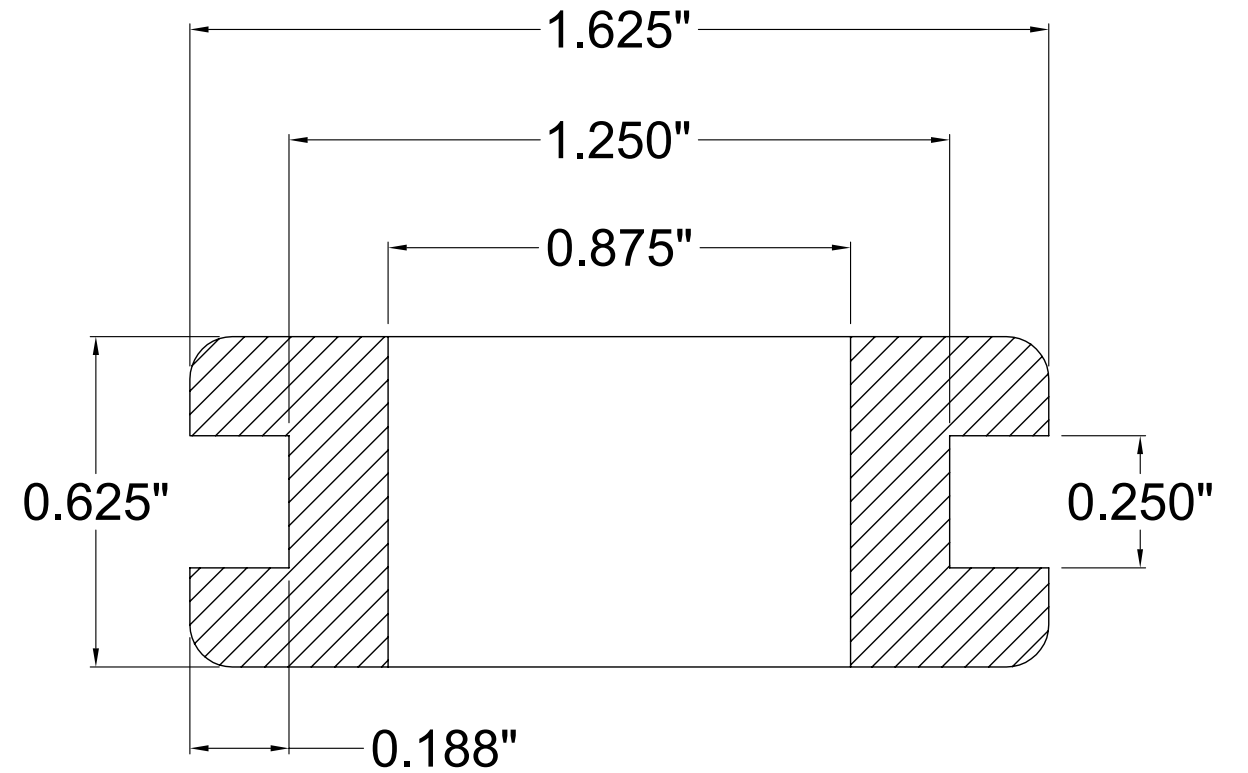
DWG#:



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PROJECT: _____
CUSTOMER: _____

7/8"
GROMMET
2570-A60
8/22/16

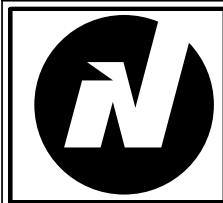


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BY:

DATE:

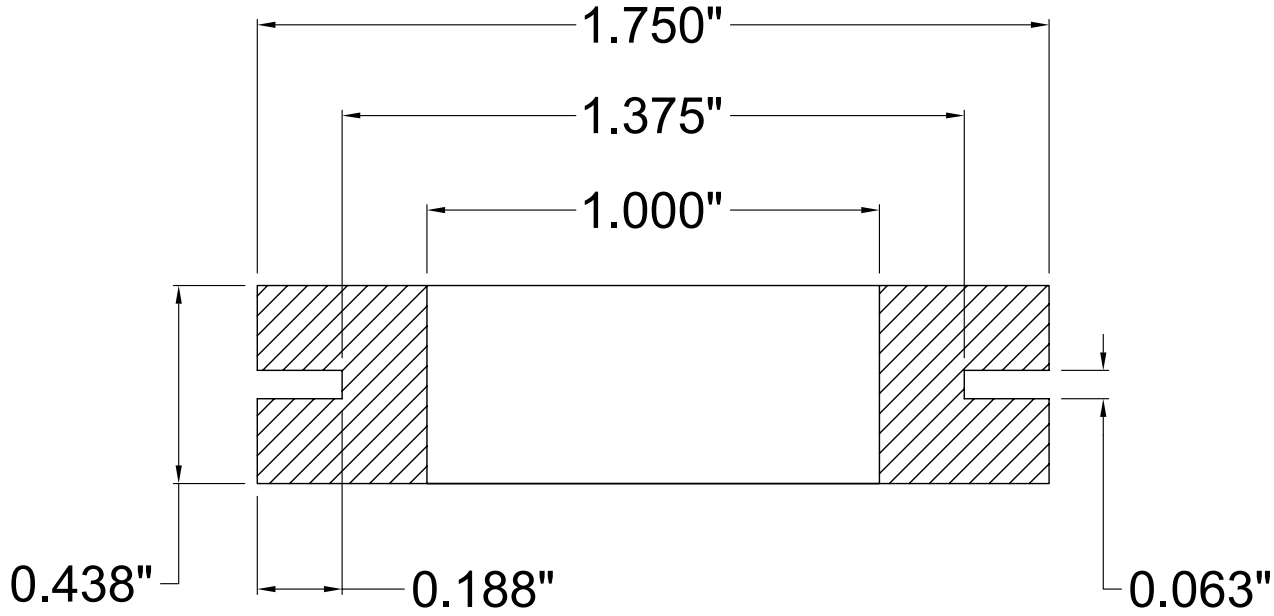
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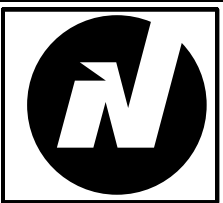
PROJECT: _____
CUSTOMER: _____

1"
GROMMET
2277
8/22/16



CERTIFICATION DATA

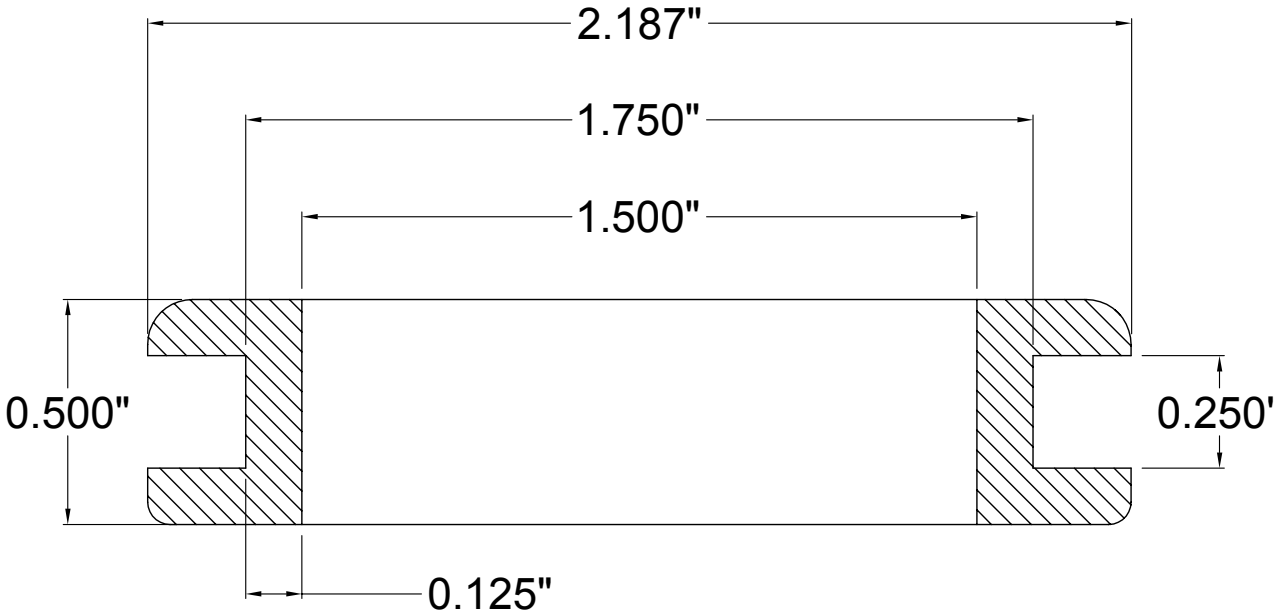
BY: _____ DATE: _____ DWG#: _____



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PROJECT: _____
CUSTOMER: _____

1-1/2"
GROMMET
2034-A70 SBR
8/22/16



CERTIFICATION DATA

BY: _____ DATE: _____ DWG#: _____



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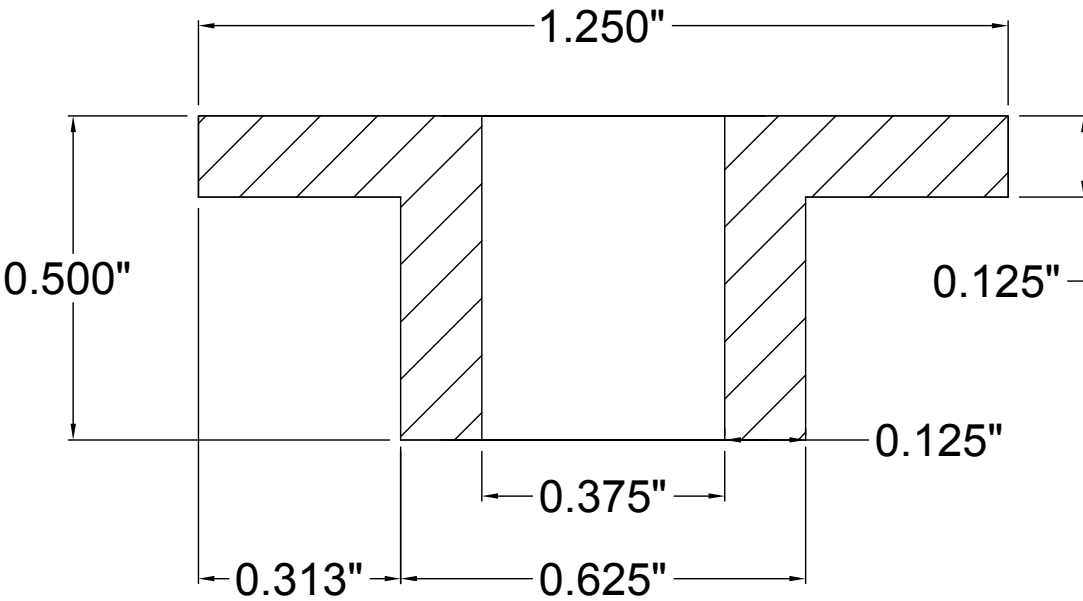
PROJECT: _____

CUSTOMER: _____

HG-38

Bushing

05/03/07



CERTIFICATION DATA

TAG _____

UNIT _____



MOUNT LOCATION PLAN VIEW

1	2
3	4
5	6
7	8
9	10

MATERIAL FOR ONE SET _____ SET(S) REQUIRED

BY: _____

DATE: _____

DWG#: _____



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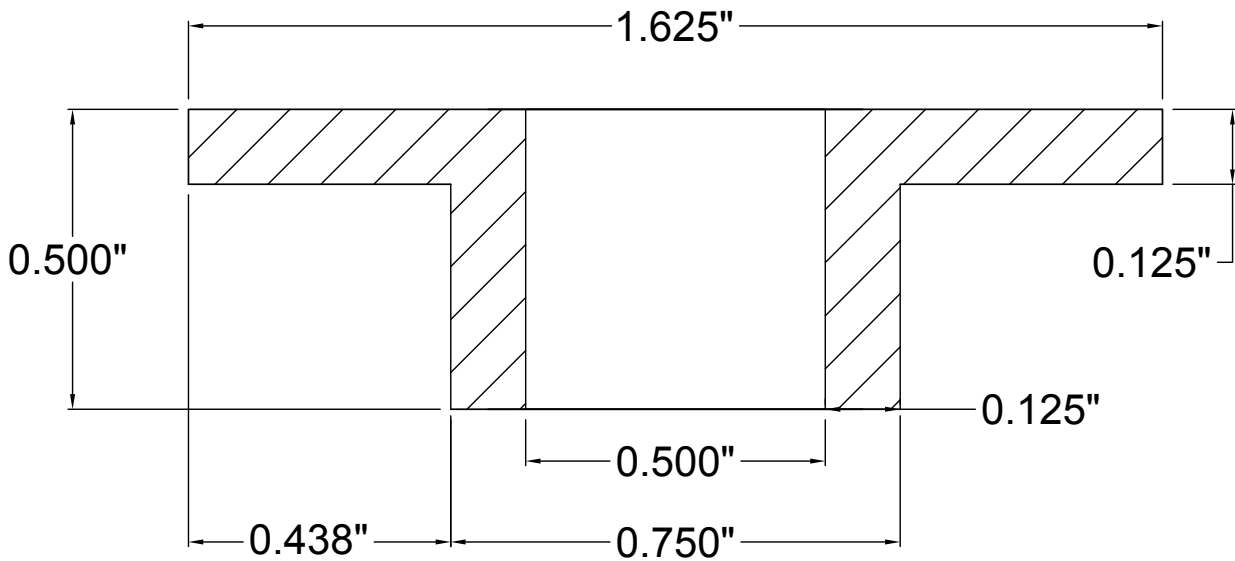
PROJECT: _____

CUSTOMER: _____

HG-50

Bushing

05/03/07



CERTIFICATION DATA

TAG _____

UNIT _____



MOUNT LOCATION PLAN VIEW

1	2
3	4
5	6
7	8
9	10

MATERIAL FOR ONE SET _____ SET(S) REQUIRED

BY: _____

DATE: _____

DWG#: _____

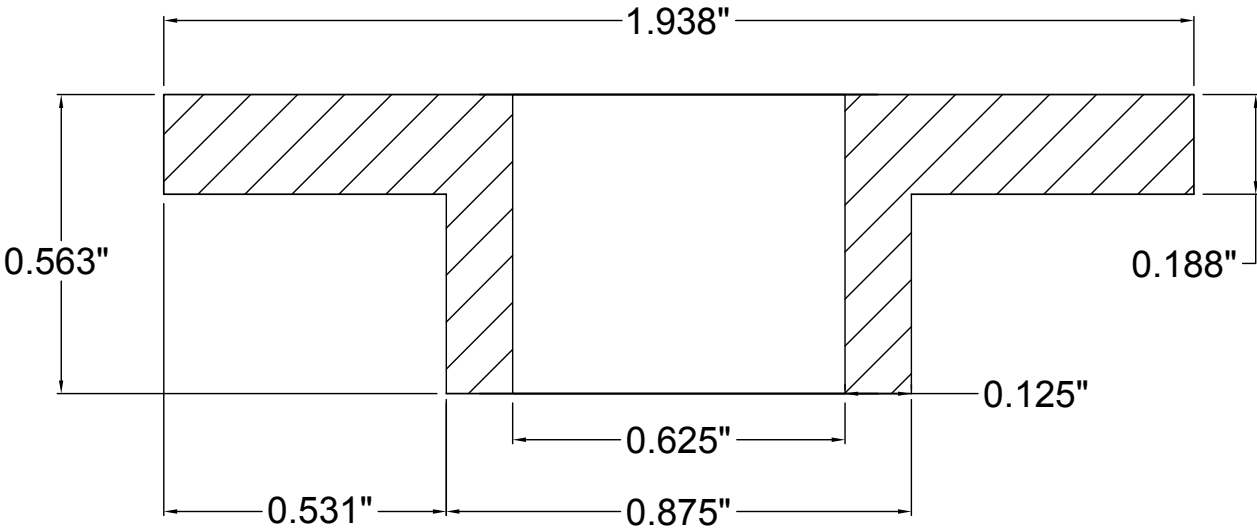


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PROJECT: _____
CUSTOMER: _____

HG-63
Bushing

05/03/07



CERTIFICATION DATA

TAG _____
UNIT _____



MOUNT LOCATION PLAN VIEW

1	2
3	4
5	6
7	8
9	10

MATERIAL FOR ONE SET _____ SET(S) REQUIRED

BY: _____

DATE: _____

DWG#: _____

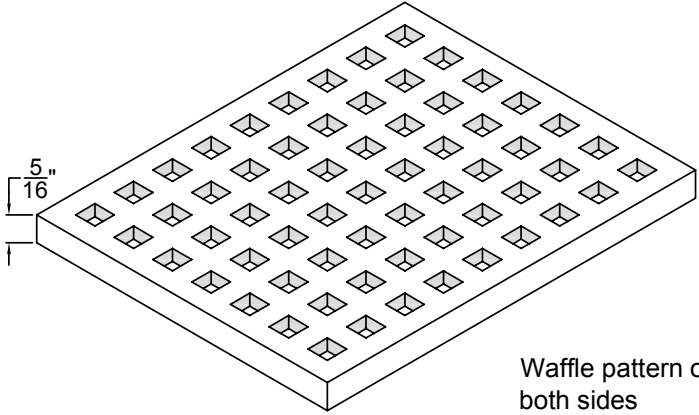


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PROJECT: _____
CUSTOMER: _____

NPW 516

NEOPRENE - WAFFLE
PAD
NPW 516 7/28/16



Waffle pattern on both sides

MODEL	MAX CAPAC. (LBS)	SIZE (IN)
NPW 516 1818	9,720	18 X 18 X 5/16
NPW 516 1212	4,320	12 X 12 X 5/16
NPW 516 0808	1,920	8 X 8 X 5/16
NPW 516 0606	1,080	6 X 6 X 5/16
NPW 516 0404	480	3 X 3 X 5/16
NPW 516 0303	270	4 X 4 X 5/16
NPW 516 0202	120	2 X 2 X 5/16

Any size available

Material: Neoprene - 45 Duro
Maximum Loading: 30 lbs. / sq. in.
Working Range: 15 to 30 lbs. / sq. in.

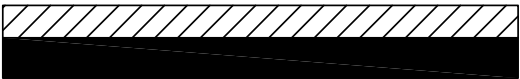
NPW-516

Indicates one layer of pad.



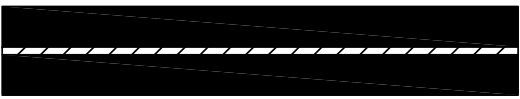
NPW-516-P

Indicates one layer of pad with steel load plate.



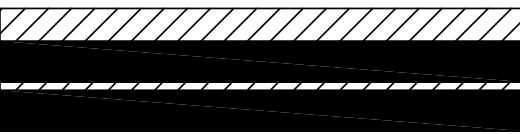
NPW-516-2S

Indicates two layers of pad with galvanized shim.



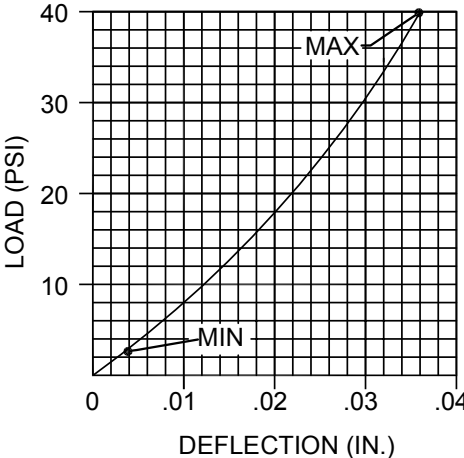
NPW-516-2P

Indicates two layers of pad with steel load plate & shim.



Features:
* "Waffle Pad" design with built-in suction cups on both sides
* No bolting required
* Easy to cut

LOAD (PSI)



DEFLECTION (IN.)

CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____



Novia

A Division of C&P

1 Northwestern Dr.

Salem, NH 03079

Ph: 603-898-8600

Fax: 603-898-2755

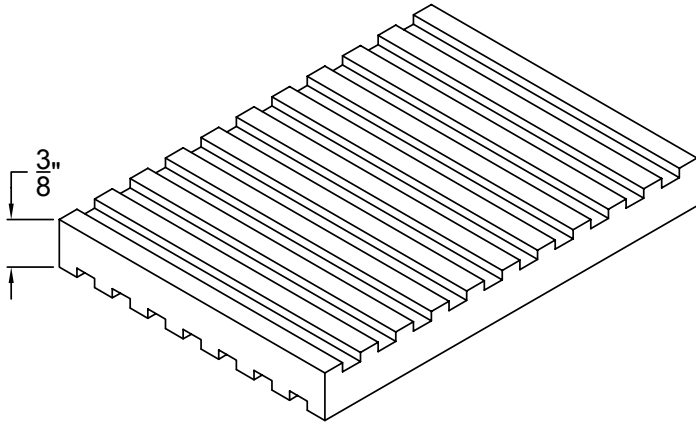
sales@cp-novia.com

PROJECT: _____

CUSTOMER: _____

NPR 38

NATURAL RUBBER
PAD-RIBBED
NPR 38 7/28/16



MODEL	MAX CAPAC. (LBS)	SIZE (IN)
NPR 38 1818	19,440	18 X 18 X 3/8
NPR 38 1212	8,640	12 X 12 X 3/8
NPR 38 0808	3,840	8 X 8 X 3/8
NPR 38 0606	2,160	6 X 6 X 3/8
NPR 38 0404	960	3 X 3 X 3/8
NPR 38 0303	540	4 X 4 X 3/8
NPR 38 0202	240	2 X 2 X 3/8
Any size available		

Material: Natural Rubber 80 Duro

Maximum Loading: 60 lbs. / sq. in.

Working Range: 30 to 60 lbs. / sq. in.

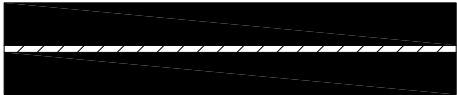
NPR-38 Indicates one layer of pad.



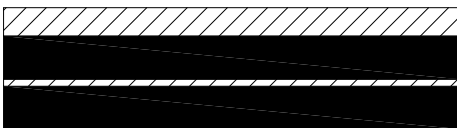
NPR-38-P Indicates one layer of pad with steel load plate.



NPR-38-2S Indicates two layers of pad with galvanized shim.



NPR-38-2P Indicates two layers of pad with steel load plate & shim.

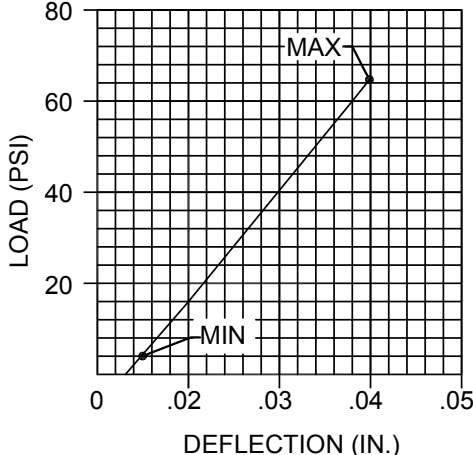


Features:

* Alternate High-Low rib construction

* No bolting required

* Easy to cut



CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____



Novia

A Division of C&P

1 Northwestern Dr.

Salem, NH 03079

Ph: 603-898-8600

Fax: 603-898-2755

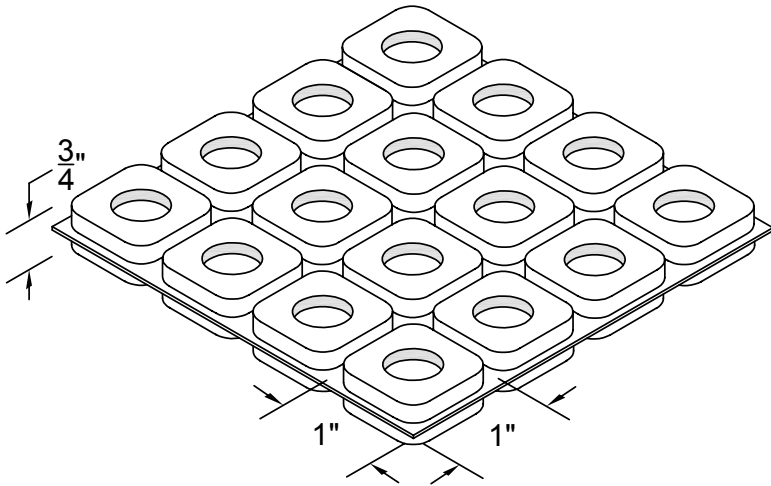
sales@cp-novia.com

PROJECT: _____

CUSTOMER: _____

NPW 75

NEOPRENE - WAFFLE
PAD
NPW 75 7/28/16



MODEL	MAX CAPAC. (LBS)	SIZE (IN)
NPW 75 1818	19,440	18 X 18 X 3/4
NPW 75 1212	8,640	12 X 12 X 3/4
NPW 75 0808	3,840	8 X 8 X 3/4
NPW 75 0606	2,160	6 X 6 X 3/4
NPW 75 0404	960	4 X 4 X 3/4
NPW 75 0202	240	2 X 2 X 3/4
Any size available in 1" increments		

Material: High Quality Ozone & Water Resistant 55 Duro
Elastomer Blend

Maximum Loading: 60 lbs. / sq. in.

Working Range: 15 to 55 lbs. / sq. in.

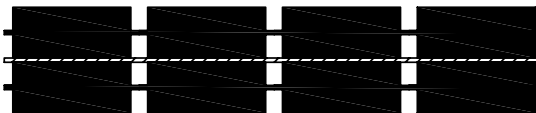
NPW-75 Indicates one layer of pad.



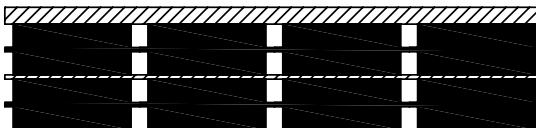
NPW-75-P Indicates one layer of pad with steel load plate.



NPW-75-2S Indicates two layers of pad with galvanized shim.



NPW-75-2P Indicates two layers of pad with steel load plate & shim.

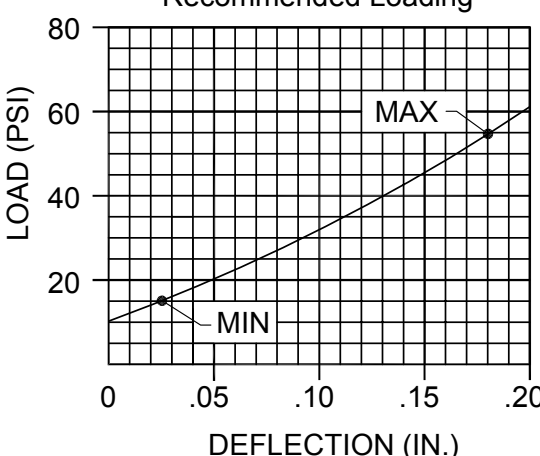


Features:

* "Waffle Pad" design with built-in suction cups on both sides

* No bolting required

* Easy to cut



CERTIFICATION DATA

BY: _____

DATE: _____

DWG#: _____

TERMS & CONDITIONS

1. DEFINITIONS

In these Standard Terms of Sale (“Terms”) the following words shall have the following meanings (unless the context otherwise requires): “Company” means Novia - A division of Carpenter & Paterson., a Delaware corporation; “Contract” means any purchase order, Sales agreement, or other agreement for the sale of Goods between the Company and the Customer to which these Terms apply; “Customer” means the person, firm or company who has placed an order for Goods from the Company; “Delivery Point” means the Company’s address or such other address as the Company may specify to the Customer; and “Goods” means all material goods; and “Services” means intangible products to be supplied under the Contract to the Customer by the Company.

2. GENERAL

2.1 Any quotation is not an offer to sell Goods. All orders by the Customer for the Goods (“Orders”), if accepted by Company in its sole discretion, will be accepted subject only to these Terms. DIFFERENT OR ADDITIONAL TERMS PROPOSED BY CUSTOMER ON OR IN CONNECTION WITH CUSTOMER’S PURCHASE ORDER FORMS OR OTHER DOCUMENTATION, SHALL NOT APPLY TO THE PURCHASE OF GOODS HEREUNDER AND ARE HEREBY EXPRESSLY REJECTED AND SHALL NOT BECOME PART OF THE TRANSACTION. COMPANY’S AGREEMENT TO SELL GOODS TO THE CUSTOMER IS EXPRESSLY LIMITED TO THESE TERMS AND, IF APPLICABLE, A WRITTEN AND SIGNED SUPPLY AGREEMENT BETWEEN THE CUSTOMER AND COMPANY TO WHICH THESE TERMS ARE ATTACHED.

2.2 If, subsequent to this Contract, any sale is concluded with the same Customer by fax, telegram, electronically or orally, or by any combination of these, without express reference to these Terms, these Terms shall apply unless expressly modified in writing, and signed by both the Company and Customer.

2.3 Any statement or representation by the Company or its employees or agents upon which the Customer proposes to change, must be set out in writing and signed by both parties. Any statement or representation which is not so confirmed in writing is followed or acted upon entirely at the Customer’s own risk. For the avoidance of doubt, illustrations, weights, measures, performance capabilities, application suitability information and other data set out in the sales literature of the Company are statements of opinion and are provided for information only and form no part of the Contract.

2.4 Quotations shall be available for acceptance by the Customer for a maximum of sixty (60) days from the date of issue by the Company and may be withdrawn by the Company by written or oral notice to the Customer at any time prior to acceptance of the Order by the Company. Supply or delivery dates quoted may be affected by delays in placing an Order.

2.5 Verbal, telephone, fax, or email Orders will be executed at the Customer’s sole risk and Company will make every effort to confirm in writing receipt by the Company within 72 hours. No order for Goods shall be deemed to have been accepted by Company unless written acknowledgement of acceptance is received by the Customer from the Company or the Order is processed by the Company.

2.6 No Order which has been accepted by the Company may be cancelled by the Customer except with the agreement in writing of the Company and the Customer shall indemnify the Company in full against all loss (including loss of profit), costs (including the cost of all labor and materials used), damages, charges and expenses incurred by the Company as a result of cancellation.

2.7 The Company may cancel an Order at any time by serving notice in writing on the Customer if it does not receive, on request, satisfactory (in the Company’s sole opinion) credit references in relation to the Customer. If the Company cancels an Order pursuant to this Section it shall have no liability whatsoever for any liabilities, losses, damages, costs or expenses whatsoever incurred, suffered or paid by the Customer as a result of or in connection with such cancellation.

2.8 Seller cannot accept any return of goods unless its written permission has been first obtained. Credit will be allowed on the basis of the price charged for the goods less a 20% restocking charge and less any freight charges allowed or paid by Seller. Goods not in first class saleable condition are subject to refusal or higher restocking charges, at the option of Seller. Special Order, non-standard or fabricated goods are not subject to cancellation or return except as specifically specified in writing at time of order.

3. PRICES

3.1 In the supply of Goods, prices do not include the price of delivery or of any import or customs duties or any other applicable taxes or governmental impositions unless otherwise stated in writing by the Company, which taxes, impositions and duties shall be the sole responsibility of the Customer. All prices are subject to the addition of any applicable sales tax.

3.2 The Company reserves the right at any time prior to delivery, to increase the price of the Goods to reflect any increase in the cost to the Company which is due to any factor beyond the control of the Company (including but not limited to, any foreign exchange fluctuation, currency regulation, alteration of duties, significant increase in the costs of labor, materials or any other costs of manufacture), any change in delivery dates, quantities or specifications for the Goods which is requested by the Customer, or any delay caused by any instructions of the Customer or failure of the Customer to give the Company adequate information or instructions.

4. PAYMENT

4.1 Subject to Section 4.2 below, payment of the price for the Goods is due in U.S. Dollars in cash or ACH funds no later than thirty (30) days following shipment of the Goods, unless otherwise agreed in writing.

4.2 If the Customer wrongfully fails to take delivery of the Goods, the Company shall be entitled to invoice for payment by the Customer for the contract price.

4.3 No payment shall be deemed to have been received until the Company has received cleared funds.

4.4 In the event of default in payment by the Customer, the Company shall be entitled (without prejudice to any other right or remedy it may have under these Terms or otherwise) to charge interest on a daily basis (after as well as before judgment) on any amount outstanding at the rate of four percent (4%) above the prime rate published by JPMorgan Chase Bank from time to time.

4.5 In the event of any dispute, the Customer shall not be entitled to withhold payment of the price of the Goods or any payments or to any right of set-off, deduction, counterclaim, reduction or otherwise against any payment due to the Company under any Contract.

4.6 In respect of Goods sold for export, unless otherwise agreed in writing, payment should be made by irrevocable letter of credit confirmed with a clearing bank approved by the Company, or payment prior to fabrication or shipment.

4.7 Time for payment shall be of the essence of the Contract.

4.8 All payments payable to the Company under the Contract shall become due immediately on its termination.

5. DELIVERY

5.1 Unless otherwise agreed in writing by the Company, delivery shall be deemed to take place when the Goods are made available by the Company at the Delivery Point, for collection by the Customer or its carrier at the Company’s premises (“Delivery”).

5.2 Any and all dates and periods specified by the Company for Delivery are estimates only and do not constitute fixed times for delivery. Delivery shall not be of the essence of the Contract and shall not be made of the essence by notice. The Company shall have no liability for any damages, losses, costs or expenses whatsoever or in connection with the failure by the Company to meet any delivery times specified in the Order. The Customer shall have no right to cancel an order for a failure of the Company to meet any delivery times.

5.3 The Company will endeavor to comply with any reasonable request by the Customer for postponement of Delivery but shall be under no obligation to do so and the Customer is obliged to take Delivery at such date and time as specified by the Company. Where postponement is agreed by the Company in writing the Customer shall, if required, pay all costs and expenses including a reasonable charge for storage occasioned thereby and any costs incurred by the Company in relation to any insurance payments reasonably made by it. The Company reserves the right to deliver the Goods to the Customer in partial shipments. Where the Goods are delivered in partial shipments, each Delivery shall constitute a separate contract and failure by the Company to deliver any one or more of the partial shipments in accordance with these Terms or any claim by the Customer in respect of any one or more installments shall not entitle the Customer to treat the Contract as a whole as repudiated.

5.4 The date for Delivery shall in every case be dependent upon prompt receipt of all necessary information, final instructions or approvals from the Customer.

5.5 If the Customer is ordering Goods for Delivery outside of the country of manufacture by the Company, such Goods may be subject to import duties and taxes which are levied when the Goods reach the specified destination. The Customer will be responsible for payment of such import duties and taxes. The Customer will comply with all laws and regulations of the country for which the Goods are destined and the Company will not be liable for any breach of those laws.

5.6 The Customer shall (and shall procure that its sub-contractors and agents shall):
(a) Strictly follow all instructions and installation materials related to the Goods and not make any alteration, modification or addition to the Goods or packaging (and any alteration of the Goods, or use of non-approved parts, products or packaging with the Goods, shall be a material breach of these Terms and voids any warranties made by the Company for the Goods).

6. RISK AND TITLE

- 6.1** Title to the Goods will pass to Buyer upon Buyer’s receipt of monies for the Goods.
- 6.2** Unless otherwise agreed between the Company and the Customer in writing, risk of damage to or loss of the Goods shall pass to the Customer upon Shipment. When Goods are transported by the Company’s own vehicles, Delivery shall be deemed to take place at the moment the Goods are lifted from the Company’s vehicle.
- 6.3** No claim for Goods damaged in transit will be considered by the Company unless the Company used its own transport for Delivery and/or unless:
- (a) An appropriately qualified signature, e.g. “Goods received damaged, (signed)” is clearly made by the Customer on the delivery note; at time of Delivery.
 - (b) The Company is advised in writing per motor carrier rules; unless modified by contract.
 - (c) The Company is advised in writing within three days of receipt of Goods for ocean carriers.
- 6.4** No allowance for claims for short deliveries will be made unless the Company is given an opportunity for verifying same within one (1) week of receipt.
- 6.5** For the avoidance of doubt, where the Customer collects the Goods from the Shipment Point or where a third party delivers the Goods, the Company shall have no liability to the Customer for any Goods damaged in transit.
- 7. WARRANTY AND LIABILITY**
- 7.1** Company has provided its Goods under normal conditions; however, Company does not represent or warrant that the results of those conditions would necessarily avoid injury to persons or property. Company expressly disclaims any warranty or liability for claims arising by reasons of death or personal injury or damage to property resulting from any impact, collision or contact with the Goods or nearby hazards or objects by any vehicle, equipment, object or person, misuse for which it was not intended, or failure of the Customer to strictly comply with Section 5.6.
- 7.2** Company warrants only that the Goods and any component part manufactured by Company will be free from defects in material or workmanship during the Warranty Period (as defined below).
- 7.3** THE FOREGOING WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- 7.4** For defects reported during the Warranty Period,

- Company will, at Company’s election, refund, repair or replace free of charge the Goods or component part manufactured by Company that contains such a defect. Company’s liability is expressly limited to replacement free of charge (in the form and under the terms originally shipped), or to repair or to manufacture/remanufacture by Company, the Goods or parts not complying with Company specifications, or, at Company’s election, to the repayment of an amount equal to the purchase price of the Goods or parts, whether such claims are for breach of warranty or negligence. COMPANY SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL LOSSES, DAMAGES OR EXPENSES OF ANY KIND, INCLUDING, WITHOUT LIMITATION, ANY SUCH LOSSES, DAMAGES OR EXPENSES ARISING DIRECTLY OR INDIRECTLY FROM THE SALE, HANDLING OR USE OF THE GOODS FROM ANY OTHER CAUSE RELATING THERETO, OR FROM PERSONAL INJURY OR LOSS OF PROFIT.
- 7.5** This Warranty is made to the direct Buyer from the Company and does not extend to any other person or entity and is not assignable, except that this warranty will transfer to a commercial buyer, buying directly from a Customer who is an authorized distributor of the Company and party to a distributor or Sales agreement with Company.
- 7.6** Any claim with respect to the Goods and any component parts manufactured by the Company and sold hereunder shall be deemed waived by the Customer unless Company is notified in writing, in the case of defects apparent on visual inspection, within sixty (60) days from the delivery date, or, in the case of defects not apparent on visual inspection, within twelve (12) months from the said delivery date (such 60 days or 12 months, as applicable, the “Warranty Period”). The Goods claimed to be defective may be returned prepaid to Company’s plant for inspection in accordance with return shipping instructions that Company shall furnish to the Customer forthwith upon receipt of the Customer’s notice of claim. If the claim is established, Company will reimburse the Customer for all shipping costs incurred in connection with such return.
- 7.7** The foregoing warranty shall not apply (a) if the Goods have been subject to improper storage, accident, misuse or unauthorized modifications or alterations, or have not been installed, operated, and maintained in accordance with procedures approved by the Company, or (b) to any components manufactured by the Customer or a third party not approved by the Company.
- 7.8** The Customer shall indemnify and keep the Company indemnified in full against all and any direct, indirect or consequential liabilities (all three of which terms include without limitation loss of profit, loss of business, depletion of goodwill and like loss), losses,

- claims, damages, costs and expenses (including all legal and other professional expenses) awarded against or incurred or paid by the Company as a result of or in connection with any breach of the Contract by the Customer and death or personal injury to the Company’s employees or agents while such employees or agents are on any premises of the Customer in connection with the Contract. Without limiting the foregoing, the Customer shall indemnify the Company against all claims by any third parties for any claims, loss, damage or expense resulting from the breach by the Customer of any of its obligations under these Terms, including without limitation, any modification, misuse, or unapproved alteration of, or use of non-approved components with, the Goods.
- 8. TERMINATION**
- 8.1** The Company shall be entitled, without prejudice to the Company’s other rights and remedies, either to terminate wholly or in part any or every Contract between the Company and the Customer and/or to suspend any further deliveries of Goods in any of the following circumstances:
- (a) Non-compliance by the Customer with the Company’s terms of payment; or
 - (b) If the Customer has failed to provide a letter of credit or guarantee, or any other security required by the Contract reasonably requested by Company; or
 - (c) upon the Customer’s dissolution, insolvency, filing of a voluntary or involuntary petition under any law relating to bankruptcy, appointment by a court of a temporary or permanent receiver, trustee or custodian for the Customer’s business, or an assignment for the benefit of creditors, of the Customer;
 - (d) the Customer becomes unable to satisfy its debts as they fall due or ceases or threatens to cease to carry on business;
 - (e) the Customer or any connected person commits any breach of this or any other Contract whenever made between the Customer and the Company; or
 - (f) there has been, or the Company suspects that there has been, a breach or there has been a breach of any of the provisions of Section 13 below.
- 9. CONFIDENTIALITY AND INTELLECTUAL PROPERTY RIGHTS**
- 9.1** All intellectual property, including without limitation, all drawings, installation instructions, documents, confidential records, computer software and other information supplied by the Company or otherwise obtained by the Customer, whether produced by itself or a third party, are supplied on the express understanding that all intellectual property rights are reserved to the Company (or the third party) and that the Customer will not, without the written consent of the Company, give away, loan, exhibit or sell any such intellectual property or other information or extracts from them, or copies of

- them, or use them in any way except in connection with the Goods in respect of which they are issued.
- 9.2** All claims for alleged infringement of patents, trademarks, registered designs, design rights or copyright received by the Customer relating to the Goods must be notified immediately to the Company. If requested by the Company, the Company shall be entitled to have conduct of any proceedings relating to any such claim in such manner as the Company thinks fit and the Customer will provide the Company such reasonable assistance as the Company may request. The cost of any such proceedings will be borne by the Company.
- 9.3** If any allegations shall be made against the Customer to the effect that the supply of the Goods infringes the intellectual property rights of any third party or the Company has reason to believe that such allegation is likely to be made, the Company may at its option and expense modify or replace the Goods so as to avoid the infringement (but without adversely affecting the overall performance of the Goods), or obtain for the benefit of the Customer the right to continue to use the Goods, or repurchase the Goods at the Contract Price as reduced by a reasonable provision for depreciation. If the Company pursues any of such options, the Customer will have no rights or remedies against the Company arising directly or indirectly out of the alleged infringement.
- 10. FORCE MAJEURE**
- In the event of the performance of any obligation by the Company being prevented, delayed or in any way interfered with by war, riot, civil unrest, strikes, lock-outs, accidents, flood, fire, explosion, or by any other cause beyond its reasonable control (including the delay or failure to supply of any suppliers of the Company) the Company may suspend or treat as impossible the performance of any obligation to the Customer without liability for any loss.
- 11. HEALTH AND SAFETY**
- The Customer agrees to pay due regard to any information supplied by the Company relating to the use for which the Goods are designed or have been tested or concerning conditions necessary to ensure that they will be safe and without risk to health at all times when they are being set, used, cleaned, serviced or maintained by any person and the Customer undertakes to take such steps as may be specified by such information or otherwise necessary to ensure that as far as is reasonably practicable the Goods will be safe and without risk to health at all times as mentioned above.
- 12. TESTING AND INSPECTION**
- 12.1** Testing and inspection if specified by the Customer or his agent shall be at the Company’s desired location (at the Customer’s expense) and such testing and

inspection shall be final and conclusive as to the results thereof.

12.2 The Company shall not be obliged to produce test and performance certificates or safety critical certificates unless requested by the Customer and accepted by the Company in writing.

12.3 In addition to any costs incurred by the Company in testing the Goods the Customer shall pay for all test pieces which comply with specification.

13. COMPLIANCE

13.1 The Customer shall comply with all relevant laws, including any applicable anti-corruption laws in connection with the Contract and the Company’s business and shall immediately notify the Company if it discovers or suspects that any of its officers, directors, employees or representatives are acting or have acted in a way which violates such laws.

13.2 The Customer acknowledges that the Company has a code of responsible business: The Hill & Smith Holdings PLC Code of Business Conduct (“HS Code of Conduct”). The HS Code of Conduct together with the Company’s Anti-Bribery and Corruption Policy (“HS ABC Policy”) are available at www.hsholdings.co.uk and the Customer shall, at all times, conduct, and procure that its officers, directors, employees and/or representatives conduct, business ethically and in accordance with the relevant provisions of the HS Code of Conduct and the HS ABC Policy, as each may be updated from time to time. This clause shall apply whether or not the Customer is acting pursuant to the Contract or its relationship with the Company.

13.3 The Customer agrees that it must be able to demonstrate its compliance with the requirements referred to in this Section 13 at the request of and to the satisfaction of the Company. If the Customer fails to comply with this Section 13, the Company shall be entitled, in its sole discretion, to terminate the Contract and any other agreements between the Customer and the Company without penalty to the Company, but with obligations for the Customer to remedy any damages suffered by the Company as a result of such termination or as a result of the breach of contract.

14. MISCELLANEOUS

14.1 In the case of any Order for the export of Goods, the Schedule to the Uniform Law on International Sales Act 1967 shall not in any circumstances apply to the Contract and neither shall the limits imposed by the Unfair Contract Terms Act 1977 on the extent to which liability can be excluded or limited. The United Nations Convention on Contracts for the International Sale of Goods shall have no application to the purchase of Goods, these Terms or actions hereunder or

contemplated hereby.

14.2 Any failure to exercise or any delay by the Company in exercising a right or remedy provided by this Contract or at law or in equity will not constitute a waiver of the right or remedy or a waiver of any other rights or remedies. A waiver of a breach of any of the terms of the Contract or of a default under these Terms will not constitute a waiver of any other breach or default and will not affect the other terms of the Contract.

14.3 The Customer shall not, without the written consent of the Company, assign (including by operation of law), transfer, mortgage, or grant a lien on any of its rights under any Contract or purport to do the same.

14.4 The Company shall be entitled to appoint one or more sub-contractors to carry out all or any of its obligations under any Contract and shall for the avoidance of doubt be entitled to assign any interest or rights that it has in relation to any Contract.

14.5 If any provision of these Terms shall be held invalid or unenforceable in whole or in part then the unaffected provisions shall remain in full force and effect. Headings appear for convenience only and shall not affect the construction of these Terms.

14.6 The Contract and any non-contractual obligations arising out of or in connection with it shall be governed and interpreted exclusively according to the laws of the State of Massachusetts. The parties hereby agree to submit to the exclusive jurisdiction of the courts in Pennsylvania provided that the Company may at its option file suit in the state in which the Customer is organized or located, including action to obtain any remedy (including injunctive relief).

14.7 There are no third party beneficiaries to these Terms.

15. SERVICES WARRANTY AND LIABILITY

Provided that the Company has been notified, within a reasonable time, not to exceed sixty (60) days, from completion of the contracted Service to the customer, of any verified errors or deficiencies in the Service; the Company will proceed to correct the error(s) or deficiency (ies) for the Customer at no cost. This rework will constitute the Company’s sole liability for errors, deficiencies, defects or other non-conformance. However, no other direct or indirect expenses, material costs to the customer, as a result of any and all corrections made, will be accepted by the Company.

CARPENTER & PATERSON

For over 100 years, Carpenter & Paterson, Inc. has been the premier pipe hanger and support choice for the construction industry. Our manufacture and distribution of a complete line of pipe hangers and supports for commercial and industrial applications, in accordance with ASME B31.1 and MSS-SP58, have been specified and installed on major water treatment, pharmaceutical, process piping, petro-chemical, hospital, and school buildings as well as many other industrial projects throughout the world.



Our sales and engineering group offer a full range of experience in the areas of product design and value engineering and are available to discuss your project needs. With seven stocking locations in the continental United States, our products and services are always available to meet your requirements.

Carpenter & Paterson, Inc. products and the “Witch” trademark are synonymous in the pipe support industry for quality. Our mission is to support the mechanical industry with timely estimates, efficient designs, and full-line inventories that will allow us to meet our customers’ critical schedules.

With the acquisition of Novia Associates, Carpenter & Paterson further expands our offerings to include the quality engineered seismic and vibration products designed by an industry leading manufacturer.

ARE YOU READY TO HANG WITH THE BEST?

SALES & DISTRIBUTION

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445 North Smith Ave.
Corona, CA 92880
Tel: 323-622-1830
Fax: 323-622-1837

Canada

921 Bartown Street
Stoney Creek,
ON L8E 5P5, Canada
Tel: 289-656-1599

Eastern Regional Service Center

Covering NY, NJ, MD, PA, VA,
DC & DE
2 Altran Court
Bordentown, NJ 08505
Tel: 800-342-6437
Fax: 609-298-1534

Louisiana:

434 Latigue Road
Waggaman, LA 70094
Tel: 504-431-7722
Fax: 504-431-7900

Massachusetts:

225 Merrimac Street
Woburn, MA 01801
Tel: 781-935-2950
Fax: 781-935-7664

Pennsylvania:

484 Galiffa Drive
Donora Industrial Park
Donora, PA 15033
Tel: 724-379-8461
Fax: 724-379-8463

EXECUTIVE OFFICE

Novia Headquarters

1 Northwestern Dr.
Salem, NH 03079
Tel: 603-898-8600
Fax: 603-898-2755



Carpenter & Paterson, Inc.

225 Merrimac Street
Woburn, MA 01801
Tel: 781-935-2950
Fax: 781-935-7664

For ordering information please call Novia at (603) 898-8600 or email us at sales@cp-novia.com.