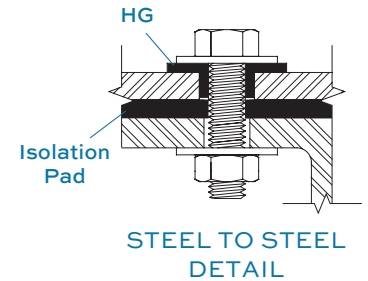
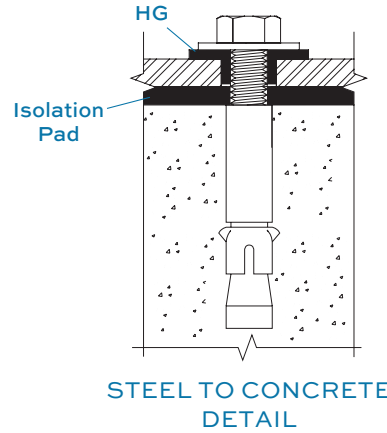
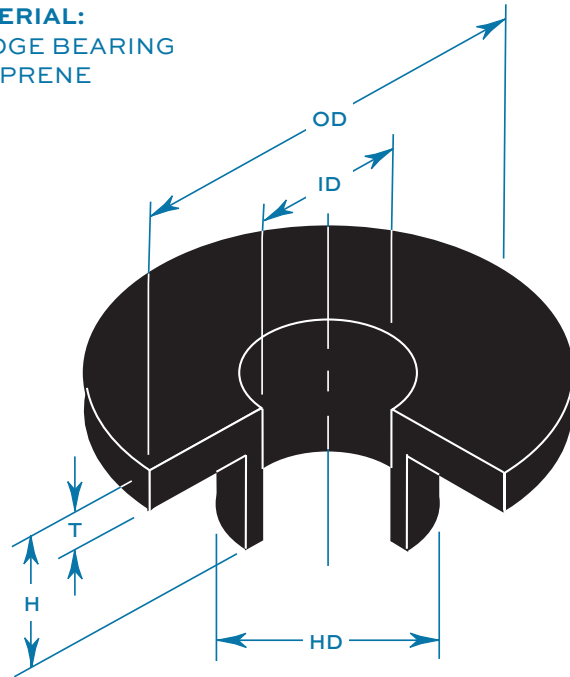


BOLT ISOLATION WASHER BUSHINGS

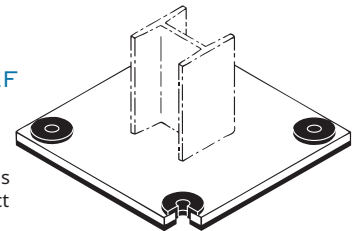


MATERIAL:
BRIDGE BEARING
NEOPRENE



BOLT ISOLATOR AND SEISMIC RELIEF APPLICATION

HG Washer Bushings may be used without isolation pads to limit bolt shear from impact



TYPE HG DIMENSIONS

Type & Size	Bolt Diameter*		Allowable Shear Load in a Steel to Steel Connection		Allowable Tension Load in a Steel to Steel Connection		ID		HD		OD		T		H	
	(in)	(mm)	(lb)	(kg)	(lb)	(kg)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
HG-25	1/4	6	490	222	980	445	1/4	6	1/2	13	1	25	1/8	3	3/8	10
HG-38	3/8	10	1100	499	2200	998	3/8	10	5/8	16	1 1/4	32	1/8	3	1/2	13
HG-50	1/2	13	1960	889	3920	1778	1/2	13	3/4	19	1 5/8	41	1/8	3	1/2	13
HG-63	5/8	16	3070	1393	6140	2785	5/8	16	7/8	22	2	51	3/16	5	5/8	16
HG-75	3/4	19	4420	2005	8840	4010	3/4	19	1	25	2 1/4	57	3/16	5	5/8	16
HG-100	1	25	7850	3561	15700	7121	1	25	1 1/4	32	2 3/4	70	1/4	6	7/8	22
HG-125	1 1/4	32	12270	5566	24540	11131	1 1/4	32	1 1/2	38	3 1/4	83	1/4	6	7/8	22
HG-150	1 1/2	38	17670	8015	35340	16300	1 1/2	38	1 3/4	45	3 3/4	95	1/4	6	1	25

*Retention strength based on diameter of anchor bolt and anchoring method.

AASHTO BRIDGE BEARING SPECIFICATIONS FOR NEOPRENE

ORIGINAL PHYSICAL PROPERTIES			TESTED FOR AGING				COMPRES- SION SET
Tests: ASTM D-2240 & D-412			Oven Aging (70hrs/212°F) ASTM D-573			Ozone ASTM D-1149	ASTM D-395
Duro- meter Shore A	Tensile Strength (min)	Elongat. at Break (min)	Hard- ness (max)	Tensile Strength (max)	Elongat. at Break (max)	100 pphm in air by Vol. 20% Strain 100°F	22 hrs/212°F Method B
40±5	2000 psi	450%	15	-15%	-40%	No Cracks	30% (max)
50±5	2250 psi	400%	15	-15%	-40%	No Cracks	35% (max)
60±5	2250 psi	350%	15	-15%	-40%	No Cracks	35% (max)
70±5	2250 psi	300%	15	-15%	-40%	No Cracks	35% (max)

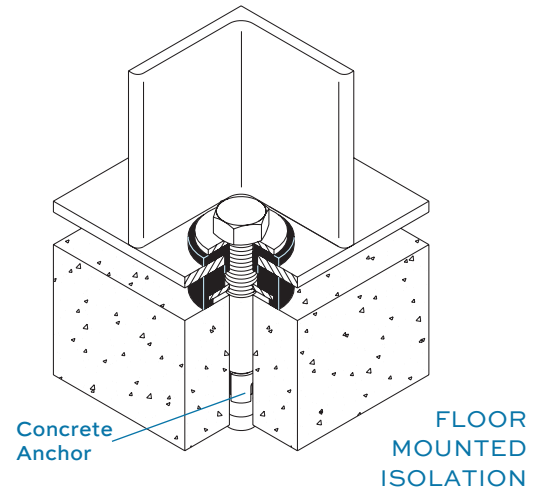
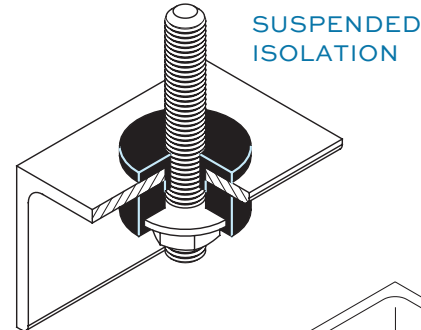
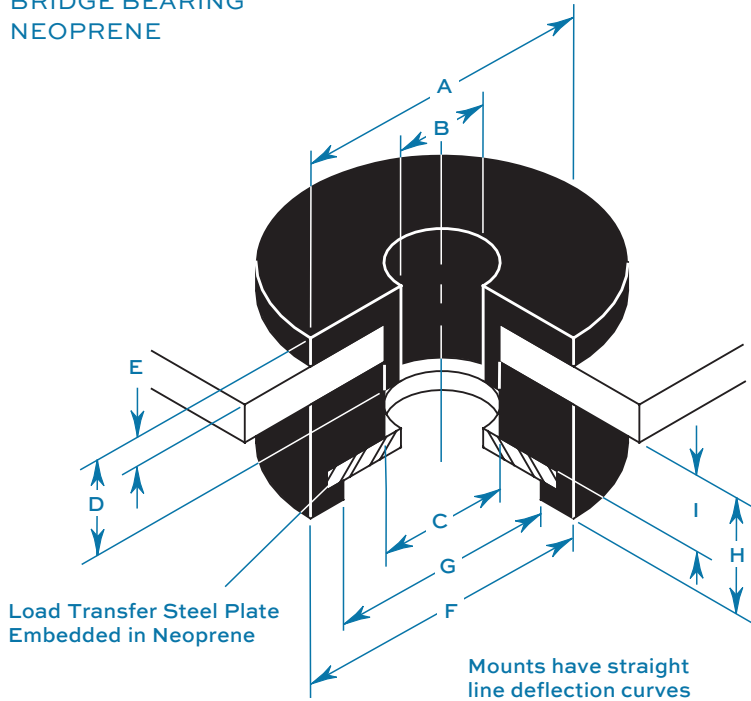
NOTE: 40 Durometer is not included in AASHTO Specifications. Numbers are Mason standard.

HANGER MOUNT ISOLATED BUSHINGS



Used for Suspended or Floor Mounted Equipment

MATERIAL:
BRIDGE BEARING
NEOPRENE



TYPE HMIB DIMENSIONS

Type & Size	A		B		C		D		E		F		G		H		I		Rated Load		Rated Defl.	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(lb)	(kg)	(lb)	(kg)
HMIB-1/4	1	25	1/4	6	1/2	13	3/8	10	1/8	3	1 1/2	38	1	25	1/2	13	3/8	10	60	27	.075	1.9
HMIB-3/8	1 1/4	32	3/8	10	5/8	16	1/2	13	1/8	3	1 3/4	45	1 1/4	32	5/8	16	1/2	13	70	32	.095	2.4
HMIB-1/2	1 5/8	41	1/2	13	3/4	19	1/2	13	1/8	3	1 3/4	45	1 1/4	32	5/8	16	1/2	13	100	45	.095	2.4
HMIB-5/8	2	51	5/8	16	7/8	22	5/8	16	3/16	5	2	51	1 1/2	38	3/4	19	1/2	13	120	54	.110	2.8

AASHTO BRIDGE BEARING SPECIFICATIONS FOR NEOPRENE

ORIGINAL PHYSICAL PROPERTIES	TESTED FOR AGING						COMPRESSION SET
	Oven Aging (70hrs/212°F) ASTM D-573			Ozone ASTM D-1149 100 pphm in air by Vol. 20% Strain 100°F			
Tests: ASTM D-2240 & D-412 Duro- meter Shore A	Tensile Strength (min)	Elongat. at Break (min)	Hard- ness (max)	Tensile Strength (max)	Elongat. at Break (max)	No Cracks	ASTM D-395 22 hrs/212°F Method B
40±5	2000 psi	450%	15	-15%	-40%	No Cracks	30% (max)
50±5	2250 psi	400%	15	-15%	-40%	No Cracks	35% (max)
60±5	2250 psi	350%	15	-15%	-40%	No Cracks	35% (max)
70±5	2250 psi	300%	15	-15%	-40%	No Cracks	35% (max)

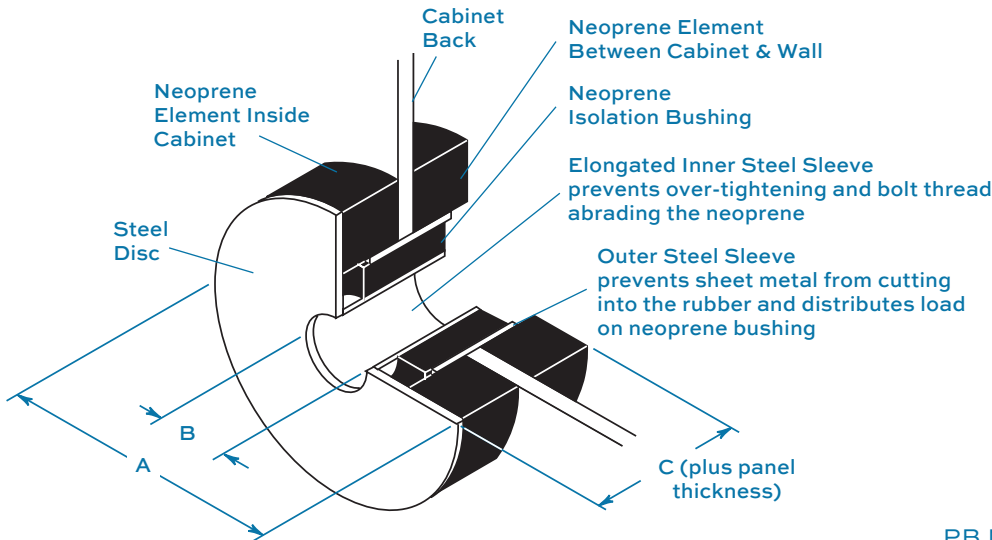
NOTE: 40 Durometer is not included in AASHTO Specifications. Numbers are Mason standard.



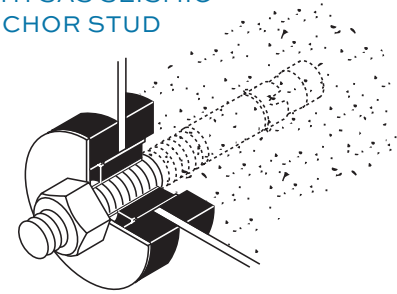
PANEL BOARD MOUNTS



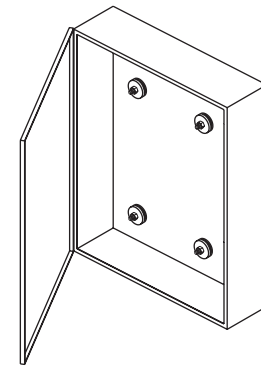
MATERIAL:
BRIDGE BEARING NEOPRENE AND
ELECTROGALVANIZED STEEL



PB MOUNT WITH SAS SEISMIC ANCHOR STUD



PB MOUNTS INSTALLED IN CABINET



TYPE PB CAPACITY AND DIMENSIONS

Type & Size	Rated Capacity (in) (mm)		A Diameter (in) (mm)		B Diameter (in) (mm)		C Diameter (in) (mm)		Hole Size to Be Drilled in Panel Board (in) (mm)		Bolt Diameter (in) (mm)	
PB-150	20	9	1 1/2	38	5/16	8	3/4	19	1	25	1/4	6
PB-175	35	16	1 3/4	44	7/16	11	7/8	22	1 1/8	29	3/8	10
PB-225	75	34	2 1/4	57	9/16	14	1 1/8	29	1 1/4	32	1/2	13

AASHTO BRIDGE BEARING SPECIFICATIONS FOR NEOPRENE

ORIGINAL PHYSICAL PROPERTIES			TESTED FOR AGING				COMPRES- SION SET
Tests: ASTM D-2240 & D-412			Oven Aging (70hrs/212°F) ASTM D-573			Ozone ASTM D-1149	ASTM D-395
Duro- meter Shore A	Tensile Strength (min)	Elongat. at Break (min)	Hard- ness (max)	Tensile Strength (max)	Elongat. at Break (max)	100 pphm in air by Vol. 20% Strain 100°F	22 hrs/212°F Method B
40±5	2000 psi	450%	15	-15%	-40%	No Cracks	30% (max)
50±5	2250 psi	400%	15	-15%	-40%	No Cracks	35% (max)
60±5	2250 psi	350%	15	-15%	-40%	No Cracks	35% (max)
70±5	2250 psi	300%	15	-15%	-40%	No Cracks	35% (max)

NOTE: 40 Durometer is not included in AASHTO Specifications. Numbers are Mason standard.

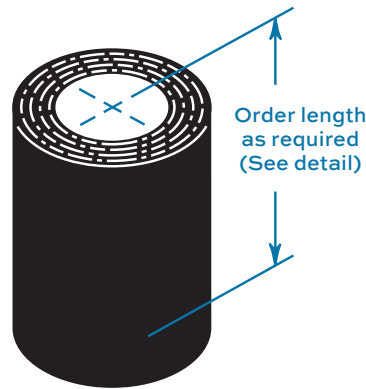
NEOPRENE IMPREGNATED DUCK BUSHINGS & DUCK WASHERS



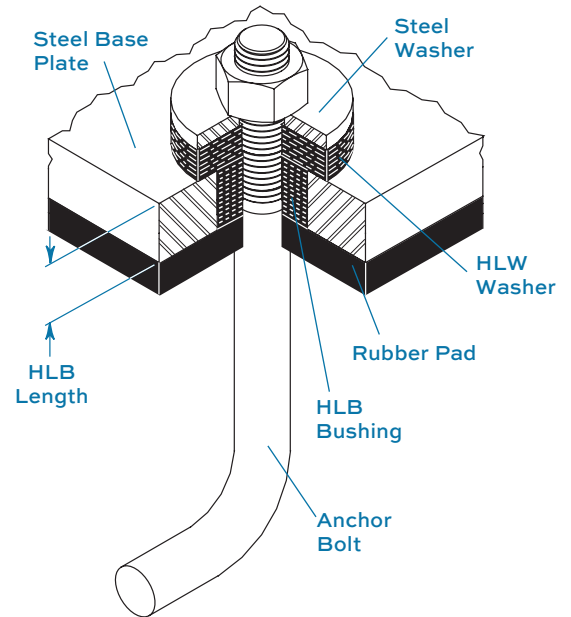
TYPE HLB DIMENSIONS

Type	Nominal Size & Bolt Dia.		Standard Bushing ID x OD*	
	(in)	(mm)	(in)	(mm)
HLB-	3/8	10	13/32 x 7/8	12 x 22
	1/2	13	17/32 x 1	15 x 25
	5/8	16	21/32 x 11/8	18 x 29
	3/4	19	25/32 x 11/4	21 x 32
	7/8	22	29/32 x 13/8	24 x 35
	1	25	11/32 x 11/2	27 x 38
	11/8	29	15/32 x 15/8	31 x 41
	11/4	32	19/32 x 13/4	34 x 44
	11/2	38	117/32 x 2	40 x 51
	13/4	44	125/32 x 21/4	46 x 57
	2	51	21/32 x 21/2	53 x 64

HLB NEOPRENE IMPREGNATED DUCK BUSHINGS



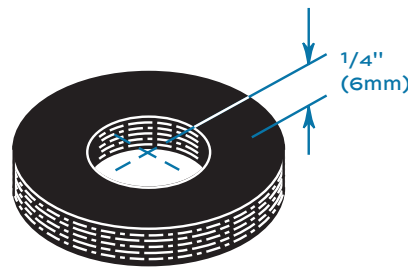
*Order length as required.
Maximum length is 19" (483mm).



TYPE HLW DIMENSIONS

Type	Nominal Size & Bolt Dia.		Washer Size ID x OD	
	(in)	(mm)	(in)	(mm)
HLW-	3/8	10	7/16 x 1	11 x 25
	1/2	13	9/16 x 13/8	14 x 35
	5/8	16	11/16 x 13/4	17 x 44
	3/4	19	13/16 x 2	21 x 51
	7/8	22	15/16 x 21/4	24 x 57
	1	25	11/16 x 21/2	27 x 64
	11/8	29	11/4 x 23/4	32 x 70
	11/4	32	13/8 x 3	35 x 76
	11/2	38	15/8 x 31/2	41 x 89
	13/4	44	17/8 x 4	48 x 102
	2	51	21/8 x 41/2	54 x 114

HLW NEOPRENE IMPREGNATED DUCK WASHERS



Custom sizes and thicknesses as needed.
Washers may be square.