



Weaver

CONSTRUCTION MANAGEMENT

3679 S Huron Street, Suite 404 Englewood, Colorado 80110

Phone: (303) 789-4111 FAX: (303) 789-4310

SUBMITTAL TRANSMITTAL

August 17, 2012

Submittal No: 15070-001

PROJECT: **Harold Thompson Regional WRF**
Birdsall Rd.
Fountain, CO 80817
Job No. 2908

ENGINEER: **GMS, Inc.**
611 No. Weber St., #300
Colorado Springs, CO 80903
719-475-2935 Roger Sams

OWNER: **Lower Fountain Metropolitan
Sewage Disposal District**
901 S. Santa Fe Ave.
Fountain, CO 80817
719-382-5303 James Heckman

CONTRACTOR: **Mesa Plumbing**
Gary Cunningham
gcunninghamph@qwestoffice.net

SUBJECT: Plumbing Pipe Support for the Operation Building

SPEC SECTION: 15070: Pipe Supports

PREVIOUS SUBMISSION DATES:

DEVIATIONS FROM SPEC: ___ YES X NO

CONTRACTOR'S STAMP: This submittal has been reviewed by Weaver Construction Management and, unless indicated otherwise, has been found to be in conformance with the intent of the contract documents.

Contractor's Stamp:

Date: 8/17/12

Reviewed by: John Jacob

() Reviewed Without Comments

(X) Reviewed With Comments

Engineer's Stamp:

ENGINEER'S
COMMENTS: _____



Project: HDTWRF Project

Location: Fountain, CO

Supplier: Mesa Plumbing

Date: 8/17/12

Submittal 15070-001 Plumbing Pipe Support for the Operation Building

Additional Submittal Review Comments:

1. Mesa Plumbing proposes to use galvanized for the swivel hangers and plain steel for the clevis. Sizes are dependent upon piping size .

End of Review by WCM.

John Jacob

From: gary cunningham [gcunninghamph@qwestoffice.net]
Sent: Friday, August 17, 2012 7:25 AM
To: John Jacob
Subject: RE: Emailing: hangers

Galvanized for the swivel hangers and plain steel for the clevis.

Gary Cunningham
Mesa Plumbing and Heating Inc.
Office #: 719-593-7071
Cell #: 719-661-9769

-----Original Message-----

From: John Jacob [<mailto:john@weavercm.com>]
Sent: Thursday, August 16, 2012 3:27 PM
To: gary cunningham
Subject: RE: Emailing: hangers

What finish are you proposing?

-----Original Message-----

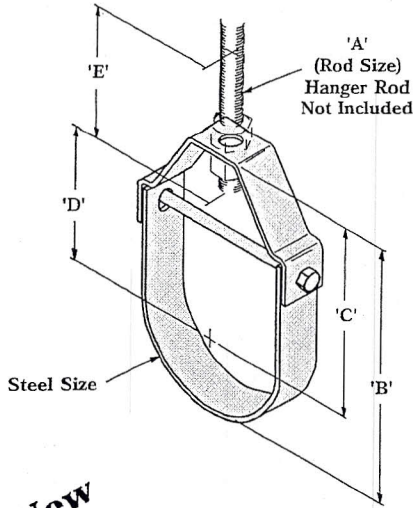
From: gary cunningham [<mailto:gcunninghamph@qwestoffice.net>]
Sent: Tuesday, August 14, 2012 7:50 AM
To: John Jacob
Subject: Emailing: hangers

Jonh,
The attached is the type of hangers we intend to use for all pipe types at the WRF project.
Gary Cunningham
Mesa Plumbing
Your message is ready to be sent with the following file or link
attachments:

hangers

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

PIPE HANGERS



New

*Slide-Rite™ Clevis Hanger design, as shown above, for sizes 2, 2½, 3, 4, 5 & 6.

- 'B' Bottom of pipe to top of hanger.
- 'C' Center of pipe to top of hanger.
- 'D' Rod Take-Out Center of pipe to bottom of hanger rod.
- 'E' Minimum thread length of hanger rod
- 'F' Adjustment Top of cross bolt to bottom of hanger rod nut inside the hanger.



Material: Steel

Standard Finish: Plain, Electro-Plated, Dura-Green® or Hot-Dipped Galvanized

Service: Designed for suspending non-insulated stationary pipe allowing for vertical adjustment.

Ordering: Specify part number and finish.

Approvals: Underwriter's Laboratories Listed for ¾" (20) thru 12" (300). Complies with Federal Specification WW-H-171E Type 1 and Manufacturers' Standardization Society SP-69 & SP-58 Type 1.

For Stainless Steel, see B3105, page 41.
For AWWA - Ductile Iron, see B3102, page 40.

Note: When using oversized clevis hangers, install B3100PS (Pipe Sleeve) over cross bolt to prevent deformation of clevis bottom.

When attaching seismic bracing to clevis hangers, a B3100PS (Pipe Sleeve) must be installed over the cross bolt (see Seismic Restraints Brochure).

Order pipe sleeves B3100PS-(pipe size) separately.

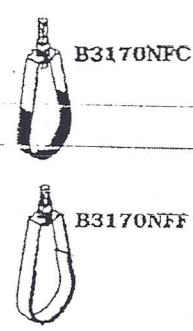
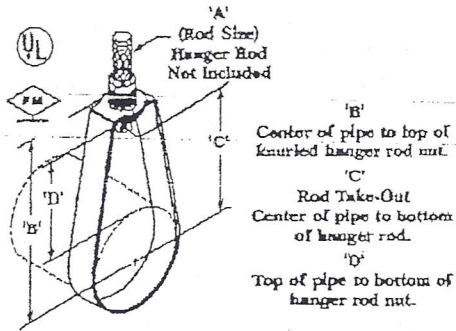
Figure B3100 Standard Clevis Hanger

(Available with plastic coating as B3100C-size or felt lined as B3100F-size)

Part No.	Nominal Pipe Size	Rod Size 'A'	Upper		Lower		'B'		
			Steel Size	Steel Size	Steel Size	Steel Size			
B3100-½	½"	(15)	⅜"-16	⅛" x 1"	(3.2 x 25.4)	⅛" x 1"	(3.2 x 25.4)	2⅛"	(54.0)
B3100-¾	¾"	(20)	⅜"-16	⅛" x 1"	(3.2 x 25.4)	⅛" x 1"	(3.2 x 25.4)	2⅞"	(61.9)
B3100-1	1"	(25)	⅜"-16	⅛" x 1"	(3.2 x 25.4)	⅛" x 1"	(3.2 x 25.4)	2 ¹³ / ₁₆ "	(71.4)
B3100-1¼	1¼"	(32)	⅜"-16	⅛" x 1"	(3.2 x 25.4)	⅛" x 1"	(3.2 x 25.4)	3 ⁷ / ₁₆ "	(87.3)
B3100-1½	1½"	(40)	⅜"-16	⅛" x 1"	(3.2 x 25.4)	⅛" x 1"	(3.2 x 25.4)	4"	(101.6)
B3100-2*	2"	(50)	⅜"-16	⅛" x 1"	(3.2 x 25.4)	⅛" x 1"	(3.2 x 25.4)	4½"	(114.3)
B3100-2½*	2½"	(65)	½"-13	⅛" x 1¼"	(3.2 x 31.7)	⅛" x 1¼"	(3.2 x 31.7)	5 ⁹ / ₁₆ "	(141.3)
B3100-3*	3"	(80)	½"-13	⅜" x 1¼"	(4.8 x 31.7)	⅛" x 1¼"	(3.2 x 31.7)	6¾"	(171.4)
B3100-3½	3½"	(90)	½"-13	⅜" x 1¼"	(4.8 x 31.7)	⅜" x 1¼"	(4.8 x 31.7)	7"	(177.8)
B3100-4*	4"	(100)	⅝"-11	⅜" x 1¼"	(4.8 x 31.7)	⅜" x 1¼"	(4.8 x 31.7)	7 ¹³ / ₁₆ "	(198.4)
B3100-5*	5"	(125)	⅝"-11	⅜" x 1¼"	(4.8 x 31.7)	⅜" x 1¼"	(4.8 x 31.7)	9 ¹ / ₁₆ "	(230.2)
B3100-6*	6"	(150)	¾"-10	⅜" x 1½"	(4.8 x 38.1)	⅜" x 1½"	(4.8 x 38.1)	10 ⁷ / ₁₆ "	(265.1)
B3100-8	8"	(200)	¾"-10	¼" x 1¾"	(6.3 x 44.4)	⅜" x 1¾"	(4.8 x 44.4)	12¾"	(323.8)
B3100-10	10"	(250)	7/8"-9	⅜" x 1¾"	(9.5 x 44.4)	¼" x 1¾"	(6.3 x 44.4)	15¼"	(387.3)
B3100-12	12"	(300)	7/8"-9	⅜" x 2"	(9.5 x 50.8)	¼" x 2"	(6.3 x 50.8)	17 ⁵ / ₈ "	(447.7)
B3100-14	14"	(350)	1"-8	½" x 2"	(12.7 x 50.8)	¼" x 2"	(6.3 x 50.8)	19 ⁹ / ₁₆ "	(496.9)
B3100-16	16"	(400)	1"-8	½" x 2½"	(12.7 x 63.5)	¼" x 2½"	(6.3 x 63.5)	21 ⁷ / ₁₆ "	(544.5)
B3100-18	18"	(450)	1"-8	½" x 2½"	(12.7 x 63.5)	¼" x 2½"	(6.3 x 63.5)	25"	(635.0)
B3100-20	20"	(500)	1¼"-7	⅝" x 3"	(15.9 x 76.2)	⅜" x 3"	(9.5 x 76.2)	27½"	(698.5)
B3100-24	24"	(600)	1¼"-7	⅝" x 3"	(15.9 x 76.2)	⅜" x 3"	(9.5 x 76.2)	31¾"	(806.4)
B3100-30	30"	(750)	1¼"-7	¾" x 3"	(19.0 x 76.2)	⅜" x 3"	(9.5 x 76.2)	38 ⁷ / ₈ "	(987.3)

All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.

PIPE HANGERS

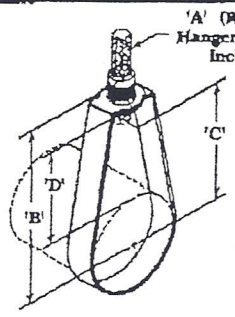


Material: Steel
Standard Finish: Pre-Galvanized
Service: Designed for suspending insulated pipe (with shield) or non-insulated pipe allowing for vertical adjustment.
Ordering: Specify part number and finish.
Approvals: Underwriters' Laboratories Listed for 1/2" (15) thru 4" (100) and Factory Mutual Approved for 1/2" (15) thru 4" (100). Complies with Federal Specification WW-H-171E Type 10 and Manufacturers' Standardization Society SP-69 & SP-58 Type 10, and the National Fire Protection Association Code (NFPA).

Figure B3170NF Adjustable Swivel Ring

(Available with plastic coating as B3170NFC-size or felt lined as B3170NFF-size)

Part No.	Nominal Pipe Size	Rod Size	B	C	D	Design Load	Wt. Coef.						
B3170NF-1/2	1/2"	(15)	3/8"-16	2 3/8"	(60.3)	1 1/4"	(31.7)	1 1/16"	(27.0)	180	(.80)	11	(5.0)
B3170NF-3/4	3/4"	(20)	3/8"-16	2 3/8"	(60.3)	1 5/16"	(33.3)	1 1/16"	(27.0)	180	(.80)	12	(5.4)
B3170NF-1	1"	(25)	3/8"-16	2 3/8"	(66.7)	1 1/2"	(38.1)	1 1/16"	(27.0)	180	(.80)	13	(5.9)
B3170NF-1 1/4	1 1/4"	(32)	3/8"-16	2 7/8"	(73.0)	1 11/16"	(42.9)	1 1/8"	(28.6)	180	(.80)	14	(6.3)
B3170NF-1 1/2	1 1/2"	(40)	3/8"-16	3 1/8"	(79.4)	1 15/16"	(49.2)	1 1/4"	(31.7)	180	(.80)	14	(6.3)
B3170NF-2	2"	(50)	3/8"-16	3 1/2"	(89.9)	2 3/16"	(58.7)	1 3/8"	(34.9)	180	(.80)	16	(7.2)
B3170NF-2 1/2	2 1/2"	(65)	3/8"-16	4"	(101.6)	2 3/8"	(66.7)	1 7/16"	(36.5)	200	(.89)	25	(11.3)
B3170NF-3	3"	(80)	3/8"-16	4 1/2"	(114.3)	3 1/8"	(79.4)	1 5/8"	(41.3)	250	(1.11)	29	(13.1)
B3170NF-3 1/2	3 1/2"	(90)	3/8"-16	4 15/16"	(125.4)	3 9/16"	(90.5)	1 13/16"	(46.0)	300	(1.33)	33	(14.9)
B3170NF-4	4"	(100)	3/8"-16	5 1/16"	(131.8)	3 7/8"	(92.1)	1 5/8"	(41.3)	360	(1.60)	40	(18.1)
B3170NF-5	5"	(125)	1/2"-13	5 23/32"	(145.2)	4 1/8"	(104.8)	1 5/8"	(41.3)	480	(2.13)	83	(37.6)
B3170NF-6	6"	(150)	1/2"-13	6 13/16"	(173.0)	5 1/4"	(128.6)	2"	(50.8)	630	(2.80)	91	(41.3)
B3170NF-8	8"	(200)	1/2"-13	8 1/16"	(204.8)	6 5/16"	(160.3)	2 1/4"	(57.1)	970	(4.31)	130	(59.9)



Material: Steel
Standard Finish: Pre-Galvanized
Service: Designed for suspending insulated pipe (with shield) or non-insulated pipe allowing for vertical adjustment.
Ordering: Specify part number and finish.
Approvals: Complies with Federal Specification WW-H-171E Type 10 and Manufacturers' Standardization Society SP-69 & SP-58 Type 10.
Note: For pipe sizes 2" (50) and under, use B3170NF.

Figure B3170 Adjustable Swivel Ring

Part No.	Nominal Pipe Size	Rod Size	B	C	D	Design Load	Wt. Coef.						
B3170-2 1/2	2 1/2"	(65)	1/2"-13	4"	(101.6)	2 3/8"	(66.7)	1 7/16"	(36.5)	300	(1.33)	29	(13.1)
B3170-3	3"	(80)	1/2"-13	4 1/2"	(114.3)	3 1/8"	(79.4)	1 5/8"	(41.3)	300	(1.33)	34	(15.4)
B3170-3 1/2	3 1/2"	(90)	1/2"-13	4 15/16"	(125.4)	3 9/16"	(90.5)	1 13/16"	(46.0)	300	(1.33)	42	(19.0)
B3170-4	4"	(100)	5/8"-11	5 7/16"	(131.8)	3 9/16"	(92.1)	1 5/8"	(41.3)	475	(2.11)	54	(24.5)
B3170-5	5"	(125)	5/8"-11	5 23/32"	(145.2)	4 1/8"	(104.8)	1 5/8"	(41.3)	475	(2.11)	97	(44.0)
B3170-6	6"	(150)	3/4"-10	7"	(177.8)	5 1/8"	(128.8)	2"	(50.8)	950	(4.22)	113	(61.2)
B3170-8	8"	(200)	3/4"-10	8"	(203.2)	6 5/16"	(160.3)	2 1/4"	(57.1)	950	(4.22)	140	(63.5)

All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.