



**WEAVER CONSTRUCTION MANAGEMENT, INC.**  
 3679 S. Huron St., Suite 404  
 Englewood, CO 80110  
 Phone: (303) 789-4111 FAX: (303) 789-4310

**SUBMITTAL TRANSMITTAL**

September 12, 2011  
**WGC Submittal No: 02622-001**

**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:** **Always Plumbing & Heating**  
 P.O. Box 25215  
 Colorado Springs, Colorado 80936  
 719-532-1344 Ed Buss  
 info@alwaysph.com

**SUBJECT:** Plumbing Submittal for Head Works Building - Flexible Transition Couplings

**SPEC SECTION:** 02622: Plastic Pipe

**PREVIOUS SUBMISSION DATES:** n/a

**DEVIATIONS FROM SPEC:** \_\_\_ YES X NO

**CONTRACTOR'S STAMP:** This submittal has been reviewed by Weaver General Construction and approved with respect to the means, methods, techniques, & safety precautions & programs incidental thereto. Weaver General Construction also warrants that this submittal complies with contracted documents and comprises on deviations thereto:

**Contractor's Stamp:**

**Engineer's Stamp:**

Date: 9/12/11  
 Reviewed by: H.C. Myers  
 ( X ) Reviewed Without Comments  
 ( ) Reviewed With Comments

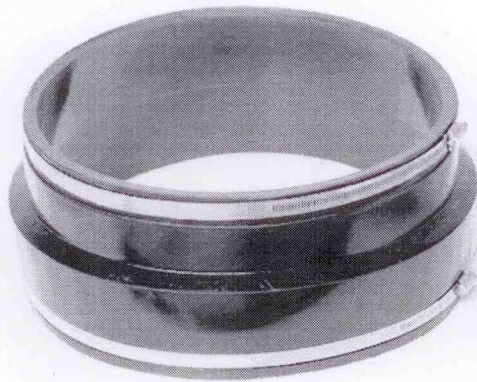
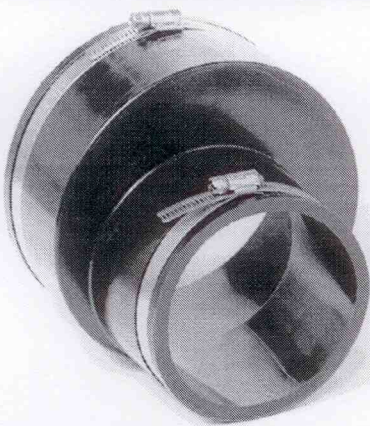
**ENGINEER'S  
 COMMENTS:** \_\_\_\_\_

# Flexible Couplings



# INDIANA SEAL™

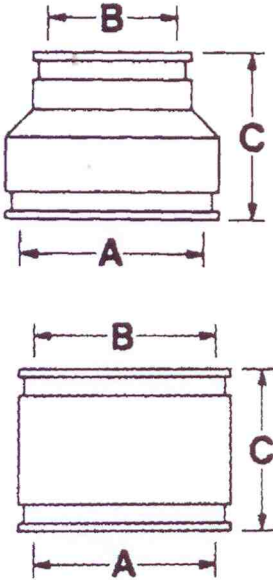
A GPK PRODUCTS Company



**PRODUCTS FOR THE PIPING INDUSTRY**



# Couplings



## 151

Asbestos Cement or Ductile Iron to Cast Iron or Plastic

Part No.	Pipe Size	A	B	C
*151-43	4x3	4.75	3.40	4.60
151-44	4x4	4.75	4.40	4.25
*151-53	5x3	5.90	3.40	5.00
151-54	5x4	5.90	4.40	4.80
151-55	5x5	5.62	5.62	4.00
151-56	5x6	5.90	6.40	4.88
*151-63	6x3	7.00	3.40	6.00
151-64	6x4	7.00	4.40	5.70
151-65	6x5	7.00	5.50	5.80
151-66	6x6	7.00	6.40	6.00
*151-68	6x8	7.00	8.55	6.70
*151-84	8x4	9.12	4.40	6.00
151-86	8x6	9.12	6.40	6.00
151-88	8x8	9.12	8.55	6.00
*151-108	10x8	11.12	8.55	6.37
151-1010	10x10	11.12	10.60	6.12
151-1212	12x12	13.20	12.60	6.25
151-1615	16x15	17.40	15.30	7.00
151-1818	18x18	19.25	19.25	9.00

\*Supplied with reducer

## 155

Asbestos Cement or Ductile Iron to Asbestos Cement or Ductile Iron

Part No.	Pipe Size	A	B	C
155-44	4x4	4.75	4.75	4.20
155-55	5x5	5.62	5.62	4.00
155-64	6x4	7.00	4.75	6.00
155-66	6x6	7.00	7.00	6.00
155-86	8x6	9.12	7.00	5.80
155-88	8x8	9.12	9.12	6.00
155-1010	10x10	11.12	11.12	6.50
155-1212	12x12	13.20	13.20	6.30
155-1616	16x16	17.40	17.40	9.00
155-1818	18x18	19.50	19.50	9.00
155-2020	20x20	23.50	20.35	9.00
155-2424	24x24	25.80	25.80	9.00

# Couplings



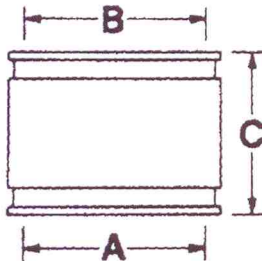
156 Series fits all of these drain pipe materials:

**Cast Iron Soil Pipe**

- Extra Heavy (XH)
- Service Weight (SW)
- No Hub (NH)

**Steel Pipe, Schedule 40, Copper Pipe, Lead Pipe, Plastic Pipe**

- ABS/PVC, DWV (Schedule 40)
- ABS/PVC, Schedule 30 (Thin Wall)
- ABS/PVC, Styrene, sewer and drain ASTM 2729
- PVC Sewer and drain ASTM 3034 and SDR35
- PVC Sewer and drain ASTM 3033 and SDR41



# 156 Cast Iron or Plastic to Cast Iron or Plastic

Part No.	Pipe Size	A	B	C
156-125	1 1/4 x 1 1/4	1.66	1.66	3.50
156-15125	1 1/2 x 1 1/4	1.90	1.66	3.50
156-15	1 1/2 x 1 1/2	1.90	1.90	3.50
156-215	2 x 1 1/2	2.40	1.90	3.50
156-22	2x2	2.40	2.40	3.50
*156-315	3 x 1 1/2	3.40	1.90	4.18
156-32	3x2	3.40	2.40	4.00
156-33	3x3	3.40	3.40	4.25
*156-415	4 x 1 1/2	4.40	1.90	4.18
156-42	4x2	4.40	2.40	4.00
156-42EC	4x2	4.40	2.40	4.00
156-43	4x3	4.40	3.40	4.00
156-44	4x4	4.50	4.50	4.25
156-44S	4x4S	4.40	4.40	4.25
*156-53	5x3	5.50	3.40	4.30
156-54	5x4	5.50	4.40	4.00
156-55	5x5	5.62	5.62	4.00
156-63	6x3	6.40	3.40	6.00
156-64	6x4	6.40	4.40	5.63
156-64L	6x4	6.45	4.50	5.63
156-64EC	6x4	6.45	4.50	6.00
156-65	6x5	6.40	5.50	4.75
156-66	6x6	6.40	6.40	6.00
*156-84	8x4	8.55	4.40	6.00
156-86	8x6	8.55	6.40	5.88
156-88	8x8	8.55	8.55	5.75
*156-104	10x4	10.60	4.40	6.63
*156-106	10x6	10.60	6.40	6.63
156-108	10x8	10.60	8.55	6.38
156-1010	10x10	10.60	10.60	5.88
156-1210	12x10	12.60	10.60	6.25
156-1212	12x12	12.60	12.60	6.38
156-1510	15x10	15.30	10.60	6.75
156-1512	15x12	15.30	12.60	6.50
156-1515	15x15	15.30	15.30	6.75
156-1815	18x15	18.10	15.02	7.00
156-1818	18x18	18.70	18.70	8.00
156-2121	21x21	22.05	22.05	9.00
156-2424	24x24	24.80	24.80	9.00
156-2727	27x27	27.95	27.95	9.00

\*Supplied with reducer

S = Smaller OD

EC = Eccentric





## FLEXIBLE TRANSITION COUPLINGS

### SUBMITTAL SHEET

- 1.0 Indiana Seal Flexible Transition Couplings** Shall be manufactured from elastomeric materials that comply with the applicable requirements of ASTM C 1173 Standard Specification for Flexible Transition Couplings.
- 2.0** The **purpose** of Indiana Seal Flexible Transition Couplings is to form a leak proof joint between sections plain end pipe or fittings of the same or different materials such as cast iron, clay, ductile iron, concrete and plastic pipe in sizes ranging from 1 ¼” up to 30” with larger sizes available upon request.
- 3.0 Indiana Seal Compression Seals** are manufactured from flexible PVC materials in sizes from 1½” to 8”. The compression seals with there unique ribbed design eliminate the need for mortar or cement at the sewer joint and provide a lasting bond through years of natural ground movement. The pliability of these compression seals allows them to flex during freezing and thawing periods without damaging the watertight integrity at the joint.
- 4.0 Stainless Steel Hose Clamps** Indiana Seal hose clamps are constructed of series 300 premium grade stainless steel, including the housing and screw to insure a positive seal ranging in size from 1 1/16” through 21”. The stainless steel hose clamps shall be tested to withstand the required minimum torque of 60 in-lbs and maximum free running torque of 4 in-lbs as to the applicable requirements in ASTM C 1173.
- 5.0 Stainless Steel Shear Ring** Indiana Seal shear rings are manufactured from all series 300 premium grade stainless steel construction to ensure extra rigidity and strength, and provide protection in even the most unstable ground conditions. The shear rings are available for several types of piping, in most popular sizes. They are available in thicknesses of 0.007” and 0.012”(Amazon Heavy Duty). Indiana Seal shear ring couplings are manufactured to conform to the functional requirements of ASTM C 1173.
- 6.0 Sealing Resistance** Indian Seal Flexible Transition Couplings shall show no visible leakage while under an internal hydrostatic pressure of 4.3 psi as to the applicable requirements of ASTM C 1173.
- 7.0 Durometer Hardness Testing** Indiana Seal Flexible Transition Couplings shall have a shore “A” durometer (hardness) of 50-75 as to the applicable requirements of ASTM C 1173 and ASTM Test Method D 2240.
- 8.0 Marking** Indiana Seal Flexible Transition Couplings shall be marked with the manufacturers name or trademark, or both. The type and size of pipe for which the coupling is intended of the manufacturer’s product number shall be marked on or attached to each coupling as to the applicable requirements of ASTM C 1173.