



**CITY OF AUSTIN  
STANDARD PRODUCTS LIST**  
for  
**JOINT RESTRAINT DEVICES FOR DUCTILE IRON PIPE**

**USING DEPARTMENT:** Austin Water      **PREPARED BY:** William Flynn, P.E.      **ISSUED:** 03/24/83  
**REVISED BY:** Jeff A. Kyle, P.E.      **REVISED:** 01/01/24

- DESCRIPTION:** Externally-mounted devices used to restrain DI pipe bell and spigot (push-on) joints and mechanical joints and to restrain DI pipe spigots to DI fittings and valves. The devices shall be of the wedge-action type or backup-ring, joint harness type meeting the following criteria:
1. The primary components of these devices such as restrainer gland body, wedge, wedge actuator, and backup ring body shall be ductile iron.
  2. Solid, non-split devices shall have a working pressure rating of 350 psi for sizes 4" – 16" and 250 psi for larger than 16". See Note 5 below.
  3. Split devices shall have a working pressure rating of 350 psi for sizes 4" – 8", 300 psi for 12" – 16", and 200 psi for 24". See Note 5 below.
  4. Glands and backup rings shall be black with an epoxy or polyester thermoset powder coat, or epoxy electrocoat (e-coat) finish. A top-coat may be applied over the base powder coat or e-coat.
  5. Wedges, actuating bolts, and torque control nuts that are part of wedge-action devices shall have a fluoropolymer or e-coat finish. T-head bolts and nuts shall be plain high strength low alloy (HSLA) steel.
  6. Threaded thrust rods and nuts and clamping bolts and nuts used with harness type devices shall be HSLA steel having a fluoropolymer finish.
  7. All components necessary for installation of harness (bell-to-spigot) type devices shall be provided by the device manufacturer.
  8. The only approved products are those having the exact same identification as listed below and only in the sizes indicated.

LISTING DATE	MANUFACTURER	PRODUCT IDENTIFICATION/COMMENT	APPROVAL
10/01/96 01/01/24	EBAA IRON, INC. Box 857 Eastland, TX 76448	Megalug MJ Wedge-Action Restraint: Series 1100 (4" – 48"), Part No. 11xxDEC Megalug Solid Restraint Harness (see Note 5): Series 1700 (4" – 48"), Part No. 17xx00Y Megalug Split Restraint Harness (see Note 5): Series 1100HD (4" – 24"), Part No. 11xxHDY Megaflange Restrained Flange Adapter (see Note 4): Series 2104 to 2112 (4"-12")	R. Lamb J. Kyle
10/01/00 01/01/24	UNI-FLANGE/DIVISION OF FORD METER BOX CO. P.O. Box 443 Wabash, IN 46992- 0443	Uni-Flange MJ Wedge-Action Restraint: Series 1400 (4" – 48") Part No. UFR-1400-xx-I/U Uni-Flange Solid Restraint Harness (see Note 5): Series 1450 (4" – 12") Part No. UFR-1450-xx-RB-I/U Uni-Flange Split Restraint Harness (see Note 5): Series UFR1490 (4" – 24") Part No. UFR1490-D-xx-RB-I	R. Lamb



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LISTING DATE	MANUFACTURER	PRODUCT IDENTIFICATION/COMMENT	APPROVAL
04/01/98 01/01/24	STAR PIPE PRODUCTS, INC. (SP, CD, XY Foundries, China) 4018 Westhollow Pkwy. Houston, TX 77082	Stargrip MJ Wedge-Action Restraint: Series 3000 (4" – 8") Item Code SGDPPKSxxN Series 3000 (12" – 48") Item Code SGDPPKSxx Stargrip Solid Restraint Harness (see Note 5): Series 3100P (4" - 8", 16", 24"), Item Code SGDPGFSxxNCB Series 3100P (12", 30", 36"), Item Code SGDPGFSxxCB Series 3100P (42", 48"), Item Code SGDPGSxxCB Stargrip Split Restraint Harness (see Note 5): Series 3100S (4" – 24"), Part No. SGDPGSxxSCB Super Flange Restrained Flange Adapter: Series 7200 (4"-12"), Part No. RSF72XXCB	R. Lamb J. Kyle
11/26/01 01/01/24	SIGMA CORP (A-1 Foundry, China) 5000 Askins Lane Houston, TX 77346	Sigma MJ Wedge-Action Restraint: One-Lok SLDE (4" – 64"), Part No. SLDE-X## Sigma One-Lok Solid Restraint Harness (see Note 5): Series ESLDEH (4" – 36"), Part No. ESLDEH-X#TT Sigma One-Lok Split Restraint Harness (see Note 5): Series ESSLDEH (4" – 24"), Part No. ESSLDEH-X#TT	K. Flowers J. Kyle
07/01/09	TYLER UNION / DIVISION OF McWANE 1501 W. 17 <sup>th</sup> St. Anniston, AL 36201	TUFGrip MJ Wedge-Action Restraint: Series 1000 (4" – 48"), Item Code MJ TUFGripTLD w/TUFBond Coating	R. Lamb
04/01/17	ACCUCAST (EG Foundry, China) 415 South 21 <sup>st</sup> St. Waco, TX 76706	Acculok MJ Wedge-Action Restraint: ALDI (4" – 12"), Item Code ALDIxx	J. Kyle
04/01/17	SIP INDUSTRIES (EF Foundry, China) 2900 Patio Dr. Houston, TX 77017	EZ Grip MJ Wedge-Action Restraint: EZD (4" – 48"), Item Code EZDxxE	J. Kyle



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**NOTES:**

1. These devices are not to be used on plain-end DI fittings or on cast iron, PVC, HDPE, or asbestos cement pipe.
2. Warning tape shall be placed on top of the polyethylene wrap around DI pipe restrained with these devices for the full length of restrained joint pipe and fittings. The warning tape shall be yellow and shall have black lettering at least 2 inches high that states "Restrained Joint / Junta de Restriccion" at intervals not exceeding 24 inches. The warning tape shall be polypropylene having a minimum thickness of 2 mils, a minimum width of 3 inches, and adhesive backing on the side opposite the lettering.
3. xx or ## in the Item Code or Part Number refers to the nominal size of the device.
4. Restrained Flange Adapters are only allowed when project plan and/or detail sheets specifically require their use.
5. Solid, non-split restraint devices shall be used on new DI pipe only. Split restraint devices shall be installed on existing DI pipe not subject to pressure testing. Split restraint devices larger than 24" diameter shall be approved by AW on a case-by-case basis. Installation of split restraint devices on new pipe is prohibited.

[Inspector—show location of restrained pipe and fittings on intersection drawings. Also show on record drawings along with manufacturer's name.]

**LATEST REVISIONS (since 07/01/23):**

1. Updated DESCRIPTION Nos. 2&3, to define pressure ratings for split and solid devices.
2. Updated device names in PRODUCT IDENTIFICATION/COMMENT information to better clarify restraint type.
3. Added following restraint harnesses: EBAA Iron (Split Megalug Series 1100HD); Ford Meter Box (Uni-Flange Split Retainer Series UFR1490-D); Star Pipe (Split Stargrip Series 3100S); Sigma Corp. (One-Lok Solid Retainer Series ESLDEH & One-Lok Split Retainer Series ESSLDEH).
4. Added Note 5, and Part No. for Star Pipe Super Flange Restrained Flange Adapter.