

**CITY OF AKRON, OHIO
DEPARTMENT OF PUBLIC SERVICE
WATER SUPPLY BUREAU**

SPECIFICATIONS FOR MECHANICAL JOINT RESTRAINING GLAND PACKS

DESCRIPTION

Each gland pack shall be of best quality materials and workmanship and shall conform to the dimensions and requirements of the Akron Water Supply Bureau Standard Construction Drawing W-5.0 Mechanical Joint Ductile Iron Restraining Glands.

Each gland pack shall include one mechanical restraining gland as manufactured by EBAA Iron, Inc., Series 1100, or equal, sacrificial zinc anode hex head caps for the total number of T-head bolts in each gland pack, one tapered rubber gasket, and the proper number and size of T-head bolts and nuts for the mechanical joint sizes shown on the order. For sizes 4 to 12 inches, package all gland pack materials to make one joint and mark each package to specify its weight and contents. Package T-head bolts and nuts separately in the box. For the 16-inch gland pack, package one gasket, T-head bolts and nuts, mark its contents, and provide the gland separately, unpackaged.

RESTRAINING GLANDS

Each restraining gland shall have the following weights and have no less than the following number of wedges with auto-torquing heads. T-head bolts are ½ inch longer than normal to accommodate the restraining gland.

<u>Diameter (in.)</u>	<u>Weight (lbs.)</u>	<u>No. of Wedges</u>	<u>¾ in. Bolt Length (in.)</u>
4	7	2	4
6	12	3	4
8	16	4	4-1/2
10	24	6	4-1/2
12	33	8	4-1/2
16	58	12	5
20	75	14	5
24	139	16	5-1/2

The restraining gland shall be properly prepared and coated with a TGIC polyester-based coating. The gripping wedges and actuating bolts shall be properly prepared and coated with a Xylan fluoropolymer coating.

For quality control tracking, an identification number indicating the plant and date of production shall be cast onto each restraining gland.

The restraining gland shall be made of ductile iron and display the UL/FM approval.

Nuts and T-head bolts shall be construction grade low alloy Cor-ten steel.

Zinc anode caps shall weigh 6 ounces each, have the proper thread dimensions for the size of T-head bolts included in the gland pack, measure 1-7/16 inch flat-to-flat, and conform to the chemical requirements of ASTM B418-88.

Gaskets must conform to the latest revision of the AWWA C111 standard for Rubber-Gasket Joints for Pipe and Fittings and be marked by the manufacturer.