

# Connecting BOSS HDPE Pipe To Other Pipe Materials

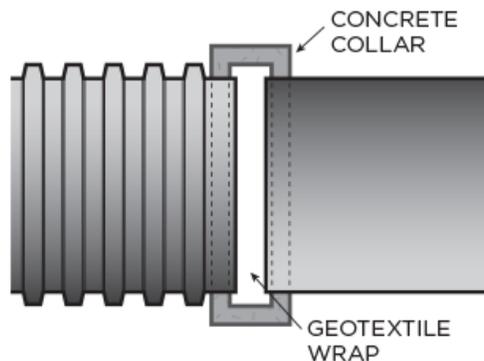
## Introduction

Connection of HDPE pipe to dissimilar materials is a regular occurrence during project installations. BOSS HDPE pipe can be easily connected to other pipe materials such as PVC, steel, concrete or HDPE materials supplied by other manufacturers.

## Connection To Other Pipe Materials

Several methods exist to connect dissimilar materials. One of the most common is to butt the two pipes to be joined together, wrap the connection with a non-woven geotextile then pour a concrete collar around the joint. This involves building a form around the area to be joined and encasing the geotextile in concrete.

**FIGURE 1:** Example of concrete collar coupler with geotextile wrap



Specially designed couplers are also available from a variety of manufacturers to effectively join dissimilar pipe materials and prevent infiltration into the pipe system. The *Mar Mac Dissimilar Pipe Coupler* manufactured by Mar Mac Construction Products is an effective joining system. It incorporates high strength steel straps and rubberized mastic laminated to a reinforced mesh. The coupler compresses the specially formulated mastic to permanently bond to the pipe surface. All materials are chemically inert and resistant to the effect of common ground conditions.

### Installation of Dissimilar Pipe Coupler

The Mar Mac Dissimilar Pipe Coupler or an approved equal shall be installed according to the manufacturer's recommendations. The coupler shall have an outer cover of cross-laminated polyethylene with an under layer of rubberized bonding mastic that is reinforced with a woven polypropylene fabric. There shall be a peelable protective release film against the bonding mastic that is removed when the coupler is applied to the joint. Compression bands shall be located within the coupler and will perform as compression seals at specific areas along each side of the joint.

1. The coupler shall be designed so that when it is applied around the joint the ends overlap a minimum of 8 inches on the largest pipe size being connected.
2. A bell hole shall be dug under the joint with the pipe ends butted or the smaller pipe placed inside the larger pipe. The pipe should be aligned for efficient drainage flow.
3. The coupler shall be placed around the pipe, mastic side to the pipe, spanning the joint. All foreign material shall be removed prior to placement.
4. The protective release film shall be removed and the coupler applied with the overlap at the top of the pipe.
5. The straps shall be secured (outside straps first) on the larger OD pipe with the proper tools, the securing straps on the outside of the smaller OD pipe shall then be secured, the inside strap shall be tightened last.
6. The closing flap shall cover all remaining exposed compression bands, completing the joint.



**FIGURE 2:** Dissimilar pipe coupler with rubberized sealing mastic and steel compression bands (*ref. Mar Mac*).

\* Efficacy of this product is dependent upon factors including: proper preparation, installation and backfill.