

# **EXTERNAL JOINT SEAL**

## **PART 1 GENERAL**

### **1.01 WORK REQUIRED**

An external joint seal, as shown on the attached drawing, shall be installed on each section joint of all sanitary manholes in accordance with the manufacturer's instructions.

### **1.02 SUBMITTALS**

The contractor shall make submittals of the manufacturer's literature, shop drawings, installation instructions, and other items in accordance with the provisions of the Standard Specifications. The contractor shall submit a notarized certification from the manufacturer stating that their product meets, or exceeds, the requirements of ASTM C-877, Type II.

## **PART 2 PRODUCTS**

### **2.01 EXTERNAL JOINT SEAL**

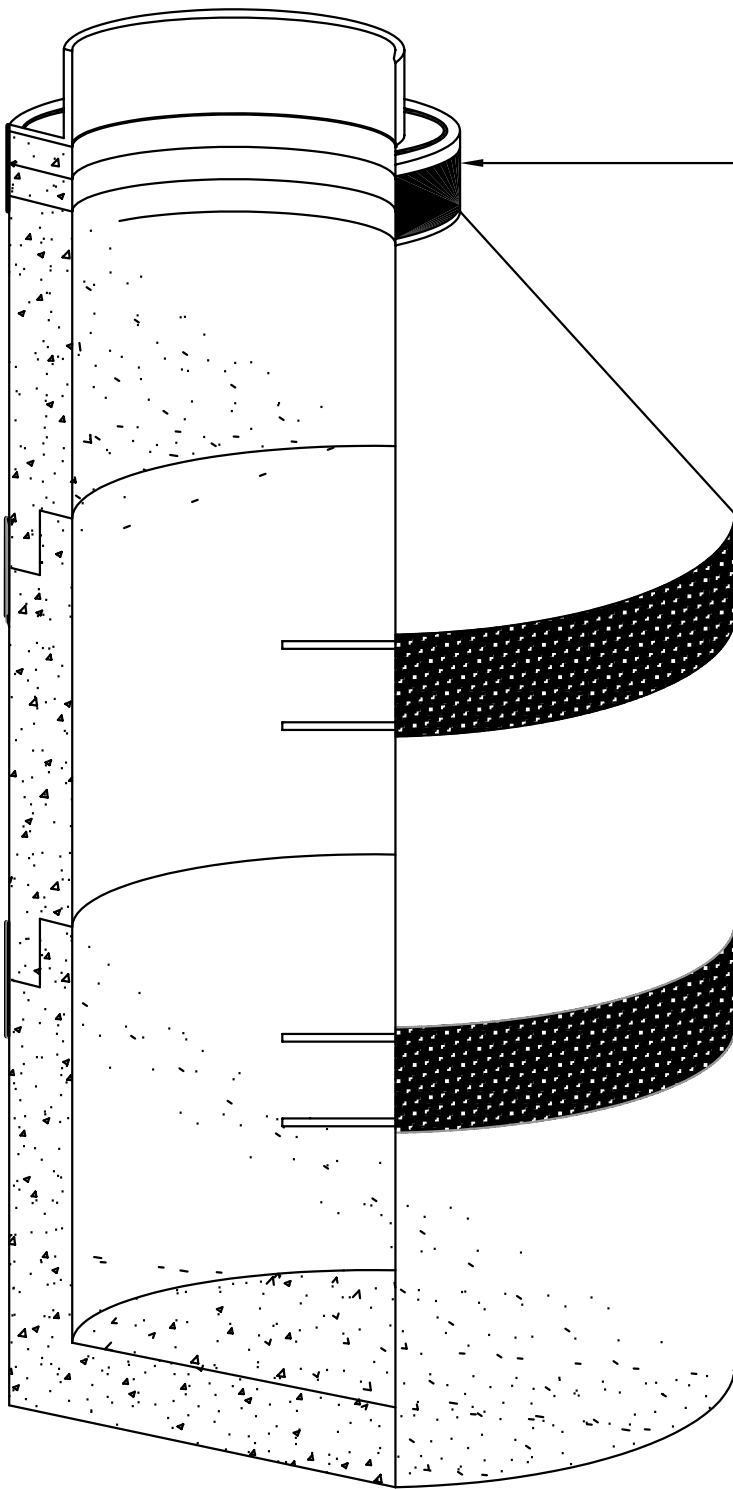
External joint seals shall meet, or exceed, the requirements of ASTM C-877, Type II. External joint seals shall be MacWrap External Joint Sealers as manufactured by MarMac Manufacturing Co., Inc. or pre-approved equal conforming to the following requirements.

External joint seals shall consist of a collar 9 inches wide with an outer layer of polyethylene, with a minimum tensile strength of 4000 psi and a minimum tear resistance of 1500 psi, and an under layer of rubberized mastic that is reinforced with a woven polypropylene fabric. Two 5/8 inches steel straps shall be located within the collar 3/4 inches from each edge. The straps shall be confined in tubes that isolate them from the mastic and allow them to slip freely when mechanically tightened and locked around the manhole. The collar shall be furnished with a minimum 6 inches overlap and a closing flap to cover any remaining exposed strap.

## **PART 3 MEASUREMENT AND PAYMENT**

### **3.01 EXTERNAL JOINT SEAL**

All costs for furnishing and installing the external joint seals shall be included in the unit bid price for sanitary manholes.



**SurSeal External  
Manhole Chimney Seal**

**MacWrap External  
Manhole Joint Seals**

**Sanitary Manhole  
Sealing Detail**