## SECTION 729 -- DECK JOINT SEALS

### 729.01 -- Description

1. The item, "Deck Joint Seals", shall consist of furnishing and installing fabricated modular expansion joint systems of the general size and configuration shown in the plans. The seals shall be capable of the movement specified and shall be built to the lines and elevations shown in the plans.

2. Manufacturers producing acceptable items are shown in the plans.

### 729.02 -- Material Requirements

1. a. Structural steel for extrusions and support bars shall conform to the minimum requirements of ASTM A 709/A 709M, Grade 50 steel.

b. All exposed surfaces of the extrusions and support bars shall be painted with primer in accordance with Subsection 709.03; the finish coat is not required.

c. As an alternate, steel extrusions and support bars may be galvanized in accordance with ASTM A 123.

2. Stainless steel sheets for the sliding surfaces of support bars shall conform to the requirements of ASTM A 240/A 240M, Type 304, polished to a 508 nm RMS finish.

3. The elastomeric sealing element shall be a polychloroprene (neoprene) locking box seal that meets the requirements of ASTM D 2628, modified to omit the recovery test as noted below:

| | | |
|---|---|---|
| Hardness (Shore A Durometer) | 60 ± 5 | ASTM D 2240 (modified) |

4. The seal shall be one piece full length over the entire expansion joint, including curb or parapet units.

5. Support bar bearings shall incorporate a polytetraflourethylene surface and a stainless steel surface to minimize resistance to joint movements.

6. Suitable equilibrium type springs, which work counter to compression forces of the sealing elements, shall be used to maintain equalized expansion properties for each element across the joint.

7. Slider plates shall be provided at the curbs as part of the completed joint assembly in accordance with the details shown in the plans.

8. The manufacturer of the expansion joint assembly shall supply shop drawings showing details of the assembly and installation.

**729.03 -- Construction Methods**

1. The Contractor shall provide and assemble the expansion joints in accordance with approved shop drawings, joint setting data, plans, and the specifications.

2. The assembly shall be properly secured for shipping and shall contain provisions for final field adjustment at the time of installation.

3. All movements due to factors such as shrinkage, creep, and mid-span deflection shall be properly accounted for before the final adjustment.

4. The prefabricated joint assembly shall be properly positioned and attached to the superstructure by the Contractor using anchorages provided with the assembly as shown in the plans.

**729.04 -- Method of Measurement**

Modular type expansion joints will be measured by the linear foot of the joint in place. Measurement shall be between gutterlines along the centerline of the joint with no allowance for curb units, skewed ends, or slider plate assemblies.

**729.05 -- Basis of Payment**

1.

| Pay Item | Pay Unit |
|---|---|
| Deck Joint Seal, Type _____ | Linear Foot (LF) |

2. Payment is full compensation for all work prescribed in this Section.