

SECTION 07 95 00

EXPANSION CONTROL

PART 1 - GENERAL

1.1 SUMMARY

- A. Work includes removal and replacement of existing expansion joints at the following locations:
 - 1. Grade level transition to elevated framing.
 - 2. Level 1 joint between garage and building / entry plaza.
 - 3. Level 2 joint between garage and building.

1.2 RELATED SECTIONS

- A. Section 03 93 00 – Concrete Repairs
- B. Section 07 92 00 – Joint Sealants

1.3 SUBMITTALS

- A. Product Data: Submit specifications, installation instructions and a detailed statement describing the expansion joint sealing system to be installed including typical cross section details with pertinent dimensioning. Approved Installers shall prepare and submit details of all special conditions to the manufacturer for review and approval prior to installation.
- B. Installer Certification: Submit a letter issued by the Manufacturer stating the contractor is an approved installer of the system.
- C. Statement of Manufacturer's Review: Furnish a written statement from the product manufacturer attesting that their products comply with specification requirements, are proper and adequate for this application, and are compatible with adjacent systems and materials. If necessary, submit revisions to project specifications prior to Engineer's approval for installation of products.

1.4 QUALITY ASSURANCE

- A. Manufacturer's Instructions: In addition to the requirements of these specifications, comply with manufacturer's instructions and recommendations for all phases of the work, including preparation of substrate, application of materials, and protection of installed joints.

- B. The Contractor along with the Manufacturer shall field verify existing joint conditions including joint widths, substrate and accessibility.
- C. The installer shall be approved by expansion joint manufacturer.

1.5 SPECIAL WARRANTY

- A. Furnish a five (5) year warranty for the expansion joint system. Repair or replacement of work which leaks water, deteriorates excessively or otherwise fails to perform as required due to failures of materials or workmanship shall be provided. The warranty shall include an agreement to remove and repair other work which has been constructed on or adjacent to the expansion joint, to the extent required to repair or replace the expansion joint.

PART 2 - PRODUCTS

2.1 EXPANSION JOINT SYSTEM: FLANGED JOINT AT GRADE TO ELEVATED SLAB TRANSITION AND LEVEL 1 AT GARAGE TO BUILDING PLAZA INTERFACE

- A. The expansion joint system shall be a complete system of compatible materials designed by the manufacturer to produce a waterproof, traffic-bearing expansion joint seal. System approved for use:
 - 1. Iso-Flex Winged Expansion Joint Sealing System Type J by LymTal International, Inc.
 - 2. LMS Expansion Joint by MM Systems Corporation
 - 3. Associated fasteners, sealants and other materials shall be as specified by the manufacturer and compatible with the substrate.
 - 4. Directional changes, terminations into vertical plane surfaces, and transitions through curbs or other plane changes shall be provided by factory-manufactured assemblies that preserve continuity of seal.
- B. Elastomeric concrete header material: In accordance with joint manufacturer recommendations.
- C. Priming Agent: In accordance with joint manufacturer recommendations.
- D. Tack Coat: In accordance with joint manufacturer recommendations.
- E. Accessories
 - 1. Wall Mount: Provide necessary and related parts including thermoplastic wall mount plates with appropriate anchors and sealant for complete installation.

2. Vertical Installation: Where the expansion joint is situated in a vertical condition, thicken the elastomeric concrete header material **in accordance with joint manufacturer recommendations**.

2.2 EXPANSION JOINT SYSTEM: LEVEL 1 AT BUILDING INTERFACE

- A The expansion joint system shall be a complete system of compatible materials designed by the manufacturer to produce a waterproof, traffic-bearing expansion joint seal. System approved for use:
1. Iso-Flex Pressure Lok System by LymTal International, Inc.
 2. **EBS Expansion Joint by MM Systems Corporation**

2.3 EXPANSION JOINT SYSTEM: LEVEL 2 JOINT AT BUILDING INTERFACE

- A The expansion joint system shall be a complete system of compatible materials designed by the manufacturer to produce a waterproof, traffic-bearing expansion joint seal. System approved for use:
1. Iso-Flex SILFAST XL System by LymTal International, Inc.
 2. **Colorjoint / SIF Series by MM Systems Corporation**

PART 3 - EXECUTION

3.1 PREPARATION

- A. General
1. Remove existing expansion joint as indicated on the Drawings.
 2. Identify and mark areas requiring adjoining concrete repairs for Engineer review.
 3. Where concrete repairs occur at a joint location, install blockouts along the joint. Size the blockouts in accordance with the manufacturer's requirements for the new joint installation. Concrete work shall be performed in such a manner that a section profile is achieved that is consistent with the surrounding concrete and with the manufacturer's requirements for the new expansion joint seal installation.

3.2 CONDITION OF SUBSTRATE

A. General

1. Examine the substrate and the conditions under which the new expansion joints will be installed. Do not proceed with the work until unsatisfactory conditions have been corrected. Non-durable and unsound concrete at the joint gap edge must be removed and repaired.
2. The joint sides shall be constructed straight and parallel to each other to the proper width and depth as required by the expansion joint manufacturer. Clean the joint surfaces and/or concrete blockout of all contaminants as well as anything which would inhibit the bond of the joint material by abrasive blasting.
3. Remove all foreign material from within existing joint gaps.

3.3 INSTALLATION

A. Mask areas adjacent to the joint to provide clean joint lines.

B. Prior to and during installation, remove dirt, debris, and dust from surfaces by vacuuming, sweeping, blowing with compressed air, and/or similar methods.

C. During application of materials, ensure that overloading of structure does not occur. Do not exceed maximum construction load indicated herein or on drawings.

D. If an unusual or concealed condition is discovered, stop work and notify Engineer and waterproofing system manufacturer immediately in writing.

E. General

1. The expansion joint installer shall verify that concrete repair associated with the expansion joint has sufficiently cured prior to installation.
3. The installation of new expansion joint seals shall only be performed by licensed applicators for the particular system. The installation procedure shall be reviewed and approved by the Manufacturer's technical representative.
4. The expansion joint seals as installed on sloping surfaces shall not impede the flow of water to floor drains.

F. Elastomeric Concrete Nosing at Flanged Joints

1. Install elastomeric concrete nosing material into recess ensuring full joint flanges embedment. Allow no air or void in the nosing material under the flanges.

2. Nosing material to match adjoining surface.

3.4 PROTECTION

- A. Protect new expansion joint installation from damage until installation is fully capable of functioning as intended and capable of resisting wheel loads and foot traffic. Damage to the joint system shall be repaired/replaced at Contractor's expense. After work is complete, clean exposed surfaces with a suitable cleaner that will not harm or attack finish.

END OF SECTION 07 95 00