

Available types of joints include compression seals, strip seals, and modular joints. Compression seal joints and strip seal joints are generic and should be detailed on the plans, by standards and/or covered in the special provisions. Modular joints are proprietary and require that the designer specify allowable joint types and styles in the special provisions. Information concerning specific design parameters and installation details of modular joints should be obtained from literature supplied by the manufacturer of the system. It is the responsibility of the designer to review the proprietary joint literature and related manufacturer's specifications to ensure that the selected joint types are properly specified and compatible with the design requirements.

The following features of joints should be shown on the plans:

- 1) Blockout details showing a second pour, including blockout dimensions and additional reinforcing required.
- 2) Required end treatment in barriers or curbs, including enough detail or explanation to accommodate each of the proprietary systems selected (i.e. cover plates, etc.).
- 3) Consideration to traffic control in determining section pattern lengths.
- 4) Movement rating.
- 5) Assumed temperature and opening at time of installation with temperature correction factors.
- 6) Actual horizontal length of joint measured from inside of barrier face to inside of barrier face corrected for skew.

The following features of joints should be specified in the specifications:

- 1) For modular joints, the joint style, gland type, steel edge beam material, and the name of a representative manufacturer.
- 2) Method of measurement (by linear meter from face to face of barrier).

A general discussion of joint types follows. However, for modular joints the actual selection of the specific alternates should be made from the

list of approved joint types which can be obtained from the Project Manager.

602.02 COMPRESSION SEALS

The compression seal element should have a shape factor of 1:1 (width to height) to minimize side wall pressure. The size of the compression seal shall be specified on the plans.

Effective movement ratings for this type of joint range up to 50 millimeters. Advantages for this type of joint include its low cost, proven performance and acceptance for use on pedestrian walkways. However, this type of joint can not be unbolted and easily raised, generates pressure and is not good for high skews or horizontal directional changes.

602.03 STRIP SEALS

Strip seals should generally conform to the details shown in the structure detail drawing titled "Strip Seal Joint". Proprietary alternates to this detail other than those shown on the detail drawing will not be allowed.

Effective movement ratings for this type of joint range up to 100 millimeters. This type of joint is best used when the movement rating is beyond the capacity of compression seals and for large skews. Strip seal joints will require cover plates for pedestrian walkways.

602.04 MODULAR JOINTS

Modular joints are very complex joint systems. Effective movement ratings range from 100 millimeters up to 750 millimeters. Modular joints are the best choice for movement ratings over 100 millimeters.

603 BEARINGS

603.01 GENERAL

Unlike joints, where the opening can be adjusted if the ambient temperature at the time of construction is different than the assumed mean temperature, bearings must be designed to be installed at temperatures other than the mean temperature. For this reason, the movement