

Technical Bulletin #167

Use of Pecora 890NST & 890FTS Non-Staining, Silicone Joint Sealants in Horizontal Traffic Applications

Pecora 890NST & 890FTS, low modulus, non-staining, silicone sealants are non-sag sealant materials designed for sealing expansion joints when excessive movement is expected. The cyclic movement rating of these sealants is +100/-50% when tested according to ASTM C719. The non-sag consistency, high movement capability, non-staining characteristics, and color flexibility of these sealants make them desirable for horizontal applications in pedestrian or vehicular traffic areas such as parking garages and plaza decks. Typical self leveling joint sealant can sometimes be problematic due to excessive flow on sloping concrete slabs and do not provide the color flexibility and non-staining characteristics often needed in architecturally sensitive applications.

Sealant joints in traffic areas can be subject to severe abuse from contact with automobile tires, environmental debris such as rocks, glass, foot traffic, and standing water. When using lower modulus sealants in traffic applications, the practice of simple but important guidelines is necessary for a successful project.

Guidelines

Joint Dimensions

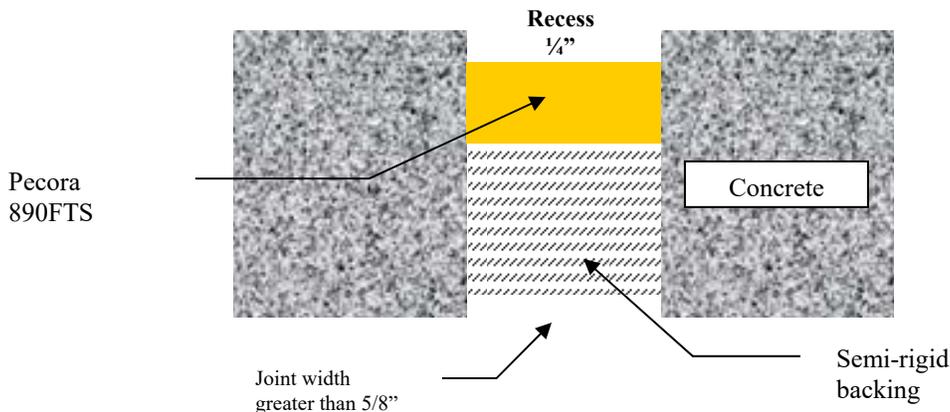
- 1) Always use proper sealant dimensions with respect to width to depth ratios. The general guideline is 1:1 width to depth in joints up to 5/8 inch wide. And 2:1 thereafter, with a maximum joint depth of 1/2 inch in joints up to 1 1/2 inches wide. In special cases where joints exceed 1 1/2 inches in width a 2:1 ratio may be maintained.
- 2) Added sealant thickness in wide joints while maintaining a 2:1 width to depth ratio will aid in puncture resistance while maintaining movement capability and long term performance.

Pedestrian Traffic Applications

- 1) Sealant joints wider than 5/8" using 890NST & 890FTS for horizontal applications with heavy pedestrian access must be capable of resisting puncture. A pedestrian joint design consists of semi-solid joint filler, such as fiberboard or rigid polystyrene foam, with bond breaker applied to its surface in contact with the sealant. Periodic inspection and maintenance should be a realistic consideration to ensure a consistent waterproof expansion joint. ***No special backing consideration is necessary when using 890NST & 890FTS in horizontal joints 5/8" or less in width.*** Minimum joint width for 890NST & 890FTS in horizontal traffic applications is 1/4".

Vehicular Traffic Applications

- 1) 890NST & 890FTS may be used in vehicular traffic joints using the same joint dimension guidelines as discussed above. In areas of heavy vehicular traffic where joint width exceeds 5/8" a recess may be incorporated to reduce excessive physical abuse of the sealant surface.



Note: Use Pecora P-225 primer on concrete surfaces.