

New Jersey Department of Transportation  
**QUALITY IMPROVEMENT ADVISORY**

**QUALITY MANAGEMENT SERVICES**

**Manager: Brian Strizki**

**Telephone: (609) 530-6363**

QIA No. QIA015

**Approved: Brian Strizki**

**Date: 11/30/98**

**Process Affected:**

Scope  Design  Right of Way  Utilities  Environmental  Historic  Construction

**Bureaus Affected:** Construction

**Procedure(s) Affected:** Construction

**Route & Section:** N/A

**County/Municipality:** N/A

**Project Summary:** N/A

**Nature of Problem(s):** Subsection 404.08 requires that a Bituminous Concrete Paver be equipped with a sloped plate to produce a wedge edge at longitudinal joints. The sloped plate shall be attached to the paver screed extension. Bituminous pavers shall also be equipped with infrared heater(s) of at least 103 kilowatts per hour capacity to heat the longitudinal edge of the previously placed layer. To achieve bonding of the newly placed layer with the previously placed layer without undue breaking or fracturing of the aggregate at the interface, the joint heater(s) shall be positioned not greater than 50mm above the surface of the previously placed layer.

This provision is not being enforced uniformly throughout the construction of bituminous pavements.

There appears to be a misunderstanding from the results of recent longitudinal joint studies. The wedge joint and the use of a joint heater has shown thus far to be one of the best type of joint construction, provided that good construction practices are followed. These practices includes proper paver speed, proper roller speed and a uniform supply of material.

**Recommendation(s):** Construction enforce the current specification requiring the use of a wedge joint and the use of a joint heater(s). Ensure that good construction practices are utilized in the construction of bituminous pavements.

The only time that the wedge joint and the joint heater may be waived is when echelon paving is being utilized.

**Implementation:** Effective immediately

**Impact Assessment:**

Schedule  Quality  Cost  Scope

**Cost Impact:** None