



TAILGATE CHECKLIST

Please mark the box for each item as you complete it and fill in notes section as needed. For additional questions, please contact the Translab at (916) 227-7230.

STEP 2: PREPARING BASE AND PAVEMENT JOINTS

BOND BREAKER

- A. Suitable plastic sheeting, 6 mil thick, shall be placed between the replacement pavement and the base for full-depth repairs; for full-depth and treated base repairs, suitable plastic sheeting shall be placed on the subgrade or subbase layer immediately prior to concrete placement
- B. Repair damage to base with cold patch. Damaged areas that are 1" or deeper need to be filled to make a level base

Notes:

CONTACT JOINTS

- A. Transverse or crosswise contact joints
 1. The expansion material shall be secured to the face of the existing pavement joint by any method that will hold the expansion material securely in place during concrete placement; concrete shall not be allowed to get between the expansion material and existing PCC pavement
 2. A 6-mm- (1/4-in-) thick foam expansion material must be placed securely across the transverse joint face and extend the full depth of the joint, with the top of the expansion material flush with the top of the pavement
- B. Longitudinal or lengthwise contact joints
 1. Expansion materials are not required along the longitudinal contact joint for isolated pavement slab repairs
 2. Expansion material used along longitudinal contact joints must be placed securely across the entire length of the joint and extend the full depth, with the top of the expansion material flush with the top of the pavement joint
 3. Expansion material along each of the joints must meet at the slab corners without any gap

STEP 3: SELECTING CONCRETE

CONCRETE MIX QUANTITY FORMULA

$$\text{Quantity} = \frac{\text{Slab Length} \times \text{Slab Width} \times \text{Slab Depth}}{27} + 10\%$$

Notes:

CONCRETE MIX PROPERTIES

- A. 400 PSI flexural strength at the time of opening to traffic
- B. 30 minutes workability after concrete comes down the chute

CONCRETE MIX TICKET ITEMS

- A. 8 - 8.5 sacks of cement per cubic yard
- B. 0.3 - 0.35 : 1 water cement ratio
- C. A super plasticizer
- D. A set retarder
- E. An accelerator

If you have any questions regarding the concrete specification contact Doran Glauz, Senior Concrete Specialist at the Translab. He can be reached at (916) 227-7272.



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STEP 4: PLACING CONCRETE

CONCRETE ARRIVES ON-SITE

- A. Check temperature
- B. Watch for consistency of concrete, how long is the material workable, what type of slump does it have, etc.
- C. Watch for concrete balls coming down the chute and remove them
- D. Ensure that the vibrator keeps up with the concrete placement
- E. Ensure that final finishing is keeping up with concrete placement

Notes:

CONCRETE TESTING

- A. Measure in-place temperature of the new concrete slab

POTENTIAL ISSUES

- A. Cold joints
Check temperature of discharging concrete from ready mix truck to ensure it doesn't set faster than it can be finished
- B. Low concrete slumps
 1. Concrete should be delivered to the job with a slump specified by the approved mix design (the average is 102 to 204 mm or 4 to 8 in)
 2. Too low a slump can cause difficulty in placing and finishing
 3. Do not add water to adjust slump. A type F chemical admixture, or super plasticizer, may be added to adjust slump

STEP 5: OPENING LANES TO TRAFFIC

CURING CONCRETE SLABS

- A. Apply curing compound after brooming
- B. Cover slabs with visquine or insulated blanket (cold weather)

Notes:

PROTECTING NEWLY PLACED SLABS

- A. Protect slabs so that vehicles will not drive on them
- B. Place "WET CONCRETE" signs on barricades. It is also recommended to place cones around the entire perimeter of the replaced slabs

WEAKENED PLANE JOINTS

- A. Sawing of weakened plane joints shall be completed as soon as the concrete will support the saw (refer to Caltrans Specification 40-1.08 B (1))
- B. The minimum depth-of-cut for the weakened plane joint shall be D/3, where D is the slab depth

CLEAN-UP & OPENING TO TRAFFIC

- A. A street sweeper is recommended for clean-up
- B. Open freeway lanes to uncontrolled traffic when the slab temperature reaches 120°F (49°C)
- C. If the slab temperature has not reached 120°F after 4 hours, place a changeable message sign one mile before slab replacement that reads "TRUCKS USE LEFT LANE NEXT 2 MILES"