

3530000 CONCRETE PAVEMENT SLAB REPLACEMENT
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comments: (6-4-15)

The rigid pavement design calls for a minimum compressive strength of 2200 psi before opening to traffic and also a minimum compressive strength of 4000 psi for concrete pavement. I do not know if the pavement design manual will change. The specs are in conflict with the rigid pavement design manual.

Response:

Neil Monkman
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Comments: (6-5-15)

The proposed revision specifies a "curing box". Are we saying that if the contractor provides galvanized tanks with water maintained at 73 +/- 3, these are not acceptable? It appears we are defining the method of curing. I suggest the verbiage state to provide the equipment necessary to properly cure concrete in accordance with the contract documents. 2. In regards to the controlled cracks. What constitutes a designed crack? While control "joints" may be part of a design, the concrete may not necessarily crack at all joints. If control joints are placed on 10' centers, it still might only crack every other joint (typical 20'). By defining "cracks" as part of the design, it raises another question. If I saw cut my joints per the plans and the concrete does not crack there, does the in place material not meet the intent of the design. Although ACI has guidelines about when you should begin saw cutting joints, it is not definitive. I believe what we are trying to define here is "random" cracking outside of any control joint. In that regard, I believe that a statement that "random cracking of concrete outside of any designed control joint will be removed and replaced." Lastly, is there any consideration for unforeseen? If I place my concrete, saw cut the joint at the perfect time and make every effort to avoid random cracking and it occurs anyway, is that not beyond the control of the contractor?

Response:

D5 Construction

Comments: (6-23-15)

353-5 the second paragraph states Cure the acceptance set of cylinders as close to the replacement slab as possible identical to the protection set of cylinders for the first 6-hours. Is this 6-hours a minimum?

Response:

D5 Construction

Comments: (6-26-15)

353-3.3 Consider having the contractor: “demonstrate the ability to furnish replacement slabs by constructing a demonstration slab on site within the time limitations of the project.” Comments: If contractors failing to achieve this in the allowable lane closure restrictions. Consider adding this to strengthen the language giving the engineer the ability to require additional demonstration slabs prior to moving to a full production mode. 353-10 “Provide a printed maturity meter record to the engineer indicating that the required strength was achieved.” Comments: Consider changing this to certified reading or something to allow them to send it electronically without the use of paper. 353-10 Consider allowing the use of compressive strength test results from the last slab if the maturity meter fails to provide a reading. This way the engineer can assure that the slabs were not prematurely loaded prior to traffic.

Response:

Deborah Ihsan
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Comments: (6-30-15)

Comments from District 4 Construction Mark Riordan Project Administrator Target Engineering Group T (954) 777-4186 C (772) 332-9022 Section 353-3 Test requirements, first paragraph. If they’re deleting the 28day/24 hour modification, then there is no “following modification”. Cylinders are always fabricated after all ingredients are added, that’s not a modification. I think there should just be a period after “Section”.

Response:

Brian Price
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Comments: (7-2-15)

Designate the actual proportions to be used to produce a concrete with a minimum compressive strength of 1600 psi and a minimum 28 day compressive strength of 3000 psi. What is the time period to achieve the 1600 psi when trialing the mix in the lab? Should we have a minimum 28 day compressive strength of 4000 psi since the 350 developmental specification requires 4000 psi for Class I pavement? Indicate slump before and after addition of accelerator. Why do we need to know the slump after the accelerator is added if the plastic properties are taken in the field prior to the accelerator being added? Test the concrete for consistency subject to the following deviations from the approved mix design values: What values, the lab results? 353-6- Concrete Slab Acceptance Reject any Concrete not meeting the requirements of 353-5. Acceptance will be based on achieving the 1600 psi compressive strength prior to opening the slabs to traffic based on the Maturity Method and the 28 days compressive strength of 3000 psi. Acceptance will be based on achieving the 1600 psi compressive strength prior to opening the slabs to traffic based on the Maturity Method and the 28 days compressive strength, this opens

the door for the contractor to place the concrete out of plastic property requirements.

Response:
