

Aaron Kjolhede Regional Services Manager



JT Mesite Program Manager







Table 2. Low Strength Example for $f_C' = 4,000$ psi (1)						
(1) Test No.	(2) Individual CYL Strengths (psi)		(3) Strength Test AVG of A & B (psi)	(4) AVG of 3 Consecutive Strengths (psi)	(5) REQ#1 Satisfied?	(6) REQ #2 Satisfied?
	A	В				
1	3,620	3,550	3,585 <sup>(2)</sup>	_	YES	
2	3,970	4,060	4,015		YES	
3	4,080	4,000	4,040	3,880(4)	YES	NO
4	4,860	4,700	4,780	4,278	YES	YES
5	3,390	3,110	3,250 <sup>(3)</sup>	4,023	NO	YES

<sup>&</sup>lt;sup>1</sup> Modified from CIP 9 – Low Concrete Cylinder Strength, Concrete in Practice, National Ready Mix Concrete Association, www.nrmca.org.



<sup>&</sup>lt;sup>2</sup> Acceptable strength because 3,585 psi does not fall below 4,000 psi by more than 500 psi

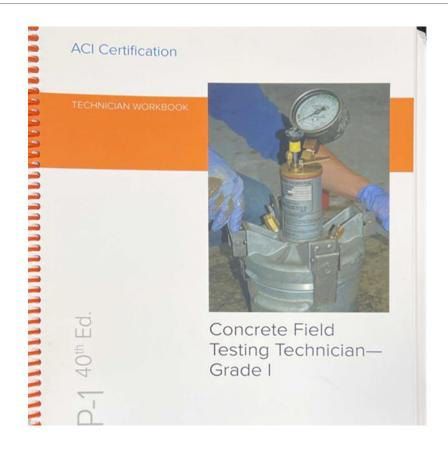
<sup>&</sup>lt;sup>3</sup> Low strength because 3,250 psi falls below 4,000 psi by more than 500 psi (3,250 is less than 3,500 psi)

<sup>&</sup>lt;sup>4</sup> Low strength because 3,880 psi falls below 4,000 psi





# Training





## Communication





## Coaching











## Thank you!







Strength No.





Strength North



## Concrete Industry Expectations



Technicians
<u>must</u> be
certified



Technicians must know procedures



Technicians
should know
WHY testing is
needed and
meaning of
tests



Managers
should know
who tests
correctly and
consistently



Managers
should know if
training is
working



Producers
should know
their results are
not due to
"poor" testing



Owners <u>must</u> feel at ease with testing and results





### **Current Main Questions**

#### **ACI CERTIFIED...?**

Is the testing technician currently ACI Field 1 certified to test concrete?

#### **SAMPLED CORRECTLY...?**

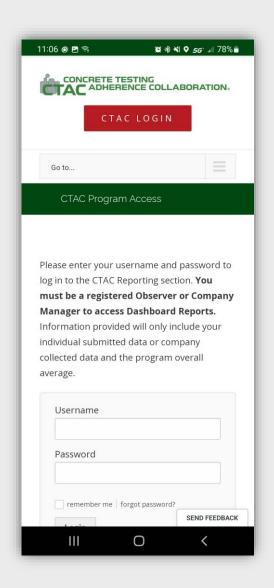
Excluding preliminary check tests, was the concrete sampled in accordance with ASTM C<sub>172</sub>?

#### **TESTS DONE CORRECTLY...?**

Where physical property tests completed and strength specimens molded (if required for cast) in accordance with the appropriate ASTM procedures?

#### **SPECIMENS PROPERLY CURING...?**

Were the concrete specimens (if required to cast) stored in an initial curing environment following ASTM C<sub>31</sub>, section 10.1.2?









Number of Number

### Observations in the Field

#### Record through mobile app

- On-site Observations
- Input by experienced ACI Certified individuals
- QA, QC, Inspector, Contractor, Engineer, Owner Rep

#### NOT a "Finger Pointing" device

- Drives accountability
- Provides Training initiatives
- Security in reliable results
- Shared responsibility



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## **CTAC Report Privacy**

#### CTAC Log-in

- User specific
- Approved by Partner

#### Dashboard Data

- Only see your data
- Based on authorization (Observer, Company Manager, etc.)

#### Company Review

- Comparison vs. regional average
- Marketing



in Numberson

### QUESTIONS?

**COMMENTS?** 



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Number