

SP4550000DB STRUCTURES FOUNDATIONS (DESIGN BUILD)
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

Jeongsoo Ko
(386)956-1967
jeongsoo.ko@dot.state.fl.us

Comments: (9/8/22, Industry)

1. Should TITDS with ASTM D7949 Method B on the method shafts be performed for project concrete mix design, not grout mix?

The Contractor may propose modifications in the above table for site specific and special concrete mix conditions, as demonstrated from lab and field testing and instrumentation. The Engineer must approve all changes to the testing times prior to the Contractor using them.

For bridges, prior to production drilled shaft and load test drilled shaft installation, perform TITDS in accordance with ASTM D7949 Method B to determine the temperature variability and time to peak temperature for each project specific grout mix. Obtain temperature measurements at least every 15 minutes during curing on the method shafts piles. Submit the TITDS results within three working days of performing the tests, in accordance with 455-17, including the proposed temperature peak time established from the TITDS. The Engineer will review the results of the test and concur with the proposed peak time or revise it. After the peak time is established for each mix, perform TITDS in accordance with ASTM D7949 Method A on production drilled shafts and load test shafts, within the following times after batching the first truck:

Minimum time (hours)= Peak time (hours) – 8

Maximum time (hours)= Peak time (hours) + 4D

Where:

D= Drilled shaft diameter in ft.

Peak time: Time after batching the first truck load that was placed in the drilled shaft, at which the maximum temperature is observed.

Response: You are correct, thank you. Change made to “concrete mix”. This change will also be included on the standard specification revision.
