



Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JOSÉ ABREU
SECRETARY

MEMORANDUM

DATE: December 2, 2004

TO: Jeff Pouliotte

FROM: Clinton J. Shaw, State Specifications Office

SUBJECT: Proposed Modifications To Specification: 4150000 - Reinforcing Steel

Comments received, regarding the subject modification to the Standard Specifications, are attached. Please review these comments and advise of any further modifications by December 16, 2004. Also, please submit an electronic summary, of your decisions concerning these comment(s) in memorandum format. This summary will be posted on the State Specifications Office Web Page and included in the Specifications folder for future reference, should someone question your response. Your assistance will be appreciated.

Please Email submittals to SP965CS or clinton.shaw@dot.state.fl.us.

CS/jf

Attachment



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4150000

Changing mortar blocks to concrete blocks may cause a problem with aggregate sizes for the concrete block. Spacer blocks on the bottom of a deck for instance may be only 2 inches tall, this restricts the aggregate size to a maximum of 0.66 inches for the largest particle (No. 7 stone). Also question the goal of the change; the spacer blocks always form part of the cover so structural strength is not the primary goal, the primary goal is protection of the steel. Actual durability of the cover block itself is secondary to preventing cracks that would allow water to reach the rebar. A weaker spacer block that bonded well and maintained integrity during volume changes over the life of the member may well be the better choice.

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File: 4150000 - Reinforcing Steel
Username: Eddie Ferris
UserEmail: eddie.ferris@dot.state.fl.us
UserTel:
UserFAX:
ContactRequested:
Remote Name: 156.75.75.142
Remote User:

Comments:

Plastic Chairs and Bolsters 415-5.13.3

Qualified Products List 415-5.13.4

I am in favor of Plastic Chairs and Bolsters provided they will support the load. Lets make sure there are enough suppliers and material available. I have seen in the past where we spec something and have major problems with supply and demand.

Mortar Blocks 415-5.2

Will this require testing of the concrete used for the blocks? If so it says moist cure blocks for seven days. I am assuming at that point the Contractor can use them. We won't have results from PSI test to ensure the blocks strength is equal to or greater than the concrete in which they are to be placed



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From: G H Stanley <GHStanley@worldnet.att.net>
Sent: Wed Oct 27 13:02:11 2004
Subject: Re: 4150000

Why is this necessary? What problems have we had with the mortar blocks we have been using for years. This will eliminate the use of mortar blocks because you will now have to test the concrete that is used.

Jerry



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The following are my review comments:

1- Subarticle 415 -5.2

This Subarticle first mentions about the required strength of the spacing mortar blocks and in the last sentence requires moist-curing of the blocks for at least seven days. The requirement of seven-day curing has been mentioned in the last part of the Subarticle, after mentioning about the required strength. I recommend the following modification:

"Use precast concrete blocks to space and support the reinforcing steel. Ensure that the concrete blocks have been cured for at least seven days, have developed strengths equal to or greater than the strength of concrete in which they will be utilized, and have wires cast into them for fastening to the steel."

1- Subarticle 415 -5.13.3

The intent of the third paragraph is not clear. It requires that the certificate should be provided to certify different heights. The plan may only specify one type of dimension. There is no need for certificate to include the heights that have been specified. I suggest the following wording:

".....ensure that the manufacturer additionally certifies that the plastic chair and/or bolster meet height and other dimension requirements of the plan."

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File: 4150000 - Reinforcing Steel
Username: Larry Kirk
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UserTel: 386-740-3496
UserFAX:
ContactRequested:
Remote Name: 156.75.75.142
Remote User:

Comments:

Section 415-5.2 states "Moist-cure the blocks for at least seven days".

It has been changed from three days to seven days. It is not necessary to moist cure support or spacing blocks for seven days. Most of our concrete only has to be cured for three days. It should be left at three days.