

## RESPONSE TO COMMENTS RECEIVED FROM INDUSTRY

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### Tom Bowles

File: 4150513-Reinforcing Steel-Chairs and Bolsters

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Date: Thursday, May 12, 2005

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Comments: We do not feel that this is a big problem in decks, especially when SIP forms are used. The problem could be eliminated by requiring that the entire support be plastic coated in lieu of coating the legs only.

**Response:** The spec disallows steel chairs in extremely aggressive environments. SIP forms are usually steel which are not allowed in these environments anyway so the issue goes away. Concrete SIP forms are so rarely used that it is not worth the effort to write an exclusion and I am not sure we should anyway.

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### Rod Powers :

The specification is ambiguous and needs to be re-written to clarify intent. Here's what I see:

1. The first sentence is emphatic that metal chairs and bolsters cannot be used to support reinforcing steel against forms in extremely aggressive environments. Firstly, chairs and bolsters are for the purpose of supporting reinforcing steel away from (not against) the forms. This bottom line seems to be that metal chairs and bolsters cannot be used in aggressive environments.....but
2. The second sentence starts off reading, "For metal chairs in contact with stay-in-place forms.....boundary surfaces .....provide supports with molded plastic.... The ambiguity enters because the reader just read the conditions where metal chairs and bolsters cannot be used, and then the second sentence talks about seemingly different applications/conditions and using metal with plastic, but it is not clear whether or not this is applicable to aggressive environmental conditions or exclusive to non-aggressive conditions.
3. I honestly cannot tell whether the intent is to:
  - a. Totally eliminate metal chairs and bolsters in extremely aggressive environments, or
  - b. Set forth requirements for plastic coating/leg in non-aggressive environments.

- c. Set forth requirements for plastic coating/leg in extremely aggressive environments.
- d. Combination of a,b,c.

Please let me know if you need any clarifications.

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***Ghulam Mujtaba:***

I have the following comments and suggestions related to the proposed specification changes:

1- At the first paragraph of the Subarticle, it should be noted that the use of metal chairs and bolsters are allowed to support the reinforcing steel bars of the structural elements that are located in the slightly and moderately aggressive environments.

2- In the second paragraph it should be mentioned that in the structural elements that are located in the extremely aggressive environments, the metal chairs and bolsters should not be in contact with the forms and floors of the structural elements.

The following is my recommended wording:

The use of chairs and bolsters are allowed to support the reinforcing steel bars of the structural elements that are located in the slightly and moderately aggressive environments.

For the structural elements that are located in the extremely aggressive environments, do not use metal chairs and bolsters to be in direct contact with the forms and floor surfaces of the structural elements.

**Response:** I have changed the spec but not as requested. I believe the restriction is better placed in the "General" section. This way if the environment is classified as extremely aggressive then the section for metal chairs is not even valid.