

International Code Council Chicago District Office 4051 W Flossmoor Road Country Club Hills, IL 60478 tel: 888.icc.safe (422.7233) fax: 708.799.4981 www.iccsafe.org July 28, 2008

Brian Black BDBlack Codes, Inc. Code and Safety Consultant to NEII 47 Leicester Street Perry, NY 14530

Dear Mr. Black,

This letter is in response to your inquiry regarding a recent code change to the IBC, G188-07/08, which recognizes that stretchers are made from tubular steel and form radius or chamfered corners which can potentially allow the use of smaller elevators to comply with Section 3002.4. Your particular question is whether this revision is necessary for a designer to justify the use of a smaller elevator or if this particular code change is simply an editorial clarification and whether this approach would have been permitted in the 2006 Code if properly demonstrated to the code official.

In response to your question, the following background and response is provided. G188-07/08 was Approved as Modified by the IBC General Code Development Committee. This particular code change did not receive any public comments and, therefore, will be included in the 2009 IBC as follows:

3002.4 (Supp) Elevator car to accommodate ambulance stretcher. Where elevators are provided in buildings four or more stories above grade plane or four or more stories below grade plane, at least one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher 24-inch by 84-inch (610 mm by 2134 mm) with not less than 5 inch (127mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame.

The revision made by this code change was primarily to add the language "with not less than 5 inch radius corners." The initial code change reason was as follows:

Reason: All ambulance stretchers found to date, are made from tubular metal, formed with radius or chamfered corners. Adding this change reflects actual stretcher size and will allow the industry to better meet the requirement with more flexibility and appropriately sized cars, while still meeting the size requirement desired by the IBC. This change will also have added benefit of providing direction to the stretcher suppliers to aid in standardizing their products. None of the vendors researched to date offer a 24 inch by 84 inch ambulance stretcher, Stryker, the largest stretcher manufacturer, has a standard stretcher of 23 inches by 83 inches, with a combination of radius and chamfered corners. Further the only standard for ambulance stretchers found was a European Specification. EN 1865:2000. Section 4.1.5 Frame states "All corners of the frame shall be radiused for greater safety."



International Code Council Chicago District Office 4051 W Flossmoor Road Country Club Hills, IL 60478 tel: 888.icc.safe (422.7233) fax: 708.799.4981 www.iccsafe.org The committee's reason for accepting the proposal was as follows:

Committee Reason: Ambulance stretchers found to date, are made from tubular metal, formed with radius or chamfered corners. Adding this change reflects actual stretcher size and will allow the industry to better meet the requirement with more flexibility and appropriately sized cars, while still meeting the size requirement desired by the IBC. This change will also have added benefit of providing direction to the stretcher suppliers to aid in standardizing their products.

The intent of the code change appears to provide both clarification and more specific guidance for the design of elevators to accommodate the 24 inch by 84 inch stretcher. Prior to this code change, the language was more general and stated "the elevator car shall be of such a size and arrangement to accommodate a 24 inch by 84 inch ambulance stretcher in the horizontal open position." Certainly, the fact that stretchers primarily contain radius corners simply based upon their construction could be demonstrated to the authority having jurisdiction as part of the compliance with this section. Having this revision in the code more readily provides the means to an authority to allow such an approach without accompanying documentation to demonstrate the construction of the stretchers and ultimately the size of the elevator.

This opinion is based on the information which you have provided. We have made no independent effort to verify the accuracy of this information nor have we conducted a review beyond the scope of your question. As this opinion is only advisory, the final decision is the responsibility of the designated authority charged with the administration and enforcement of this code.

I hope this provides the answer to your questions. If you have further questions, please feel free to contact us.

Sincerely,

Beth Tubbs, P.E.

Senior Staff Engineer

ICC Codes and Standards Development

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