

April 15, 2011

Subject: *Testing of Permanently Installed Building Maintenance and Façade Maintenance System Components*

The Scaffolding Industry Association (SIA), voice of the access industry, whose mission is to promote, represent and enhance the access, scaffolding and forming industry for the benefit of its members, the public and industry with a special interest of safety, along with the Scaffolding, Shoring, & Forming Institute (SSFI), which represents the manufacturers of industry equipment and is the repository of technical expertise in the industry, have learned that some engineering/consulting companies are aggressively promoting the testing of permanently installed (PI) support equipment up to four times the rated load. This violates the industry-accepted testing procedures.

The consensus of our industry promulgated and adopted testing procedures which are embodied in the ANSI IWCA I-14.1-2001 standard and defined in Section 8.1. Language consistent with the ANSI IWCA I-14.1-2001 standard has been drafted by ASME-A120. Both standards set the testing procedures to a maximum test limit of 2,500 lbs. for anchors and two times the rated load for the support equipment.

In addition to the standards cited above, California Code of Regulations, Title 8, Section 3296 makes it a violation of code to test anchors above 50% of their capacity and PI support equipment over twice its rated load.

(4)(A) Load suspension devices shall not be tested to more than 2 times the rated working load which the device is designed to lift and/or support.

(B) Roof tie-backs shall be tested to no more than 50 percent of their rated capacity. For example, a roof tie-back with a rated capacity of 5000 pounds shall not be tested in excess of 2500 pounds

A letter of interpretation issued by OSHA, dated: 9/23/1993, with regard to testing requirements states:

“...[engineering firm] has been testing power platforms and safety equipment on high-rise buildings for several years using a four to one maximum safety factor. The basis for this safety factor is not indicated. Normally a four to one maximum safety factor, based on yield strength, for example, is a design strength criterion. Loading to this extent is not required by the 1910.66 standard and so the associated testing procedures you requested would not be available from the Occupational Safety and Health Administration. Such loading could be characterized as destructive testing unless

the tested component or installation is over-designed, for example, to extend its service life.”

It is extremely dangerous to expose this equipment to loads above the recommended testing standards – this letter represents the position of SIA, SSFI and its member companies.

Building owners and property managers must understand these tests so as not to be confused about the appropriate way to perform testing on their equipment. Recent efforts to promote testing at higher loads than what the above standards specifically address will subject the anchors and support equipment to destructive loads which can result in catastrophic failure of these systems and/or components. Equipment that has been tested to loads exceeding the recommended standards shall be immediately marked “DO NOT USE” and removed from service. Any equipment subjected to testing above these standards must be re-evaluated by the manufacturer and replacement may be required.

In addition to these safety and risk concerns, building owners must also recognize that testing above the recommended loads creates additional structural impact which may not be observed by the inspector. The safety and financial implications of this damage and the replacement of the equipment and repair to structure are very serious.

Please feel free to contact me directly at (816) 595.4833 with any questions.

Respectfully,

Laurie Weber
Executive Director

Enclosures (1)

Endorsements



The following manufacturers endorse the position of the SIA and SSFI:

Bee Access Products
CoxGomyl
Gondolas in Design, s.l.
Harsco Infrastructure Americas
Hi-Lo Climbers, LLC
HighRise Systems, Inc.
Manntech
NIHON BISOH Co., Ltd
Power Climber, A Division of SafeWorks, LLC
Pro-Bel Enterprises, Ltd.

SafeWorks, LLC
Safway Services, LLC
Sky Climber, LLC
Sky Rider Equipment Co., Inc.
Spider, A Division of SafeWorks, LLC
Tractel Inc., Griphoist Division
Tractel Ltd., Swingstage Division
Urban Scaffolding, Ltd.
Weatherguard Services, Inc.
Winsafe Corporation