



Scott L. Melnick

As with most kids, my brood is enthralled by the opportunity to bounce on any piece of furniture (especially if I'm trying to rest in the same location). Put them on a trampoline, and they're in heaven. Take them to the park, and they gravitate to bouncy, swaying walkways. But somehow, office workers are less excited about movement in their floors.

Vibration concerns are nothing new—as far back as the 1960s sophisticated design and analysis methods were propagated (e.g., the Modified Reiher-Meister and the Murray Criterion). And the problem is not material specific—the *PCI Journal* covers the issue in concrete structures just as *Engineering Journal* addresses it in steel structures.

But if current guidelines are followed, vibration shouldn't be a concern. Tom Murray and Chris Hewitt's article on page 21 outlines how changing office use (the move from offices with tall partitions, heavy file cabinets, and large bookcases to "electronic offices"), combined with larger bays, has decreased the amount of modal damping. The article clearly and simply outlines procedures and presents alternatives. (For a more detailed look at vibration, see AISC's *Design Guide 11: Floor Vibrations due to Human Activity*—available as a free download to members from www.aisc.org; non-members can download or purchase a copy for \$60.)

Of course, one of the problems with designing for vibration is that the typical structural engineering software program does not adequately address the issue. In fact, I'm not aware of any design and analysis package that fully addresses the issue (if I'm wrong, I'd love to hear about it!). Fortunately, there are specialized programs that can help. By the time you read this, a limited version of Tom Murray's new Windows-based program, FloorVibe, should be available for download from www.aisc.org/steeltools.

And speaking of software available from AISC, I urge you to check out the rest of the pro-

grams available at www.aisc.org/steeltools. AISC's Steel Tools are a brilliant set of programs (primarily Excel-based and most created by the Steel Solution Center's Jason Ericksen) that simplify routine tasks ranging from calculating how much paint is required for exposed members in a project to calculating the door openings that can be created in braced frames. There's also a program that provides bay framing information designed to minimize fabrication costs, and one that suggests member alternatives to cut costs by reducing or eliminating the need for stiffeners. And, for RAM Structural System users, there's a module that provides a cost estimate for the total frame.

Congratulations to EAE Winners

This month's issue also features the winners of this year's Engineering Awards of Excellence—and this year's crop is one of the best in recent memory. Congratulations to all of the winners and a special thanks to the competition judges:

- Lawrence A. Fuess from L.A. Fuess Partners in Dallas
- Kenneth Gible from Gible Norden Champion Brown in Old Saybrook, CT
- James O'Callaghan from Dewhurst Macfarlane and Partners in New York City.

And for those interested, it's not too late to enter AISC's IDEAS (Innovative Design and Excellence in Steel) Award Competition, which honors those designs where structural steel forms a prominent architectural feature of a building, either as an interior or exterior application. You can download information at www.aisc.org/awardsideas—but act quickly, deadline for entries is April 15!

Editorial Offices

Modern Steel Construction
One E. Wacker Dr., Suite 3100
Chicago, IL 60601
312.670.2400 tel
312.670.5403 fax

Editorial Contacts

Editor & Publisher
Scott L. Melnick
312.670.8314
melnick@modernsteel.com

Managing Editor
Keith A. Grubb, P.E., S.E.
312.670.8318
grubb@modernsteel.com

Associate Editor
Beth S. Pollak
312.670.8316
pollak@modernsteel.com

AISC Officers

Chairman
James A. Stori
Vice Chairman
John Yohe
Treasurer
Lawrence A. Cox
Secretary & General Counsel
David B. Ratterman
President
H. Louis Gurthel, P.E.
Vice President, Finance & Technology
E. Joseph Dietrich
Vice President, Engineering & Research
Louis F. Geschwindner, Ph.D., P.E.
Vice President, Communications
Scott L. Melnick

Advertising Contact

Account Manager
John A. Byrne
847.699.6049 tel
847.699.8681 fax
byrne@modernsteel.com
2400 E. Devon Ave., Suite 380
Des Plaines, IL 60018

To receive advertising information, contact John Byrne or view it online: www.modernsteel.com

Address Changes and Subscription Questions

312.670.5444 tel
312.670.5403 fax
admin@modernsteel.com

