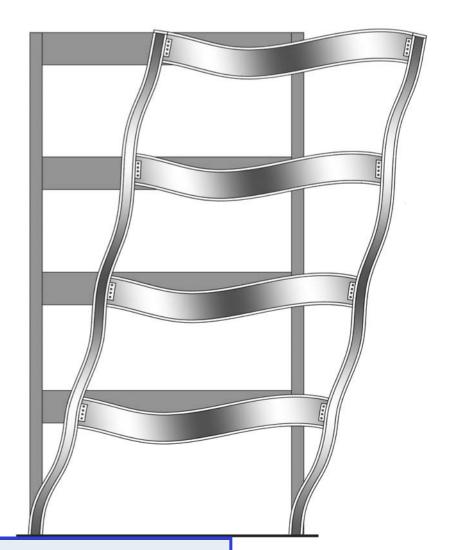




Serviceability Design Considerations for Steel Buildings

Second Edition



This is a preview. Click here to purchase the full publication.





Serviceability Design Considerations for Steel Buildings

MICHAEL WEST AND JAMES FISHER

Computerized Structural Design, Inc. Milwaukee, Wisconsin

with contributions from

LAWRENCE G. GRIFFIS

Walter P. Moore and Associates Austin, Texas

Second Edition

AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC.

This is a preview. Click here to purchase the full publication.

Copyright © 2003

by

American Institute of Steel Construction, Inc.

All rights reserved. This book or any part thereof must not be reproduced in any form without the written permission of the publisher.

The information presented in this publication has been prepared in accordance with recognized engineering principles and is for general information only. While it is believed to be accurate, this information should not be used or relied upon for any specific application without competent professional examination and verification of its accuracy, suitability, and applicability by a licensed professional engineer, designer, or architect. The publication of the material contained herein is not intended as a representation or warranty on the part of the American Institute of Steel Construction or of any other person named herein, that this information is suitable for any general or particular use or of freedom from infringement of any patent or patents. Anyone making use of this information assumes all liability arising from such use.

Caution must be exercised when relying upon other specifications and codes developed by other bodies and incorporated by reference herein since such material may be modified or amended from time to time subsequent to the printing of this edition. The Institute bears no responsibility for such material other than to refer to it and incorporate it by reference at the time of the initial publication of this edition.

Printed in the United States of America

First Printing: March 2004

This is a preview. Click here to purchase the full publication.

Preface

This Design Guide is the second edition of AISC *Design Guide 3*, which was originally titled *Serviceability Design Considerations for Low-Rise Buildings*. The new title *Serviceability Design Considerations for Steel Buildings* reflects the addition of information on tall buildings and the following more general information:

- 1. A review of steel building types, occupancies and serviceability design considerations related to each, as applicable.
- 2. Revision to current editions of references.
- 3. Information on ponding for roof design.
- Information on floors, including discussion regarding cambering beams and how deflection issues relate to the construction of concrete slabs.
- Revision of floor vibration information to follow AISC Design Guide 11, Floor Vibrations Due to Human Activity (Murray and others, 1997).

Acknowledgements

The authors wish to thank the Metal Building Manufacturers Association for its joint support with AISC in the preparation of the first edition of this Guide.

AISC would also like to thank the following people for assistance in the review of this Design Guide. Their comments and suggestions have been invaluable.

Todd Alwood Harry A. Cole Charles J. Carter Cynthia J. Duncan Tom Ferrell Louis F. Geschwindner John L. Harris Christopher M. Hewitt Lawrence Kloiber Jay W. Larson Roberto Leon William Liddy Ronald L. Meng Charles R. Page Davis Parsons David T. Ricker Victor Shneur William T. Segui Eldon Tipping

v