

MIXED-USE PROPERTIES:
STANDARD METHODS OF MEASUREMENT



Building Owners and Managers
Association (BOMA) International

www.boma.org



CONTENTS

Legal Notice*	iii	Section 4: Allocation of Mixed-Use Common Areas.....	8
Acknowledgements*	iv	Section 5: Measurement Methods/Examples.....	11
Introduction	1	Section 6: Definitions.....	61
Section 1A: Scope.....	2	Section 7: Using the Global Summary of Areas With Mixed-Use Properties.....	66
Section 1B: Application and Use.....	3	Section 8: Appendix.....	74
Section 2: Overview of Measurement Method.....	4		
Section 3: Classification of Mixed-Use Components.....	6		

**Not part of the Mixed-Use Standard*

BOMA International
Suite 800
1101 15th Street, NW
Washington, DC 20005
202.408.2662
www.boma.org

*An American National Standard
Approved August 7, 2012 by American National Standards Institute, Inc.*

*Secretariat
Building Owners and Managers Association International*

*Copyright © 2012 Building Owners and Managers Association (BOMA)
International. All rights reserved. No portion of this document may be
reproduced without permission.*

LEGAL NOTICE

The Publisher has developed this publication as a service to the real estate industry and to the public. Use of this publication is voluntary and should be undertaken after an independent review of the applicable facts and circumstances of the particular projects. Although the Publisher has made all reasonable efforts to present comprehensive and accurate information, NO GUARANTEES OR WARRANTIES ARE MADE, INCLUDING ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS WITH RESPECT TO THIS PUBLICATION BY THE PUBLISHER, ITS OFFICERS, DIRECTORS, EMPLOYEES OR AGENTS, WHO ALSO ASSUME NO LEGAL RESPONSIBILITY FOR THE ACCURACY OF THE PRESENTATIONS, COMMENTS, OR OTHER INFORMATION IN THIS PUBLICATION. IN ADDITION, NO LIABILITY IS ASSUMED AND ALL LIABILITY IS EXPRESSLY DISCLAIMED FOR NEGLIGENCE OR DAMAGES OF ANY KIND, ANY DECISIONS, CONTRACTS, COMMITMENTS, OBLIGATIONS OR ANY OTHER ACTIONS UNDERTAKEN OR MADE ON THE BASIS OF THE INFORMATION CONTAINED IN THIS PUBLICATION. This document has important legal consequences and independent consultation with an attorney is advised and encouraged with respect to execution and modification.

BOMA International does not certify, approve, or endorse any individual, firm, device or software for the measurement of floor areas.

A Note about Terminology

Because a key purpose of a standard is to foster clear communications, key terms that are used in this standard are carefully defined in the Definitions section and are underlined wherever they appear in the text. Readers are advised to refer to the Definitions section wherever an underlined term is encountered in the text. To facilitate this in the electronic version, hyperlinks connect all underlined terms with their definitions.

Special note is made concerning the term "common area". There are distinctions between the meaning of this term in each of the four standards published by BOMA International for office, retail, industrial and multi-unit residential occupancy. In fact, the term was removed from the 2010 version of the BOMA Office Standard and replaced by the term "service and amenity area". However, it is still in use under existing leases that cite the 1996 or earlier BOMA Standards. This mixed-use standard introduces a new term for mixed-use common area (MUCA), which is separate and distinct from

the common areas (or the service and amenity areas) of the individual use components of a mixed-use property. Users of this standard are cautioned to pay special attention to understanding and using terms that refer to any of these "common area" classes of space.

Special Note

This American National Standard is a national consensus standard developed under the auspices of the Building Owners and Managers Association (BOMA) International and certified by the American National Standards Institute (ANSI), of which BOMA International is a member and ANSI Certified Standards Developer. Consensus is defined by ANSI as "substantial agreement reached by directly and materially affected interest categories. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution." BOMA International obtains consensus through participation of its members, associated groups, and public review. Contact the Director of Codes and Standards at BOMA International to:

- a. Participate in the next review of this or any other BOMA International standard,
- b. Offer constructive criticism for improving the Standard,
- c. Permission to reprint portions of the Standard, or
- d. Register any inquiry concerning this Standard or any other BOMA International standard.

The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Interpretations of Mixed-Use Properties: Standard Methods of Measurement (ANSI/BOMA Z65.6-2012) may be obtained through the "Floor Measurement Standards Interpretations" section found on the BOMA International website (www.boma.org). Interpretations are provided by BOMA Recognized Floor Measurement Standards Interpreters. No person shall have the right or authority to issue an interpretation of this American National Standard in the name of the American National Standards Institute nor in the name of BOMA International except by BOMA Recognized Floor Measurement Standards Interpreters.

ISBN: 978-0-9778587-9-8

Copyright © 2012 by the BOMA International. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a data retrieval system, without prior written permission of BOMA International.

ACKNOWLEDGEMENTS

BOMA International wishes to extend its appreciation to those individuals who contributed to the development of *Mixed-Use Properties: Standard Methods of Measurement (2011)*.

Kathleen DiValentin
Task Force Chair
Corporate Office Properties Trust
Columbia, Maryland

Rebecca B. Hanner, CPM, RPA
Task Force Vice Chair
Cassidy Turley
Raleigh, North Carolina

Bill Tracy, AIA, MBA
Task Force Vice-chair
Building Area Measurement LLC
Denver, Colorado

Roberto Bueno
JPC Architects
Bellevue, Washington

Johnny Campbell
Sundance Square
Fort Worth, Texas

Bruce Clayton
City Creek Reserve Inc.
Salt Lake City, Utah

Steve Cramer
2-D Floor Plans
Seattle, Washington

Adam Fingret
Extreme Measures, Inc.
Toronto, Ontario

Tery Finigan, CPM
Stevenson Systems, Inc.
Laguna Niguel, California

Kent Gibson
Property Reserve Inc.
Salt Lake City, Utah

David Jones
City Creek Reserve Inc.
Salt Lake City, Utah

Richard King
Colliers International
Hollywood, Florida

James Kleeman
Related Management
New York City, New York

Bruce Lyman
City Creek Reserve, Inc.
Salt Lake City, Utah

Joe McDonnell
American Building Calculations Inc.
Land O Lakes, Florida

Nate Olson
Stevenson Systems Inc.
Laguna Niguel, California

William Partridge
BOMA Calgary
Calgary, Alberta, Canada

Jody Resnick
Pace Compumetrics, Inc.
Canoga Park, California

Fraser Rowe
American Building Calculations Inc.
Land O Lakes, Florida

Robert Shovan
Transwestern
Columbia, Maryland

Peter Stevenson
Stevenson Systems, Inc.
Laguna Niguel, California

Ilya Tsioma
Architectural Innovations
Mosckovskaya, Russia

David P. Tyree, P.E., C.B.O.
BOMA International
Washington, DC

Roger Vanderklok
Penn. Real Estate Investment Trust
Philadelphia, Pennsylvania

BOMA also extends special appreciation to those who contributed plans of their projects for use as examples in this standard:

- Highwoods Properties
- SmithGroupJJR

In addition, BOMA thanks JBG Companies of Chevy Chase, Md., for the use of the photograph of North Bethesda Market on the cover of this publication and to the photographer David Roe.

INTRODUCTION

The original BOMA Standard was introduced in 1915 and became the best known standard for measuring floor area in office buildings in the United States and many other countries. However, it applies only to buildings that contain primarily office occupancy plus limited ancillary use, such as ground level retail space. It was not intended to measure retail buildings, industrial buildings, single or multi-unit residential buildings, parking structures, or other occupancies such as hotels, institutional or civic buildings. Nor was it intended to measure buildings that were legally subdivided into separate parcels of real estate or mixed-use properties.

In recent years, developers, businesses and communities have realized the benefits of mixed-use properties, and their development has been supported by new zoning laws and other incentives in many areas. As a result, they have grown in popularity. With only one published BOMA standard that applied to office space, the measurement of the floor areas in these mixed-use properties has presented challenges to developers, property managers, design professionals and others in the real estate industry. There was a clear need for a measurement standard addressing mixed-use properties. Therefore, in 2000, BOMA International embarked upon an expansion of published measurement standards with the intent of publishing this standard for the measurement of mixed-use properties.

A prerequisite for a mixed-use standard was the development of a measurement standard for each use component in which floor area is important for property leasing and management. Accordingly, BOMA International developed or updated the following ANSI measurement standards:

2009 (new) – The Gross Areas of a Building: Standard Methods of Measurement

2010 (new) – Multi-Unit Residential Buildings: Standard Methods of Measurement

2010 (new) – Retail Buildings: Standard Methods of Measurement

2010 (updated) – Office Buildings: Standard Methods of Measurement

2012 (updated) – Industrial Buildings: Standard Methods of Measurement

This publication, *Mixed-Use Properties: Methods of Measurement*, enables a user to consistently:

- Classify the floor areas of a mixed-use property onto use components, parking components, and mixed-use common areas.
- Measure the exterior gross areas of use components for office, industrial, retail and multi-unit residential use components, for which rentable area, gross leasable areas or unit areas are individually measurable using measurement standards published by BOMA.
- Measure the exterior gross area of use components for which BOMA International does not publish specific measurement standards, such as hotels, theaters, institutional and civic uses, and of parking components.
- Measure the exterior gross areas of mixed-use common areas and fairly allocate those areas among all use components and parking components within a mixed-use property.

SECTION 1A: SCOPE

These methods for measuring floor area are intended for application to properties containing two or more use components, including, but not limited to, office, retail, industrial, single and multi-unit residential, hospitality, entertainment, civic and institutional buildings, both private and public. They can be applied to both new and existing properties containing single or multiple floors or buildings, and properties that are either owner occupied or leased to single or multiple tenants. They are not intended for application to site improvements other than buildings, and do not address the measurement of spatial volume.