



# Masonry Take-Out Talks 2012



Take-Out Talks are held at 11:30 a.m. on the first and second Wednesdays of the month at Rocky Mountain Masonry Institute, 686 Mariposa St, Denver. 303-893-3838 [www.rmmi.org](http://www.rmmi.org)

Combined Axial Loads and Flexure.....11:30 a.m. January 4, 2012

Most designers use the simplified Unity Formula for considering axial loads in combination with flexure. It may be quick and easy, but how much of the masonry capacity are you throwing away with this approach? We'll talk about using interaction diagrams to "reclaim" the effect of axial loads and how they increase the wall's flexural resistance. Each attendee will receive simple design charts that you can use for a wide range of wall types and reinforcement ratios. Taught by Michael Schuller at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#)

Become an Instant Masonry Expert.....11:30 a.m. January 11, 2012

Have you ever wondered where RMMI Technical Director Diane Travis gets her information? In spite of what she may tell you, Diane does not know it all. In this seminar she will share her trade secrets—the technical books that are easiest to understand, the most trusted resource people and the most complete web sites. This class will even tell you where to find free downloadable pre-drawn details to save yourself drafting time. In no time at all you too will be a masonry expert. Taught at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#)

Designing for Shear: Beams and Walls.....11:30 a.m. February 1, 2012

What's the difference between an ordinary reinforced shear wall and a special reinforced shear wall? What is the benefit of using more reinforcement to ensure ductile performance? We'll cover how to design beams and walls for applied shear loads, and see how the Building Code lets us take advantage of specially reinforced shear walls. Learn about the different potential shear failure modes and how to apply building code requirements to ensure our walls behave in a ductile manner. We'll finish with simple diagrams showing code requirements for vertical and horizontal reinforcement in the different seismic zones. Taught by Michael Schuller at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#)

Masonry 101.....11:30 a.m. February 8, 2012

This introductory seminar is designed for people who are unfamiliar with masonry construction. It gives you the basic tools you will need to design with brick, block and stone. The class also gives you a list of resources you can consult if you need more advanced information. Taught by Diane Travis at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#)

Distributing Loads to Shear Walls.....11:30 a.m. March 7, 2012

You probably never thought about how the building's roof system will affect your design of masonry shear walls, but be careful - the loads carried by masonry walls will vary hugely depending on floor and roof diaphragm stiffness. Come to this seminar to learn simple rules for defining flexible and stiff diaphragms, and how to distribute lateral loads to walls with non-symmetric building layouts. Taught by Michael Schuller at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#)

Control Joints in Masonry Walls.....11:30 a.m. March 14, 2012

Everybody knows that you need to include Control Joints in masonry walls but everybody hates them. This seminar will teach you where you absolutely MUST put control joints. It will also teach you how to avoid using control joints in some instances. Taught by Diane Travis at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#)

Detailing Reinforcement and Anchorage.....11:30 a.m. April 4, 2012

Fitting reinforcement into congested masonry walls can be tricky. We have to worry about anchorage, development

length, splices, hooks, stirrups, and all the rest. The way we treat lap splices in masonry has been constantly changing since the formula was updated with the 1999 MSJC Code. Did you know the formula for lap splice length continues to be modified? Recent research is leading to a reformulation of how we look at lap splices and development length in masonry. Don't be left behind – see what is happening now and what is in store for future code cycles as we discuss code requirements for steel detailing in masonry walls. We'll finish with simple diagrams showing code requirements for vertical and horizontal reinforcement in the different seismic zones.

Taught by Michael Schuller at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[Rain Screen Walls.....](#)11:30 a.m. April 11, 2012

Rain Screen Walls are the latest version of Cavity Walls. They not only have a gap behind the veneer to manage moisture penetration, they also have a vented cavity that allows this air gap to dry out. A Rain Screen Wall also allows natural convection to cool this cavity. Taught by Diane Travis at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#)

[Cost-Effective Engineering Design.....](#)11:30 a.m. May 2, 2012

This seminar is aimed at designers who want to use masonry (brick, block and stone) but have budget concerns. Some value-engineering options work just fine, but others can significantly affect the long-term viability of the building. It is always better to understand your options before you build the structure. We will talk about effective structural design concepts, compare the costs of different competing wall systems, and understand how some common masonry details affect constructability and cost. Taught by Michael Schuller at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[An Introduction to the International Green Construction Code.....](#)11:30 a.m. May 9, 2012

The International Green Construction Code is the first green building code to be published in 2012. The seminar will cover the development process of the IGCC, the scope and adoption requirements, mandatory language vs. project electives and the extent of freedom in design, major concepts covered by the IGCC, and how the IGCC relates to the existing building codes. This program is for architects and engineers. Taught by Shahnaz Jaffari, President of EcoGreen Vision at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[How to Design a Masonry Structure in 20 Minutes.....](#)11:30 a.m. June 6, 2012

The Direct Design seminar is based on The Masonry Society's new Direct Design Handbook for Masonry Structures. This new standard provides a direct design procedure that provides a step-by-step process using a series of tables to design and specify relatively simple, single story concrete masonry bearing wall structures in compliance with the 2008 MSJC Code and Specification as well the 2009 International Building Code. This program is for architects and engineers. Taught by NCMA Director of Engineering Jason Thompson at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#)

[Flashing—The Most Important Detail.....](#)11:30 a.m. June 13, 2012

Since flashing is usually hidden, it is sometimes substituted or deleted. This can be a HUGE mistake. Although flashing is not a masonry material itself, it is the critical piece that makes the rest of your detail work. This seminar will help you compare different flashing materials (for cost as well as effectiveness). The class will also teach you where to put the flashing and how to install it so that it will work. Taught by Diane Travis at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[RTD and Transit Oriented Development.....](#)11:30 a.m. July 11, 2012

Our annual check-in with the Regional Transportation District's progress on FasTracks and projections for Transit Oriented Development projects along the rail lines throughout Denver. This presentation is to assist architects and engineers in planning for future business developments. Taught at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[Bracing Masonry Walls.....](#)11:30 a.m. August 1, 2012

For many years the construction industry has followed OSHA requirements that dictated masonry walls over eight feet tall must be "adequately" braced. But what exactly is "adequate" for bracing masonry walls, and what are the most effective approaches for the typical job site? This seminar will show you what you need to do to design masonry wall

bracing systems and comply with the industry's Standard Practice for Bracing Masonry Walls Under Construction. Taught by Michael Schuller at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[High R-Value CMU Walls](#) .....11:30 a.m. August 8, 2012  
Although building codes are getting more and more restrictive in their insulation requirements, you can build a single-wythe concrete block building in most climate zones and still meet the International Energy Conservation Code if you know what to specify. This seminar will teach you what you have to include in your design to make it meet today's energy codes. It will also cover detailing advice you need to know to make sure your building will be trouble-free for decades. Taught by Jacob Wipf at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[Masonry Codes and Standards Update](#).....11:30 a.m. September 12, 2012  
What's new in the 2012 IBC and the 2011 MSJC? Are there any new ASTM Standards that apply to masonry or have there been significant changes to any of the existing standards? Find out what you need to know (and what you already know). For architects and engineers. Taught by David Woodham at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[Using Finite Element Methods for Masonry Analysis](#).....11:30 a.m. October 3, 2012  
Some structures are difficult to evaluate or design using conventional analysis techniques. This could be due to a complex geometry, soil structure interaction or other factors. The finite element method can be used to analyze masonry in these situations. This session will discuss the nuances of modeling masonry vs. other typical materials such as steel or reinforced concrete. We will present several case studies and discuss results of typical analyses. Taught by David Woodham and Carlo Citto at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#)

[Masonry Detailing on a Budget](#).....11:30 a.m. Oct 10, 2012  
Budget limitations are a fact of life for most projects. Some details cost almost nothing. Some cost a lot. If you know the difference, you can save yourself a lot of re-design time. Taught by Diane Travis at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[Masonry Repair Materials and Procedures](#) .....11:30 a.m. November 7 2012  
This presentation will provide an overview of best practices for masonry repair. Content will include structural repair and strengthening, repointing, stitching, reconstruction, and aesthetic repairs. The course will introduce attendees to a vast range of masonry repair options and techniques, including appropriate types of repair materials for different applications. Taught by Donald Harvey at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[How to Insulate an Old House](#).....11:30 a.m. November 14, 2012  
Massive load-bearing masonry walls of historic buildings typically included no insulation at all. Installing insulation in these old masonry assemblies can sometimes have disastrous results. This class will give you advice about the most cost effective approach to making old buildings more energy efficient without destroying them. Taught by Diane Travis at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[Evaluating Masonry in Historic Homes](#).....11:30 a.m. December 5, 2012  
Denver has an incredible variety of historic homes – most of which involve masonry foundations and unreinforced masonry bearing walls. Attend this seminar to learn what we've come to recognize as the six common causes of masonry distress in historic homes and see some potential solutions for repairing historic masonry. We'll also discuss some common foundation issues with historic homes and talk about methods for stabilizing historic foundation walls. . Taught by Shan Wo (Atkinson-Noland) and Delchi Fafach (DLK Engineering) at [Rocky Mountain Masonry Institute, 686 Mariposa St, Denver.](#) .

[Become an Instant Masonry Expert](#).....11:30 a.m. December 12, 2012  
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