



RCI offers a series of educational courses and seminars throughout the year in the U.S. and Canada covering all segments of the building envelope. Seminar material is continually updated with the latest technology and industry practices. Courses are taught by RCI professional staff and field professionals – RCI volunteers with years of experience and a wealth of expertise. Textbooks are included and are also available for purchase separately. Although they are recommended, the courses below are not intended as preparatory for RRC[®], RWC[®], or RRO[®] exams. For course dates and locations, check the Calendar of Events on RCI's Web site: www.rci-online.org. All courses offer Continuing Educational Hours (CEHs).

Roofing Technology and Science I

Roofing Technology and Science I and II are two-day classes. They are not necessarily sequential, but it is logical to take Part I before taking Part II. They are sometimes presented back to back so that they can be taken as a four-day class if desired. Roofing Technology and Science I contains information on structures and decks; basic thermal and moisture technology; insulation; bitumen, modified bitumen, and BUR systems; single-ply, polyurethane foam, and PMR systems.



practice, including the role of the consultant, ethics, legal contract issues, and roof inspections. Included are some advanced technology subjects such as roof system selection, reroofing fundamentals, and chemical and physical forces as related to roofing.

Roofing Technology and Science II

Roofing Technology and Science II continues after Part I with a knowledge base on wind and fire design and testing, fluid-applied roofing, moisture and condition surveys, life-cycle costs and roof maintenance, asphalt shingles and miscellaneous steep roofing systems, venting of steep roofs, and metal roof systems. The basic technology and roofing science presented in Parts I and II provide the necessary base of knowledge for the other RCI courses.

Rooftop Quality Assurance

This two-day course is aimed at those consultants, architects, building owners, and roofing materials manufacturers who provide roof observer functions. The course provides an understanding of the proper role of the observer, including authority, daily reports, and ethics. Also discussed are contract documents. About half of the class time is spent identifying items that the observer should watch for while observing the installation of a variety of roof systems, including low- and steep-slope roofs and spray-applied polyurethane foam roofing.

Professional Roof Consulting

This course is aimed at those who are practicing roof consultants and wish to increase their professionalism, as well as those who are preparing for the RRC registration exam. Within this course are business-related topics such as contract documents and roofing warranties. Also included are the basics of the consulting

Wind and Drainage

This two-day course is aimed at developing or improving a professional roof consultant's skills in wind and drainage issues. Basic properties of wind and the various facets of wind design are taught. Code fundamentals and ASCE 7-05 wind design are discussed, and calculation methods are practiced. Factory Mutual wind design is covered, including FM 1-49 and 1-52. ANSI/SPRI ES-1-03 edge design is taught and practiced by attendees. Design for internal drains and piping and external gutters and downspouts is taught and practiced. This course teaches specific design skills using lectures and practice problems.

Advanced Thermal and Moisture

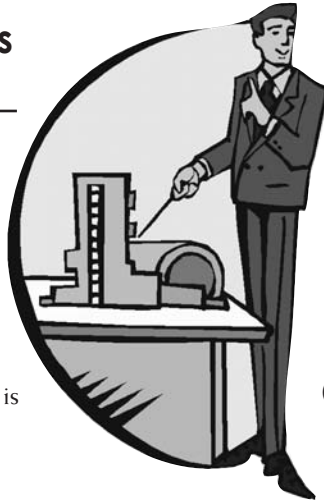
Consultants or industry members who want to develop more in-depth thermal and moisture design skills will want to take this course. Subjects, taught quickly, move beyond basic thermal terminology and calculations to cooling-load calculations, annual energy and payback calculations, cool and reflective roofs, and temperature calculations within cross sections. Moisture starts with the psychrometric chart and moist-air properties. Additional topics include vapor retarders, the effects of moisture on insulation, air barriers, and mold issues. Ample time is reserved for practice problems.

Rooftop Safety for Consultants and Building Owners

In a one-day course, the OSHA (Occupational Safety and Health Administration) safety responsibilities of each participant in a roof construction or inspection process are discussed. Both Part 1926 (construction standards) and Part 1910 (general industry standards) are covered, including where they apply. The safety role of the noncontractor parties is presented. Also discussed are consultant and building owner safety programs for their employees. This course does not provide sufficient safety training for the roofing contractor.

Construction Specifications and the Project Manual

This one-day course provides training in the content of the project manual for roofing projects. Included are discussions on bidding documents, conditions of the contract, and technical specifications. Maintaining a valid contract through the use of appropriate addenda, change orders, change directives, and other instruments of change are discussed. Guidance is also provided in writing specifications.



Masonry Wall Systems

This 1.5-day course is the first specific wall-type course to follow up on the basic technology provided in Exterior Walls Technology and Science. The course focuses on brick, CMU, terra cotta, and stone wall systems, along with mortar fundamentals and accessory materials. Masonry wall assembly types and applicable design standards are discussed. Also included are evaluation of masonry problems, leak surveys, testing methods, and repairs.

Green Roofing for Design Professionals

This one-day course provides in-depth technical information for those who design green roofs. Green-roofing design is technically demanding. In this course, guidance is provided in the areas of design criteria, system selection, reference standards, and flashing principles and guidelines. The course is structured for those who design green roofs or are responsible for correcting green-roof performance problems. It is not intended to provide in-depth information on plants or growing media but is instead focused on aspects of thermal and moisture performance.

Advanced Waterproofing

This two-day course is aimed at the practicing waterproofing consultant and those just getting into this field. Although the term "waterproofing" can refer to many segments of a building, this course is limited to plaza decks, terraces, below-grade walls, and floor slabs. Topics include critical looks at different waterproofing systems, application techniques, drainage, protection courses, specifying and detailing, green-roof waterproofing, and various case studies. This course provides a good review or learning experience for those aiming to earn their RWC registration.

Roof Asset Management

The process of Roof Asset Management (RAM) is a series of steps and procedures aimed at treating the roof as a business asset. The purpose is to achieve a dependable roof system at a low cost per year. The one-day RAM course teaches principles and techniques, as well as financial terminology and calculation methods. Computer software programs designed to simplify the process are described and demonstrated. The course is aimed at consultants, building owners, and roofing contractors who provide roof asset management services or would like to expand into this area.

Exterior Walls Technology and Science

This two-day course provides basic exterior wall technology and terminology that will be used as fundamentals in future exterior-wall course offerings. The course covers a broad range of topics, including types of walls, psychrometrics and moisture movement, accommodating movement, wall penetrations, coatings, and sealants. This in-depth course is aimed at those preparing to expand into the wall area and those practicing in this area who wish to learn a higher level of technology.

RRC® Review and Update

This one-day course is aimed at those who have already passed the RRC exam and want a review of skills and to be updated with new information, and those who have the necessary tools to complete the RRC registration exam and desire a quick brushup on technical topics as a review. Covered are a review of wind design, including ASCE 7 and FM Global requirements; thermal calculations; CSI changes; green-roofing principles; and Roof Asset Management (RAM) calculations. Updated information is provided in all areas.



RCI E-Learning Opportunities

The following courses are now available online. Registration information is available from RCI's main site (www.rci-online.org) or www.rci-e-learning.org/home/.

Roofing Basics

Roofing Basics provides an understanding of all types of low-slope roofing materials and systems and their associated vocabulary. It is helpful to those who have little or no roofing knowledge. Topics include roof decks, insulation, various types of membranes, and maintenance information.

Roofing Technology and Science I

Roofing Technology and Science I and II are not necessarily sequential, but it is logical to take Part I before taking Part II. Roofing Technology and Science I contains information on structures and decks; basic thermal and moisture technology; insulation; bitumen, modified bitumen, and BUR systems; single-ply, polyurethane foam, and PMR systems.

Roofing Technology and Science II

Roofing Technology and Science II continues after Part I with a knowledge base on wind and fire design and testing, fluid-applied roofing, moisture and condition surveys, life-cycle costs and roof maintenance, asphalt shingles and miscellaneous steep roofing systems, venting of steep roofs, and metal roof systems. The basic technology and roofing science presented in Parts I and II provide the necessary base of knowledge for the other RCI courses.

Roof Drain Design and Calculations

Roof Drain Design and Calculations is focused on methodology of design and sizing of interior roof drains, leaders, piping, and scuppers, as well as exterior gutters and downspouts.

Rooftop Quality Assurance

This course is for those who function as roof observers. It provides an understanding of the proper role of the observer, including authority, daily reports, and ethics. Also discussed are contract documents and items to watch for while observing the installation of a variety of roof systems.

Wind Design for Low-Slope Roofs – Part I: Understanding ASCE 7-05 Wind Load Calculations

This course offers step-by-step instructions for calculating wind-uplift pressures on low-slope roofs in accordance with ASCE 7-05 and the International Building Code. Skills learned in this course provide insight into all wind design guides.

Wind Design for Low-Slope Roofs – Part II: FM Global Guidelines and Best Practice Considerations

As a follow-up to ASCE 7 calculations, Part II provides a guide to FM Global design and construction criteria as per FM Data Sheets 1-28, 1-29, 1-49, and 1-52. The course also covers ANSI/SPRI ES-1 and portions of ANSI/SPRI RP-4.

Upcoming E-Courses

- Advanced Thermal and Moisture
- Professional Roof Consulting

Other Educational Opportunities

Building Envelope Symposia

A Building Envelope Symposium is held each year in a strategic geographical location. This two-day seminar features presentations on the building envelope, including below-grade waterproofing, building sealants, deck coverings, exterior insulation and finishing systems, fenestration, maintenance programs, material testing, membranes, penetrations and flashings, tilt-ups, and water repellents. It is designed for roof consultants, architects, engineers, building owners, maintenance supervisors, general contractors, plant engineers, specifiers, and roof-

ing company employees who desire a general overview of the elements of the building envelope and how they relate to one another.

Region/Chapter Meetings

Each of RCI's regions and chapters has periodic one-day meetings that include substantial educational components. Speakers include experts in various aspects of roofing, waterproofing, and exterior walls, as well as industry representatives.