

# Roofs and Attics - Thermal and Moisture Performance

## Books and Research Reports

Canada Mortgage and Housing Corporation

*Diagnosing Attic Performance by Snow- and Frost-Melt Patterns*

Ottawa: Canada Mortgage and Housing Corporation

2004

“This project investigated whether snow or frost-melt patterns on roofs would be good predictors of ice damming potential and attic problems. Photographs of roof melt patterns were taken to document where heat was leaking into attics. Warm attics, or hot spots in melt patterns, can encourage rapid snow melt on roofs, which can lead to the formation of ice dams. Photographs were later used to compare the roofs under ice dam forming conditions.”

Available at: CMHC

Canada Mortgage and Housing Corporation

*Field Testing of Valved Soffit Vent Performance in Protecting Roof and Attic in Strong Winds*

: Canada Mortgage and Housing Corporation

2007

A simple and effective retrofit, valved soffit vents ("VSVs") are designed to blow closed in strong winds, thereby preventing the entry of snow or rain and reducing wind pressurization of the roof space. Previous testing of VSV performance in depressurizing roof spaces has been limited to scale model houses mounted on automobiles. This study explores full-scale "real world" VSV performance by monitoring a house roof space in strong winds.”

Eberhard S.

*Roof Construction Manual: Pitched Roofs*

: Basel; Boston: Birkhauser

2003

“The Roof Construction Manual with over 1800 plans and 220 photographs is a vital reference work on the construction of pitched roofs. It offers extensive and fundamental information on all common types of roofing, and provides practical details for their construction. The volume is divided according to the type of roof elements and the jointing techniques. Thirteen kinds of roofs and the relevant materials including thatch, wood, slate, tile, concrete, fibrous cement, bitumen, glass, metal, membranes, and synthetic materials are documented. Also described in detail are essential topics such as ventilation, the vapour and wind seals, insulation and water drainage, and the topics of renovation and energy conservation are examined.”

Available at: BCIT

RCABC Guarantee Corp. (RGC)

*RCABC Consumers Roofing Guide*

:

2006

“The information provided in this publication from the Roofing Contractors Association of British Columbia (RCABC) was compiled as a guide to assist consumers with the selection of roofing services in British Columbia. This roofing guide includes information sections reprinted from the RCABC Guarantee Corp. (RGC) Roofing Practices Manual (RPM) and other publications including those used by the RCABC Educational Foundation (REF) during the training of roofing apprentices and journey persons for the province of British Columbia.”

Available at: HPO, <http://www.rcabc.org>

RCABC Guarantee Corp. (RGC)  
*RCABC Roofing Practice Manual*

:

2006

“The Roofing Contractors Association of British Columbia produced this newly revised (seventeenth edition) roofing manual. Offering an overview of roofing assemblages and building science as it pertains to roofing—there are also details for all types of roof assemblages from low slope to steeply sloped. All members of the Association are listed and the guarantee program is explained.”

Available at: BCIT, VPL, HPO, <http://www.rcabc.org>

Roppel, Patrick and Lawton, Mark  
*Attic Ventilation and Moisture Research Study*  
Burnaby, BC, Canada: Homeowner Protection Office  
2014

This report presents the findings of a two-phase research project that looked at the presence of moisture and mold growth on the roof sheathing of ventilated attics constructed in coastal climates. Phase 1 examined and confirmed through field testing and monitoring that in some maritime climates mold growth may occur even in well ventilated attics. Phase 2 of the study focused on evaluating the factors that lead to moisture collection and mold growth in order to identify design solutions and treatments that would minimize the potential for mold growth.

Available at: HPO

## Articles

### None

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## **Moisture Performance**

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