



ROXUL COMFORTBOARD™ 80

Basement Foundation
Interior Wall Application

Superior Interior Basement Building Envelope Performance

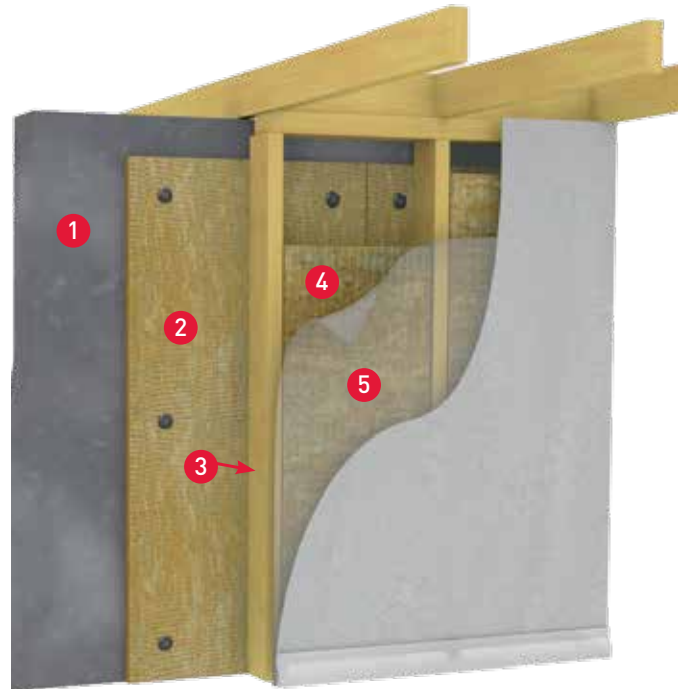
As society demands more energy efficient homes, progressive building code changes across North America are challenging builders to construct better insulated homes. One of the largest changes is taking place in the basement, where in many cases, the interior basement foundation wall now requires increased R-value performance.

R20 Solution: Code Changes drive the need for new building practices in Ontario

In Ontario, the new 2012 Building code outlines a number of instances where R20 is required by code for the basement wall. The ROXUL basement insulation system, which combines 1.5" (R6) ROXUL COMFORTBOARD™ 80 and R14 COMFORTBATT® achieves an R20 while eliminating the need for 2 x 6 construction. [Effective R-value of 17.41 calculated with 80% from insulation and 20% from studs]. The combination of 1.5" COMFORTBOARD 80 and 3.5" COMFORTBATT in the interior basement wall complies with the building codes across North America and means increased energy savings, better acoustics, thinner walls* and more comfortable living environments for home owners.

A Building Solution Catered to your R-value needs

COMFORTBOARD 80 is available in the four different thicknesses given (see chart below), which allows you to cater the design of the wall to your desired performance.



The COMFORTBOARD 80 Wall System

- 1 Concrete Foundation
- 2 ROXUL COMFORTBOARD 80 Sheathing
- 3 2 x 4 Stud Wall
- 4 ROXUL COMFORTBATT Insulation
- 5 Vapor Control Layer (where required)

Canada	COMFORTBOARD 80	COMFORTBATT	Nominal R values	Effective R values (for 16" on center wood stud construction)***	Effective R values (for 24" on center wood stud construction)***
	1.25" (R5)	R14	R19	15.64	16.41
	1.5" (R6)	R14	R20	16.64	17.41
	2" (R8)	R14	R22	18.64	19.41
	3" (R12)	R14	R26	22.64	23.41
USA	1.25" (R5)	R15	R20	15.89	16.69
	1.5" (R6)	R15	R21	16.89	17.69
	2" (R8)	R15	R23	18.89	19.69
	3" (R12)	R15	R27	22.89	23.69

* when compared to a 2 x 6 wall

** best practice, check with local jurisdiction for building code requirements

*** Effective R values were estimated for a typical basement wall assembly and include the combined effective R-values of the concrete foundation, wood studs, insulation and drywall. For the 16" on center construction, it was assumed that 75% of the wall coverage was from insulation and 25% wall coverage from wood studs. For the 24" on center construction, it was assumed that 80% of the wall coverage was from insulation and 20% wall coverage from wood studs.

ROXUL® Benefits Outperform Both Plastic Foams and Fiberglass Systems

More “Breathability” than Plastic Foams

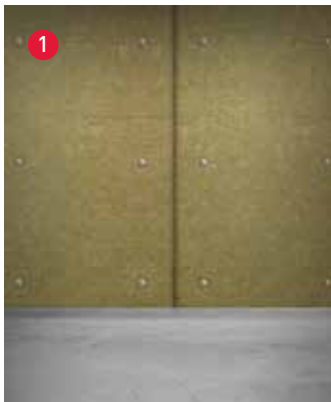
COMFORTBOARD™ 80 is a moisture-resistant, yet vapor-permeable insulation (30-40 perms) and will allow transient vapors to pass through without restriction. This unique vapor-permeable quality allows for increased drying potential “breathability” without trapping moisture in the wall assembly. ROXUL stone wool insulation does not wick water, which means that any bulk water that contacts the outer surface will drain and not be absorbed into the body of the insulation.

Today, building codes are moving to mandate “effective R-values” vs. nominal – and insulated exterior wall sheathing will play a major role to help builders achieve this requirement. ROXUL COMFORTBOARD 80 is the better sheathing insulation.

Key Benefits

- 1) Keeps moisture away from wood stud framing and quickly dries if it becomes wet, ensuring COMFORTBOARD 80 and COMFORTBATT maintain their R-value
- 2) The board offers a continual layer of thermal protection
- 3) Framing can be installed directly over the insulation boards with no gap – avoiding thermal bridging through the stud from the foundation wall
- 4) Easy to install, handle, cut, and maneuver
- 5) COMFORTBOARD 80 offers a better solution than fiberglass blanket wrap – ensuring consistent R-value performance across the entire wall surface
- 6) Complete stone wool building envelope solution – HFC-free with high-recycled content

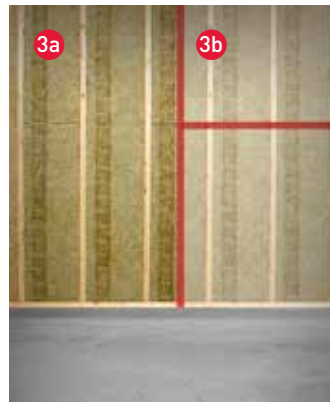
Installation Recommendations



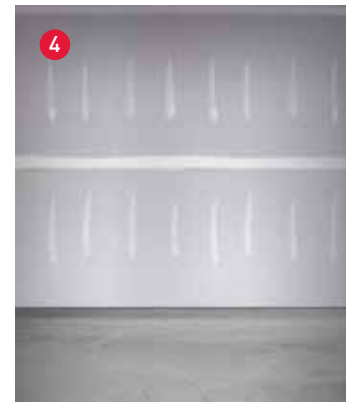
- Mechanically fasten COMFORTBOARD 80 to the concrete wall. (Eg. Use 4 to 6 concrete nails and washers per board as needed.)



- Install wall studs directly against COMFORTBOARD 80, leaving no gaps or air space.



- a) Install 3.5" COMFORTBATT wood stud insulation between studs.
- b) Install vapor barrier where required.



- Apply drywall panels horizontally or vertically to framing.

“We have developed our basement wall system using the ROXUL COMFORTBATT in order to provide our home owners with a safe, dry and comfortable living space. We’re not trying to build a perfect wall, just a more forgiving and durable wall. Installing a continuous layer of R6 COMFORTBOARD 80, between the foundation wall and the strapping significantly reduces thermal bridging and the ROXUL COMFORTBATT does not wick moisture like some other types of insulation, so there is no degradation of performance over time. We are confident that the wall system that we have designed, including ROXUL insulation, will help us exceed our customers expectations for their basement.”

– Doug Tarry, Director of Design and Marketing, Doug Tarry Homes, St. Thomas Ontario



A Global Leader

ROXUL Inc. is part of ROCKWOOL International, the largest producer of stone wool insulation, which is made from natural basalt rock and recycled material.

ROCKWOOL International was founded in 1909 and today operates worldwide with more than 8,800 employees, with 27 factories across three continents.

ROCKWOOL has more than 40 years experience in developing and manufacturing advanced wall system products. For 25 years, ROXUL has been serving the North American market.

In addition to interior wall insulation for residential construction, ROXUL also manufactures a range of other premium insulation products for multiple applications.

ROXUL is the Better Insulation

ROXUL COMFORTBOARD™ 80 and COMFORTBATT® are innovative insulation products offering a world of green features. When ROXUL is the specified insulation, green building developers can earn a variety of LEED® (Leadership in Energy and Environmental Design) points across four key construction categories toward sustainable development.



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Environmentally Sustainable

Our stone wool production process utilizes some of the most advanced technology available. The ROXUL facility is designed to capture and recycle rainwater, reduce energy consumption, and create zero waste to landfill by recycling raw materials back into the production process.

ROXUL insulations are created using naturally occurring, inorganic raw materials and materials with a high-recycled content. Stone wool insulation is non-combustible and achieves its thermal performance without the use of blowing agents. The products do not off-gas and are fully recyclable, therefore contributing to a sustainable environment.

ROXUL is pleased to have third-party certification of our products' recycled content for our Milton facility completed by **ICC-ES SAVE™**. All ROXUL products produced in the Milton facility contain a minimum of 40% recycled content. ROXUL products produced in our Grand Forks facility are currently awaiting ICC-ES Save™ certification.

ROXUL demonstrates its commitment to the environment through eco-friendly insulation products and green manufacturing processes.

For further details contact your ROXUL sales representative. Please visit www.roxul.com for the latest information.

