



[CC Expanding Sealer – An Alternative to 1- and 2-Part Expanding Foams](#)

Posted [October 23, 2010 11:30 AM](#) by Alex Wilson

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*CC Expanding Sealer comes tightly compressed in 5-meter rolls, and it expands 15-fold once it is unrolled. Photo: CC Production AB, Sweden. **Click on image to enlarge.***

Since I've been writing this weekly column on innovative green building products, the most interesting products have been brought to my attention. CC Expanding Sealer is the latest.

Manufactured by [3-C Production AB](#) in Sweden, CC Expanding Sealer is a foam "tape" that expands in a few hours to 15 times its packaged thickness. The expanding sealer is sold in vacuum-sealed, 5-meter (16.4-foot) rolls in various widths, the most common being 60 mm (2.36 in).

Peel-and-stick adhesive on one side of the foam tape (which is also available without adhesive) allows easy attachment to a window or door opening, and the slow expansion allows the window to be set in place before the foam expands to its full thickness of 30 mm (1.2 in). The expansion rate depends on temperature: at 68°F, it should take about an hour-and-a-half; at 14°F, 24 hours.

The material is an open-cell polyurethane foam that is impregnated with a low-offgassing bitumen. Fully expanded to seal a cavity, the foam provides an excellent air seal. Swedish testing and ASTM testing results are provided by the company for a wide range of performance properties.

If the non-adhesive product is used, it needs to be installed with pins rather than staples to allow for expansion. (Pin guns--like staple guns--are used in Sweden; I don't know if those are available here.)

CC Expanding Sealer was developed by Swedish inventor Johan Strömberg. According to a brochure from the company, "After working 23 years as a carpenter and seeing many of his co-workers and friends get sick because of sealing agents with isocyanate...Strömberg decided to do something about it." CC Expanding Sealer is the outcome of his efforts, which is called "totally safe" by the manufacturer. (I haven't been able to find out what flame retardant, if any, is used in the material.)



*Made in Sweden, CC Expanding Sealer has recently become available in North America. Photo: CC Production AB. **Click on image to enlarge.***

The expanded foam retains its flexibility and expands and contracts with movement of framing components seasonally, providing a consistent air seal for wood, vinyl, and metals windows and doors. Excellent sound-control properties make the product popular in Sweden for hospitals and recording studios, according to the company. (It is even used in cars in Sweden.)

If windows or doors are later removed, they can slip out easily; even if product is used with adhesive on one side, the other side of the foam does not stick. It can be removed years later if windows are being replaced, according to the company, rolled up and re-sealed for later re-use. The adhesive does not seem to be extremely sticky, so I'm guessing even the adhesive version could be reused.

3-C Production is represented in the U.S. by Doug Johnson of Bulldog Consulting, LLC in Colchester, Vermont. The distributor (wholesale) price of the 60 mm-wide product is \$10.80 per roll, according to Johnson, who takes orders and forwards them to the manufacturer in Sweden. I gather that Johnson can arrange both small and large orders.

Popular for Passive House projects in Europe, CC Expanding Sealer has been used on at least two such projects in the U.S., Johnson told me, and he's trying to generate interest especially within that segment of the market. The company claims an insulating value of R-5.2 per inch.

In our [GreenSpec directory](#), we list a similar product, [illmod 600](#), from [Tremco](#). The Tremco product is significantly faster-expanding and more expensive.

CC Expanding Sealer is one of many advanced building materials from Europe that are beginning to find their way in the U.S. I'll continue to report on such products--along with U.S.-made products.

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