

NORTHCOAST ENERGY MASTERS

7007 Krick Road (Rear) • Bedford, Ohio 44146

Phone: 440-439-8250 • Fax: 440-439-0670 • www.WorldClassWindows.com

Cellulose and Mold

Purveyors of rock wool and fiberglass often mislead homeowners regarding mold formation. Given that cellulose has a much higher R-value (3.4 to 3.75 per inch) than rock wool, mineral wool, or fiberglass (2.2 to 2.8 per inch), they have apparently decided that this is the only way to counter the superior insulating qualities of cellulose. Their statements are usually something like “tests show that cellulose gets moldy and breaks down” or “if cellulose gets wet, it loses its chemical properties and gets moldy and becomes flammable”.

Neither is true.

Cellulose comes in two basic varieties: dry-blown or wet-sprayed. The products are essentially the same, except the wet-sprayed version, also called stabilized, has glue mixed in that is activated by water. This allows the product to be sprayed onto vertical surfaces such as walls in new construction.

The only instances where cellulose has developed mold problems is when it was wet-sprayed onto wall studs and dry-walled over before it was allowed to dry. If it is allowed to dry properly, the additives in all Class One cellulose insulation products prevent the growth of mold and mildew:

Viitanen (1991) studied the influence of insulation materials on wood biodeterioration. He concluded that insulation materials do influence growth of mold and decay fungi in contact with wood. At high humidity, boron compounds added to the cellulose fiber diffused into the wood and prevented growth of brown rot fungi.

At high humidity, boron compounds added to the cellulose insulation fiber diffused into the wood and prevented growth of brown rot fungi.

It was also shown that mineral wool (fiberglass) is destroyed by decay fungi, and at the same time actively supports surrounding timber decay.



1999, 2000, 2001, 2002, 2003, 2004 & 2005

