



**Ritrama, Inc.**

**Legal Head Office & Administrative Office**  
1896 Moore Duncan Hwy  
Moore, SC 29369  
U.S.A.  
info-us@ritrama.com  
northamerica.ritrama.com

**Production Center**  
1898 Moore Duncan Hwy  
Moore, SC 29369  
U.S.A.  
Ph: +1 (864) 586-4101  
Fax: +1 (864) 640-8800

**Production Center**  
800 Kasota Ave SE  
Minneapolis, MN 55414-2814  
U.S.A.  
Ph: +1 (612) 378-2277  
Fax: +1 (612) 378-9327

## Peace of Mind

Antimicrobial technology is incorporated into our films structure to resist the growth of microorganisms on the surface through disruption of cell metabolism, inhibition of cell division and prevention of respiration.

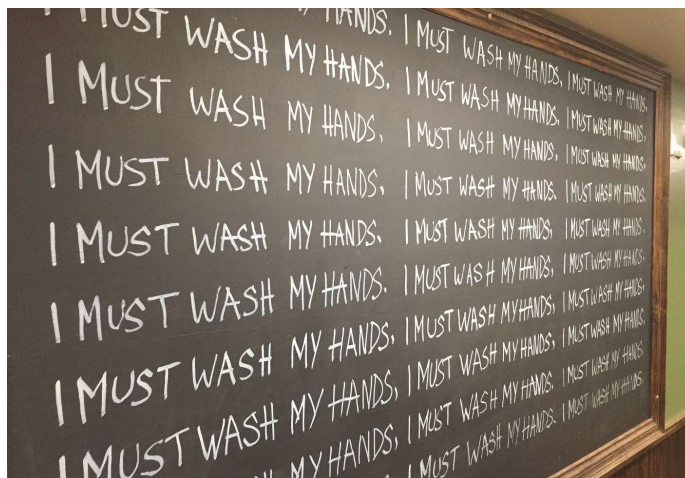
Surfaces located in education environments ranging from elementary schools and learning centers to colleges and universities can be breeding grounds for the growth of bacteria, mold, mildew, fungi or other microbes, but antimicrobial surface protection technologies can help. Cleaning protocols can be difficult to maintain where multiple users are sharing equipment and using the same contact surface. The spread of bacteria and even mold and mildew in education environments can have significant consequences including premature product degradation, stains and odors which cause lost instructional time and impact to the learning experience of the students. Studies have shown that students learn better in clean environments.



RI-GUARD can be used on many touch surfaces.

- Desks
- Counters
- Chairs
- Benches
- Doors
- Handles
- Buttons
- Screens

On an untreated surface, bacteria multiply rapidly but on an antimicrobial protected surface, the bacteria struggle to survive and are reduced by up to 99.9% in a 24-hour period. The treated surface is easier to clean and remains cleaner longer.



Custom graphics with antimicrobial characteristics can be created and placed in different locations in the classroom to remind students of safety recommendations.

The treated surfaces can be cleaned regularly with standard mild detergents and a soft cloth. The films are scratch resistant and durable and provide lasting protection.

The film can be wet applied with application fluid or water with a few drops of dish detergent and a squeegee to push out the liquid and allow the adhesive to bond to the surface.



**Ritrama, Inc.**  
Legal Head Office & Administrative Office  
1896 Moore Duncan Hwy  
Moore, SC 29369  
U.S.A.  
info-us@ritrama.com  
northamerica.ritrama.com

Production Center  
1898 Moore Duncan Hwy  
Moore, SC 29369  
U.S.A.  
Ph: +1 (864) 586-4101  
Fax: +1 (864) 640-8800

Production Center  
800 Kasota Ave SE  
Minneapolis, MN 55414-2814  
U.S.A.  
Ph: +1 (612) 378-2277  
Fax: +1 (612) 378-9327

**Please consider the study below.**

### **Antimicrobial Study recorded in the United Kingdom**

Government guidelines recommend regular cleaning alone in order to prevent the spread of infections within schools; it is not unusual for schools to close due to a widespread bacteria outbreak. Beyond regular cleaning, little consideration has been given to alternate or non-traditional methods for limiting the potential for cross contamination within the learning environment.

The world's first antimicrobial classroom was created by an antimicrobial supplier. The study investigated the levels of bacteria recovered from the antimicrobial classroom and compared them against a standard classroom.

The two classrooms were chosen due to their similarities in use, location and demographics. One was completely refurbished with antimicrobial treated products – from light switches and door handles to tables and chairs. The other classroom served as the control environment, using only standard yet comparable products. Bacterial levels were monitored across both classrooms over the period of an academic year.

The antimicrobial classroom saw a 96% reduction in bacteria when compared to the regular classroom, with all antimicrobial products harboring significantly less bacteria than their standard counterparts. This classroom also reported an astonishing 20% reduction in pupil absenteeism over the course of the academic year.

