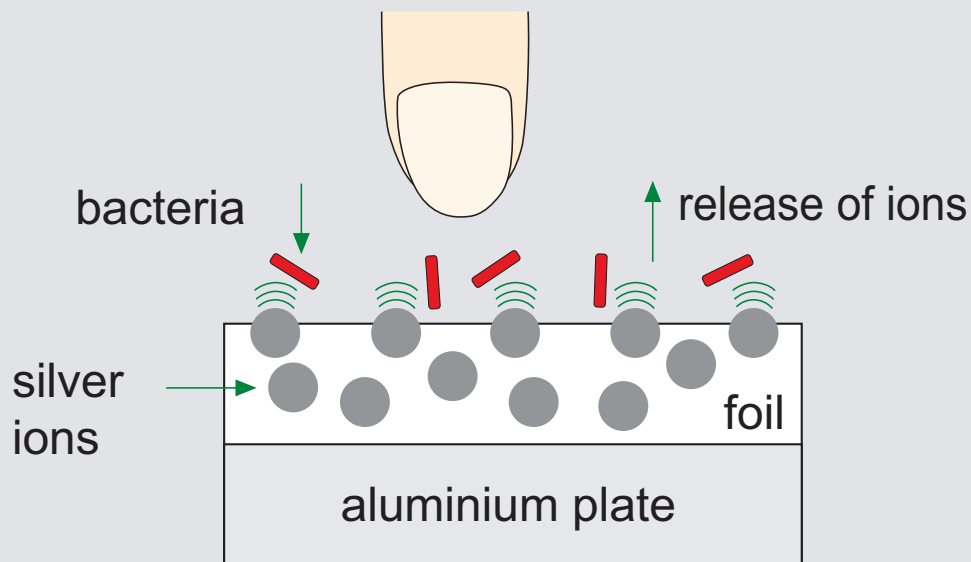
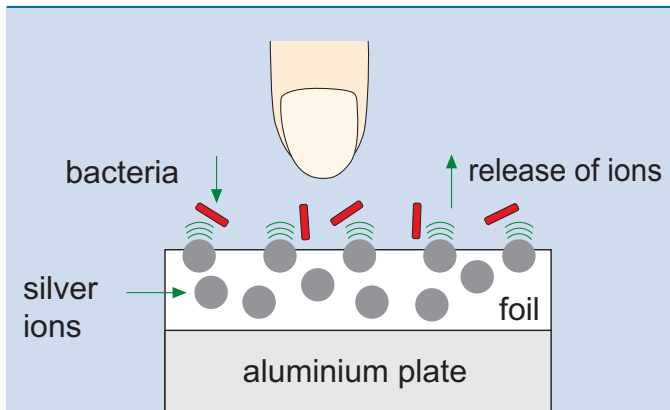


## TM800 antibacterial

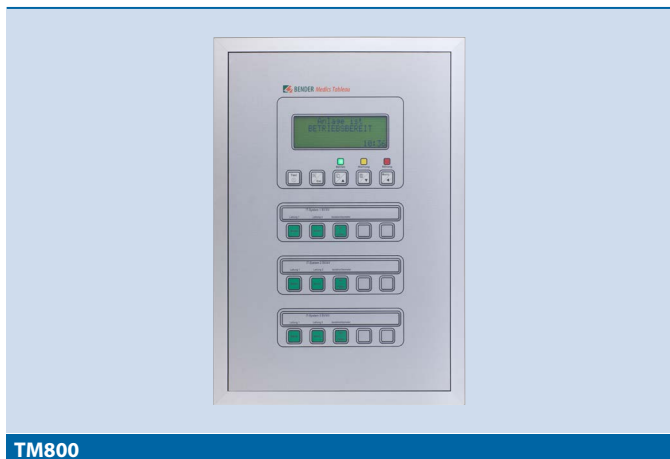
the perfect solution for long-term application in all areas where hygiene is of high importance.



## TM800 antibacterial – the perfect solution for long-term application in all areas where hygiene is of high importance.



Effectiveness of TM antibacterial



TM800

In all areas where people are gathered together, the risk of an infection is extremely high. This, for example, is true for hospitals but also for public buildings, health clinics, doctors' centres, residential homes for the elderly or other communal facilities. Often just turning on the light can be the origin of an infection, because panels can be a reservoir of viruses, bacteria and germs.

Bender, as the sole manufacturer so far, provides a solution to this problem: The new panels TM800 antibacterial. For the first time, it is possible to provide an effective barrier to prevent the spread of harmful microbes through contact with the panel. Even more: With the development of a new materials technology, we succeeded in eliminating the breeding ground for pathogens and to prevent any bacteria and fungi settlement and growth.

### Silver is a proven germ fighter

The innovative method is based on the antimicrobial properties of silver ions, which are incorporated into the front foil during the manufacturing process. The silver ions are active within the molecular structure of the material. During this process, the inorganic carrier of the stored silver ions bind with ions from the ambient humidity. This reaction activates the antibacterial effect on the panel surface, hence preventing any reproduction and mutation of pathogens.

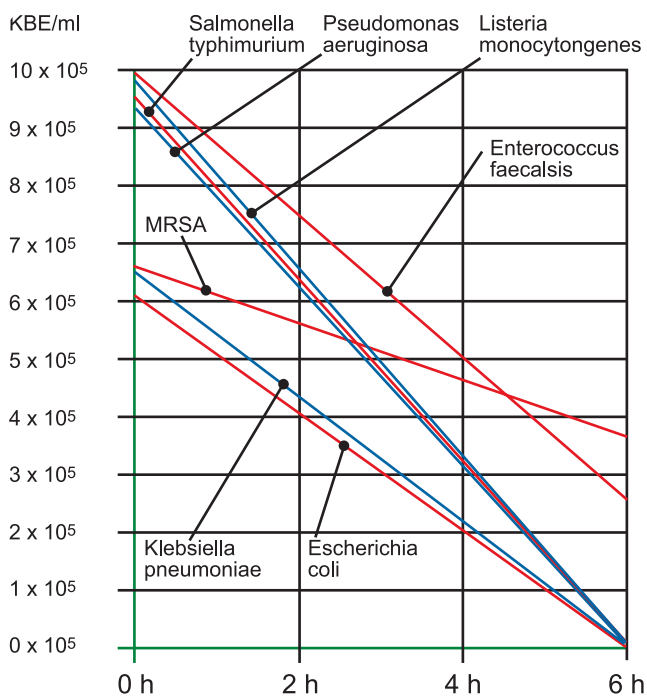
This reduces the risk of the development of new resistant strains of bacteria. In a short time, the micro-organism is completely eliminated without using dubious chemicals which can be harmful to people and the environment. Silver is a natural, harmless element without negative effects. The special exchange mechanism in the material structure, where the atmospheric moisture is used to permanently release silver ions, provides long-lasting effectiveness.

In practice that means: The complete surface of the panel TM800 antibacterial is reliably protected against various types of pathogens for many years. Because not only is the wear life span of the material considerably long but also it is extremely resistant against environmental stress. The antibacterial effectiveness is not impaired, for example, by abrasion, frequent use or temperature changes nor in any other way.

**Tested and proofed**

In October 2006, the laboratory L+S AG scientifically tested and confirmed the antibacterial effectiveness of TM800 antibacterial. An example of the strains of bacteria tested of the panels resp. foils submitted is shown in the table below.

Test germs		Number of germs used (KBE/ml)	Recovery (log) with TM antibacterial Testing period: 6 h incubation: 20...25 °C
MRSA	Clinical isolat	6.64 x 10 <sup>5</sup>	3.70
Escherichia coli	ATCC 11775	6.05 x 10 <sup>5</sup>	0
Listeria monocytogenes	ATCC 15313	9.80 x 10 <sup>5</sup>	0
Pseudomonas aeruginosa	ATCC 9027	9.44 x 10 <sup>5</sup>	0
Salmonella typhimurium	DSM 554	9.54 x 10 <sup>5</sup>	0
Enterococcus faecalis	ATCC 29212	9.92 x 10 <sup>5</sup>	2.64
Klebsiella pneumoniae	ATCC 13883	6.52 x 10 <sup>5</sup>	0





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