HOW DOES THE ZONITISE TECHNOLOGY WORK?

The active ingredient in the Zonitise antimicrobial forms a colourless, odourless, positively charged, polymer, which chemically bonds to the surface to which it is applied. Think of this antimicrobial shield as a layer of many electrically charged swords of nitrogen which attract the negatively charged cells of microbes. When a microorganism comes in contact with the treated surface, the "quat" or "sword" punctures the cell membrane and the electrical charge shocks and kills the cell. Since nothing is transferred to the now dead cell, the antimicrobial doesn't lose its strength and the sword is ready for the next cell to contact it. Normal cleaning of treated surfaces is still necessary to prevent build up of dirt, dead microbes, etc. which could cover the "swords", prohibiting it from killing microorganisms. Zonitise has a suite of recommended products for maintaining Anti-microbial efficacy of the coating.

WHAT IS THE PURPOSE OF THE SILANE PORTION OF THE MOLECULE?

Silanes are extremely efficient bonding agents, which can be coupled to other molecules and then used to permanently bond those molecules to a target surface. This process modifies surface properties of building materials and transforms them to a material that will not support microbial growth. In other words, it is the "glue" that holds the "spike" to the surface.

IS THE ZONITISE TECHNOLOGY A QUATERNARY COMPOUND?

Zonitise is an organosilane, but part of the molecule is a quaternary amine. Unlike traditional quats, which have a very short effectiveness and a limited kill spectrum, Zonitise provides long-term protection, and controls a very broad spectrum of microorganisms (including Gram (+) and Gram (-) bacteria). As an added benefit, it is easier to use.

WHAT IS THE DIFFERENCE BETWEEN ZONITISE AND OTHER ANTIMICROBIALS?

Conventional products are absorbed into living cells and kill by way of poisoning the organism. They are designed to act quickly and dissipate quickly to avoid adverse effects to humans and animals due to their toxic ingredients. Most commercial antimicrobials used for treating building surfaces do a great job of getting a quick kill on bacteria and fungi, although most have a limited spectrum of effectiveness. The Zonitise technology takes a totally unique approach. It provides an effective initial microbial kill when applied, like the conventional methods, but it also provides long-term control of growth on treated surfaces that in both laboratory studies and real life have proven efficacy at reducing bio-loads for several months.

IS ZONITISE PERMEABLE TO MOISTURE?

Yes, moisture that is in or on the treated material or surface passes through the treatment. After curing, the treatment is somewhat hydrophobic (water repellent) but it should not be considered a replacement for commercial water repellents.
The microorganism is attracted to the treated surface and punctured by the long molecular "sword." This is a physical rupture of the cell membrane, Zonitise is not consumed by the organism and stands ready to defend the surface from the risks of cross contamination.

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DOES ZONITISE GIVE OFF GASSES DURING OR AFTER APPLICATION?

No, Zonitise does not volatilize, dissipate, or leach onto other surfaces or into the environment. Zonitise antimicrobial chemistry polymerizes where it is applied and forms a permanent bond that can last for the life of the treated surface.

HOW LONG DOES A ZONITISE TREATMENT LAST?

Since the cured antimicrobial is non-volatile, insoluble, and non-leaching, the treatment should continue to be active for in excess 12 months on the treated surface. A treated surface's life span depends on a number of factors, not the least of which is surface preparation. Treating a dirty or unstable surface decreases the effectiveness of the antimicrobial. Abrasive or caustic (pH 9.0) cleaners can shorten the effective life of a treated surface. Our professional applicators have seen long term effectiveness for the life of the substrate under normal cleaning conditions.

WHAT KIND OF PREPARATION IS NEEDED FOR TREATMENT?

It is essential to the efficacy of the product that the surface to which Zonitise is being applied, is properly cleaned, as dirty or unstable surfaces can decrease the effectiveness of the antimicrobial active. Zonitise Technical Teams can offer support on the appropriate cleaners to use.

EXPERIENCE THE FREEDOM OF KNOWING YOUR ENVIRONMENT IS

CLEAN, PROTECTED & PRESERVED

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