



# CLEANROOM

ANTIMICROBIAL CLADDING SYSTEM



## SYSTEM DATA SHEET

COMPLETE ANTIMICROBIAL CLADDING SYSTEM FOR CLEANROOMS, INCLUDING WALLS, CEILINGS & COVING

Inhibits the growth of viruses and bacteria



[AM-Clad.com](http://AM-Clad.com)



# CLEANROOM

ANTIMICROBIAL CLADDING SYSTEM



AM-CLAD ANTIMICROBIAL WALL CLADDING IS COMPLIANT WITH AND CONFORMS TO ALL MAJOR QUALITY STANDARDS IN THE USA, UK AND EU.



CONFORMS TO THE  
HYGIENIC STANDARDS  
OF USP 797

COMPLIES TO cGMP, GLP & EU GMP STANDARDS  
SUITABLE AND FULLY INSTALLED INTO ISO  
CLEANROOMS (LEVELS 2-9) AND LABORATORIES

# AM-CLAD CLEANROOM



## FDA COMPLIANT ANTIMICROBIAL WALL CLADDING SYSTEMS FOR PHARMACEUTICAL-GRADE CLEANROOMS

**ANTIMICROBIAL CLEANROOMS** are the ultimate in bio-secure environments and are designed for pharmaceutical research and manufacturing, medical device and hospital environments. AM-Clad supplies premium-grade, antimicrobial wall cladding proven to deliver, thanks to silver-ion technology infused during the manufacturing process.

For a hygiene-critical environment to be truly optimized, antimicrobial cladding on walls and ceilings and in the sealed coving which connects them, is essential. The antimicrobial feature helps inhibit the growth of viruses and bacteria such as COVID-19, E.Coli, Influenza and MRSA. Our Antimicrobial cleanroom wall system is FDA compliant, USDA compliant and conforms to the hygienic standards of USP 797. It also complies to cGMP, GLP & EU GMP standards, and is suitable to install into ISO cleanrooms (levels 2-9).

Our antimicrobial cleanroom wall cladding system comes with a 20-year guarantee, ensuring performance throughout the lifespan of the products.



## THE AM-CLAD 2.5MM ANTIMICROBIAL CLADDING SYSTEM

AM-Clad 2.5mm Antimicrobial Cladding System is the ideal cladding solution for hygiene-critical areas in pharmaceuticals, biotech and medical facilities.

The antimicrobial properties are added during manufacturing. Tiny particles of silver ions deliver an authentic sterile performance. The active ingredients contain no toxins and prevent the growth of viruses and bacteria such as COVID-19, E.Coli, Influenza and MRSA.

### PREVENTS AND INHIBITS:

COVID-19  
MRSA  
C Difficile  
Aspergillus  
Niger  
E Coli  
Salmonella

(for more see table overleaf).

AM-Clad Antimicrobial meets Class A designation in the USA. In the UK and EU, it is Class 1 fire-rated, achieving a Class 0 rating when fixed to a non-combustible surface.

AM-Clad Antimicrobial panels are premium-grade and tested for durability and are impact and scratch resistant. Panels are UV-stabilized to avoid fading and offer high levels of electrical and thermal insulation.

AM-Clad Antimicrobial panels are resistant to a range of cleaning chemicals (such as Spor-Klenz) used within typical pharmaceutical and cleanroom environments and germs cannot gain a foothold on the surface. This makes cleaning quick and easy and prevents bacteria and viruses from re-forming on the panel's surface.

## Extruded rigid antimicrobial PVCu sheet

**Performance:** Proven to kill bacteria and inhibits growth of pathogens

**Colour:** AM-Clad is available in a wide range of subtle and vibrant colours which can be seen in our brochures

**Surface finish:** Smooth, satin finish

## Measurements

**2.5mm AM-Clad sheets are available in three sizes:**

4ft x 8ft x 2.5mm, 22lbs/panel  
 4ft x 9ft x 2.5mm, 24.75lbs/panel  
 4ft x 10ft x 2.5mm, 27.5lbs/panel

**Weight:** 3.5 kg per m<sup>2</sup>  
 (8' panel 22lbs, 9' panel 24.75lbs, 10' panel 27.5lbs)  
**Service temp:** -10°C (4°F) to +60°C (140°F)

## Flammability

AM-Clad Antimicrobial is self-extinguishing and complies with the most demanding international fire resistance standards defined for plastics, as shown below:

Standard:	Classification:
EN 13501	B, s3, d0
DIN 4102	B-1
BS 476/7	Class 0
NSP 92501,5	M-1
ASTM E 84	Class A

## Chemical Resistance

High resistance to mineral acids, alkalis, plating solutions, paper making chemicals, pickling solutions, inorganic solutions and fumes. Good resistance to alcohols, aliphatic hydrocarbons, glycols, amines, phenols.

## Temperature

AM-Clad Antimicrobial sheet has an operating temperature range of -10°C (4°F) to +60°C (140°F).

## Surface Preparation

Sheets should be fitted to a plumb surface and can be fitted over existing tiles, brickwork, blockwork, plaster walls and boarded-out stud partitions. The sheets fix directly to the dry substrate using professional adhesives.

## Joints

Sheets are fixed using hot welded joints. This involves leaving an even 3mm to 4mm gap between the vertical edges of the sheets when bonding them to the wall. The gap is then filled and hygienically sealed with hot weldrod.

## Cutting and Drilling

Panels can be cut to size using an appropriate saw. See the current AM-Clad Installation Guide for full details. The protective film should be left in place. Use slow drill speeds to penetrate the panel and leave a 3mm to 4mm expansion gap around pipes etc.

## Corners

AM-Clad Antimicrobial sheets can be expertly thermoformed on-site ensuring a professional finish and minimizing edge joints around corners, windows and doors. External corners in high traffic areas can also be over-clad with robust corner protectors. Thermoforming requires temperatures between 130°C (266°F) and 170°C (338°F).

## Cleaning

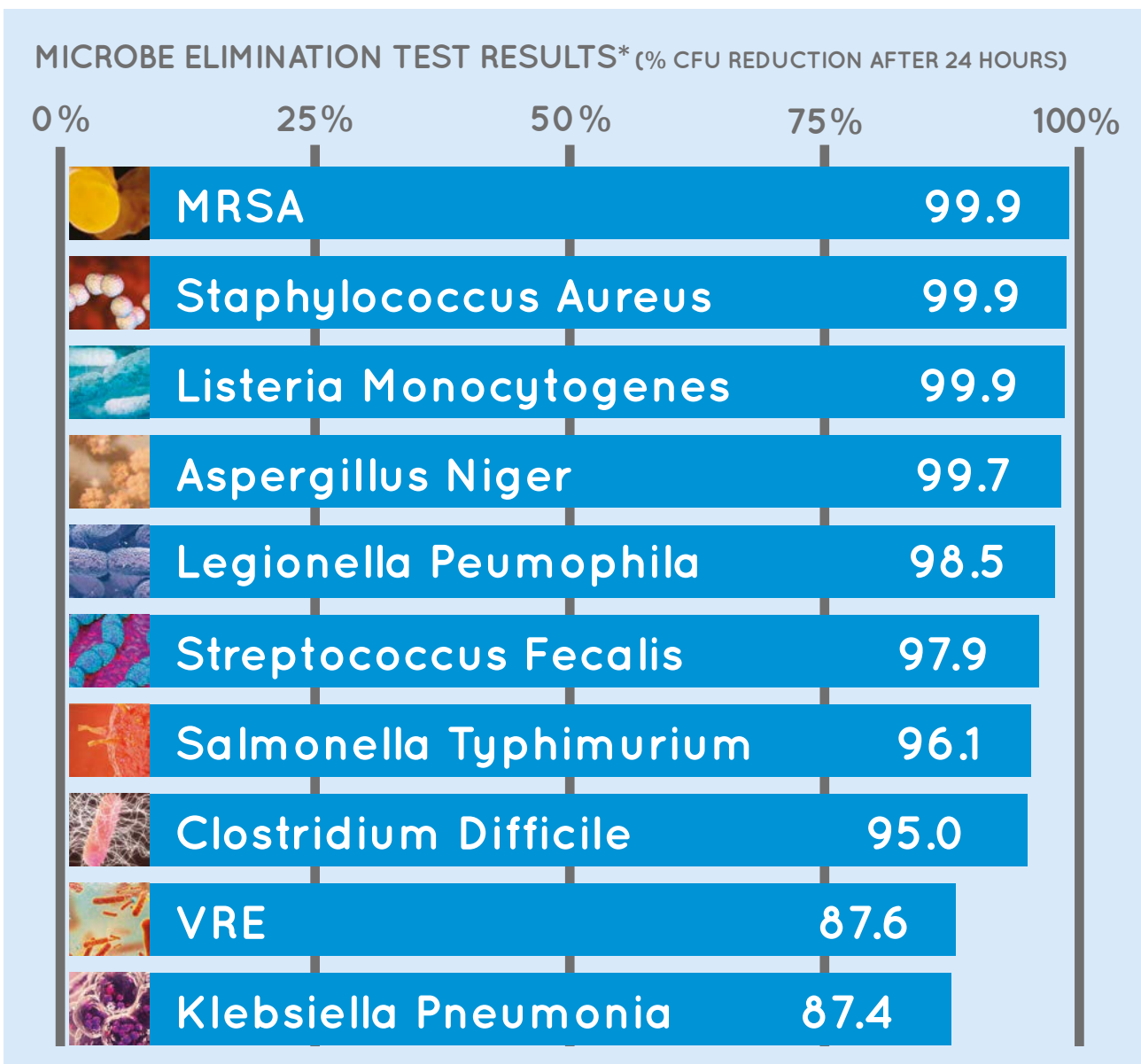
AM-Clad Antimicrobial is resistant to a range of cleaning chemicals used within typical pharmaceutical and cleanroom environments. A full chemical resistance data sheet is available on request. For regular cleaning use a soft cloth and suitable detergent. Do not use abrasive pads or wire wool. Do not clean above 60°C (140°F).

## AM-CLAD COMES WITH A LIFETIME GUARANTEE

## Proven Antimicrobial Performance

AM-Clad Antimicrobial wall cladding has a smooth, satin surface. The antimicrobial properties are added during manufacturing and its active ingredients contain no toxins and prevent the growth of bacteria, mold and viruses such as COVID-19, E.Coli, Influenza and MRSA.

AM-Clad’s biocidal performance was measured in an independent test and the results are recorded and illustrated in the chart below. It is highly effective against the top ten most common pathogens or ‘superbugs’ and its resistance to chemicals ensures no reduction in performance over time.



\*In an independent lab test, 10 common microbes were selected, and each of them was incubated on panels for 24hrs at 98.6 °F and >90 RH. As the table shows, AM-Clad panels demonstrate high antimicrobial activity. Use of AM-Clad, along with an adequate cleaning regime, would significantly reduce microbial growth, including dangerous pathogens.



# CLEANROOM

## ANTIMICROBIAL CLADDING SYSTEM

### TECHNICAL DATA

#### AM-CLAD 2.5MM ANTIMICROBIAL CLADDING SYSTEM

Property	Method	Conditions	Units	Value
Density	D-792		g/cm <sup>3</sup>	1.4
Heat deflection temperature (HDT)	D-648	Load: 1.82MPa	°F	149 to 155
Service temperature			°F	4 to 140
Thermal conductivity	C-177		W/m K	0.15
Coefficient of linear thermal expansion	D-696		cm/cm °C	6.7 x 10 <sup>-5</sup>
Rockwell hardness	D-785		R Scale	97R
Tensile strength at yield	D-638	10mm/min	MPa	50
Tensile strength at break	D-638	10mm/min	MPa	45
Elongation at yield	D-638	10mm/min		3
Elongation at break	D-638	10mm/min		>80
Tensile modulus of elasticity	D-638	1mm/min	MPa	2,900
Flexural strength	D-790	1.3mm/min	MPa	80
Flexural modulus	D-790	1.3mm/min	MPa	2,700
Impact falling weight	ISO 6603/1 E50	3mm sheet	J	95



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Contact the AM-Clad team for a quote today  
Call 01274 020 331 or email: [info@am-clad.com](mailto:info@am-clad.com)  
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