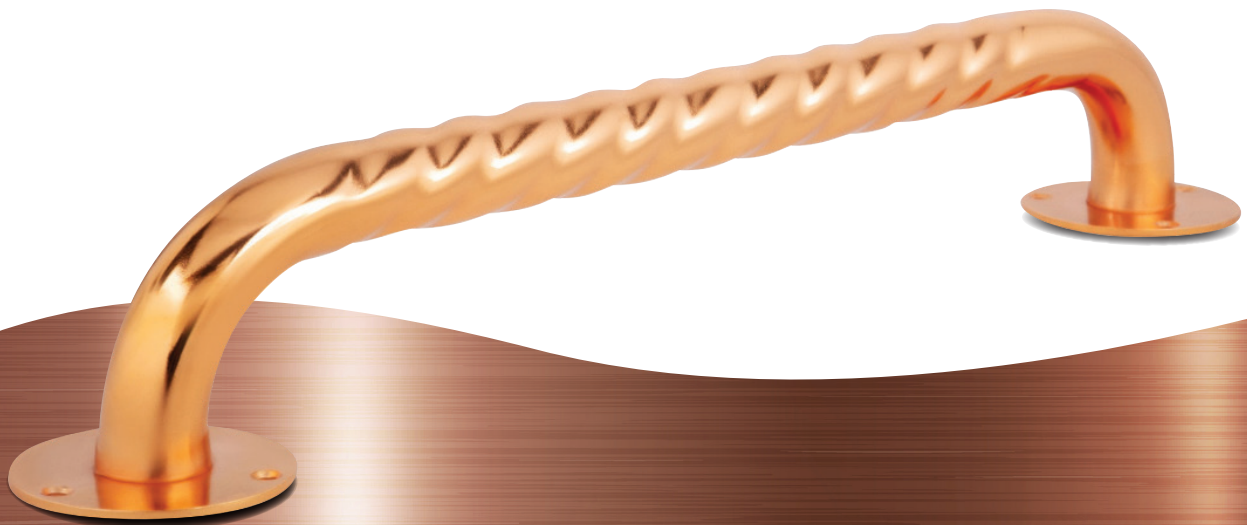




**KAG**  
Safety Rail

*Enhancing Safety*  
in the Fight Against COVID 19



*KAG Grab Rails:*

## ANTI-BACTERIAL COPPER RANGE



**KILLS BACTERIA  
ON CONTACT**  
24/7 PROTECTION

Minimum

**80%**

Extra  
Grip

Under Wet Conditions

Minimum

**160%**

Extra  
Grip

Under Dry Conditions

Minimum

**300%**

Extra  
Grip

Under Oily Conditions



**KAG**  
Safety Rail

## HOW IT WORKS

### Proven results

(1)\* Research published in the New England Journal of Medicine found that copper can be effective against SARS-CoV-2, the virus responsible for the coronavirus pandemic. The study showed that after four hours, the virus was no longer infectious on copper's surface. In comparison, coronavirus was still infectious on plastic surfaces after 72 hours.

(2)\* According to Edward Bilsky, Ph.D., Provost and Chief Academic Officer at Pacific Northwest University of Health Sciences, copper can kill germs in a few ways:

- It disrupts bacterial cell membranes — copper ions damage cell membranes or "envelopes" and can destroy the DNA or RNA of the microbe.
- It generates oxidative stress on bacterial cells and creates hydrogen peroxide that can kill the cell.
- It interferes with proteins that operate important functions that keep bacterial cells alive.

### Stop the spread

Viruses and bacteria can spread from person to person through:

Close contact with an infectious person (including in the 24 hours before they started showing symptoms); contact with droplets from an infected person's cough or sneeze; touching objects or surfaces (like grab rails) that have cough or sneeze droplets from an infected person, and then touching your mouth or face. With our new anti-bacterial grab rails we can help stop the spread and fight infection rate 24/7 by simply using our range.

### Standard Grab Rails

- Un-hygienic in high risk areas.
- Harbors deadly bacteria and disease.
- Never ending cost associated with constant cleaning.

(3)\* Healthcare-associated infections kill 99,000 US patients / 37,000 European patients each year and cost the country \$6.5 billion / €7 billion annually.

### KAG Anti-Bacterial Range

- Kills MRSA, E. coli, influenza A and norovirus on contact.
- Gives 24/7 protection against bacteria in all sectors.
- Cost effective way to ensure the public's health and safety.

(3)\* There was an 83% reduction in bacterial load on the surfaces in the rooms with copper components. Additionally, infection rates of patients were reduced by 58%.



# KAG Grab Rails

MEDICAL

## Straight grab rail

### Anti-bacterial copper



#### Description

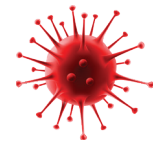
The KAG anti-bacterial copper range is available in 32mm & 38mm tube sections with a strong open fixing flange for easy installation and neat hygienic finish.

#### ABC

Anti-Bacterial Copper



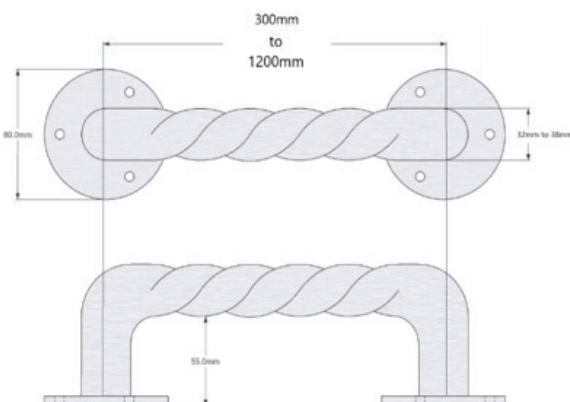
#### COVID SAFE



Model No.	Length	OD.mm	Finish
Cruise ship only	250mm	32	ABC
Cruise ship only	250mm	38	ABC
S30032ABC	300mm	32	ABC
S30038ABC	300mm	38	ABC
S450S2ABC	450mm	32	ABC
S45038ABC	450mm	38	ABC
S60032ABC	600mm	32	ABC
S60038ABC	600mm	38	ABC
S75032ABC	750mm	32	ABC
S75038ABC	750mm	38	ABC
S90032ABC	900mm	32	ABC
S90038ABC	900mm	38	ABC
S120032ABC	1200mm	32	ABC
S120038ABC	1200mm	38	ABC

With ultimate strength, beauty & protection the new KAG rail outperforms any competitor on the market. We achieve such high standards of quality by using only the best material combined with 5mm fixing plates & our new concealed assembly technique. With all this and our added anti-bacterial copper we assure all customers only the best in handrail technology and protection.

\*1.6mm tube  
\*5mm thick fixing plate, 80mm in diameter with 3x6mm countersunk holes



# KAG Grab Rails



## Fixings

### Anti-bacterial copper

#### Description

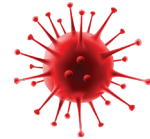
The unique fittings we use makes our product far superior to any grab rail on the market, our 5mm fixing plate & concealed assembly paired with our anti-bacterial copper provides ultimate strength & protection with a slim line aesthetic.

#### ABC

Anti-Bacterial Copper

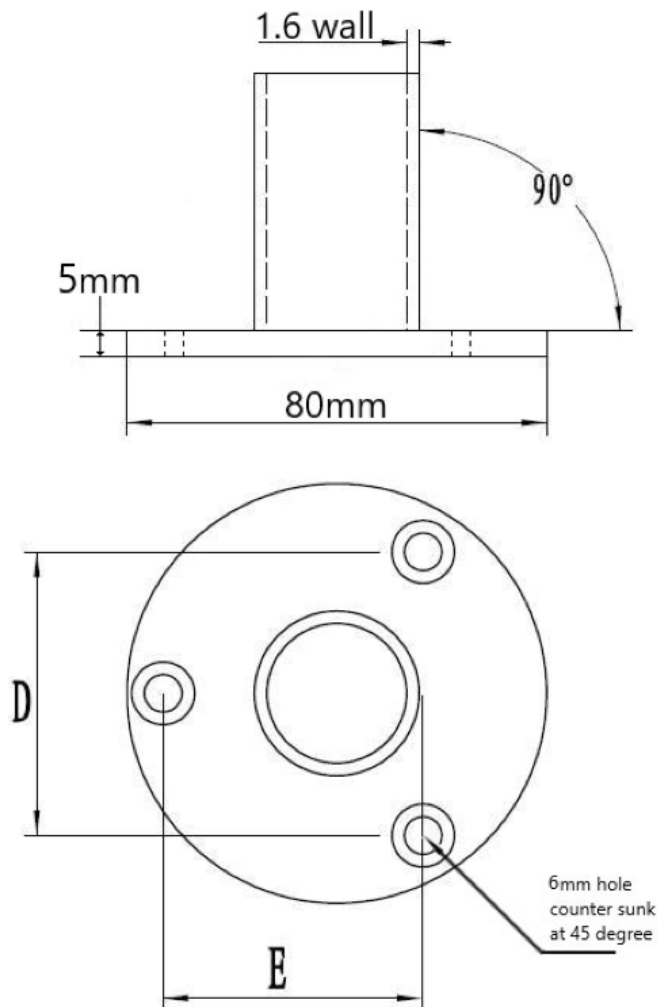


#### COVID SAFE



FIXINGS

Dimensions	Thickness	Finish	Holes	Counter sunk
80mm	5mm	ABC	3 x 6mm	450





**KAG**  
Safety Rail

## Metal Maintenance & Care

With the use of any generic brand metal polish.



## Directions

### WET



### APPLY



### DRY



### BUFF



### STEP 1.

Wipe down rail with wet non-scratch cloth

### STEP 2.

Rub product directly onto copper rail using clean non-scratch cloth.





### STEP 3.

Clean off with wet non-scratch cloth.

### STEP 4.

Dry and buff using clean dry non-scratch cloth.

## Handling & disposal procedures

-  **Safe Handling and Use:** Use rubber gloves for prolonged use or if skin sensitive. Avoid eye contact.
-  **Storage Conditions:** Store in 10°C - 38°C range.
-  **Spills or Leaks:** Dilute with water and mop up thoroughly.
-  **Waste Disposal:** Sewer, septic tank, or sanitary landfill.





# COVID SAFE



## References & Information

(1) <https://www.nejm.org/>

(2) <https://www.businessinsider.com.au/does-copper-kill-germs-and-viruses-2020-3>

(3) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4561453/>

<https://www.who.int/>

<https://www.sciencedirect.com/science/article/pii/S0960308518303109>

*Acusafe Australia Head Quarters*



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Safety Rail

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[www.kagrail.com](http://www.kagrail.com)