



CuVerro®



February 3, 2014 hs-mf



CuVerro® Sales Goals

Anti-Microbial/Bactericidal Touch Surfaces

- Increase exposure/use by hospital spec writers
- Increase exposure/use by school spec writers
- Increase exposure/use in unique markets
 - Cruise ships (CuVerro destroys Norovirus)
 - Transportation (airlines, trains, etc)
 - Grocery stores (snap-on cart handles, freezer/refrigerator handles etc.)

CuVerro Salient Points

- 1. CuVerro® is a class of copper-based alloys that continuously kills harmful bacteria 24 hours a day. These attractive, durable and easy to maintain surfaces represent the only class of EPA-registered solid surface materials that actively kill bacteria. Funding for the exhaustive testing of these copper alloys was conducted under specified EPA protocols at prominent U.S. hospitals. Effectiveness was approved without exception.
- 2. The EPA's prescribed use is as a complement to standard cleaning practices to control bacteria linked to high-touch surfaces within healthcare settings. In testing for the EPA, these copper alloy materials have demonstrated: a) Antimicrobial efficacy as a sanitizer; b) That this efficacy will not diminish nor wear away over time, and c) The ability to continuously reduce bacterial concentration when a test surface is re-inoculated, without cleaning or disinfecting the surface between inoculations.
- 3. "Antimicrobial" as applied to CuVerro® alloys, conforms to EPA registration claims that the touch surfaces kill harmful bacteria and are more appropriately termed 'bactericidal.' Other surfaces, like nano-silver and Triclosan coatings only claim to inhibit growth. They neither have EPA registration nor are allowed by EPA to claim the ability to kill bacteria.
- 4. According to the EPA registration CuVerro® copper surfaces, "...continuously kill bacteria left behind by dirty hands, killing more than 99.9% of the most virulent bacteria within two hours..."
- *Vancomycin-resistant Enterococcus (VRE) faecalis, *Escherichia coli O157:H7 (E. coli O157:H7),
- *Staphylococcus aureus, *Pseudomonas aeruginosa and methicillin-resistant Staphylococcus aureus
- (MRSA)." *Enterobacter aerogenes,

CuVerro Salient Points

- 5. Until now the most effective infection control plans combined proven practices such as routine cleaning, hand washing and good hygiene practices. CuVerro® bactericidal surfaces can enhance any infection control plan by providing a surface that continuously kills bacteria, fighting infectious bacteria 24/7.
- 6. Based on rigorous GLP (Good Laboratory Practices) testing conducted under EPA protocols, CuVerro® bactericidal copper alloys have been registered to make the following public health claims:
- Continuously reduces bacteria contamination, achieving 99.9% reduction within two hours of exposure.
- Kills greater than 99.9% of Gram-negative and Gram-positive bacteria within two hours of exposure.
- Delivers continuous and ongoing antibacterial action, remaining effective in killing greater than 99.9% of bacteria within two hours.
- Kills greater than 99.9% of bacteria within two hours, and continues to kill more than 99% of bacteria even after repeated contamination.

CuVerro Salient Points

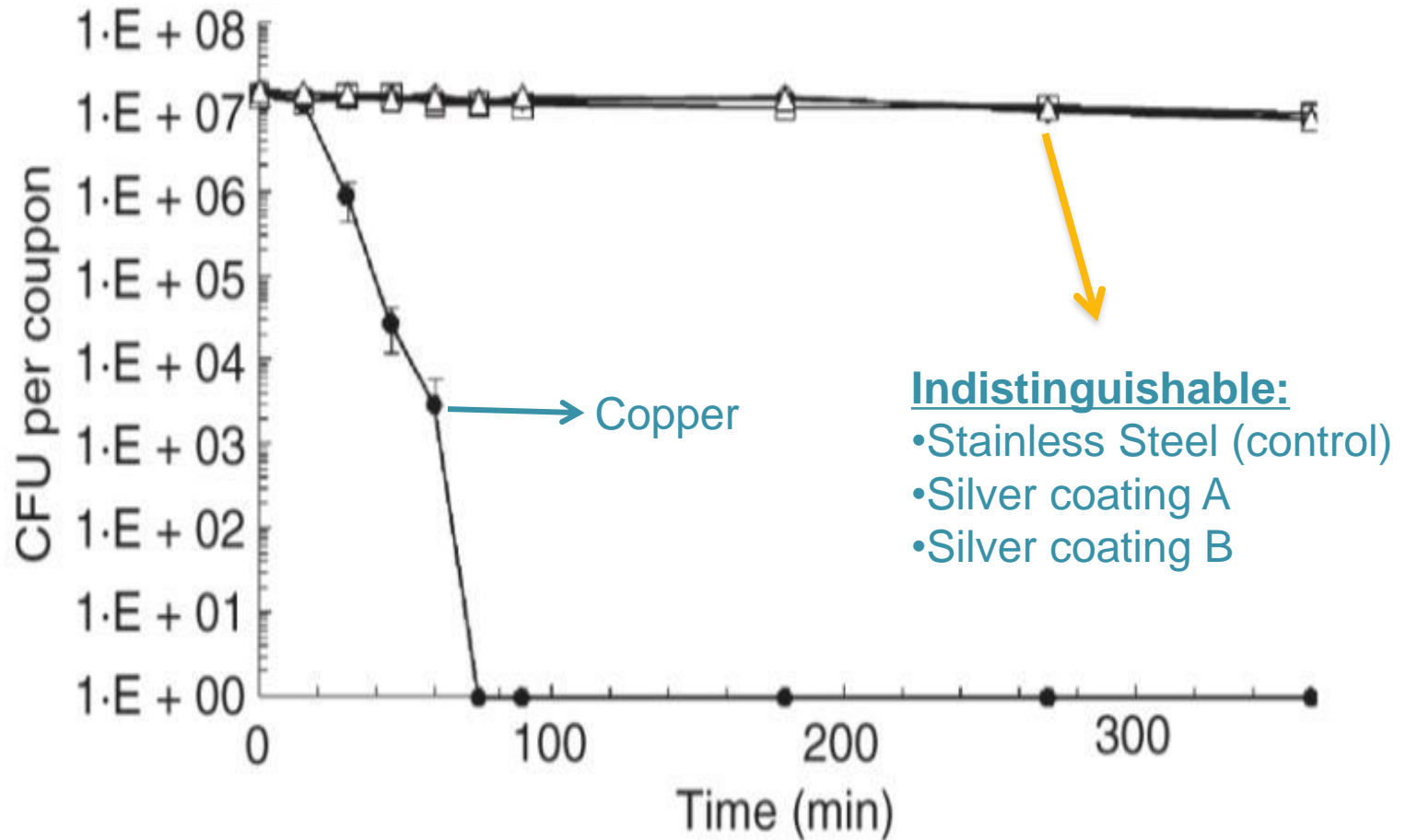
- Inhibits the buildup and growth of bacteria within two hours of exposure between routine cleaning and sanitizing steps.
- These health claims apply when Antimicrobial Copper Surfaces are cleaned regularly.
- 7. Cuverro is safe for the environment. Copper, the only active ingredient found in CuVerro® alloys, is a naturally occurring element, is recyclable and is even vital to human health as a dietary supplement.
- 8. Cuverro surfaces are especially pertinent now with the world focus on bacteria and viruses in the medical and school environments.

CuVerro v. Coatings

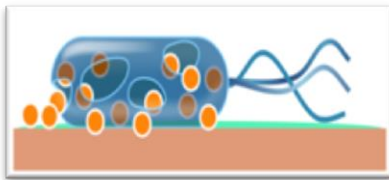
CUVERRO V. COATINGS (LIKE AGION, BIOCOATE, MICROBAN, BIOSAFE, TRIMGUARD)

<u>CHARACTERISTICS</u>	<u>CUVERRO</u>	<u>COATINGS</u>
<u>EPA PUBLIC HEALTH REGISTRATION</u>	<u>YES</u>	<u>NO</u>
<u>CONTINUOUSLY KILLS 99.9% HARMFUL BACTERIA WITHIN 2 HOURS OF EXPOSURE AND REPEATED CONTAMINATION</u>	<u>YES</u>	<u>NO</u>
<u>PROTECTS TREATED ARTICLE ONLY, NOT THOSE WHO TOUCH THE TREATED ARTICLES</u>	<u>NO</u>	<u>YES</u>
<u>PROTECTS PEOPLE AGAINST DISEASE CAUSING ORGANISMS</u>	<u>YES</u>	<u>NO</u>
<u>LIFETIME DURABILITY</u>	<u>YES</u>	<u>NO</u>
<u>EFFECTIVE INDOORS AND OUTDOORS</u>	<u>YES</u>	<u>NO</u>

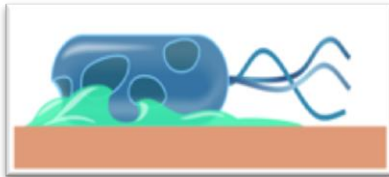
MRSA on copper vs. silver containing coatings at 22C and 50% relative humidity



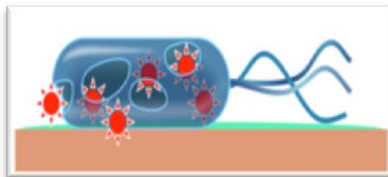
How does copper kill bacteria?



A: Copper ions on the surface are recognized as an essential nutrient, and enter the cell



B: A lethal dose of copper ions interferes with normal cell functions and membrane integrity



C: Copper ions impede cell respiration/metabolism, sometimes causing DNA damage

To Increase Hospital and School Sales/Exposure

- *Our big competitors are pushing us out by giving away trim.
- *Our best way to stay in the specs is to promote CuVerro for hospitals
- *WE MUST GET SPECIFIED TO KEEP OUR MARKET SHARE
- *SEE CURRENTLY AVAILABLE HOSPITAL and SCHOOL PRODUCTS DETAILED BELOW:

CUVERRO DRAWER/CABINET PULLS-553, 562-3/4, 571-6/8/10

CUVERRO PUSH PLATES-1001-1/2/3/9/11, 1041-4, 1807-4, 1807-25, 1809-4, 7001(FOCAL), 7009(FOCAL)

CUVERRO PULL PLATES-1015(-2/3/3B), 1017(-2/2B/3/3B/3C), 1018(2/2B/3/3B), 1056-4, 1802-4

CUVERRO FLUSH PULLS-1060/1061, 1115/B/C/P, ADA FLUSH PULLS 1111A/B/C

CUVERRO ADA SLIDING DOOR PULL-1069/L/FP

CUVERRO PULLS-1139-1/2, 1150, 1151, 1191-1/2/3/4/4J/5/5J, 1194-1/2/3/4, 1195-1/2/3/6, CUVERRO HOSPITAL PULL-1135

CUVERRO HOSPITAL PUSH/PULL LATCHES-1562A/AP/Q55/M55/AE, 1562A/AP, 1580A/AP, 1581A/AP, 1591A/AP

CUVERRO PUSH BARS-1643, 1644, 1661, 1662

CUVERRO PUSH/PULL PLATES-1820/-11, 1894-3/3B/4/4B, 1895-3/3B/4/4B, 1896-4B

CUVERRO CYLINDER PULLS-1822/-1/-2

CUVERRO LEVERS-MANY

CUVERRO CASTINGS-MANY

Current CuVerro Projects

CURRENTLY OUTFITTING DEMONSTRATION HOSPITAL ROOMS WITH
CUVERRO FOR TESTING AT:

HOAG HOSPITAL, IRVINE
SLOANE KETTERING, NYC
GRINNELL, IOWA

New CuVerro Products

- Stanley and VD Snap-on Panic Covers
- VD Trapeze Bar Retrofit
- CuVerro Handrails
- CuVerro Anti-Vandal Pull
- Fingerprint Resistant CuVerro
- Straight and Offset Entrance Pulls-Tube
- CuVerro Car Packs (a nice bag to carry in on sales calls with literature and samples)



CuVerro® Crossbar Tube Replacements for Von Duprin 55 & 88 Series Exit Devices

Installation Instructions

- 1) Dog both lever arms securely (push crossbar to down position and hold, then insert dog key into each case and rotate clockwise to full extent) – **see Figure 1**
- 2) Remove both set screws in crossbar tube using dog key tool (can be helpful to insert tip of a screwdriver for additional leverage) – **see Figure 2**
- 3) Un-dog both lever arms and remove hinge stile case and crossbar tube.
- 4) Cut Trimco CuVerro crossbar tube replacement (**we recommend using a tube cutter tool**), the outer tube, as necessary to match the length of the existing crossbar tube - cut the end opposite the end that already has a slotted hole - **See Figure 3**
- 5) Measure and mark $13/16"$ from the cut end, in-line with the center of the existing slotted hole, and drill an $11/32"$ dia. hole at this location – drill through one side of the tube only - **See figure 3**
- 6) Slip the $7/8"$ OD reinforcement tube inside the CuVerro tube until this inner tube is minimum $1 1/2"$ away from both ends of the CuVerro tube
- 7) Install CuVerro crossbar tube replacement over the mating portions of the lever arms, then reinstall the hinge stile case. **See Figure 4**
- 8) Dog both lever arms securely (push crossbar to down position and hold, then insert dog key into each case and rotate clockwise to full extent) – **see Figure 1**
- 9) Install both set screws in crossbar tube using dog key tool (can be helpful to insert tip of a screwdriver for additional leverage) – **see Figure 2**
- 10) Un-dog both lever arms and verify satisfactory operation of the crossbar.

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FIGURE #2



FIGURE #3

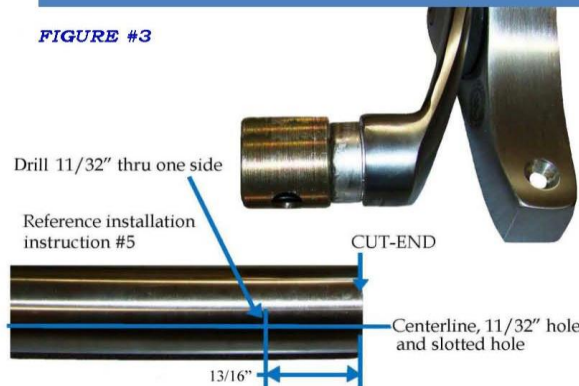
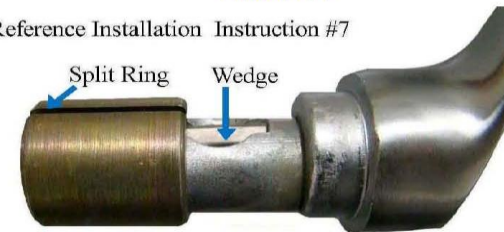


FIGURE #4

Reference Installation Instruction #7



If they should become disassembled, reassemble split ring and wedge as shown

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New CuVerro Products

TRIMCO 1 1/4" Outside Diameter Bactericidal Copper Grab Bars Round Concealed Screw Flanges

Specify Finish Required: ___ Satin
___ Satin Finish with peened gripping surface
Available Lengths (CTC): 12", 18", 24", 30", 36"*, 42"*, 48"*
* Mid support included

CuVerro® Bactericidal Copper Surfaces

CuVerro® represents the first and only class of solid bactericidal surfaces recognized and registered by the EPA to make public health claims for their inherent ability to kill infectious bacteria* within 2 hours.

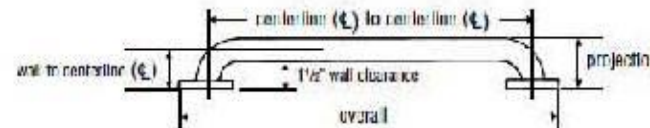
1. This surface continuously reduces bacterial* contamination, achieving 99.9% reduction within two hours of exposure.
2. This surface kills greater than 99.9% of Gram-negative and Gram-positive bacteria* within two hours of exposure.
3. This surface delivers continuous and ongoing antibacterial* action, remaining effective in killing greater than 99.9% of bacteria*

Materials:

4. Grab Bar- CuVerro® 80/20 Copper-Nickel Alloy C710, 0.049" wall thickness, 1-1/4" outside diameter. Ends
5. Are heliarc welded to concealed mounting flanges. Clearance between the grab bar and the wall is 1-1/2".
6. Concealed Mounting Flanges- 14 gauge, type-304 stainless steel plate
7. Snap Flange Covers- 20 gauge, type-304 stainless steel with satin-finish. 3"

Strength:

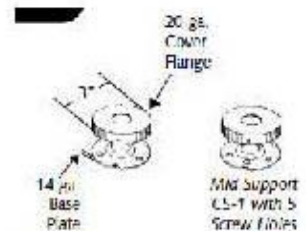
8. Trimco Grab bars that provide 1-1/2" clearance from can support a 250 pound (114kg) load
9. when properly installed, complying with barrier-free accessibility guidelines for structural strength.
10. Caution: Grab bars are no stronger than the anchors or walls to which they are attached, therefore,
11. must be firmly secured in order to support the loads for which they are intended. Grab bars should be
12. inspected periodically to make sure their attachment to the wall is not loosening.



Part #
1198-1-Length. 710CU

Technical Data

Revised August 2013



New CuVerro Products

**Bactericidal
Push Bar Trim Cover
For VD 98/99 Exit Devices and
Stanley Apex 2000 Exit
Devices**



Part #
PBT-8000-1-24.710CU (VD)
PBT8000-2.710CU (Stanley)
Patent Pending

710CU (Steralloy) Satin Finish ONLY



Materials:

Push Bar Trim Cover- CuVerro® 80/20 Copper-Nickel Alloy C710, 0.030" thick sheet metal.

Specification:

#PBT8000-1-XX.710CU for VD 98/99 Exit Devices- Specify Length. (XX)

#PBT8000-2-XX.710CU for Stanley Apex 2000 Series Exit Devices- Specify Length. (XX)

Triangle Brass Manufacturing Company, Inc., Los Angeles, CA

Material: CuVerro® 80/20 Copper-Nickel Alloy C710, 0.030" thick sheet metal.

Finish: 710CU Satin (must not be waxed, painted, lacquered, varnished, or otherwise coated)

Installation Hardware: None required.

Installation:

1. Remove Bactericidal Push Bar Trim cover from packing.
2. Align Trim cover over existing stainless steel trim cover.
3. Place rounded edge of bactericidal trim cover over top edge of installed trim cover.
4. Apply pressure inward and downward on bactericidal trim cover until lower rounded edge snaps around lower edge of existing stainless steel trim cover and snaps into place.





A: CuVerro Anti-Vandal Pull

B: Hospital Latches

C: Grab Bar

D: Pull Plate (706CU finish not available anymore)

