Antimicrobial Copper Cu+

Infection Minimized in Subway with Copper Handrails

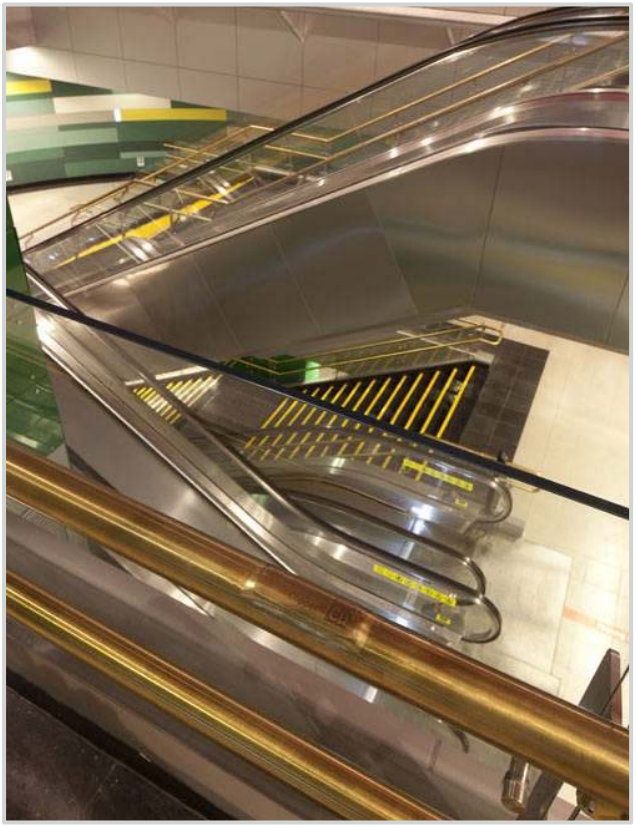
Challenge

Infectious diseases are spread through person-to-person contact—more frequently through the hands than by any other method. While handwashing is the best line of defense against infection, it can be challenging to manage in public places. When it became apparent that the Santiago transportation system required additional subway stations, the Chilean government searched for designs that were not only aesthetically pleasing but also practical and easy to maneuver for users. Codelco, the Chilean state copper producer, knew that copper presented the best option.

Solution

With construction of the new Santiago Bueras station imminent, Codelco explained the benefits of antimicrobial copper handrails to Metro, the government's subway firm. Antimicrobial copper prevents the growth of bacteria, thereby minimizing the possible spread of infection for the estimated 6,500 daily users of the Santiago Bueras station. Traditionally, nearly 100 percent of all handrails found in public transportation systems are manufactured from stainless steel, which does not prevent the growth of bacteria. Metro decided to change its original plans and go with the copper design from Codelco.

Antimicrobial copper handrail



Handrails at Santiago Bueras station

Results

The new Santiago Bueras station uses 350 m of copper alloy (Cu-Zn) tubes. The expanding Santiago underground transportation service will add 10,000 m of copper-alloy handrails to its new stations, providing an additional level of safety and security to public transportation users. At least 30 stations will be outfitted with copper over the next three years. Additionally, Metro is considering replacing stainless steel in its older trains and stations with copper.

For more information on antimicrobial copper, contact us at 1.212.251.7240 or visit www.antimicrobialcopper.com

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