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## ADVANTAGES OF ALUMINIZED STEEL CONSTRUCTION.

Load banks and neutral grounding resistors convert electrical energy into heat. The majority of this heat is dissipated away from the device by various means. However, the enclosure itself absorbs a portion of the generated heat. As such, these products must be constructed out of a material that can withstand this thermal environment. Avtron Load Banks and Neutral Grounding Resistors are constructed out of Aluminized Steel, which offers superior heat and corrosion protection over the more commonly used Galvanized Steel.

## ALUMINIZED STEEL

Aluminized steel is designed to combat heat and corrosion.Common examples of aluminized steel products are Catalytic Convertors, Mufflers Furnace Heat Exchangers and Incinerators.

Maximum surface temperature of 1250 F. This higher values insures load bank will not fatigue in high temp. exhaust applications (i.e. duct/radiator mount)

AGA (ANSI Standards) rated to 1030F above ambient.

U.L. rated to 1180F) above ambient.

Will not become brittle under heat.)

Even at 900F aluminized steel **reflects** up to 80% of radiant heat that strikes it. This results in a significantly cooler load bank.

Provides superior corrosion protection. Aluminized resists salt spray corrosion at a rate 2.5X that of galvanized. This protection assures maximum useful service life of Avtron Load Banks.

Is available in multiple qualities and grades. (i.e. Commercial, Drawing or Special Kiln). Aluminized Steel can be tailored for a variety of applications.

## **GALVANIZED STEEL**

With its low corrosion and heat thresholds, Galvanized Steel is not ideal for load bank applications. Typical galvanized applications are Gutters, Hog Feeders, Roof Shingles and Garbage cans.

Maximum surface temperature of only 500F.

No approval\*.

480F maximum rating\*\*.

Becomes brittle between 500-700F.

Starts to **absorb** heat at 500F. Load bank effectively becomes a heat sink. This heat will fatigue internal & external components. Load bank exterior becomes a heat hazard.

Starts to corrode at approximately 200 hrs (salt spray condition)\*\*\*.

Limited to Commercial Quality only.

\* The American Gas Association does not give approval of component materials. AGA endorses ANSI Standards.

\*\* Based on Comparative Data provided by ARMCO Steel, Middletown, OH \*\*\* Based on Comparative Data provided by ARMCO Steel, Middletown, OH



