DANT CLAYTON
The Next Level

DECK FINISHES — GUIDE TO ALUMINUM DECK FINISHES IN STADIUM CONSTRUCTION

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History: Our Experience with Deck Finishes

Choosing an Aluminum Deck Finish in Stadium Construction

Historically, a mill finish has been the default standard for aluminum decking in stadium construction. However, over the years the expectations placed on these systems have increased. Today, from the high school level through the major league level, it is necessary to provide a finished product that satisfies these higher expectations.

One of the critical decisions faced on every project is the type of surface treatment the aluminum receives. Mill finish aluminum can be very slippery when wet, it reflects substantial sunlight glare, and it is prone to unsightly oxidation staining.

The slip resistance is arguably the most important of these characteristics, as it can impact spectator safety.

Unfortunately, there is no clear building code requirement or test result that adequately defines the necessary slip resistance of aluminum decking in stadium applications.

The National Floor Safety Institute (NFSI) offers a program for flooring materials to become certified as “High Traction.” All of the choices presented here qualify as “High Traction” according to NFSI, including the basic mill finish. This certification is highly misleading.

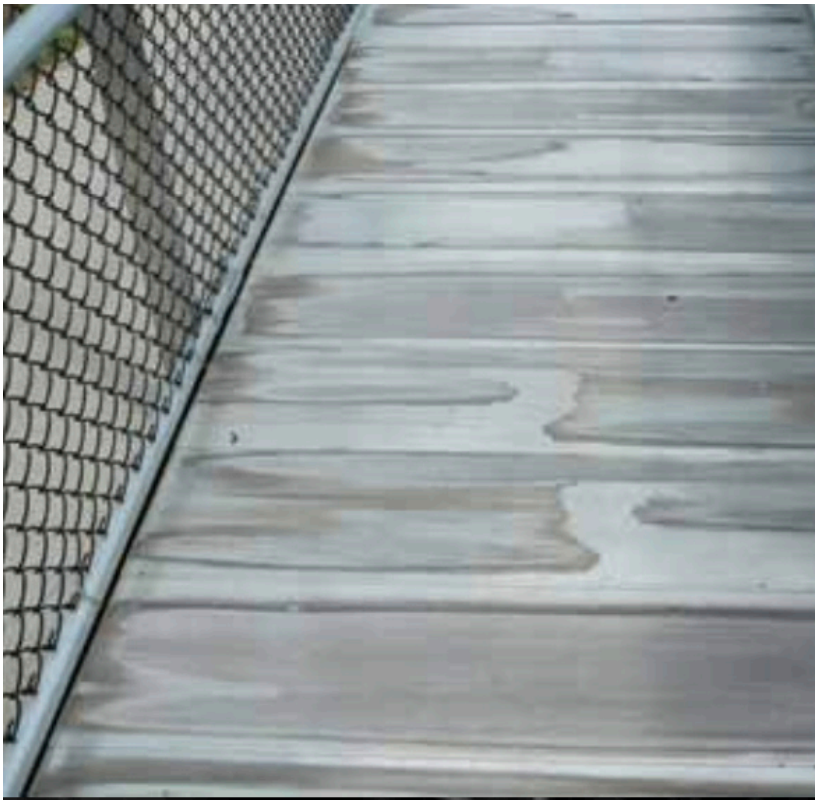
The simple fact is that any wet spot or standing water on aluminum decking in stadiums is a potential slip and fall accident. Mill finish aluminum is most certainly slippery when wet, and the deck finish choices available in the market today vary widely in their slip resistance characteristics.

In the absence of building code clarity on this topic, it is important for architects and stadium owners/operators to understand, and physically observe, the choices that are available to deal with this problem and the other shortcomings of a basic mill finish.

What follows is a comprehensive look at all available surface finish options for aluminum decking used for stadium construction. Each of these options should be reviewed in person with product samples in order to ensure the right decision for every project.

The Problem

Mill finish aluminum is slippery when wet and is prone to oxidation staining. Slippery surfaces lead to safety and liability issues for owners, and oxidation stains tarnish the look of your brand new stadium.



The Problem: The Solution

There are various surface finish choices available to address slippery and stained mill finish decking. These choices will improve the performance and aesthetics of your stadium at a manageable cost.

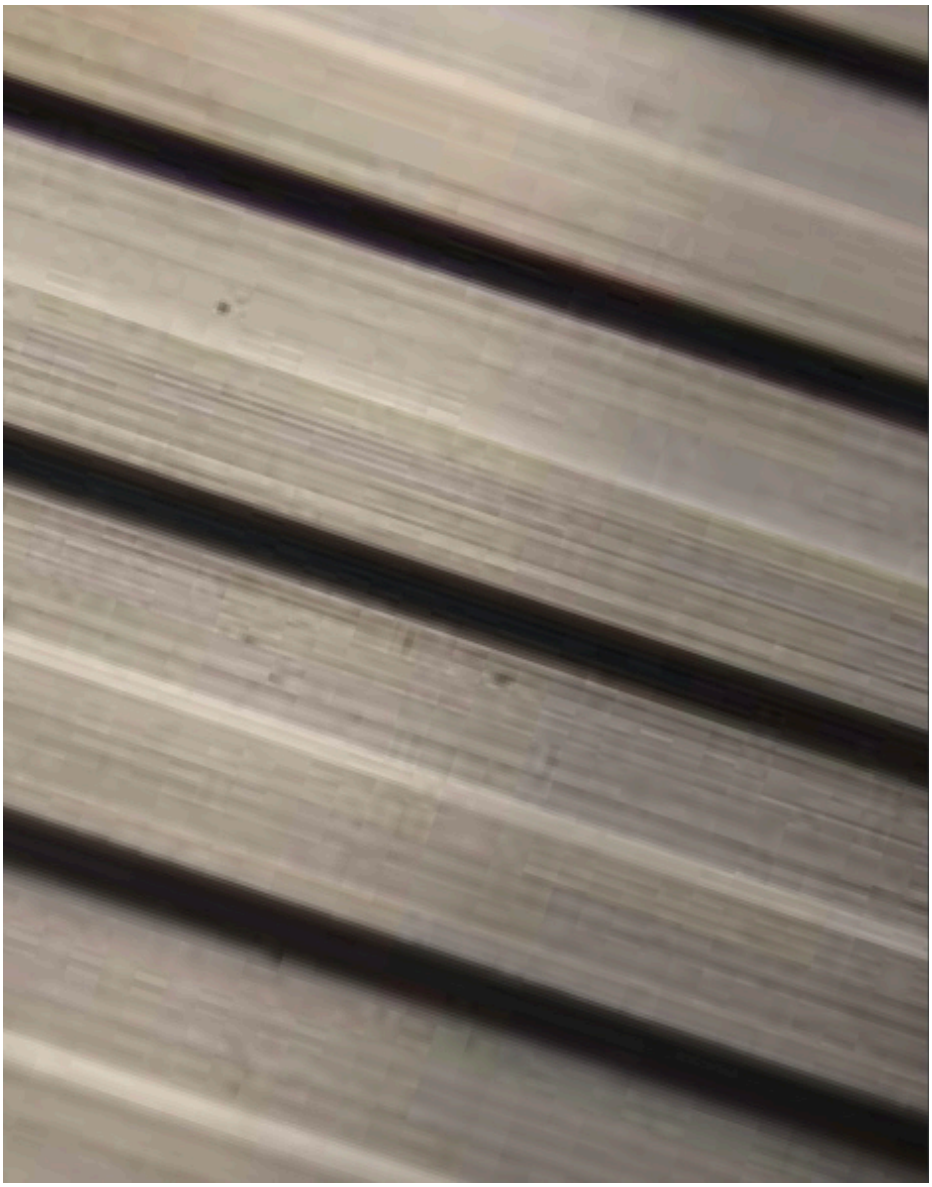
FACTORY BLASTED

ANODIZED BLASTED

TEXTURED
THERMO-BOUNDED

Mill Finish

The default standard for aluminum decking construction for many years, a mill finish is the most basic option available.

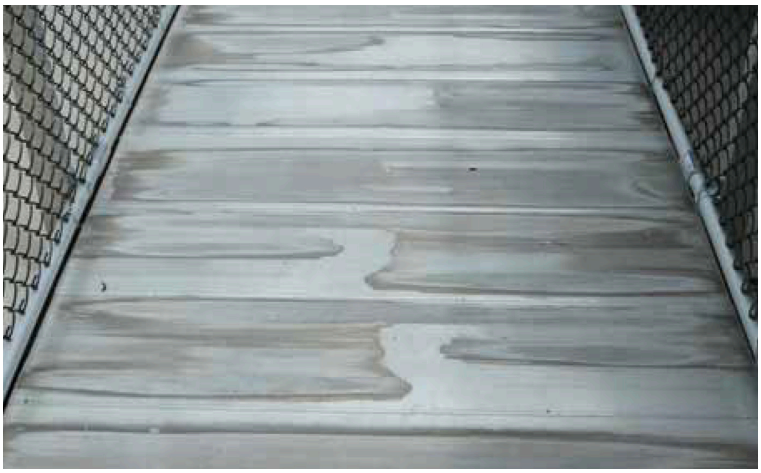


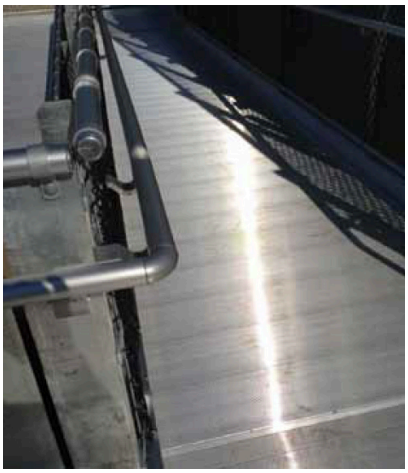
Deck Finishes: Mill Finish

The Bare Minimum

The default standard for aluminum decking construction for many years, a mill finish is the most basic option available. It addresses neither slip resistance nor stain resistance, and creates substantial sunlight glare. As such, it is the most cost effective choice.

Like all surface finish choices, the walking surface includes raised traction ribbing in the direction parallel to the seating. This provides adequate slip resistance in one direction under dry conditions, but does not address all necessary slippery situations. A mill finish is also very reflective and prone to significant oxidation staining.





Why Dant?

Dant Clayton provides a raised traction ribbing design that is the most effective in the industry. Each rib is squared off at a 90 degree corner to cut through water surface tension when walking against the ribbing, and is provided with more decking coverage than any other company.

With the premium welded deck option, and a full 1¾" plank size, the standard Dant Clayton decking product is the best on the market today.

Advantages

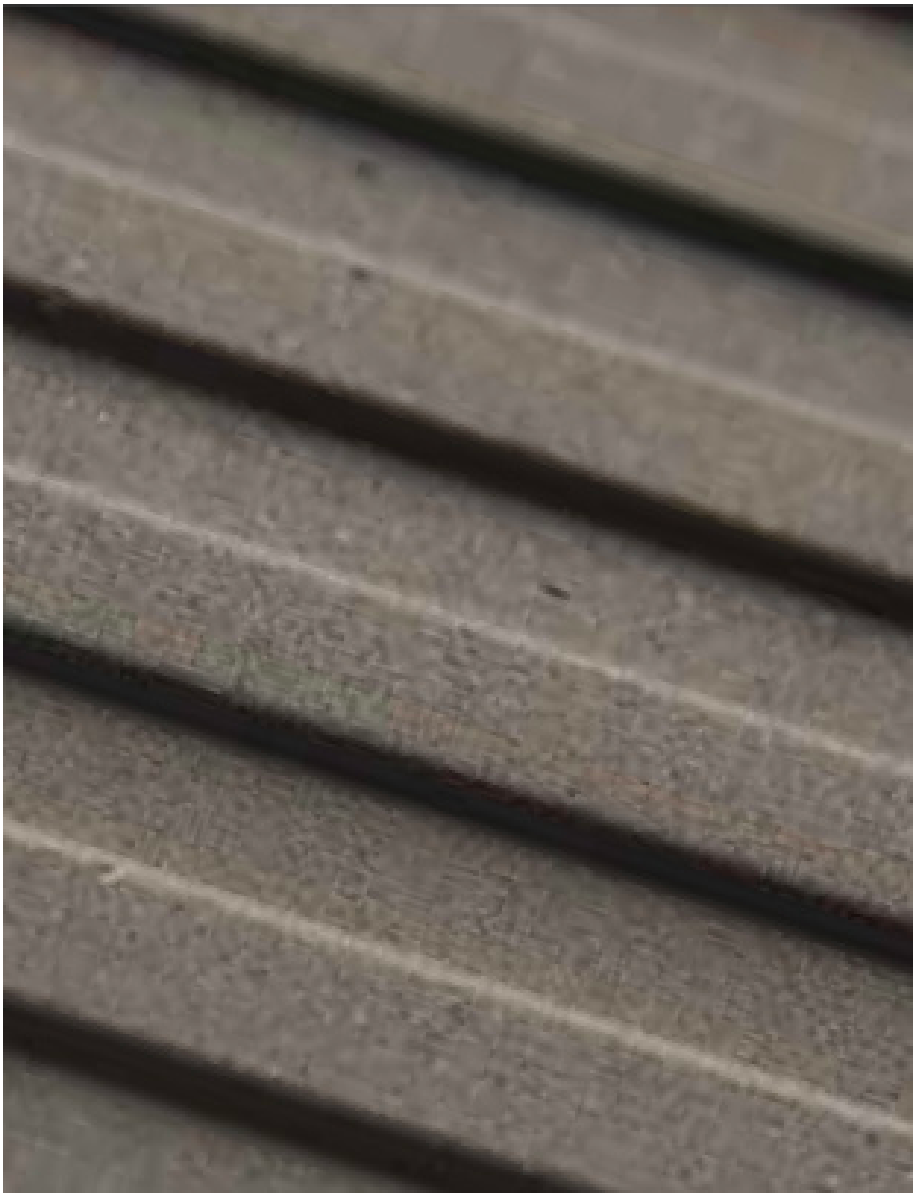
- Lowest cost option
- Readily available

Disadvantages

- Very slippery when wet
- Likely to oxidize into unsightly stains and streaks
- Very reflective and prone to sunlight glare

Factory Blasted

The safest choice to prevent slip and fall accidents, with a slip resistance coefficient of friction (COF) equal to or better than broom finished concrete.



Deck Finishes: Factory Blasted

The Safest Choice

In response to the common complaint that aluminum decking is slippery when wet, this slip resistant surface treatment was introduced to the industry in 2002. Created by blasting the walking surface with fine metallic grit, the end result is a modified mill finish that carries a tiny profile of peaks and valleys to cut through the water.

With a slip resistance coefficient of friction (COF) equal to or better than broom finished concrete, this is the safest choice to prevent slip and fall accidents. Simply put, wet spots are no longer slick. The result is a matte finish look that eliminates glare, but remains exposed to oxidation staining.

Why Dant?

Dant Clayton introduced this option to the industry in 2002. We produce the blasted finish in a controlled factory environment, which ensures uniformity and proper quality control. Our blast uses a very fine grit to maximize the slip resistant characteristics of the finish product.

Other companies utilize hand sand blasting techniques or other less refined application procedures, which produce less slip resistance and result in striping and non-uniform final look.

Advantages

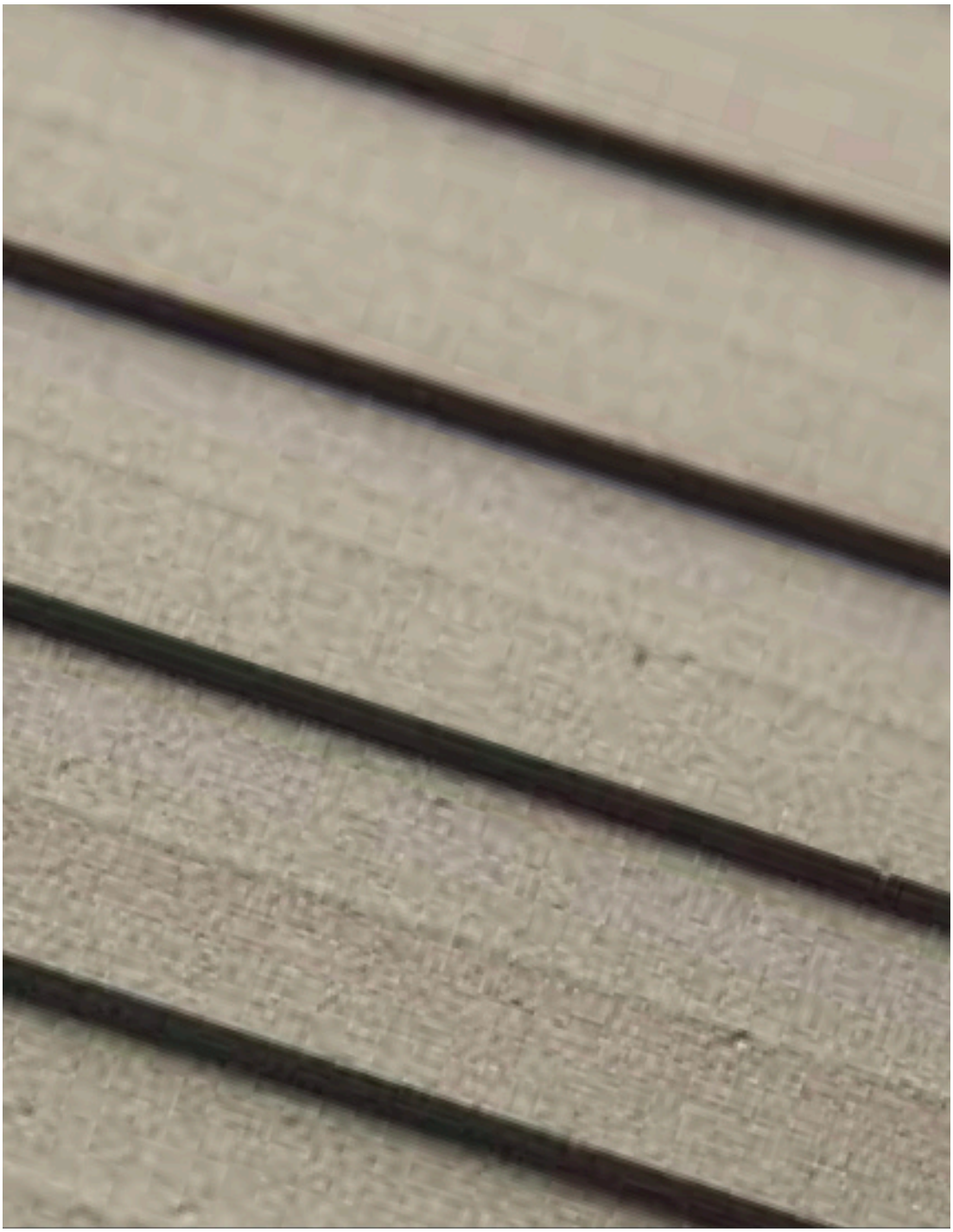
- Highest slip resistant qualities of any option
- Less costly than stain resistant choices
- Reduces glare significantly

Disadvantages

- As a modified mill finish, remains prone to oxidation staining
- More costly than mill finish
- Lack of production consistency in the industry
- Difficult to clean

Anodized Blasted

Expensive and effective, this finish option addresses both slip resistance and stain resistance.

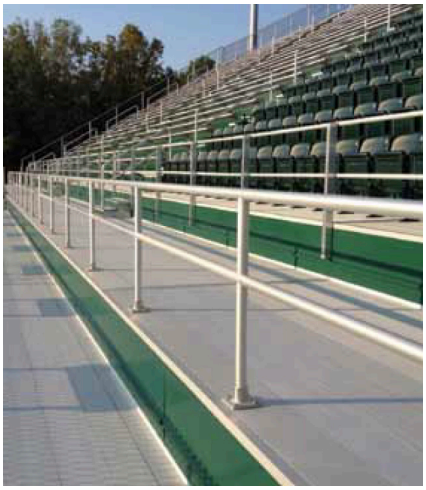


Deck Finishes: Anodized Blasted

Expensive and Effective

In recent years, the industry has introduced choices that provide both slip resistance and stain resistance. When the mill finish aluminum is anodized subsequent to the blasting process, the oxidation staining is prevented in addition to the improved slip resistance resulting from the blasting.

However, this choice is the most expensive of all the options, as two separate operations are required. In addition, the slip resistant effects of the blasting process are reduced as the anodizing tends to fill in many of the microscopic peaks and valleys necessary to cut through water.



Why Dant?

Dant Clayton uses the same industry-leading blast process to create the slip resistant surface, ensuring consistency and quality. The anodizing process is the same across all companies, but Dant Clayton tightly manages the material through each step of this complicated process.

Advantages

- Effective oxidation stain resistance
- Effective slip resistance
- Anodizing is a common process

Disadvantages

- Very expensive
- Slip resistance is reduced from factory blasted only
- Multiple operations increases lead time

Textured Thermo-Bonded

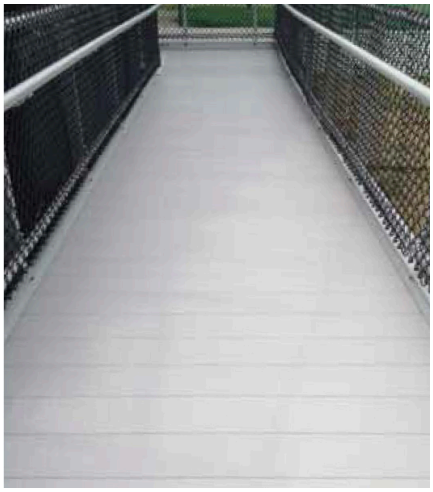
The most effective method to achieve the best results, this finish can be purchased at a manageable cost.

DECK FINISHES : Textured Thermo-Bonded

Reasonably Priced and Effective

The most efficient method to achieve the best of all results is a textured surface coating. This seals in and prevents the surface from reacting to the air, thereby eliminating the initial oxidation stains from setting in. In addition, it also creates a surface that effectively cleans itself with rainwater.

The texture in the coating provides adequate slip resistance, and as it is a one step process, it can be provided at a manageable cost. Electrostatically applied, then thermo-bonded at high temperatures for an extended duration, the resulting finish is attractive and addresses all of the important decking finish problems.



Why Dant?

Dant Clayton has a long history of leading the industry with new and innovative product, including aesthetic coatings of steel and aluminum. Through extraordinary care and attention to detail, our unique process for this decking surface finish ensures the final product is both functional and has long-term durability.

Advantages

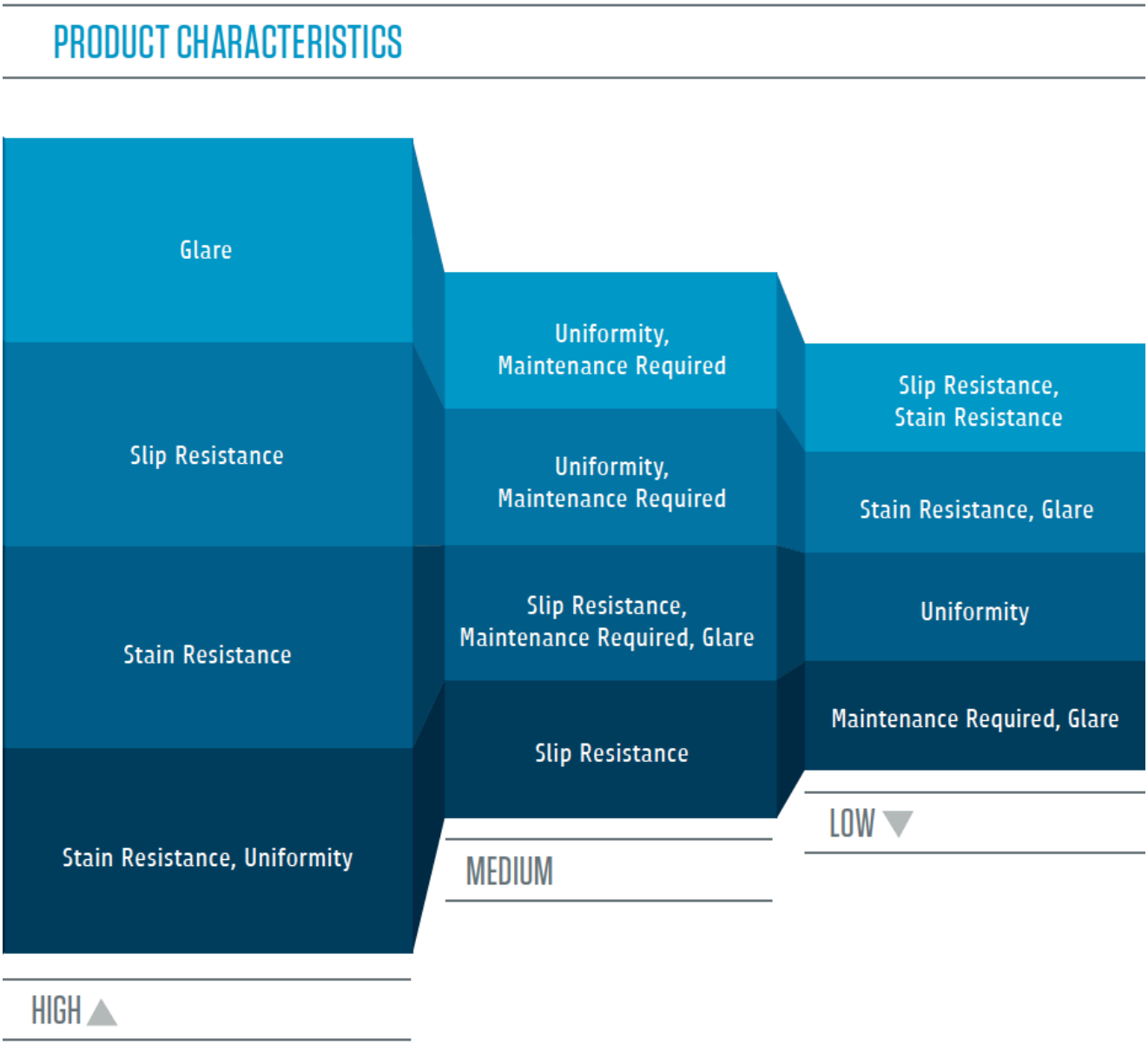
- Effective oxidation stain resistance
- Effective slip resistance
- Easy to clean every day spills & dirt
- Lest costly than Anodized Blasted
- Single operation shortens lead time

Disadvantages

- Applied coating can be damaged


LOW COST
MILL FINISH
The default standard for aluminum decking construction for many years, a mill finish is the most basic option available.
MED. COST
FACTORY BLASTED
The safest choice to prevent slip and fall accidents, with a slip resistance coefficient of friction (COF) equal to or better than broom finished concrete.
HIGH COST
ANODIZED BLASTED
Expensive and effective, this finish option addresses both slip resistance and stain resistance.
MED. COST
TEXTURED THERMO-BONDED
The most effective method to achieve the best results, this finish can be purchased at a manageable cost.

Deck Finishes: Comparison Breakdown



If you have any questions about Dant Clayton or any of our products and services, please call **800.626.2177,** email us at **info@dantclayton.com,** or visit our website at **www.dantclayton.com.**

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