

# FIRETEX<sup>®</sup> INTUMESCENT FINISHES

A GUIDE FOR FIRE PROTECTION ON EXPOSED AND EXPRESSED ARCHITECTURAL STRUCTURAL STEEL





## FIRETEX® INTUMESCENT FINISHES

### A GUIDE FOR FIRE PROTECTION ON EXPOSED AND EXPRESSED ARCHITECTURAL STRUCTURAL STEEL



When exposing and expressing architectural structural steel, understanding the requirements of finish are critical to ensuring satisfaction with the finished project. Various finishes may be achieved using the FIRETEX range of products and this guide will demonstrate how to use them effectively to maximize aesthetic satisfaction and minimize unnecessary cost. Field mockups are still recommended to establish a level of finish quality and standard on each individual project.

#### THE RELATIONSHIP OF FIRE PROTECTION FINISH TO STRUCTURAL STEEL FINISH

The AISC Code of Standard Practice includes fabrication guidance on the expression of Structural Steel and subdivides it into 6 categories:

- SSS Standard Structural Stee
- AESS 1 Basic Elements
- AESS 2 Feature Elements not in Close View
- AESS 3 Feature Elements in Close View
- AFSS 4 Showcase Flements
- AFSS C Custom Flements

#### **RECOMMENDED STANDARDS**

In order to align with the desired outcome of the AESS Standards, Sherwin-Williams suggests using the following four finish standards to align with the AISC Standards (AESS 1-4):



#### Level 1: Basic Finish

Used where steel is exposed, but aesthetic finish is not a critical concern. Product is installed to meet the thickness requirements of the specification for the prescribed rating with minimal treatment to smooth or mitigate appearance. The product should generally be level and free from major defect.



#### Level 2: Feature Elements not in Close View

Items where the observer is usually 20 feet or more from the element. The product should generally be level and free from major defect. Final coat should have a uniform smooth to textured finish, or stippled appearance, when observed from 20 feet or more.



#### Level 3: Feature Items in Close View

These items are generally located within 20 feet of the viewing public. The intumescent coating should generally be uniform and free from major defects. Texture or defects may still be noticeable when observed from six feet or less.



#### Level 4: Showcase Elements

These Items are a critical aesthetic feature (within six feet or less of view) and due to proximity, shape, topcoat sheen levels, and/or reflection of lighting, requires the highest possible degree of finish. Items should be smooth, and the finish should be even with no waviness or defect and mirror the shape of the expressed steel.

It is important -- to maximize economy and efficiency -- that the finish standard would generally not be more restrictive than the AESS Category for Structural Steel. In each increase to the standard of finish required, there would likely be a parabolic increase in the installed cost to achieve that standard. Often, in addition to labor costs, materials must intentionally be overapplied in order to be sanded down and still meet the required thicknesses prescribed for the hourly ratings required.

## FIRETEX® INTUMESCENT FINISHES

A GUIDE FOR FIRE PROTECTION ON EXPOSED AND EXPRESSED ARCHITECTURAL STRUCTURAL STEEL

#### THE SHERWIN-WILLIAMS DIFFERENCE

The industry experts at Sherwin-Williams Protective & Marine are renowned authorities in their respective fields of knowledge - including Bridge & Highway, Fire Protection, Flooring, Food & Beverage, Freight Rail, Marine, Oil & Gas, Pharmaceutical, Power Generation, Steel Fabrication and Water & Wastewater. Our global technology expertise in areas including tank linings, passive fire protection, corrosion under insulation (CUI) testing and fusion-bonded epoxy drives game-changing innovation and influences global industry standards.



Unparalleled distribution network



Global industry expertise



Most extensive sales organization coverage



Unmatched technical and specification service