Rolling Steel Door Paint Wear

Introduction

A common occurrence with rolling steel door products, under normal usage of such products, is the wearing away of the painted surface of the curtain. This condition occurs as the result of the curtain repeatedly coiling upon itself, and then repeatedly uncoiling, upon the opening and closing of a rolling steel door. The wear may appear as horizontal lines, mars or abrasions on the faces of the individual slats in the curtains.

Degree of Paint Wear

The degree to which paint may wear away from rolling steel door curtain surfaces varies depending on factors such as:

- Curtain configuration
- Curtain finish
- Door size
- Environmental conditions
- Frequency of use

Methods to Reduce Paint Wear

Rolling steel door manufacturers use different methods to reduce paint wear for steel curtains, in order to both limit the degree of paint wear and provide a highly aesthetic manufactured product. Two methods commonly used are:

1. Roll coat paint system. A galvanized steel coil goes through a three-step process. The coil is cleaned and treated, a primer coat is applied and baked, and a top coat is applied and baked. The painted steel coil is slit to the proper width and passed through a roll former mill to produce slats.

2. Powder coat. A galvanized steel coil, or a roll coat-painted steel coil, is roll formed to produce slats. Then the slats are coated with thermosetting resin and baked.
The degree of wear for the above finishes varies with the quality of the galvanized coating, and with the thickness and characteristics of the paint or resin.

**Field Painting**

Field painted curtains will show surface wear marks sooner than such wear on roll coated or powder coated curtains. Field painted finishes are typically applied after product installation in an uncontrolled environment. The door curtain manufacturer should be consulted prior to applying any finish to a rolling steel door curtain in order to determine the compatibility of the field applied coating with the original curtain finish. Professional application and adequate air-drying are essential.