

# Guide for Illumination of Industrial Coating Projects

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## Foreword

Achieving acceptable levels of illumination by natural or artificial means in the industrial painting industry is complicated due to the complexity of structures, vision-inhibiting dust, and potentially hazardous concentrations of explosive dust or solvent vapors.

Illumination standards have been established for most industrial applications by the Illuminating Engineering Society (IES) RP-7.

Within the U.S., compliance with National Fire Prevention Association (NFPA) and U.S. Occupational Safety and Health Administration (OSHA) regulations is required to ensure the safety of personnel and equipment in industrial coating projects. The user of this guide is encouraged to consult their national, regional, or local requirements for safety requirements.

Within the U.S., illumination equipment for use in industrial coating projects must be compliant with Underwriters Laboratories (UL) standards specific to the environmental conditions of equipment usage.

This guide is intended to provide project specification writers, industrial coating contractors, and inspectors with recommendations for selecting the proper illumination equipment and illumination levels for general work activities, as well as for performing surface preparation, coating application and inspection during an industrial coating surface preparation and application project.

## Scope

This guide provides information for providing the quantity and quality of lighting on industrial coating projects that is conducive to achieving quality surface preparation and coating application, productivity, inspection/quality control, and accident prevention.

These guidelines are intended to be used by facility owners, specifiers, designers, and contractors.

## Rationale

Illumination standards have been established for confined spaces in ANSI/ASSP Z117.1 and for industrial facilities by ANSI/IES RP-7. This guide provides facility owners, specifiers, designers, and contractors with a compendium of information on best practices for illumination of general work areas and specific tasks performed during surface preparation, coating application, and inspection activities, both in fixed shop facilities and in the field.

## Referenced Standards and Other Consensus Documents

The latest edition, revision, or amendment of the referenced standards in effect shall govern unless otherwise dated.

### **AMPP/NACE/SSPC Standards, [www.ampp.org](http://www.ampp.org):**

SSPC-TU 11 Inspection of Fluorescent Coating Systems

### **American Society of Safety Professionals (ASSP), [www.assp.org](http://www.assp.org):**

ANSI/ASSP Z117.1 Requirements for Entering Confined Spaces

### **ASTM International, [www.astm.org](http://www.astm.org):**

ASTM E3022 Standard Practice for Measurement of Emission Characteristics and Requirements for LED UV-A Lamps Used in Fluorescent Penetrant and Magnetic Particle Testing