



### **Indian Standard IS 15965:2012: Pre - Painted aluminium zinc alloy metallic coated steel strip and sheet (Plain)**

IS 15965:2012 specifies the requirements for pre-painted aluminium-zinc metallic-coated steel strips and sheets. These products consist of a steel base coated with an aluminium-zinc alloy layer for superior corrosion resistance and a pre-painted surface for enhanced aesthetics and additional durability. The pre-painted layer allows for a variety of colors and finishes, making the product suitable for applications such as roofing, cladding, automotive parts, and appliances.

Consumers expect the following quality parameters in the product:

1. **Corrosion Resistance:** Protection against rust and degradation in various environmental conditions.
2. **Aesthetic Appeal:** Consistent color, finish, and gloss for visual quality.
3. **Durability:** Resistance to mechanical damage, weathering, and UV exposure.
4. **Uniformity:** Consistent thickness and quality of both the metallic coating and paint layer.
5. **Mechanical Properties:** Adequate strength, flexibility, and elongation for diverse applications.
6. **Environmental Compliance:** Use of environmentally friendly materials and coatings.

IS 15965:2013 establishes the following requirements to meet these consumer expectations:

1. **Corrosion Resistance:** The aluminium-zinc alloy coating provides superior protection, and the standard specifies minimum coating mass and thickness to ensure longevity.
2. **Aesthetic Quality:** Specifications for pre-treatment, primer, and paint layers ensure uniformity and durability of color and finish.
3. **Durability:** Tests for adhesion, flexibility, and resistance to environmental factors like humidity, UV exposure, and salt spray are prescribed to ensure long-term performance.
4. **Uniformity:** Dimensional tolerances and coating consistency are rigorously defined to meet precise application needs.
5. **Mechanical Properties:** The standard includes criteria for tensile strength and elongation, ensuring the product can withstand mechanical stress.
6. **Testing Protocols:** Comprehensive testing methods for coating adhesion, flexibility, and corrosion resistance are outlined to verify product quality.

By addressing these parameters, IS 15965:2013 ensures that pre-painted aluminium-zinc metallic-coated steel sheets and strips deliver reliable performance and meet diverse consumer requirements.