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Standard**

ISO 9607-1

**Paints and varnishes — Protective
coatings for concrete structures —**

**Part 1:
General introduction**

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Foreword

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Introduction

Unprotected concrete and cement-based structures exposed to the atmosphere, water and soil are subjected to degradation that can lead to damage, especially calcium leaching, physical damage, carbonation, and chloride and sulfate attacks of steel reinforcements. To avoid such damage, these structures are protected to withstand the environmental stresses to which they are subjected during their required service life.

There are different ways of protecting concrete structures from damage. The ISO 9607 series¹⁾ deals with the protection of concrete structures through coating systems and the features that are important in achieving adequate protection against degradation. Additional or other measures are possible but require particular agreement between the parties involved.

In order to ensure the effective protection of concrete, owners of such structures, planners, consultants, companies carrying out protection work, inspectors of protective coatings and manufacturers of coating materials should have at their disposal state-of-the-art information in a concise form on protection using paint systems. It is vital that such information is as complete as possible, unambiguous and easily understandable to avoid difficulties and misunderstandings between the parties concerned with the practical implementation of protection work.

The ISO 9607 series is intended to give this information in the form of a set of instructions for those who have some technical knowledge.

The ISO 9607 series¹⁾ foresees the following parts:

- Part 1 is a general introduction to the series;
- Part 2 is intended to define the atmospheric-aggressiveness categories and indicates the degradation to be expected;
- Part 3 is expected to cover the basic design criteria for concrete structures for the purpose of improving their resistance to environmental degradation;
- Part 4 is intended to describe different types of surfaces to be protected and define the surface preparation grades and surface profiles;
- Part 5 is expected to describe the generic types of coatings on the basis of their chemical composition and the type of film formation process;
- Part 6 is expected to specify laboratory test methods that are intended to be used when assessing the performance of protective coating systems;
- Part 7 is expected to describe how coating work should be carried out in the workshop or onsite;
- Part 8 is intended to cover the development of specifications for concrete protection work.

1) The other parts of this series are under development.