
Site testing of protective coatings

Method 7: Determination of surface temperature

PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee CH-003, Paints Related Materials, to supersede AS/NZS 3894.7:1996. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

FOREWORD

The determination of the surface temperature of a metal surface to which a protective coating will be applied is essential in controlling the quality of the applied coating. The accurate determination of both surface temperature and the dewpoint of air in contact with it is needed to ensure that a coating is not applied unless the metal is warmer than the dewpoint. Measurement of the temperature of the metal surface, relative to that of the surrounding air, is therefore vital in assessing if conditions are suitable for the application of a protective coating.

The maximum and minimum surface temperature for application of a coating will be specified by the coating manufacturer.

METHOD

1 SCOPE

This Standard provides a practical procedure for use in the field to determine the surface temperature of a metal substrate to which a protective coating is to be applied to confirm that the metal temperature is an appropriate margin above the dewpoint temperature. The range of surface temperature measurements covered by this Standard is limited to ambient (field) applications. Applications of coatings to 'hot' surfaces above 80°C are not covered by this Standard.

NOTE: AS/NZS 2312 provides guidance on atmospheric conditions and their affect on painting conditions involving iron and steel substrates. It recommends that the surface temperature is at least 3°C above the dewpoint.