

AS 4822:2024



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External field joint coatings for steel pipelines

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AS 4822:2024

This Australian Standard ® was prepared by ME-038, Petroleum Pipelines. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 16 October 2024.

This Standard was published on 1 November 2024.

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Australian Energy Producers
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This Standard was issued in draft form for comment as DR AS 4822:2024.

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ISBN 978 1 76139 891 9

External field joint coatings for steel pipelines

Origin: technical specification AS 4822—2008.
Previous edition 2018.
Third edition 2024.

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Preface

This Standard was prepared by the Australian members of the Standards Australia/Standards New Zealand Committee ME-038, Petroleum Pipelines, to supersede AS 4822:2018.

The objective of this document is to provide manufacturers, suppliers, specifiers and users of oil and gas pipelines information on the application of and testing requirements for external field joint coatings (FJCs) of seamless or welded steel pipelines for onshore steel pipelines.

The major changes in this edition are as follows:

- (a) Type tests are more clearly identified and a definition has been added.
- (b) Some tests have been reclassified as Type tests.
- (c) An electrical resistivity type test has been added for liquid applied coatings.
- (d) The peel rate for polymeric tape laboratory testing has been changed to align with the rate used for field testing.
- (e) Some peel test requirements have been changed for tape coatings and FJCs.

The inclusion of roles and responsibilities in AS 4822 was approved by PMG on 21/06/2023.

The terms “normative” and “informative” are used in Standards to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is only for information and guidance.

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NOTES

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External field joint coatings for steel pipelines

1 Scope and general

1.1 Scope

This document sets out minimum requirements for the field joint coating (FJC) of seamless and welded steel buried onshore pipelines. It specifies the application and testing of corrosion protection coatings applied to steel surfaces left bare after the pipes and fittings (components) are joined by welding.

Field joint coatings may be specified for the repair and maintenance of existing pipelines. For those applications only, the end user may waive, or change, some of the requirements specified in this standard. This may be required as a result of the existing pipeline coating type, its condition, and/or application restrictions.

NOTE 1 Field joints and other specific points are coated on site.

NOTE 2 Information to be supplied at the time of order is given in [Appendix A](#).

NOTE 3 Coatings detailed in this document are suitable for use with cathodic protection systems.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document:

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1145.3, *Determination of tensile properties of plastics materials, Part 3: Test conditions for films and sheets*

AS 1391, *Metallic materials—Tensile testing at ambient temperature*

AS 1627.2, *Metal finishing—Preparation and pretreatment of surfaces, Part 2: Power tool cleaning*

AS 1627.4, *Metal finishing—Preparation and pretreatment of surfaces, Part 4: Abrasive blast cleaning of steel*

AS 1627.9, *Metal finishing—Preparation and pretreatment of surfaces, Part 9: Pictorial surface preparation standards for painting steel surfaces*

AS 2706, *Numerical values—Rounding and interpretation of limiting values*

AS 3862, *External fusion-bonded epoxy coating for steel pipes*

AS 3894.1, *Site testing of protective coatings, Part 1: Non-conductive coatings—Continuity testing—High voltage (brush) method*

AS 3894.3, *Site testing of protective coatings, Part 3: Determination of dry film thickness*

AS 3894.4, *Site testing of protective coatings, Part 4: Assessment of degree of cure*

AS 3894.5, *Site testing of protective coatings, Part 5: Determination of surface profile*

AS 3894.6, *Site testing of protective coatings, Part 6: Determination of residual contaminants*

AS 3894.9, *Site testing of protective coatings, Part 9: Determination of adhesion*

AS 4352, *Tests for coating resistance to cathodic disbonding*