

BRITISH STANDARD CODE OF PRACTICE

CP 2010 : Part 4 : 1972

UDC 624.05 : 621.643 : 666.961

PIPELINES

Part 4. Design and construction of asbestos cement pipelines in land

**THE COUNCIL FOR CODES OF PRACTICE
BRITISH STANDARDS INSTITUTION**



Documents

Document Sharing Hub

BRITISH STANDARD CODE OF PRACTICE
CP 2010 : Part 4 : 1972

PIPELINES

**Part 4. Design and construction
of asbestos cement pipelines in land**

THE COUNCIL FOR CODES OF PRACTICE
BRITISH STANDARDS INSTITUTION
2 PARK STREET, LONDON W1A 2BS



Documents

Document Sharing Hub

PIPELINES

PART 4. DESIGN AND CONSTRUCTION OF ASBESTOS CEMENT
PIPELINES IN LAND

This Part of the Code of Practice has been prepared by a Committee convened by the Codes of Practice Committee for Civil Engineering. Having been endorsed by the Council of Codes of Practice, it was published under the authority of the Executive Board on 7 April, 1972.

© British Standards Institution, 1972.

SBN: 580 07460 9

This Code of Practice makes reference to the following British Standards and ISO Recommendation:

- BS 10. Flanges and bolting for pipes, valves and fittings.
- BS 78. Cast iron spigot and socket pipes (vertically cast) and spigot and socket fittings.
Part 2. Fittings.
- BS 486. Asbestos cement pressure pipes.
- BS 534. Steel pipes, fittings and specials for water, gas and sewage.
- BS 916. Black bolts, screws and nuts.
- BS 1218. Sluice valves for waterworks purposes.
- BS 1769. Unified black hexagon bolts, screws and nuts (UNC and UNF threads). Heavy series.
- BS 2035. Cast iron flanged pipes and flanged fittings.
- BS 2494. Rubber joint rings for gas mains, water mains and drainage purposes.
- BS 3464. Cast iron wedge and double disk gate valves for general purposes.
- BS 3948. Cast iron parallel side valves for general purposes.
- BS 3961. Cast iron screw-down stop valves and stop and check valves for general purposes.
- BS 4090. Cast iron check valves for general purposes.
- BS 4190. ISO metric black hexagon bolts, screws and nuts.
- BS 4504. Flanges and bolting for pipes, valves and fittings. Metric series.
- BS 4622. Grey iron pipes and fittings.
- CP 2005. Sewerage.
- CP 2008. Protection of iron and steel structures from corrosion.

CP 2010. Pipelines.

- Part 1. Installation of pipelines in land.
- Part 3. Design and construction of iron pipelines in land.

ISO Recommendation R....*. Guide to the selection of asbestos cement pipes subject to external loads with or without internal pressure.

* In course of preparation.

British Standard Codes of Practice are revised, when necessary, by the issue either of amendment slips or of revised editions. It is important that users ascertain that they are in possession of the latest amendments or editions.

The following BSI references relate to the work on this Code of Practice:
Committee references CVCP/10, CVCP/10/2 and CVCP/10/2/2.
Draft for comment 69/15469.

CP 2010 : Part 4 : 1972

CODE DRAFTING COMMITTEE CVCP/10

PIPELINES

Mr. W. M. C. Jones (*Chairman*)

Mr. P. D. Blackmore }
 Mr. R. Ritchie }
 The Secretary

Mr. P. D. Allan
 Works Engineer
 Dr. A. M. Burdon }
 Mr. G. A. Orton }
 Mr. L. H. Hook
 Mr. L. W. F. Millis, C.B.E.
 Mr. C. Lea }
 Mr. O. G. Weller }
 Mr. R. B. Beilby, M.C.
 Technical Director

Mr. M. A. Gregory
 Mr. E. R. Pickworth
 Mr. T. W. J. Hucker }
 Mr. H. Perring }
 Mr. O. C. Young }
 Mr. W. M. C. Jones
 Mr. A. C. Bain

Mr. F. A. Whymark
 Mr. R. O. Emmony }
 Mr. H. Jones }
 Mr. E. W. Pickering }
 Mr. P. A. Shepherd }
 Mr. D. W. M. Staples, M.B.E.
 Mr. R. E. Watkins
 Mr. K. A. Spencer
 Mr. R. W. Brown
 Mr. R. O. Emmony }
 Mr. E. W. Pickering }
 Mr. P. A. Shepherd }
 Mr. H. D. Walker

*British Acetylene Association**British Chemical Plant Manufacturers' Association**British Plastics Federation**British Railways Board**British Steel Industry**British Valve Manufacturers' Association**British Waterworks Association**Chemical Industries Association**Confederation of British Industry**Council of British Manufacturers of Petroleum Equipment**County Landowners' Association**County Surveyors' Society**Department of the Environment**Department of Trade and Industry**Electricity Council, The Central**Electricity Generating Board and the**Area Boards in England and Wales**Federation of Civil Engineering Contractors**Gas Council**Home Office**Institute of Petroleum**Institution of Chemical Engineers**Institution of Civil Engineers**Institution of Gas Engineers**Institution of Mechanical Engineers*

Mr. R. G. Woolcock
 Mr. W. Fillingham Brown
 Mr. K. Howorth }
 Mr. J. S. M. Willis }
 Mr. G. Cole
 Mr. D. A. Oliver }
 Mr. H. M. Wilson }
 Mr. T. Glasgow }
 Mr. J. H. Manson }
 Mr. F. H. Treglown }
 Mr. R. E. Watkins }
 Mr. H. G. B. Nolan }
 Mr. L. S. Northern }
 Mr. G. Dickinson }
 Mr. J. G. Young }

Institution of Municipal Engineers
Institution of Public Health Engineers
Institution of Water Engineers
Ministry of Agriculture, Fisheries and Food
National Farmers' Union

Oil Companies Materials Association

Pipe Industries Guild
Royal Institution of Chartered Surveyors
The Welding Institute

SUB-COMMITTEE CVCP/10/2

PIPELINES, DESIGN AND MATERIALS

Mr. W. M. C. Jones (Chairman)

Mr. H. Y. Anderson

Asbestos Cement Manufacturers'
Association

Mr. P. D. Blackmore }
 Mr. R. Ritchie }
 Mr. E. N. Andrews }
 The Secretary }

British Acetylene Association

British Cast Iron Pressure Pipe Association
British Chemical Plant Manufacturers'
Association

Mr. G. A. Orton
 Mr. W. J. Gilbert
 Mr. H. Howard

British Steel Industry
Chemical Industries Association
Council of British Manufacturers of
Petroleum Equipment
Department of the Environment
Department of Trade and Industry
Gas Council

Mr. O. C. Young
 Mr. W. M. C. Jones
 Mr. R. O. Emmony
 Mr. R. E. Watkins }
 Mr. R. T. J. Clarke }
 Mr. R. W. Brown
 Mr. R. O. Emmony
 Mr. K. Howorth
 Mr. R. E. Watkins
 Mr. H. G. Nolan

Institute of Petroleum

Institution of Civil Engineers
Institution of Gas Engineers
Institution of Water Engineers
Oil Companies Materials Association
Pipe Industries Guild

CP 2010 : Part 4 : 1972

DRAFTING PANEL CVCP/10/2/2

NON-METALLIC PIPELINES

Mr. W. M. C. Jones (*Chairman*)

Mr. H. Y. Anderson

*Asbestos Cement Manufacturers'
Association*

Mr. E. N. Andrews

British Cast Iron Pressure Pipe Association

Mr. O. C. Young

Department of the Environment

Mr. W. M. C. Jones

Department of Trade and Industry

Mr. R. W. Brown

Institution of Civil Engineers

Mr. K. Howorth

Institution of Water Engineers



CONTENTS

	Page
Foreword	9
 1. GENERAL	
1.1 Scope	9
1.2 Definition	10
1.3 Application	10
1.4 Safety	10
1.5 Inspection	10
 2. MATERIALS	
2.1 Pipes	11
2.2 Fittings and valves	11
2.3 Flanges	11
2.4 Bolts	11
2.5 Joint rings and gaskets	12
 3. DESIGN	
3.1 General considerations	12
3.2 Joints and flexibility	14
3.3 External and internal protection	15
 4. CONSTRUCTION	
4.1 General	15
4.2 Transport, handling and stringing	15
4.3 Trenching	16
4.4 Pipe inspection and repairs	16
4.5 Laying, jointing and anchoring	17
4.6 Backfilling	19
 5. CLEANING, TESTING AND COMMISSIONING	
5.1 Cleaning	19
5.2 Testing	19
5.3 Commissioning	22