

GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS

1992 Edition (Hong Kong Government)

CORRIGENDUM No. 1/96 (August)

VOLUME 1

SECTION 1

GENERAL

(a) Appendix 1.1,
Clause 1.1.1,
Page 61

Replace BS 882 : 1983 by BS 882 : 1992

(b) Appendix 1.1,
Clause 1.1.1,
Page 64

Delete:-

BS 2499 : 1973

**Specification for hot applied
joint sealants for concrete
pavements**

and replace by:-

BS 2499

**Hot-applied joint sealant
systems for concrete pavements**

BS 2499 : Part 1 : 1993

**Specification for joint
sealants**

BS 2499 : Part 2 : 1992

**Code of practice for the
application and use of joint
sealants**

BS 2499 : Part 3 : 1993

Methods of test

(c) Appendix 1.1,
Clause 1.1.1,
Page 65

Replace BS 3416 : 1988 by BS 3416 : 1991 with AMD 7288

(d) Appendix 1.1,
Clause 1.1.1,
Page 73

Add the following standards between BS 6700 : 1987 and BS 6925 : 1988:

BS 6920	Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water
BS 6920 : Part 1 : 1990	Specification
BS 6920 : Part 2	Methods of test
BS 6920 : Section 2.1 : 1990	Samples for testing
BS 6920 : Section 2.2	Taste of water
BS 6920 : Subsection 2.2.1 : 1990	General method of test
BS 6920 : Subsection 2.2.2 : 1990	Method of testing tastes imparted to water by hoses
BS 6920 : Subsection 2.2.3 : 1990	Method of testing tastes imparted to water by hoses for conveying water for food and drink preparation
BS 6920 : Section 2.3 : 1990	Appearance of water
BS 6920 : Section 2.4 : 1988(1994)	Growth of aquatic microorganisms
BS 6920 : Section 2.5 : 1990	The extraction of substances that may be of concern to public health
BS 6920 : Section 2.6 : 1990	The extraction of metals
BS 6920 : Part 3 : 1990	High temperature tests

(e) Appendix 1.1,
Clause 1.1.2,
Page 73

Add the following standard between ASTM A 775M-86 and ASTM C 127-88:

ASTM C 117-87	Test method for materials finer than 75-μm (No. 200) sieve in mineral aggregates by washing
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- (f) Appendix 1.1,
Clause 1.1.5

Delete:

**CS1 : 1990 with AMD 1101 and
AMD 1201**

Testing Concrete

and replace by:

**CS1 : 1990 with AMD 1101,
AMD 1201, AMD 1202 and AMD
1203**

Testing Concrete

SECTION 5

DRAINAGE WORKS

- (a) Page 132,
Table 5.10,
last column, 2nd row

Replace 500 mm - 800 mm by 450 mm - 800 mm

VOLUME 2

SECTION 9

CARRIAGEWAYS : SUB-BASE MATERIAL AND BITUMINOUS MATERIALS

- (a) Clause 9.52(2),
3rd line

Replace ASTM D 546 by ASTM C 117

- (b) Clause 9.56(2),
4th line

Replace ASTM D 546 by ASTM C 117

SECTION 11

MISCELLANEOUS ROADWORKS

- (a) Clause 11.39(1),
2nd line

Replace BS 1499 : Part 1 by BS 1449 : Part 1

- (b) Appendix 11.1,
Clause 11.1.4

Replace sub-clause (2) by the following:

(2) The unbiased standard deviation (s) shall be calculated from the following equation:

$$s = \frac{\sqrt{O\alpha C^2 - 5(Cm)^2}}{2} \text{ MPa}$$

where:

- αC^2 is the sum of the square of the compressive strengths of the five interlocking blocks (MPa)
- Cm is the average of the compressive strengths of the five interlocking blocks

SECTION 16**CONCRETE AND JOINTS IN CONCRETE**

- (a) Clause 16.74(1),
2nd line **Add and effluent treatment after sewage**
- (b) Clause 16.74(1),
3rd line **Replace bacteriological attack and by microbiological attack and resistant**
- (c) Clause 16.74(2),
2nd line **Replace shall be non-toxic and shall not impart a taste to the water by shall comply with the requirements of BS 6920**
- (d) Clause 16.77(5),
2nd line **Replace type A1 by type N1**
- (e) Page 200,
Table 16.10 **Replace Table 16.10 by the following:**

Table 16.10 : Joint sealant for water retaining structures and water tight structures

Structure for retaining/excluding	Type of joint	Type of joint sealant
Sewage	All joints	Polyurethane-based
Other than sewage	Expansion joints	Polysulphide-based or polyurethane-based
	Horizontal joints other than expansion joints	Hot-applied bitumen rubber, polysulphide-based or polyurethane-based
	Vertical and inclined joints other than expansion joints	Polysulphide-based, polyurethane-based or cold-applied bitumen rubber

VOLUME 3**SECTION 21****MARINE WORKS**

- (a) Clause 21.21(3),
1st line **Replace type 2 by type D (drainage)**

SECTION 23**WATER SUPPLY PIPEWORKS**

- (a) Clause 23.18(4) **Add or welded-on after cast-on**

(b) Clause 23.20,
1st line

Replace Type 1 for water by type W (water)

(c) Clause 23.21

Replace sub-clauses (1), (2) and (3) by the following:

(1) Anticorrosion tape shall be a proprietary type approved by the Engineer. The tape shall either be a petrolatum tape with fabric reinforcement or a bituminous tape with PVC backing. Petrolatum tape shall be used for valves, flanged joints, slip-on type couplings and flange adaptors of all sizes. Bituminous tape shall be used in buried or non-exposed condition for welded joints of steel pipe, repair of steel pipe sheathing and other applications as specified on the Drawings.

(2) Anticorrosion tapes shall have a high resistance to cathodic disbondment, acids and alkalis. Colour of bituminous tape shall be black. Anticorrosion tapes shall have the minimum properties stated in Table 23.2.

(3) Primer and mastic filler for use with anticorrosion tape shall be compatible with the tape and shall be a type recommended by the manufacturer of the tape and approved by the Engineer. Notwithstanding Clause 23.28(1)(f), primer and mastic filler for use with anticorrosion tape shall be supplied by the Contractor.

(4) Bituminous tapes shall be stored in a cool dry place away from the sun's rays. No dirt or grits shall be allowed to stick on the edge of the tape before applying the tape for pipe protection.

(5) The following particulars of the proposed anticorrosion tape for water supply pipeworks shall be submitted to the Engineer:

(a) manufacturer's literature for anticorrosion tape, and

(b) certificate for anticorrosion tape showing the manufacturer's name, the date and place of manufacture and showing that the material complies with the requirements stated in the Contract and including results of tests in accordance with the Contract.

(6) The particulars, including certificates, shall be submitted to the Engineer at least 14 days before the first delivery of the material to the Site. Certificates shall be submitted for each batch of the material delivered to the Site.

(d) Page 149,
Table 23.2

Replace Table 23.2 by the following:

Table 23.2 : Properties of anticorrosion tape

Properties		Petrolatum tape	Bituminous Tape
Thickness of PVC backing (mm)		-	0.75
Total thickness (mm)		1.1	1.65
Mass (kg/m ²)		1.4	2.0
Tensile strength (N/mm)		4	10
Adhesion strength (180° peel) (N/mm)	Self	0.5	2.5
	Steel	0.5	2.5
Dielectric strength (2 layers) (kV)		15	30
Elongation (at break) (%)		-	260
Temperature range (°C)	Wrapping	-5 to +45	+5 to +50
	In service	-5 to +45	-20 to +75

Standards Unit
Civil Engineering Department
August 1996