MALAYSIAN STANDARD

MS 1293-1:1992
(CONFIRMED:2015)

Specification for precast reinforced concrete box culverts - Part 1: Small culverts

(Not exceeding 1800 mm width and 1800 mm depth with a maximum backfill depth of 2 m inclusive pavement, if any)

ICS: 91.080.40; 91.100.30

Descriptors: precast reinforced concrete box culverts, small culverts, specification

NOTE. This Malaysian Standard has been reviewed and confirmed as being current.

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This Malaysian Standard, which had been approved by the Building and Civil Engineering Industry Standards Committee and endorsed by the Council of the Standards and Industrial Research Institute of Malaysia (SIRIM) was published under the authority of the SIRIM Council in December, 1992.

SIRIM wishes to draw attention to the fact that this Malaysian Standard does not purport to include all the necessary provisions of a contract.

The Malaysian Standards are subject to periodical review to keep abreast of progress in the industries concerned. Suggestions for improvements will be recorded and in due course brought to the notice of the Committees charged with the revision of the standards to which they refer.

The following references relate to the work on this standard:
Committee reference : SIRIM 491/16
Draft for comment : D112 (ISC D)

Amendments issued since publication

Amd. No.	Date of issue	Text affected

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Committee representation

The Building and Civil Engineering Industry Standards Committee under whose supervision this Malaysian Standard was prepared, comprises representatives from the following Government Ministries, trade, commerce and manufacturer association and scientific and professional bodies.

Association of Consulting Engineers (Malaysia)

Institution of Engineers (Malaysia)

Malaysian Institute of Architects

Master Builders' Association

Ministry of Housing and Local Government (Housing Department)

Ministry of Works and Utilities (Public Works Department)

Universiti Teknologi Malaysia

Chartered Institute of Building (Malaysia)

The Technical Committee on Concrete Products which prepared this Malaysian Standard consists of the following representatives:

Encik Song Sow Fee (Chairman)	Master Builders Association Malaysia (MBAM)
Encik Harry Low	Federation of Malaysian Manufacturers (FMM)
Encik Sobri Aziz Puan Dang Anom Mohd Zin	Public Works Department (JKR)
Encik Lee Loke Chong	Drainage and Irrigation Department
Ir. R. Anantaraju Pillai	City Hall Kuala Lumpur
Ir. Munning Jamaluddin	Institution of Engineers (Malaysia)
Encik Wan Shaari Hassan	Malaysian Highway Authority
Encik A Letchumanan	ACP (M) Sdn. Bhd.
Encik Boey Wah Kin/ Encik Chuah Chin Joo/ Encik Lee Yoon Choy	E-Rete (M) Sdn. Bhd.
Encik William Toh/Encik Azahan Ariffin	Hume Sdn. Bhd.
Encik Zulkifli Pesol	
Encik Ali Maidin/ Cik Noor Fauziah Sulaiman (Secretary)	Standards and Industrial Research Institute of Malaysia

FOREWORD

This Malaysian Standard was prepared by the Technical Committee on Concrete Products under the authority of the Building and Civil Engineering Industry Standards Committee.

This standard consists of two Parts, mainly

Part 1 - Small culverts (Not exceeding 1800 mm width and 1800 mm depth)

Part 2* - Large culverts (Exceeding 1800 mm width and 1800 mm depth).

The term 'culvert' is commonly used to refer both to complete conduit made up of a number of units placed end-to-end and to a single unit that may be an integral hollow section or a combination of a U-shaped section and a slab. For the purpose of this standard, the term 'culvert' is used to refer to a single unit, whether integral or made up of two sections. The term 'conduit' is then used to designate the assembly of a number of 'culverts'.

This standard made references to:

(a)	AS 1597:1974	– Australian Standard Specification for Precast Reinforced Concrete Box Culverts. Part 1: Small Culverts (Not exceeding 1200 mm width and 900 mm depth).
(b)	BS 5400	– British Standard Institute (BSI) - Steel, Concrete and Composite Bridges.
(c)	MS 1195	– Code of Practice for Structural use of concrete. Part 1: Design and Construction.
(d)	ASTM C789M - 83	– Standard Specification for Precast Reinforced Concrete Box Sections for Culverts, Storm Drains and Sewers (Metric).
(e)	ASTM C850M - 82	– Standard Specification for Precast Reinforced Concrete Box Sections for Culverts, Storm Drains and Sewers with less than 0.6 m of Cover Subjected to Highway Loading (Metric)
(f)	BD 31/87	– Department of Transport, Highways and Transport Departmental Standard BD 31/87 Buried Concrete Box Type Structures.

*(Under preparation)