

**SPECIFICATION FOR MANHOLE TOPS AND SURFACE-BOX TOPS**

**AMENDMENT NO. 1**

September 2006

**1. Page 7, Clause 1 Scope**

- a) *Insert* “, gully tops” after manhole tops in the first sentence.
- b) *Add* at end of first paragraph, “This standard does not apply to floor and roof gullies in buildings.”

**2. Page 7, Clause 2 Normative references**

*Update* the following normative references:

<i>Delete</i>	<i>Substitute with</i>
ISO 185 : 1988 Grey cast iron – Classification	ISO 185 : 2005 Grey cast irons – Classification
ISO 1083 : 1987 Spheroidal graphite cast iron – Classification	ISO 1083 : 2004 Spheroidal graphite cast irons – Classification
ISO 630 : 1980 Structural steels	ISO 630 : 1995 Structural steels – Plates, wide flats, bars, sections and profiles
ISO 1460	ISO 1460 : 1992
ISO 1461 : 1973 Metallic coatings – Hot dip galvanized coatings on fabricated ferrous products – Requirements	ISO 1461 : 1999 Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods
ISO 8062 : 1984 Castings – System of dimensional tolerances	ISO 8062 : 1994 Casting – System of dimensional tolerances and machining allowances

**3. Page 8, 3.2 Manhole top**

*Replace* the text with “That part of a manhole consisting of a frame and a cover and/or a grating”.

**4. Page 8, 3.5 Frame**

- a) *Re-number* subclause "3.5" as "3.7".
- b) *Insert* the following new subclauses:

**3.5 Gully**

An assembly to receive surface water for discharge into a drainage system.

**3.6 Gully top**

The part of a gully, consisting of a frame and grating which permits the passage of water through itself to the gully.

**5. Page 8, 3.6 Cover**

- a) *Re-number* subclause "3.6" as "3.8".
- b) *Replace* the text with the following:

The movable part(s) of a manhole top or a gully top which cover(s) the manhole or gully opening.

**6. Page 8, 3.7 to 3.12**

*Re-number* subclauses "3.7" to "3.12" as "3.9 to "3.14" respectively.

**7. Page 10, 3.13 Mass per unit area (kg/m<sup>2</sup>)**

- a) *Re-number* "3.13" as "3.15".
- b) *Replace* the text with the following:

Total mass of the cover or grating in kg divided by the clear area in m<sup>2</sup>.

**8. Page 10, 3.14 Cushioning insert**

- a) *Re-number* "3.14" as "3.16".
- b) *Replace* the text with the following:

Material in a frame, grating or cover used to provide a non-rock seating.

**10. Page 10, 3.15 Test load (kN)**

- a) *Re-number* "3.15" as "3.17".
- b) *Replace* the text with the following:

Load applied to manhole tops or gully tops when tested.

**11. Page 10, Table 1**

*Delete* Table 1 including the note and *replace* with the following table.

**Table 1 – Design load / place of installation**

Grade	Design load	Place of installation*
AA1	900 kN	In areas imposing particularly high wheel loads, e.g. aircraft pavements
AA2	600 kN	In areas, generally not on public road imposing high wheel loads, e.g. docks, aircraft pavements
A1	400 kN	In carriageways of expressways, arterial and industrial roads and parking areas for all types of road vehicles
A2	230 kN	In carriageways not exceeding 0.5 m away from kerbside channels of all roads and in carriageways of minor residential roads
B	125 kN	On footways where it is possible for a vehicle to mount or occasionally open to light vehicle to use and car parking decks
C	30 kN	In precincts which are inaccessible to motor vehicles

\*The user of this standard is responsible to determine the applicability of regulatory limitations prior to use.

**12. Page 11, 5.1 General**

*Add* an additional material after (f) as follows:

(g) aluminium alloy.

**13. Page 11, 5.1.2 Cover fillings**

*Insert* a note as follows:

NOTE – Recessed cover filled with concrete, etc should not be used within carriageways of public roads.

**14. Page 13, Table 3**

*Replace* Table 3 with the following table.

**Table 3 – Thickness of edge and contact surface protection**

Grade	Minimum thickness of the cast iron or steel * mm
C	2
B	3
A2	5
A1	6
AA2 AA1	To be determined according to each design

NOTE – \* Excludes the thickness of the additional corrosion protection.

**15. Page 14, new subclause**

*Insert* the following new subclause:

6.15 All hinged covers and gratings shall be designed such that, when in the open position, they shall be secured to prevent accidental closure of the covers or gratings. Kerb type units, if hinged, should open away from the carriageway or be hinged on the approach side.

**16. Page 15, Table 4**

*Amend* test load for Grade C from 15 kN to 30 kN.