



EUROPEAN COMMISSION
 Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
 Single Market Policy, Regulation and Implementation
Standards for Growth

Brussels, 14.12.2015

A Notification under Article 12 of Regulation (EU) No 1025/2012¹

Subject matter related to

<input type="checkbox"/>	Annual Union Work Programme for European standardisation (Art. 12, point a)
<input type="checkbox"/>	Possible future standardisation requests to the European standardisation organisations (Art. 12, point b)
<input checked="" type="checkbox"/>	Formal objections to harmonised standards (Art. 12, point c)
<input type="checkbox"/>	Identifications of ICT technical specifications (Art. 12, point d)
<input type="checkbox"/>	Delegated acts to modify Annexes I or III of Regulation (EU) No 1025/2012 (Art. 12, point e)

Title of the initiative

Formal Objection against EN 124:2015 "Gully tops and Manhole covers" - Parts 2-6

Additional information

Legislative reference(s)	Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC, OJ L 88, 4 April 2011
EN reference(s)	EN 124:2015 – Parts 2-6
Status	
Other information	This is a formal objection launched by the United Kingdom on 23 July 2015 against EN 124:2015 - Parts 2-6 the references of which have been published in the Official Journal of the European Union.

Commission contact point for this notification

GROW-CONSTRUCTION@ec.europa.eu

¹ OJ L 316, 14.11.2012, p. 12



Department for
Communities and
Local Government

register of
attn to
AXA

Ms M Rogalska
GROW/G1
European Commission
BREY 7/06
B-1049
Brussels
Belgium

Our Ref: Y/032/004/001/EN124

23 July 2015

Dear Ms Rogalska,

Regulation 305/2011 Article 18 objection to EN 124 Gully Tops & Manhole Tops for Vehicle and Pedestrian Areas

I am writing to invite you to consider a Construction Products Regulation 305/2011 Article 18 formal objection to the 2015 EN 124 standard for gully tops and manhole tops for vehicle and pedestrian areas, and examination by the Commission with the Standing Committee on Construction of issues with EN124. I summarise the reasons for this below.

Standard EN 124, which has recently been published in six parts, includes elements describing how products' skid resistance, a mandated essential characteristic, should be assessed and declared.

The EN124 approach to assessing and declaring skid resistance refers to surface texture and an unpolished slip resistance value (USRV). This approach is not aligned with the basic requirements for construction works set out in national provisions of the UK roads authorities, which require surfaces to have polished skid resistance values (PSRV) of 45 or 60 dependent on the location. I am advised also that EN124 does not demonstrate a correlation for in-service performance between its USRV test approach and the required PSRV test. Therefore it can be considered that the standard does not entirely satisfy the requirements set out in the relevant mandate.

I welcome the opportunity provided by your Unit for discussions in August on this and other industry issues (choice of AVCP, and burdens on industry) with EN124.

Yours sincerely,

Guy Bampton
Team Leader, Construction Products and Building Regulations

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Ms F Raffaelli
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BREY 7/06
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Brussels
Belgium

Our Ref: Y/032/004/001/EN124

8 October 2015

Sent via the office of the UK Permanent Representation to the EU

Dear Ms Raffaelli,

Regulation 305/2011 Article 18 objection to EN 124 Gully Tops & Manhole Tops for Vehicle and Pedestrian Areas

I am resending my request of 23 July - inviting consideration of a Construction Products Regulation 305/2011 Article 18 formal objection to the 2015 EN 124 standard for gully tops and manhole tops for vehicle and pedestrian areas, and examination by the Commission with the Standing Committee on Construction of issues with EN124 - as requested via our Permanent Representation. In addition to the summary below I also provide a more detailed technical explanation from our roads authority at Annex A.

Standard EN 124, which has recently been published in six parts, includes elements describing how products' skid resistance, a mandated essential characteristic, should be assessed and declared.

The EN124 approach to assessing and declaring skid resistance refers to surface texture and an unpolished slip resistance value (USRV). This approach is not aligned with the basic requirements for construction works set out in national provisions of the UK roads authorities, which require surfaces to have polished skid resistance values (PSRV) of 45 or 60 dependent on the location. I am advised also that EN124 does not demonstrate a correlation for in-service performance between its USRV test approach and the required PSRV test. Therefore it can be considered that the standard does not entirely satisfy the requirements set out in the relevant mandate.

I thank you for the circulation of this by your Unit for discussion with the Standing Committee on Construction, and for the discussions of industry issues (choice of AVCP, and burdens on industry) with EN124.

Yours sincerely,

Guy Bampton
Team Leader, Construction Products and Building Regulations

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Our ref: EUL/CPR/EN124/01L
Your ref:

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Direct Line:
5 October 2015

Ms F Raffaelli
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Regulation 305/2011 Article 18 objection to EN 124 Gully Tops & Manhole Tops for Vehicle and Pedestrian Areas

We have concerns that the published standard for manhole covers, EN124, may decrease safety for road users, particularly motorcycles and other powered two wheel motor vehicles, as the standard does not require high enough skid resistance for areas of turning and braking.

The UK roads authorities are represented here by Highways England acting under licence from the UK Department for Transport.

The published standard

EN 124 - Gully tops and manhole tops for vehicular and pedestrian areas – Part 1: Definitions, classification, general principles of design, performance requirements and test methods

EN 124 has recently been published in 6 parts.

Part 1 is the general specification and forms a normative reference for the other parts
Parts 2 to 6 are standards for various material types, eg steel, concrete etc.

The standards are yet to be cited in the OJEU.

The standard includes elements describing how products' skid resistance, a mandated essential characteristic, should be assessed and declared.

Part 1 contains general requirements for all cover types and situations for skid resistance as follows:

7.4.2 a in terms of material type (all concrete meets skid resistance requirements) and then for other materials-

7.4.2 b texture depth which varies from 2mm - 8mm depending on the class (2 mm to 6 mm for classes C 250 and below, and 3 mm to 8 mm for classes D 400 and above). 7.4.2 c then has an alternative minimum USRV of 35 in the case that a or b are not met. This minimum alternative does not track the class like the texture depth does.

The classes represent wheel loading values and D400 is rated for 40 tonnes loading.

Definitions

Texture depth - the depths of grooves between or height of protrusion of features on manhole covers to provide purchase for tyres.

USRV – Unpolished Skid Resistance Value. This involves a swinging pendulum with a defined frictional surface on the bottom, and unlike using approximations such as texture depth, it tests the actual frictional characteristics of the sample in its factory finished but untrafficked state.

PSRV – Polished Skid Resistance Value. This is the same test format, however the sample is subject to polishing over a number of hours prior to the test. The polishing simulates the wearing effect of traffic on the sample surface, and models the 'in-service' performance.

UK Regulations

UK roads authorities' requirements for skid resistance were notified as follows,

- HD 21 (for testing, now incorporated into HD 36), TRIS reference: 1990/317/UK
- HD 28 (in-service requirements), TRIS reference: 1992/339/UK

In these documents, roads are permitted an as-built skid resistance value above 60 and are allowed to fall to an in-service skid resistance value of around 45 before intervention.

HA 104 contains UK requirements for skid resistance of manhole covers, and the values specified are taken directly from HD 28 (in-service requirements).

UK skid resistance values

HA 104 currently specifies manhole covers in carriageways to PSRV of either 45 or 60 according to the risk at the proposed location.

Risks to road users of manhole covers with low skid resistance

The wheel configurations of powered two wheeled motor vehicles make them particularly vulnerable to losing control when braking or turning on slippery surfaces such as manhole covers. On the UK road network, these high risk locations are at stop

or give way lines on single carriageway junctions and roundabouts on both single and multilane roads, as well as slip roads and at the apexes of sharp bends.

In the UK single carriageway roads, such as the A47 and A5, include many services running below them which is the legal right of service providers under the New Roads and Street Works Act. Single carriageway roads also have many other high risk features such as sharp bends, T junctions, areas of reduced visibility, eg vertical and horizontal alignment issues.

The UK road network has been subject to carriageway widening programmes, which have resulted in manhole covers being located in running lanes where they were previously in the hard shoulder or verge. To protect road users, specified in-service skid resistance for these manhole covers is increased to that of the carriageway.

Mandate M118 and rev 1

The mandates M118 and M118 rev 1 give no indication that a pass/fail methodology should be used by CEN in the development of requirements for skid resistance. See the revised 'Comprehensive Table of Characteristics'.

It should be considered whether skid resistance should be given the same variable declaration status as load bearing capacity when administered in the essential characteristics of parts 2 to 6.

Unmitigated consequences

If UK roads authorities follow EN 124 as published we are not able to install manhole covers with the required skid resistance suitable in high risk situations. The UK roads authorities have concerns as follows:

1. Texture depth - Manhole covers for D400 and above could be provided with only 3mm texture depth.

UK finds that texture depth has an unreliable correlation with skid resistance.
[TRL367 - Parry, Roe et al, PPR727 – Sanders, Morosuk Peeling]

2. Skid resistance test -The requirement to undergo skid resistance testing is only invoked if the minimum texture depth cannot be provided.
3. Value - The skid resistance value of 35 is very low and would not provide sufficient skid resistance in high risk situations
4. Durability - Without the requirement for tested covers to undergo polishing, to simulate the ordinary wearing effects of traffic wheels, in service performance of manhole covers could fall even lower. This would be particularly evident if softer materials were used for covers, where polishing would eliminate softer materials during the test.

It should also be noted that covers not subject to polishing can also include initial coatings or casting microtexture which increase short-term skidding resistance for the test but wear off very quickly in service.

5. Exception for concrete - Any concrete cover is assumed to pass the skid resistance requirements without any testing. There is no evidence to suggest that plain concrete would provide sufficient skid resistance to meet the UK requirement of PSRV of 45 or 60.
6. Pass/Fail Methodology – UK roads authorities find the pass/fail methodology does not allow specification of skid resistance performance according to the risk at the location. This does not align with our national provisions.

This will lead to an increase in the number of deaths and injuries on our roads due to slippery manhole covers at high risk locations.

Compliance with EN 124 as published would not allow the specification of high enough skid resistance for covers in relocated running lanes and could result in very costly relocation of drainage assets.

Conclusions

The use of the pass/fail methodology for skid resistance is not aligned with the basic requirements for construction works set out in national provisions of the UK roads authorities.

Consideration should be given regarding interpretation of the mandate M118 to include skid resistance as a declared essential characteristic in the same way that load bearing capacity is treated. This should be measured by using the PSRV test. The UK roads authorities consider that a minimum of 3 classes should be considered, PSRV of 35, 45 or 60.

If EN 124 is published in its proposed form, the UK roads authorities will have no choice but to set a requirement for the continued provision of covers with sufficient skid resistance in locations where the risks to road users associated with turning and braking are high.

Steve Davy, Principal Technical Advisor
Team Leader, Knowledge Performance Governance and Implementation