

INTERIM ADVICE NOTE 117 /08

Certification of Combined Kerb and Drainage Products

Summary This Interim Advice Note provides guidance on the requirements for certification of combined kerb and roadside drainage units that may be used on HA roads.

Instructions for Use

This IAN takes immediate effect.

1. Introduction

The Highways Agency has recently become aware that contractors on a number of road schemes have installed combined kerb and roadside drainage units that appear not to fully comply with the required Highways Agency and British Standards Institution (BSI) published standards. Subsequent discussions with all current suppliers suggested that no products were fully compliant, though several were taking active steps to achieve compliance. Where non-compliant kerb units are installed there may be consequences for road users through failure, blockage of drainage channels, delays to replacement and the associated costs.

This Interim Advice Note clarifies the compliance requirements contained within the Specification for Highway Works, to ensure that all suppliers appreciate that they have the same opportunity to offer their products in line with the requirements of the national standard. A 'period of grace' is also extended to existing suppliers to show that they meet these requirements. The aim is to create a situation where all suppliers have the same opportunity to offer their products in line with the national standard requirements.

2. Identified Issues

Requirements for combined kerb and roadside drainage units are contained in British Standard BSEN 1433:2002 *Drainage channels for vehicular and pedestrian areas – Classification, design and testing requirements, marking and evaluation of conformity*. This is applied for Highways Agency projects using clauses 516 and 104 and through Appendix B of the Specification for Highway Works.

Some manufacturers of combined kerb and roadside drainage units appear to be only considering some of the requirements of BS EN 1433 without appreciating the implications of product certification requirements. Some Designers and Contractors have been equally uncertain.

There has also been some confusion over the formal independent third party requirements for Initial Type Testing (ITT) of the products as compared to manufacturers own testing information.

The status of CE marking of products has also been identified as uncertain.

3. Requirements - clarification

The Highways Agency specification for combined kerb/drainage systems is set out in Series 500 (Drainage and Service Ducts) of the SHW. Clause 516 imposes a requirement for systems to comply with BS EN 1433

Series100 (Preliminaries) of SHW, Clause 104 sets out the product quality certification requirements. Clause 104.4 also imposes a requirement for the Contractor to institute a quality management plan complying with BS EN ISO 9001 and identifies the product certification requirements.

The detailed Highways Agency requirements for product certification set out in section 4 below and replace the requirements of clause 104 of the Specification for Highway Works for combined kerb and roadside drainage, in order to clarify the requirements for product certification contained in BS EN 1433.

Note: *Appendix A of the SHW is relevant to drainage products where fasteners (nuts, screws, etc) are used.*

4. Product certification requirements

To demonstrate compliance a product manufacturer must have successfully carried out three steps, and all quality certification schemes must include all three steps as detailed below – such certification schemes must be fully transparent to allow other parties access to evidence to demonstrate compliance.

a) Initial Type Testing (ITT)

This is a series of independent third party tests identified within the standard BSEN1433 which will demonstrate that a product can achieve the requirements. It checks the basic design of the product. Clause 10.2 and Annex ZA.1 of BS EN 1433 lists tests that are to be reported.

In terms of durability for metal combined kerb and drainage products reference should be made to Clause 6.2.1 of BS EN 1433, for concrete and synthetic concrete products reference should be made to Clause 6.2.2 and for products for other non-specified materials, a suitable and relevant international standard should be referenced.

b) Factory Production Control (FPC)

This is the series of procedures to be undertaken by the manufacturer to ensure that the product is produced to a consistent quality, so that the product will remain within the design parameters. BS EN 1433 Clause 10.3 sets out the requirements for FPC. A manufacturers 'Declaration of Conformity' (similar to Clause ZA.2.2) will be sufficient to confirm acceptability.

c) Audit (Product Certification)

This checks that ITT and FPC were carried out correctly by a suitably qualified certification body.

Manufacturers must operate a quality management system in accordance with BS EN ISO 9001:2000 *Quality management systems Requirements*, issued by an accredited body (UKAS or equivalent) working to BS EN 45012:1998 *General requirements for bodies operating assessment and certification/registration of quality systems*.

A transparent and accessible system of third party control compliant with BS EN 45011:1998 *General requirements for bodies operating product certification systems*, shall be maintained by the manufacturer. Product certification shall be carried out by an accredited body (undertaken by UKAS or equivalent, and for which acceptance has been granted by the Overseeing Organisations).

The supplier must provide a copy of the certificate of conformity affirming compliance with the above requirements issued by the accredited body.

CE Marking

At present in the UK CE marking of products is not mandatory. For the time being the use of CE marking is a matter for manufacturers to consider.

5. Applications

Additional guidance on combined kerb and drainage products is given in the Notes for Guidance to the Specification for Highway Works. Relevant are clauses NG516 and NG517 which advise the strength class of product for particular locations. In general Class 'D' higher strength products should be used for all Highways Agency applications except that Class 'C' products (C250) may be installed in locations which are protected from direct traffic loading, in areas behind safety barriers.

6. Actions

To assess the suitability of a product, the technical requirements of the combined kerb and drainage unit must be checked and the status of compliance must be confirmed by contractors and designers. Direct evidence must be produced by the suppliers to demonstrate the compliance with the requirements set out in section 4 above. Some suppliers may be able to produce additional markings and certification to support the use of their product.

Following discussions with all manufacturers, the Highways Agency is appreciative of the positive approach and the willingness to comply with these clarified requirements. It is understood that all suppliers are in the process of revising their certification accordingly. In recognition of this and the acceptance that there have been clearly different interpretations of the standards, the Highways Agency have agreed to implement a transitional period of grace whereby a lesser requirement will be acceptable, provided the technical suitability of the product has been clearly established. These basic requirements are:-

- a) Initial Type Test – carried out by a suitably accredited Body (or suitably qualified independent laboratory)
- b) Factory Production Control – This should be confirmed by a declaration by the manufacturer.

This transitional period will run until **31st March 2009** by which time all the required certification as detailed in sections 3 and 4 of this Interim Advice Note must be in place. Products which do not have all this certification in place by this date will no longer be acceptable for use on Highways Agency projects. Products which gain full certification after this date may be used on Highways Agency schemes provided that the certification is supplied and accepted prior to installation.

7. Implementation

This Interim Advice Note must be used forthwith.

8. References

BS EN 1433:2002 *Drainage channels for vehicular and pedestrian areas – Classification, design and testing requirements, marking and evaluation of conformity.* BSI

BS EN ISO 9001:2000 *Quality management systems Requirements* BSI

BS EN 45011:1998 *General requirements for bodies operating product certification systems* BSI

BS EN 45012:1998 *General requirements for bodies operating assessment and certification/registration of quality systems* BSI

Specification for Highway Works
Series 100: Preliminaries
Series 500 Drainage and Service ducts
Appendix B Product Certification Schemes

Notes for Guidance on the Specification for Highway Works
Series NG 500 Drainage and Service ducts