



THE HIGHLAND COUNCIL
BUILDING STANDARDS

Professional Policy Note

Non-Entry Inspection Chambers

(05 FEB 2009)

BST-016

Purpose

The Highland Council Building Standards Professional Policy Notes are produced to inform and create uniformity and consistency of interpretation throughout the Highland Council area, thus promoting good practice and customer care for the benefit of our Stakeholders. Please note that this guidance note is based upon information available at the time of issue, and may be subject to change.

General

As the name suggests, these are chambers for which all access of the drain (i.e. maintenance rodding, testing) is achieved from the surface. The non-entry inspection chamber is advertised as a much safer and cost-effective alternative to traditional concrete ring manholes during installation and occupation as pipe inspection, maintenance and testing can be carried out from above ground, so there is no need for ground workers or owners to enter a potentially hazardous environment. As a result there has been increased pressure on Building Standards Authorities to accept these systems.

Policy

Much discussion has taken place over the last few years with particular concern regarding their safety due to the potential depths involved, however it has been agreed (PBSS Meeting 11 Oct 2002) that **Non Entry Inspection Chamber Systems can be accepted by the HC.**

N.B

Where a Non-Entry Inspection Chamber System is proposed, Surveyors should ensure they meet the following criteria:

- All products should have suitable test certification;
- Installed in accordance with the manufacturer's instructions
- Constructed and installed in accordance with the recommendations in BS EN 12056-1 2000, BS EN 752-3 1997 (Amendment 2), BS EN 752-4 1998 and BS EN 1610 1998.
- All Non-Entry inspection chambers covers should be lockable to restrict unauthorised access;
- For health and safety reasons, they should have a restriction just beneath the cover to deter human entry. A restrictor cap to restrict the opening hole at the top of the shaft to a maximum of 350 mm should be provided.

AN EXTRACT FROM BE EN 752-3:1997 IS ATTACHED BELOW WHICH SHOWS THE RECOMMENDED DIMENSIONS FOR RODDING EYES, ACCESS FITTINGS AND INSPECTION CHAMBERS (non personnel entry)

Table NB.2 — Recommended dimensions for rodding eyes, access fittings and inspection chambers (non personnel entry)

Type of access	Depth to invert from cover level m	Minimum nominal internal dimensions ^a		Clear opening size		Remarks
		Rectangular length and width mm	Circular diameter mm	Rectangular length and width mm	Circular diameter mm	
Rodding eye	—	—	Preferably same size as drain but not less than DN 100	—	Same size as pipework ^d	
Access fitting ^b Type (1) See Table NB.1	0.6 or less, except where situated in chamber	150 × 100	150	Same size as access fitting ^d	Same size as access fitting ^d	The depth restriction is imposed because of the limited access afforded and is based on the ability to manipulate a stopper at arms length from the surface
		225 × 100	225	Same size as access fitting ^d	Same size as access fitting ^d	
Access fitting ^b Type (2) See Table NB.1	0.6 or less, except where situated in chamber	225 × 100	190 for drains up to DN 150	—	Min 190	Restricted to inspection and remotely operated equipment — no personnel entry
		450 × 450	450	Min 430 × 430	Min 430	
Inspection chamber ^c — shallow	1.2 or less	450 × 450 ^e	450 ^e	Access restricted to max 300 × 300 ^f	Access restricted to max 300 × 300 ^f	Restricted to inspection and remotely operated equipment — no personnel entry Max size imposed to prevent personnel entry
		Greater than 1.2	Greater than 1.2	—	—	

^a These sizes apply to straight-through pipes; larger sizes may be required for turning chambers or chambers with several side branches.

^b Fitting with a removable cover that permits access into the pipe, either from surface level or from within a chamber.

^c Chamber with a removable cover constructed on a drain or sewer that provides access from surface level only, but does not permit entry of a person (BS EN 752-1).

^d The clear opening may be reduced by 20 mm in order to provide proper support for the cover and frame.

^e It may not be possible to gain access to side branches. The upper part of the chamber may be reduced to a minimum of 300 × 300 or 350 dia. to form a neck entry.

^f A larger clear opening cover may be used in conjunction with a restricted access.