

Verification of Gas Protective Measures - Technical Note

The verification of gas protection systems has come about as an industry reaction to poor practices in the past and is the result of a cross industry working group in conjunction with CIRIA (Construction Industry Research & Information Association). The whole process is detailed within CIRIA C735 which is important reading for all parties involved in the process, so they understand the responsibilities and activities required by all.

In the revision of BS8485 2015 the importance of Verification has been notified and if a gas barrier is to be considered as part of a gas protection system, then it must be verified.

Section 3.2.2 of CIRIA C735 states that then person validating the membrane must be independent of the installation contractor or material supplier. It is recognised that under certain circumstances, others may assist the independent third party verifier, but that in such a case their work must be subject to independent third part audit.

Section 3.3 of CIRIA C735 states that it is essential appropriately experienced and qualified workforce is employed on site to install ground protection systems. If this is not the case onerous/intensive verification activities will need to be planned and carried out. Appropriate experienced and qualified workforce is recommended as an installer carrying an NVQ level 2 diploma in gas membrane installation or a TWI/CSWIP accreditation for plastic welding.


All independent verifiers will provide a verification plan in advance of the work in line with C735, identifying which methods they will employ and the frequency of verification visits, as part of their quotation. The frequency of verification visits and hence associated costs are normally dictated by the risk of the site in conjunction with the qualifications of the installation technicians doing the work, so this must be clear at the time of request. All this is identified by the verification specialist in their proposal (Recommendations are made in CIRIA C735)

The validator is in place to collate evidence to enable the discharge of planning conditions related to ground gas and to ensure that what has been designed is installed to appropriate best practice standards, in line with material manufacturers installation guidance, and is not to comment on the design or materials unless those installed do not match the specification for the project. A guide on suitable materials for gas membrane selection is given in Table 7, BS8485:2015 (A1 2019).

JUTA UK is pleased to confirm that GP®1, and GP®TITANFLEX membranes are fully manufactured in accordance with the requirements of BS8485:2015 (A1 2019), and are independently certified through the BBA for use as Gas Resistant membranes. Care should always be taken to assess the suitability of materials proposed for use as Gas Protective membranes – not all materials are suitable, and marketing literature is not sufficient to provide confidence materials are suitable, fit for purpose and designed to last a minimum design service life of >60 years in the built environment.

I trust that this meets with your requirements, however should you require any further information then please do not hesitate to contact the undersigned.

Best Regards
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