



## Bostik Technical Department Anhydritec Gyvlon FD E2C Screed Testing

**Company:** Anhydritec  
**Contact:** Andy Hone  
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Bostik were asked to undertake testing to ascertain whether Anhydritec Gyvlon FD flowing screeds with a maximum recorded relative humidity value of 92%RH within the substrate once applied are suitable for the application of Bostik preparation products without any negative effects being encountered.

### Method of Testing:

- Gyvlon FC E2C screeds were cast to form 6 slabs at a thickness of 50mm. The slabs were cast within a 1200 gauge visqueen sheet.
- When the applied screed was suitably dry enough to facilitate adhesion, insulated hygrometer boxes were sealed to the surface of the screed and the %RH value was monitored. The hygrometer boxes were repositioned after each inspection (approximately every 3-4 days) until a value of 92%RH was recorded and confirmed.
- Once a value of 92%RH was confirmed, an application of **Bostik Hytec E570 One Coat Membrane** (surface applied epoxy damp proof membrane – DPM) was immediately undertaken. The surface was abraded mechanically prior to the application of the DPM.
- Once fully cured, the DPM received an application of undiluted **Bostik Grip A526 Universal Primer**. The primer was allowed to fully dry, an application of **Bostik SL-C540 Flow** smoothing compound, at a nominal thickness of 3mm, immediately followed.
- The slabs were left undisturbed at room temperature for a period of not less 28 days. After this time, pull-off testing was undertaken to ascertain the integrity achieved by the applied products.

### Control Bay:

A control bay was also cast at the same time and at the same thickness. This was cast from Anhydritec Gypsum Eco Screed. The bay was monitored as above until such a point that the relative humidity value was recorded and confirmed as 87%RH. The same application of materials and processes as above was undertaken. Pull-off testing was then undertaken to provide benchmark result for comparison purposes.

### Results:

All pull-off testing undertaken to the Anhydritec Gypsum ECO Screed showed that the bond strength achieved for the applied products exceeded that which would be considered as acceptable. The results received for the Gyvlon FD E2C were comparable to the result received from the control bay when the same test was undertaken.

### Conclusion:

We confirm that Bostik preparation products, when applied in accordance with the recommendation as detailed below, can be applied to the surface of the Anhydritec Gyvlon FD E2C Screed with a confirmed relative humidity not exceeding 92%RH.

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**Recommendation:**

Bostik recommend the following process for the application of Bostik products to the surface of the Anhydritec Gypsum FD E2C Screed with a confirmed relative humidity value that does not exceed 92%RH.

- Prepare the existing subfloor using appropriate mechanical surface preparation equipment to remove any weak friable surface layers, such as and not limited to; laitance, dust, dirt and any loose friable material. After preparation, the surface should be thoroughly vacuumed using industrial vacuum equipment. The purpose of the mechanised surface preparation is to provide a clean and flat surface, free of contamination with a micro-textured finish visible.
- Apply **Bostik Hytec E570 One Coat** as a continuous even film, at a maximum coverage rate of 20-22m<sup>2</sup> per 10Kg unit. The applied coating must be free from pinholes. Allow to cure (overnight) to a glossy and tack free film.
  - Should a matt finish be obtained, indicative of preferential absorption into the substrate, it is necessary to apply a second coat.
- Within 24 hours, apply **Bostik GRIP A936 Xpress Primer** or **Bostik Grip A526 Universal Primer**.
  - Apply the primer undiluted by brush and/or roller directly to the cured **Bostik Hytec E570 One Coat**. Allow to fully dry.
- Within 24 hours, apply a Bostik smoothing compound in accordance with the methods as detailed within the current product technical data sheet for the chosen smoothing compound.

The above statement does not include screeds which contain underfloor heating systems of any type.

All products must be used in accordance with the information available on the current product technical datasheet. Drying and curing times are based on good ambient conditions. Cold and/or damp environments will retard these times and allowances should be made accordingly.

I trust that the above is of assistance and fully covers all aspects. However, should you require further support, or wish to discuss any part of the above in detail, please do not hesitate to contact the author or the Bostik Technical Services Department.

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Note:

- If you are unsure of any of the attached recommendations, please contact the writer.
- Unless otherwise stipulated, Bostik cement based products should be mixed and applied at temperatures of 5°C and rising, in accordance with industry recommendations.
- The British Standards Codes of Practice recommend that any existing movement joints or other joints subject to movement should not be covered and be brought through to the surface of the final floor covering.
- If the final floor coverings are not immediately applied after 48 hours, it is recommended that the sub-floor be covered to protect the surface from damage and contamination. Application of the floor covering protection during early installation of heavy fittings and loads is advised.
- The above advice and recommendations are based on the information made available to us and may need to be amended if there are other relevant factors of which we have not been informed. As part of the Bostik quality procedure the above recommendations will be checked by the Bostik Technical Services Department, and should any additional information be required we will contact you. If a typographical error has occurred and the above advice appears to conflict with the datasheet please contact the writer or Bostik Technical Services department for clarification. Please note that all Bostik products referred to above should be mixed and applied strictly in accordance with the current technical literature, which, if not attached, are available on the Bostik Web Site <https://www.bostik.com/uk/en/markets-applications/building-construction/>
- For any application methods not covered in these recommendations please contact Technical Services on +44 (0) 1785 272625. Recommendation and suggestions are for guidance only, since conditions of use are completely beyond our control. For health and safety instruction, first aid measures, spillage and disposal instructions, see separate Health and Safety Data Sheet for Bostik products available at [www.bostik.com/uk](http://www.bostik.com/uk)

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