

# Performance Testing of Flexible Cementitious

## General Product Description

Flexible cementitious is generally a 2-part, polymer-modified cementitious waterproofing system.

## Critical Conditions to Note

Weather conditions such as ambient temperature, precipitation, and humidity can affect the quality of the application and performance of the product. Cementitious membrane systems require a damp surface to improve the adhesion of membrane to the concrete surface. However, standing water must be removed from the concrete surface. The concrete surface should be saturated with clean water to achieve saturated surface-dry (SSD) condition prior to the application of the first coat of waterproofing membrane. Concrete surface that is under constant immersion or with an active hydrostatic head of water may not be suitable for usage of flexible cementitious. Flexible cementitious waterproofing membrane is not suitable to be used as an exposed system.

## Recommendations for Laboratory Testing Conditions

| Type of Tests                   | Recommended Curing Conditions                                      |
|---------------------------------|--------------------------------------------------------------------|
| Tensile Strength and Elongation | Consistent 23 °C and 70% relative humidity for a period of 28 days |
| Adhesion to Concrete            | 23 °C and 50% relative humidity for a period of 28 days            |

| Type of Tests                   | Recommended Testing Conditions                                                                                                                                                                                                                       |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tensile Strength and Elongation | Testing conditions: 23 °C and 50% relative humidity. Specimens shall be conditioned for at least 3 hrs when the test temperature is 23 °C. Maintain relative humidity at 50 ± 5% and condition the specimens for at least 24 hours prior to testing. |
| Adhesion to Concrete            |                                                                                                                                                                                                                                                      |

| Type of Tests                   | Recommended Curing/Testing Conditions for Quick test                                                                                                                                                                                                        |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tensile Strength and Elongation | 1. Curing condition at 70% relative humidity for 7 days.<br>2. Testing conditions with specimens conditioned at 40 °C for 30 mins without air cycling. Maintain relative humidity at 50% and condition the specimens for at least 30 mins prior to testing. |

| Type of Tests                   | Recommended Testing Equipment Loadcell and Speed                                            |
|---------------------------------|---------------------------------------------------------------------------------------------|
| Tensile Strength and Elongation | 500mm / min with dumb-bell Die C Specimen using up to a maximum load cell capacity of 100N. |

| Type of Tests        | Recommended Testing Conditions                                                                             |
|----------------------|------------------------------------------------------------------------------------------------------------|
| Adhesion to Concrete | At least 28-day cured concrete is used as the substrate for application of waterproofing membrane for test |

[gcpat.com](http://gcpat.com) | For technical information: [asia.enq@gcpat.com](mailto:asia.enq@gcpat.com)

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

© Copyright 2021 GCP Applied Technologies, Inc. All rights reserved.

GCP Applied Technologies Inc., 62 Whittemore Avenue, Cambridge, MA 02140, USA

GCP Applied Technologies (Malaysia) Sdn. Bhd, 7 Lorong CJ 1/1A, Off Jalan Balakong, 43200 Cheras Jaya, Kuala Lumpur, Malaysia

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

GCP Applied Technologies (Malaysia) Sdn. Bhd, 7 Lorong CJ 1/1A, Off Jalan Balakong, 43200 Cheras Jaya, Kuala Lumpur, Malaysia

This document is only current as of the last updated date stated below and is valid only for use in Malaysia. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on [www.gcpat.my](http://www.gcpat.my). Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2025-05-19

[gcpat.my/solutions/products/performance-testing-flexible-cementitious](http://gcpat.my/solutions/products/performance-testing-flexible-cementitious)