



Solutions for the bonding and sealing of VIROC wood-cement panels

Sikabond , SikaTack Panel e Sikaflex

MAY 2017 / 2ª VERSION / SIKA PORTUGAL / ARMÉNIO REIS

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SCOPE

This document describes the correct use of the elastic adhesive **Sikabond®T-2** and the bonding system **SikaTack®-Panel**, as well as **Sikaflex** and **SikaHyflex** sealants, used in the installation of VIROC cement-bonded particleboard in façade and other vertical applications.

Sikabond®T-2 is used mainly in interior applications, while **SikaTack®-Panel** bonding system was developed for the bonding of panels in the exterior.

INTRODUCTION

Viroc panels are cement-bonded particleboard, composed by a compressed and dry mixture of cement and pine wood particles.

It combines the flexibility and durability of wood with the strength of cement, allowing a large range of applications, both indoor and outdoor.

Can be used for façade, wall, floor and roof/ceiling applications.

INSTALLATION REQUIREMENTS

The elastic adhesive **Sikabond®T-2** and the system **SikaTack®-Panel** allow the bonding of VIROC panels to a wood or metal structure previously prepared, without any mechanical fixing.

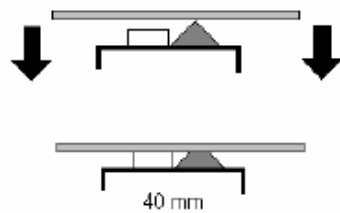
It is not advisable the direct bonding of the panels to the wall or façade without any support structure.

The dimensions of the structure must be suited to the façade/wall typology. The distance between the various elements of the structure, as well as its width, depends on the expected load and the size and type of panels to be used; each project requires a detailed study and scale out.

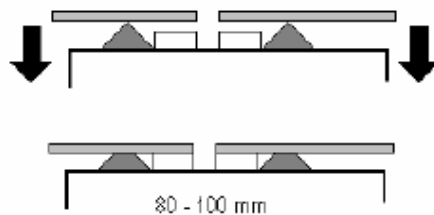
Just as reference, the following aspects must be considered:

- Distance between the support elements: 400 a 600 mm
- Width of the support elements:

- Single elements



- Multiple elements



4 SURFACE PREPARATION

4.1 PREPARATION OF THE SUPPORT STRUCTURE

- Wood structure:
 - Remove the dust and contaminants
 - Sand the surface with sanding paper and remove the sawdust; **never use solvents to clean and prepare the wood surface**
 - Shake the can of Sika Primer 3N, for Sikabond®T-2 (or SikaTack Panel Primer when using SikaTack®-Panel)
 - Apply the primer in a thin layer over all the support structure surface
 - Wait at least 30 minutes (max. 8 hours) before applying the adhesive
- Metal structure:
 - Sand the surface with high grain sanding paper; **never use solvents to clean and prepare the wood surface**
 - Clean the surface using a clean cloth with Sika®Aktivator 205; apply the product in only one direction: do not rub the product
 - Wait 10-15 minutes for the product to dry
 - Shake the can of Sika Primer 3N, for Sikabond®T-2 (or SikaTack Panel Primer when using SikaTack®-Panel)
 - Apply the primer in a thin layer over all the support structure surface
 - Wait at least 30 minutes (max. 8 hours) before applying the adhesive

4. 2 PREPARATION OF THE VIROC PANEL SURFACE

- Sand the panel surface in the areas where the adhesive is going to be applied and remove the dust by means of vacuum cleaning or compressed air; **never use solvents to clean and prepare the panel surface**
- Shake the can of Sika Primer 3N, for Sikabond®T-2 (or SikaTack Panel Primer when using SikaTack®-Panel)
- Apply the primer in a thin layer over the area of the panel that will receive the adhesive. Wait at least 30 minutes (max. 8 hours) before the next stage

5 BONDING PROCEDURE

5.1 APPLYING SIKATAACK-PANEL 3 DOUBLE SIDED TAPE

Apply Sikataack®Panel double side tape over the structure elements, in all the extension. Do not remove the protection paper until the adhesive is not applied, to avoid contamination by dust and other debris.

5.2 APPLYING THE ADHESIVE

Extrude the adhesive (Sikabond®T-2 or SikaTack®-Panel) using a manual or pneumatic caulking gun with the supplied V shaped nozzle (8mm height and 10 mm wide), alongside the double sided tape (minimum clearance 5 mm).

5.3 PANEL BONDING

Remove the protection film from Sikatack®Panel 3 double sided tape. Position the panel over the structure without contacting with the tape. Choose the final position of the panel and press it strongly in order to contact with the tape; do not over press in order not to squash the adhesive. The panel installation must be done within 10 minutes after the adhesive application. A joint between the panels must be provided in order to avoid contact due to an eventual expansion of the panels or the support structure.

6 JOINT TREATMENT

Particularly in the situations where the panels are installed outside, the joints must be treated with an adequate sealant.

If the width of the joint is less than 5mm, it must be treated like a crack and the sealant must be applied all the way down and tooled superficially with a spatula.

Joints larger than 5mm must be treated like expansion joints, with the sides of the joint treated with Sika Primer 3N and the sealant applied over a backer rod.

For exterior installation, the panels can be sealed with a Sikaflex polyurethane based sealant, like Sikaflex 11 FC+, Sikaflex Construction+ or SikaHyflex 250 Façade, or with an STP hybrid based sealant like Sikaflex AT Connection.

For interior low movement joints, an acrylic based joint, like Sikacryl S, can also be used.

Refer to the updated version of the respective product data sheets prior to any handling or application of the products.

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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