

Cerdanyola del Vallès : 31 de mayo de 2007
Expediente : **07/32302417**
Referencia del Peticionario : **Técnicas de Anclaje, S.A.**
Mare de Deu de Nuria, 22C
08830 SANT BOI DE LLOBREGAT
Barcelona (España)
NIT:ES A35020395

INFORME DE ENSAYOS

Registro nº: 07/1610

MATERIAL RECIBIDO:

El día 25 de abril de 2007, se recibieron en Applus+CTC envases de espuma de poliuretano monocomponente B3 de 750ml que endurece por contacto con la humedad, para su aplicación mediante pistola, destinado para la ejecución y reparación de sistemas constructivos, y en el caso que nos ocupa, para la adhesión de tejas para cubiertas inclinadas.

Los sustratos para la determinación de la adherencia han sido 3 tejas curvas de cerámica, 3 tejas mixtas de cerámica y 3 tejas de hormigón, aportadas por el Laboratorio.

Desa Foam – Tejas

ENSAYOS SOLICITADOS:

Con el fin de verificar el comportamiento a la adherencia de la espuma de poliuretano adhesiva a unas condiciones climáticas, y al no existir normativa específica al respecto por tratarse de una solución de nueva creación, se ha estimado conveniente la realización de unos ensayos que son aplicables a productos similares de construcción como pueden ser las propias tejas, morteros de recubrimiento, etc.

El fin de los ensayos programados es la determinación de la resistencia a tracción según el procedimiento asimilado de la norma EN 1015-12, antes y después de ciertos ciclos de envejecimiento del producto aplicado en teja cerámica y en teja de hormigón común, de manera:

- Determinación de la adherencia por tracción directa a los 7 días de la aplicación.
- Realización de 25 ciclos de calor, consistentes en 16 horas a +65°C y 8 horas a +20°C, al aire, y determinación posterior de la resistencia a la adherencia por tracción.
- Realización de 25 ciclos de hielo-deshielo, consistentes en 16 horas a -20°C al aire y 8 horas a +20°C, al agua, y determinación posterior de la resistencia a la adherencia por tracción.

FECHA DE REALIZACIÓN DE LOS ENSAYOS: del 07/05/2007 al 28/05/2007.

RESULTADOS: Ver página adjunta.

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Técnicas de Anclaje, S.A.	Desa Foam - Tejas

RESULTS:

The application of the foam has been realized in all the tiles. The conditions of the application of the product on the manometers have been of 22°C and 54 % of H.R. in a closed enclosure.

Before there have been cleaned the surfaces of the tiles of powder and fat. Immediately afterwards, the packing is waved and there is projected a thickness of approximately 3 cm. Of foam of poliuretano, that will be left to harden.

The diverse tiles have surrendered to the cycles and conditions established before and after a stabilization of the manometers to 20°C and 55 % of H.R. has carried out the tractions to determine the resistance to the adherence, with the results that appear later:

		Values of traction adherence Kg/cm²		
		To 7 days	After 25 heat cycles, consisting of 16 hours to +65°C and 8 hours to +20°C to the air, in every cycle.	After 25 cycles of ice - thaw consisting of 16 hours to -20°C to the air and 8 hours to +20°C to the water, in every cycle.
Adherence on ceramic curved tile	Tile 1	1,21	0,85	1,04
	Tile 2	1,13	0,74	1,12
	Tile 3	0,93	1,02	0,77
	Tile 4	0,84	0,96	0,92
	Tile 5	1,16	0,91	0,84
	Minimal value	0,8	0,7	0,8
	Average value	1,1	0,9	0,9
Adherence on ceramic mixed tile	Tile 1	0,94	0,66	0,82
	Tile 2	0,92	0,74	1,02
	Tile 3	1,11	0,92	1,11
	Tile 4	0,88	1,02	0,91
	Tile 5	0,90	0,61	1,16
	Minimal value	0,9	0,7	0,8
	Average value	1,0	0,8	1,0
Adherence on tile of concrete	Tile 1	1,24	0,73	1,03
	Tile 2	1,16	0,61	0,77
	Tile 3	1,33	0,79	0,92
	Tile 4	0,94	0,92	1,12
	Tile 5	1,14	0,84	1,08
	Minimal value	0,9	0,6	0,8
	Average value	1,2	0,8	1,0

In all the cases the type of break has been in the adhesion to the support.

Juan Martínez Egea
Person in Charge for Construction Materials
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The results specified in this document refer only to the material received and tested according to the indications that they present.



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Bellaterra : On May 31, 2007
File number : **07/32302417**
Petitioner reference : **Técnicas de Anclaje, S.A.**
Mare de Deu de Nuria, 22C
08830 SANT BOI DE LLOBREGAT
Barcelona (España)
NIT:ES A35020395

REPORT OF TESTS

Register number: 07/1610

RECEIVED MATERIAL:

On April 25 2007, packings of foam received in Applus+CTC of poliuretano monocomponent **B3** 750ml that it she hardens for contact with the dampness, for your application by means of pistol, destined for the execution and repair of constructive systems, and in the case that occupies us, for the adhesion of tiles for sloping covers.

The substratum for the determination of the adherence have been 3 curved tiles of ceramics, 3 mixed tiles of ceramics and 3 tiles of concrete, contributed by the Laboratory.

Desa Foam - Tejas ,

REQUESTED TESTS:

In order to check the behavior to the adherence of the foam of poliuretano adhesive to a few climatic conditions, and when specific regulation did not exist in the matter for treating itself about a solution of new creation, there has been considered suitable the accomplishment of a few tests that are applicable to similar products of construction since can be the own tiles, mortars of covering, etc.

The purpose of the programmed tests is the determination of the resistance to traction according to the procedure assimilated of the norm EN 1015-12, before and after certain cycles of aging of the product applied in ceramic tile and in tile of common concrete, of way:

- Determination of the adherence for direct traction to 7 days of the application.
- Accomplishment of 25 heat cycles, consisting of 16 hours to +65°C and 8 hours to +20°C, to the air, and later determination of the resistance to the adherence for traction.
- Accomplishment of 25 cycles of ice-thaw, consisting of 16 hours to -20°C to the air and 8 hours to +20°C, to the water, and later determination of the resistance to the adherence for traction.

DATE OF TESTS: from 07/05/2007 to 28/05/2007.

RESULTS: To see attached page.

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