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TEST REPORT

CLIENT: **VIPEQ HISPANIA**

APPLICANT: **RAMÓN MILLÁN AND JOSE LUIS VIANA**

ADDRESS: **POL. MOREA NORTE, C/D Nº 14**
31191 BERIAIN (NAVARRA)

MATERIAL TESTED: **FIBRE CEMENT WITH COATING**
REF. «VIPEQ WHITE CORK INSULATION" and
"VIPEQ NATURAL CORK INSULATION"

PURPOSE OF THE REQUEST: **MEASUREMENT OF SURFACE TEMPERATURES**
AND HEAT FLOW UNDER RADIATION

DATE OF RECEIPT:	**29.09.2008**
DATE OF TEST COMMENCEMENT:	**21.10.2008**
DATE OF TEST COMPLETION:	**24.10.2008**
DATE OF ISSUE OF REPORT:	**04.11.2010**

The results compiled in this report refer only to the material received and submitted to testing at this Research Centre on the dates indicated.

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Company Name: Fundación Cidemco • Nº F-231 Registro de Fundaciones Vasco • CIF: G20971214

SAMPLE CHARACTERISTICS

On 29 September 2008, CIDEMCO received from the company VIPEQ HISPANIA 4 panels of fibre cement measuring (1000 x 250) mm, one 85 mm thick without coating and the others with coating, whose references are:

"VIPEQ WHITE CORK INSULATION 14" (approximate total thickness 14 mm)

"VIPEQ WHITE CORK INSULATION 18" (approximate total thickness 18 mm)

"VIPEQ NATURAL CORK INSULATION" (approximate total thickness 12 mm)

The technical data sheet for the coating, provided by the client, is attached in the appendix.

TEST REQUESTED

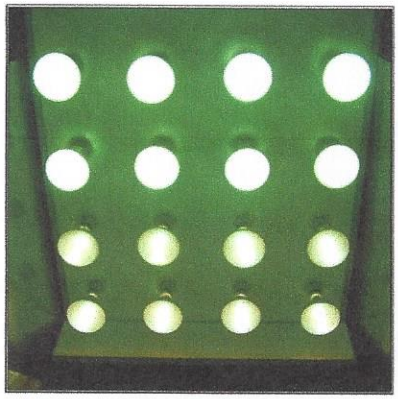
The test requested was the measurement of surface temperatures on the side exposed and the side unexposed to the radiation and the heat flow through two panels of fibre cement received when they are submitted to radiation from OSRAM ULTRAVITALUX lamps arranged as indicated in standard UNE-EN ISO 12543-4:1998 when a steady state is reached.

Reason for the amendment: Updating of the client and applicant due to a change in the company's name.

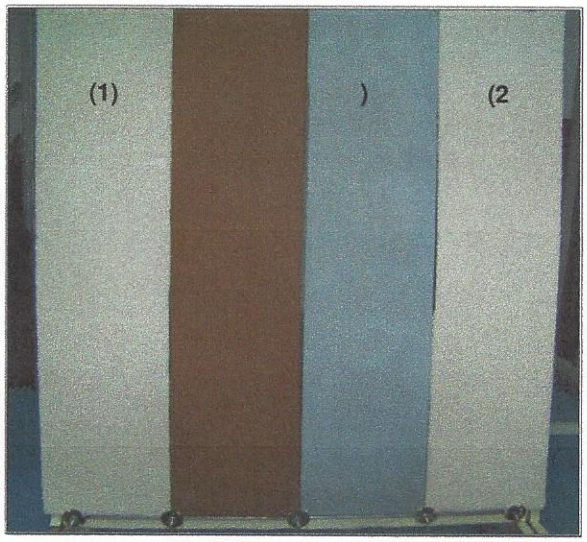
TEST PERFORMED

The four panels of fibre cement were placed on a vertical frame and were submitted to radiation from a panel of ULTRAVITALUX lamps arranged as shown in appendix A of standard UNE-EN ISO 12543-4:1998.

With this arrangement of lamps, at a distance of 1,100 mm from the samples the radiation over a surface perpendicular to these is 900 W/m^2. This radiation was focused on the coated side of the panels of fibre cement.



Arrangement of the lamps



Panels of fibre cement with different coatings

(1) Reference "VIPEQ WHITE CORK INSULATION 18"
(2) Reference "VIPEQ NATURAL CORK INSULATION"
(3) Fibre cement without coating
(4) Reference "VIPEQ WHITE CORK INSULATION 14"

Different temperature probes were placed on both sides of the samples and heat flow probes were placed on the unexposed side.

Once the probes were in position the ULTRAVITALUX lamps were turned on and when a steady state had been reached the surface temperatures and the heat flow through the fibre cement samples were recorded.

RESULTS

The average room temperature recorded once a steady state had been reached is shown in the following table:

Room temperature unexposed side (ºC)	**28.6**

Table 1. Room temperature

Table 2 shows the average surface temperatures on the exposed side and the unexposed side of both samples and the average heat flow through these once a steady state had been reached.

Fibre cement without coating	
Exposed surface temperature (ºC)	**36.7**
Unexposed surface temperature (ºC)	**35.2**
Heat flow (W/m^2)	**237.4**

Sample "VIPEQ WHITE CORK INSULATION 14"	
Exposed surface temperature (ºC)	**35.3**
Unexposed surface temperature (ºC)	**30.7**
Heat flow (W/m^2)	**123.3**

Sample "VIPEQ WHITE CORK INSULATION 18"	
Exposed surface temperature (ºC)	**32.9**
Unexposed surface temperature (ºC)	**27.8**
Heat flow (W/m^2)	**99.0**

Sample "VIPEQ NATURAL CORK INSULATION"	
Exposed surface temperature (ºC)	**36.7**
Unexposed surface temperature (ºC)	**28.6**
Heat flow (W/m^2)	**166.2**

Table 2. Results

The following table compares the results of both samples:

	Heat flow	Difference between sample with coating and sample without coating
Fibre cement without coating	**237.4 W/m^2**	-
Sample "VIPEQ WHITE CORK INSULATION 14"	**123.3 W/m^2**	**-92.5%**
Sample "VIPEQ WHITE CORK INSULATION 18"	**99.0 W/m^2**	**-139.8%**
Sample "VIPEQ NATURAL CORK INSULATION"	**166.2 W/m^2**	**-42.8%**

Table 3. Comparison of results

APPENDIX

VIPEQ HISPANIA
CORCHO NATURAL
en emulsión proyectado

Polígono Morea Norte, C/ D Nº 14
Tfno. y Fax: 948 31 24 13
31191 - BERIAIN (Navarra)

Revisión: 1

FICHA TÉCNICA

VIPEQ

DESCRIPCIÓN

PRODUCTO AISLANTE TERMICO-ACUSTICO CON FUNCIÓN DECORATIVA

CARACTERÍSTICAS

VIPEQ-F08 es una mezcla de partículas de corcho seleccionadas, con diferentes tipos de resinas en base agua, cargas minerales, estabilizantes y aditivos varios.

ESPECIFICACIONES

Aspecto	Producto pastoso
Color	Natural Blanco Carta de colores
Densidad	0,5-0,7 g/cm^3

APLICACIONES

VIPEQ-F08 tiene buena adherencia sobre la mayoría de materiales (mortero, metal,madera,P.V.C.,polietileno expandido,etc.) y es idóneo para:

-Revestimiento de fachadas (decorándolas y aislándolas térmicamente).

-Impermeabilización de cubiertas de todo tipo (tela asfáltica, chapa, uralita), aportando en la misma aplicación un aislamiento térmico.

-Decoración de interiores y corrección acústica de locales.

Y un largo etcétera que convierten a VIPEQ-F08 en un material único.

MODO DE EMPLEO

La forma de aplicación puede ser manual, con herramienta convencional (llana,espátula);o mecánica , mediante proyección con máquina.

Secado al tacto..... .....30 minutos (Temperatura ambiente 20ºC)
Secado total.....12-24 horas (Capa de 3-8 mm)
Rendimiento.....1,2-1,5 kg/m^2 (variable en espesor)
Temperatura de aplicación.....-2ºC y +45ºC

RECOMENDACIONES

El soporte debe estar limpio, exento de polvo y seco.

ALMACENAMIENTO

El producto no debe ser expuesto a la acción directa del sol ni a temperaturas superiores a 45 ºC ni menores de -2ºC.

PRESENTACIÓN

Envases de 12 kg.

FRASES R/S Y SÍMBOLOS DE RIESGO

S2 Manténgase alejado de los niños.
S7 Mantener el envase bien cerrado.

La información y recomendaciones indicados en esta hoja técnica corresponden a nuestros conocimientos actuales, pruebas de laboratorio y experiencias habituales. Por tal motivo, nuestra garantía se limita a la calidad del producto suministrado. Esta empresa no asumirá responsabilidades derivadas del mal uso de nuestros productos.