SOFFITTO IN RISCALDAMENTO

Test report
for the determination of the heating capacity
of hot surface for rooms

heating ceiling

Type: Pannello radiante domuslife

closed heating ceiling,
PE-tubes (6 x 1mm) integrated in gypsum panel
distance between the tubes: 27,5mm

Idrotecnoclima SAS

Test report

No.: DF07 H26.2335

heating capacity: 87 W/m² (Δt: 15K)

(referring to the active area: 9,08m²)

Inspektionsstelle Typ A
DAP-IS-3139.01
Deutscher Akkreditierungs Rat
DAR
DAP-PL-3139.00
Prüfstelle mit flexibler Akkreditierung

This test report consists of 6 pages and it may be reproduced only in its integral form.
The results of the test refer only to the test samples.

The HVAC Institute, Lehrstuhl für Heiz- und Raumlufttechnik (LHR), is from DAR accreditated according to ISO/IEC 17025 and is from DINCERTCO recognised as an independent test laboratory. Further on the Institute is also an accreditated inspection body according to EN 45004.

Test report no.: **DF07 H26.2335**

test report A
for the determination of the heating capacity of a heating surface close to EN 14037

- Initial testing -

1 Test laboratory	Prüfstelle Heizung - Lüftung - Klimatechnik Stuttgart Pfaffenwaldring 6A 70569 Stuttgart	HLK STUTTGART
2 Applicant	Idrotecnoclima SAS Via A. Volta, 26 I - 70028 Sannicandro di Bari	IDROTECNOCLIMA
3 Manufacturer	the applicant	

4 Data of the tested ceiling surface (drawing and photo: page 3,6)	gypsum panels, 15mm, with insulation.	
	active ceiling area:	9,08 m²
	total ceiling area:	10,80 m²
trademark: **Pannello radiante domuslife**	PE-tubes (6mm x 1mm), circle flow, 10 lines, distance between tubes: 27.5mm	
date of entry of test samples:	21.02.2007	
date of entry of technical documents:	-	
sampling:	delivery by applicant	
date of installation:	06.03.2007	
connection:	the 30 elements are connected in parallel serie, only one single element in circuit.	
surface coating:	painted with color, emissivity about 0.94	

5 correction due to nominal pressure

radiation ratio: 0,7 exponent for correction: 0,5

6 test results The results of the test refer only to the test samples

Characteristic equation: $\dot{q} = C \cdot \Delta t^n$

exponent n = **1,125** constant C = **4,144**

nominal capacity at Δt=15K: **87** W/m² referring to the active area

Stuttgart, the 19.03.2007

i.A.

(stamp and signature of the test laboratory)
Prof. Dr.-Ing. M. Schmidt Dr.-Ing. Chr. Beck

SOFFITTO IN RAFFRESCAMENTO

Test report
for the determination of the cooling capacity
of cooling surfaces for rooms according to EN 14240

closed ceiling

Type: Pannello radiante domuslife

gypsum panel, PE - tubes (6x1mm),
distance between the tubes: 27,5mm

Idrotecnoclima SAS

Test report

No.: VF07 K26.2334

nominal capacity: 534 W resp. **59 W/m²** (Δt: 8K)

(active area ratio: 84%; active area: 9,08m²)

capacity in acc. to DIN 4715 - old: **63 W/m²** (Δt: 10K)
(active area: 10,80m²)

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Deutscher Akkreditierungs Rat
DAR
DAP-PL-3139.00
Prüfstelle mit flexibler Akkreditierung

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Prüfstelle Heizung Lüftung Klimatechnik HLK STUTTGART

test report A
for the determination of the capacity of cooling surfaces for rooms in acc. to EN 14240
- initial testing -

1 Test laboratory: Prüfstelle Heizung-Lüftung-Klimatechnik Stuttgart
Pfaffenwaldring 6A
70569 Stuttgart

2 Applicant: Idrotecnoclima SAS
Via A. Volta, 26
I - 70028 Sannicandro di Bari

3 Manufacturer: The applicant

4 Data of tested cooling surface: gypsum panels, 15mm, with insulation.
(drawing and photo: pages 8,9)
active ceiling area: **5,45m²**
total ceiling area: 6,48m²
PE-tubes (6mm x 1mm), circle flow, 10 lines,
distance between tubes: 27.5mm

Trademark:
Pannello radiante domuslife

Date of entry of the test samples: 21.02.2007 perforation: -

Date of entry of the technical data: - acoustical fleece: no

Sampling: Delivery by the applicant Distance between the tubes: **27,5mm**

5 Test results: **closed wall**

Measurement report see pages 3 to 6 Characteristics see page 7

Characteristic equation: $P_a = k \cdot \Delta\theta^n$ [W/m²]

exponent n = **1,1018** constant k = **5,1109**

cooling capacity Δt=8K: 274 W resp. **51** W/m² referring to the active area

Note: The results of this testing refer only to the test samples.

Calculated mass flow rate at 2K temperature difference (inlet - outlet)
at 8K temperature difference between room and water: 22 kg/(h*m²)

Characteristic equation for half mass flow rate: $P_a = c \cdot \Delta\theta^m$ [W/m²]

exponent m = 1,1141 constante c = 4,8638

cooling capacity Δt=8K: 49 W/m² referring to the active area

Stuttgart, the 21. Mrz 07

i. A.

(Stamp and signature of the test laboratory)
Prof. Dr.-Ing. M. Schmidt Dr.-Ing. Chr. Beck

PARETE IN RISCALDAMENTO

Test report
for the determination of the heating capacity
of hot surface for rooms

heating wall

Type: Pannello radiante domuslife

closed heating wall,
PE-tubes (6 x 1mm) integrated in gypsum panel
distance between the tubes: 27,5mm

Idrotecnoclima SAS

Test report

No.: DF07 H26.2338

heating capacity: 112 W/m² (Δt: 15K)

(referring to the active area: 5,45m²)

Inspektionsstelle Typ A
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Test report no.: **DF07 H26.2338**

test report A
for the determination of the heating capacity of a heating surface close to EN 14037

- Initial testing -

1 Test laboratory	Prüfstelle Heizung - Lüftung - Klimatechnik Stuttgart Pfaffenwaldring 6A 70569 Stuttgart	HLK STUTTGART
2 Applicant	Idrotecnoclima SAS Via A. Volta, 26 I - 70028 Sannicandro di Bari	IDROTECNOCLIMA
3 Manufacturer	the applicant	

4 Data of the tested wall surface	gypsum panels, 15mm, with insulation.	
(drawing and photo: page 3,6)	**active wall area:**	**5,45 m²**
	total wall area:	6,48 m²
trademark:	PE-tubes (6mm x 1mm), circle flow, 10 lines,	
Pannello radiante domuslife	distance between tubes: 27.5mm	
date of entry of test samples:	21.02.2007	
date of entry of technical documents:	-	
sampling:	delivery by applicant	
date of installation:	12.03.2007	
connection:	the 18 elements are connected in parallel serie, only one single element in circuit.	
surface coating:	painted with color, emissivity about 0.94	

5 correction due to nominal pressure

radiation ratio: 0,5 exponent for correction: 0,5

6 test results The results of the test refer only to the test samples

Characteristic equation: $\dot{q} = C \cdot \Delta t^n$

exponent n = **1,187** constant C = **4,511**

nominal capacity at Δt=15K: **112** W/m² referring to the active area

Stuttgart, the 19.03.2007

i. A.

(stamp and signature of the test laboratory)
Prof. Dr.-Ing. M. Schmidt Dr.-Ing. Chr. Beck

PARETE IN RAFFRESCAMENTO

Test report
for the determination of the cooling capacity
of cooling surfaces for rooms according to EN 14240

closed wall

Type: Pannello radiante domuslife

gypsum panel, PE - tubes (6x1mm),
distance between the tubes: 27,5mm

Idrotecnoclima SAS

Test report

No.: VF07 K26.2337

nominal capacity: 274 W resp. **51 W/m²** **(Δt: 8K)**

(active area ratio: 84%; active area: 5,45m²)

capacity in acc. to DIN 4715 - old: **54 W/m²** **(Δt: 10K)**
(active area: 10,80m²)

Inspektionsstelle Typ A DAP-IS-3139.01 Deutscher Akkreditierungs Rat DAR DAP-PL-3139.00 Prüfstelle mit flexibler Akkreditierung

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Prüfstelle Heizung Lüftung Klimatechnik HLK STUTTGART

test report A
for the determination of the capacity of cooling surfaces for rooms in acc. to EN 14240
- initial testing -

1 Test laboratory: Prüfstelle Heizung-Lüftung-Klimatechnik Stuttgart
Pfaffenwaldring 6A
70569 Stuttgart

2 Applicant: Idrotecnoclima SAS
Via A. Volta, 26
I - 70028 Sannicandro di Bari

3 Manufacturer: The applicant

4 Data of tested cooling surface: gypsum panels, 15mm, with insulation.
(drawing and photo: pages 8,9)
active ceiling area: **5,45m²**
total ceiling area: 6,48m²
PE-tubes (6mm x 1mm), circle flow, 10 lines,
distance between tubes: 27.5mm

Trademark:
Pannello radiante domuslife

Date of entry of the test samples: 21.02.2007 perforation: -

Date of entry of the technical data: - acoustical fleece: no

Sampling: Delivery by the applicant Distance between the tubes: **27,5mm**

5 Test results: **closed wall**

Measurement report see pages 3 to 6 Characteristics see page 7

Characteristic equation: $P_a = k \cdot \Delta\theta^n$ [W/m²]

exponent n = **1,1018** constant k = **5,1109**

cooling capacity Δt=8K: 274 W resp. **51** W/m² referring to the active area

Note: The results of this testing refer only to the test samples.

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at 8K temperature difference between room and water: 22 kg/(h*m²)

Characteristic equation for half mass flow rate: $P_a = c \cdot \Delta\theta^m$ [W/m²]

exponent m = 1,1141 constante c = 4,8638

cooling capacity Δt=8K: 49 W/m² referring to the active area

Stuttgart, the 21. Mrz 07

i. A.

(Stamp and signature of the test laboratory)
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