

DIVISIONE: **FOOD PACKAGING MATERIALS** LABORATORIO: **MATERIALI**  
 DIVISION: **FOOD PACKAGING MATERIALS** LABORATORY:

<b>RAPPORTO DI PROVA</b> <i>(Test Report)</i>		Pag. 1 di/of
		pag. 5
N°	0550\FPM\MATs\15	Data: 24/06/2015 Date:

 IDENTIFICAZIONE E DESCRIZIONE DEL CAMPIONE:  
 SPECIMEN DESCRIPTION:  
**Isotex concrete sheets with wood-chips as aggregate made up of mineralized spruce wood and Portland concrete for the manufacturing of shuttering blocks and floors; thickness about 40 mm**

 DATI IDENTIFICATIVI DEL CLIENTE:  
 CLIENT:  
**C&P Costruzioni**  
 Via D'Este, 5/7  
 42028 Poviglio (RE)

 NORMA DI RIFERIMENTO:  
 REFERENCE STANDARD:  
**UNI EN ISO 12572:2006**

DISTRIBUZIONE ESTERNA: OUTSIDE DISTRIBUTION: <b>C&amp;P Costruzioni</b>	DISTRIBUZIONE INTERNA: INSIDE DISTRIBUTION: Copy: Division Head
---	---

 ENTE DI ACCREDITAMENTO:  
 ACCREDITATION BODY:

Mod.37 - Rev.8 - Società a Socio Unico soggetto ad attività di direzione e coordinamento di IMQ spa

## **GENERALITIES**

- Sample receiving date: 06/05/2010
- Analyses start date: 11/05/2010
- Analyses end date: 03/06/2010
- Deviation from the test method: NO

## **SAMPLES**

**Isotex concrete sheets with wood-chips as aggregate made up of mineralized spruce wood and Portland concrete for the manufacturing of shuttering blocks and floors; thickness about 40 mm**

## **SAMPLING**

The initial sampling has been done by the customer.

The sampling for the test has been done drawing casually part of the sample in our possession.

## **DECLARATIONS**

The test results of the present report are related exclusively to the tested sample.

The present test report cannot be partially reproduced without the authorization of CSI managing Director.

The present test report is an English translation of test report 0377/FPM/MATs/10 rev.1 dated 29/07/2010.

The uncertainties are estimated as extended uncertainty obtained multiplying the standard uncertainty by the coverage factor k corresponding to a confidence level of about 95%. Normally, this factor = 2.

## **PERFORMED DETERMINATIONS**

### **UNI EN ISO 12572:2006:**

### **Hygrothermal performance of building materials and products - Determination of water vapour transmission properties**

Determination of the water vapour transmission rate **g** and of the air layer equal to the water vapour diffusion **Sd**.

### **TEST CONDITIONS: B, 23 – 0/85%**

- ◆ temperature: 23±1°C
- ◆ relative humidity and pressure inside the cup: 0%; 0 Pa
- ◆ relative humidity and pressure inside the cup: 85%; 2390 Pa

- ◆ Surface: 50 cm<sup>2</sup>

## **RESULTS**

**UNI EN ISO 12572:2006:**

**Hygrothermal performance of building materials and products - Determination of water vapour transmission properties**

**Test conditions: B, 23 – 0/85%**

SAMPLE	g		μ	Sd
	g / m <sup>2</sup> x 24h	mg / m <sup>2</sup> x h	---	m
<b>Isotex concrete sheets with wood-chips as aggregate made up of mineralized spruce wood and Portland concrete for the manufacturing of shuttering blocks and floors; thickness about 40 mm</b>	174 ± 19	7232 ± 792	5.9 ± 0.6	0.23 ± 0.03



**RAPPORTO DI PROVA**  
(Test Report)

Pag. 4  
di/of  
pag. 5

N° 0550\FPM\MATs\15

Data: 24/06/2015  
Date:

**Definitions:**

**3.1.1**

**density of water vapour flow rate**

mass of water vapour transferred through the specimen per area and per time

**3.1.2**

**homogeneous material**

material with properties likely to affect the transmission of water vapour which do not vary on a macroscopic scale

**3.1.3**

**water vapour permeance**

density of water vapour flow rate divided by the water vapour pressure difference between the two specimen faces

**3.1.4**

**water vapour resistance**

reciprocal of water vapour permeance

**3.1.5**

**water vapour permeability**

product of the water vapour permeance and the thickness of a homogeneous specimen

NOTE Water vapour permeability can only be calculated for specimens of a homogeneous material.

**3.1.6**

**water vapour resistance factor**

water vapour permeability of air divided by that of the material concerned

NOTE The water vapour resistance factor indicates how much greater the resistance of the material is compared to an equally thick layer of stationary air at the same temperature.

**3.1.7**

**water vapour diffusion-equivalent air layer thickness**

thickness of a motionless air layer which has the same water vapour resistance as the specimen

DATA  
Date

RESP. FOOD PACKAGING  
MATERIALS  
Division Head  
Alberto Taffurelli

RESP. DEL CENTRO  
Managing Director

Raoul Gatti



**RAPPORTO DI PROVA**  
*(Test Report)*

Pag. 5  
di/of  
pag. 5

N° 0550\FPMMATs\15

Data: 24/06/2015  
Date: