



Centrum stavebního inženýrství, a.s.  
(Centre of Building Construction Engineering, a.s.)  
Workplace Zlín, K Cihelně 304, 764 32 Zlín – Louky

*Authorized person, Notified person, Certification authority  
Testing laboratory of materials for finishing building operations*

## TEST CERTIFICATE

**No. 07 - 13 - 69**

**Date: 30.12. 2013**

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*Order No.: 3 62 099  
Number of copies: 2  
Number of pages: 9*

**Ordering party:**

**Icynene Europe Sprl**  
30 Clos Chapelle aux Champs  
B-1200 Brussels

**Subject of the test:**

**Thermal foam insulation ICYNENE LD-C-50**

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**Receipts-of-specimen date:**

**25.11. 2013**

**Test date:**

**02.12. 2013 – 30.12.2013**

**Centre manager**

**Ing. Ladislav Vendl**

Based on the order filed under our registration number 3 62 099 of 25.11.2013, a corrosivity/non-corrosivity test of a zinc-coated sheet metal with the applied foam ICYNENE LD-C-50 was carried out for the ordering party LIKO-S, a.s., U Splavu 1419, 684 01 Slavkov u Brna.

## 1. USED TEST REGULATIONS

| Test name                                 | Test procedure   |
|---|--|
| Corrosivity/non-corrosivity determination | according to the internal procedure AO 212, ČSN EN ISO 10289 – Rating of test specimens and manufactured articles subjected to corrosion tests |

## 2. TEST SPECIMEN TO BE EVALUATED

Six pieces of (100 x 150 x 1,5) mm of the zinc-coated sheet metal with the applied foam insulation ICYNENE LD-C-50 in a non-uniform thickness (from about 5 mm to 60 mm all over the surface of the zinc-coated substrate) and 3 pieces of (100 x 150 x 1,5) mm of the reference test specimens of the zinc-coated sheet metal.

## 3. TESTED MATERIAL

Thermal foam insulation ICYNENE LD-C-50 – two-part foam, which can be applied by spraying onto any substrate. The applied foam expands immediately in the ratio of 1:100 and hardens after 20 seconds. The produced material is elastic and its structure has open cells. The foam is used as a thermal insulation layer for commercial and residential applications, primarily in compositions of external claddings of buildings, etc.

## 4. RESULTS OF THE MEASUREMENT

### 4.1 Corrosivity/non-corrosivity determination

ČSN EN ISO 10289

The test specimens (zinc-coated sheet metal & applied foam ICYNENE LD-C-50) were exposed together with reference test specimens (zinc-coated sheet metal) in the following conditions:

- 7 days at the laboratory temperature and humidity (23 °C and RV 50 %)
- 7 days at the temperature of -10 °C
- 7 days at the temperature of +50 °C
- 7 days at the laboratory temperature and humidity (23 °C and RV 50 %)

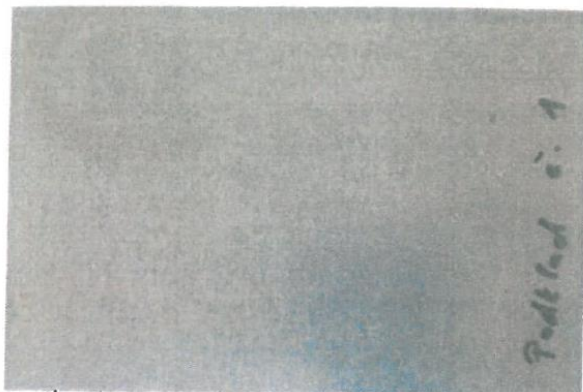


Fig. 13 – Ref. test specimen 1 before the air-conditioning

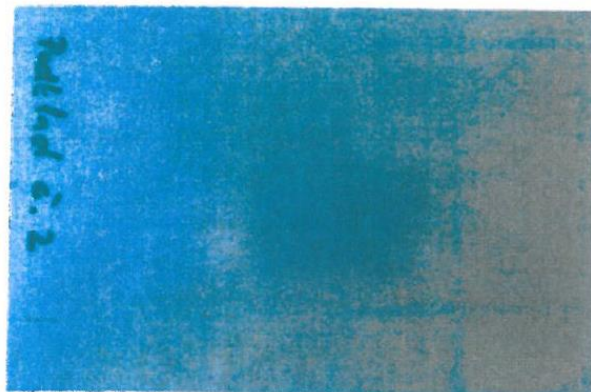


Fig. 14 – Ref. test specimen 2 before the air-conditioning

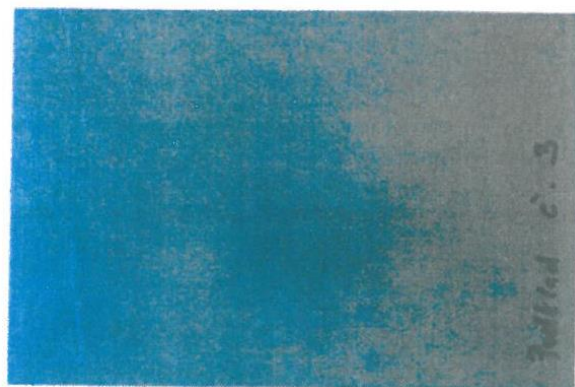


Fig. 15 – Ref. test specimen 3 before the air-conditioning

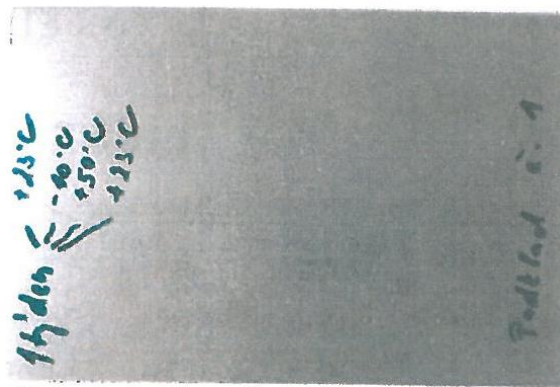


Fig. 16 – Ref. test specimen 1 after the air-conditioning

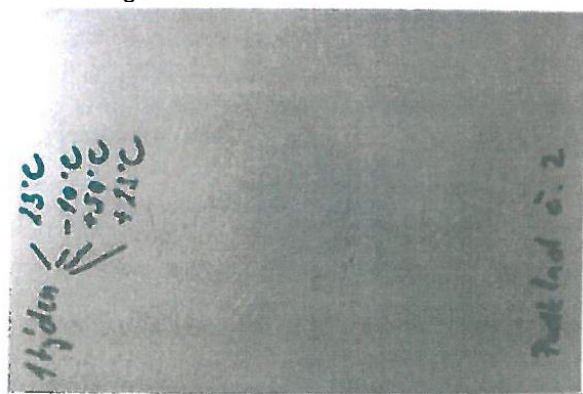


Fig. 17 – Ref. test specimen 2 after the air-conditioning

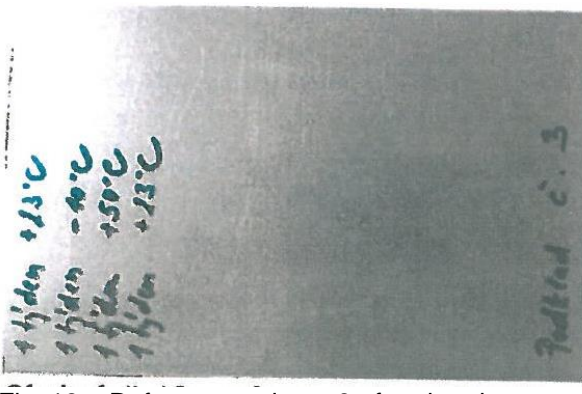


Fig. 18 – Ref. test specimen 3 after the air-conditioning

Conclusion: It follows from the testing results that the thermal foam insulation ICYNENE LD-C-50 does not cause corrosivity of the substrate zinc-coated sheet metal.

## 5. LABORATORY STATEMENT

The test results apply only to the tested product.

The party ordering the tests has the right to submit comments to the test results given in this report to CSI a.s., Zlín within 3 days after the date of its delivery.

Zlín, 30.12.2013

Ing. Ladislav Vendl  
602 Centre manager

CSI a.s., workplace Zlín

PREKLAD záveru testovania:

Záver: z výsledkov testov vyplýva, že tepelná penová izolácia ICYNENE LD-C-50 nespôsobuje koróziu plechu potiahnutého zinkom.