Entwicklungs- und Prueflabor Holztechnologie GmbH · Zellescher Weg 24 · 01217 Dresden · Germany

Falco Zrt. Szombathely
Mr. József Mursics
Zanati u. 26

9700 Szombathely
Hungary

E-Mail: j.mursics@falco-woodindustry.com

Entwicklungs- und Prueflabor
Holztechnologie GmbH
Zellescher Weg 24
01217 Dresden · Germany

Phone: +49 351 4662 0
Fax: +49 351 4662 211
info@eph-dresden.de
www.eph-dresden.de

Dresden, 20 December 2016

Regular TPC Supervision Report No. 04-2016
Order no. 250073

Client:	Falco Zrt. Szombathely Zanati u. 26 9700 Szombathely, Hungary
Date of order:	30 August 2016
Inducement:	Third Party Supervision and Certification Agreement SPL-10-09-17-01
Order:	Regular supervision within the supervision contract SPL-10-09-17-01 including the Factory Production Control (FPC) and the determination of the formaldehyde release of particle boards according to the Final Regulation Order of "Airborne Toxic Control Measure to Reduce Formaldehyde Emission from Composite Wood Products"; sections 93120 - 93120.12, title 17, California Code of Regulations by the Third Party Certifier (TPC)
Contractor:	Entwicklungs- und Prüflabor Holztechnologie GmbH Zellescher Weg 24, 01217 Dresden, Germany
Person in Charge TPC:	Dipl.-Chem. Christiane Osthaar

Dr.-Ing. Rico Emmler
Head of the Third Party Certifier

1 Assignment

Within the Third Party Supervision and Certification Agreement SPL-10-09-17-01 the TPC the Entwicklungs- und Prüflabor Holztechnologie GmbH (EPH) was assigned by FALCO ZRT. SZOMBATHELY with the regular supervision of the FPC as well as to determine the formaldehyde release of particle boards according to the Final Regulation Order of "Airborne Toxic Control Measure to Reduce Formaldehyde Emission from Composite Wood Products"; sections 93120 - 93120.12, title 17, California Code of Regulations.

2 Sampling

The sample material was taken by the responsible person of the TPC under co-operation of the persons in charge for the FPC on 29 November 2016.
The samples for testing were up to 2 days old and randomly selected from one single batch, which was ready for shipping. The samples were labeled immediately after sampling, wrapped airtight into foil and sent to the chemical testing laboratory of the TPC.
On 2 December 2016, the particle boards arrived at the EPH wrapped airtight in foil.

Concerned are the following control samples:

Product	Type	Dimension of board [mm] / Article-no.	Thickn. [mm]	EPH-Code	Production date
1	Particle board PB E-LE > 12 – 28 mm	5605 x 2070 73065	18	AQ-PB-1-R4-1/1...4-16-11-29 AQ-PB-1-R4-2/1...4-16-11-29*)	2016-11-29
2	Particle board PB E-LE 8 – 12 mm	5605 x 2070 73020	10	AQ-PB-2-R4-1/1...4-16-11-29 AQ-PB-2-R4-2/1...4-16-11-29*)	2016-11-27
3	Particle board PB E-LE > 28 – 40 mm	5605x 2070 73054	30	AQ-PB-3-R4-1/1...4-16-11-29 AQ-PB-3-R4-2/1...4-16-11-29*)	2016-11-29

*) reserve set

3 Audit of the FPC

The FPC was audited on 20 November 2016.

Audit participants

FALCO Zrt. Szombathely	Mr. Mursics, QCM
	Mrs. Domjan, Head of Laboratory
	Mr. Baranyai, Quality control employee
TPC – EPH	Mr. L. Koroknai, EPH-Inspector

The following areas were visited
Laboratory for testing the formaldehyde content acc. to the perforator method EN 120
Spectrophotometer DR 2800 (Hach Lange); Thermostat LT 200 (Hach Lange)
Analysis method: cuvette test - acetyl acetone

Audit results
Within the audit the questionnaire according to the California Code of Regulations § 93120 were reviewed. The quality manual was submitted (version 3 dated 2016-03-02). The laboratory facilities and equipment are in proper condition and calibrated.
In result of the production plant audit, it can be stated that the personnel and equipment conditions for a constant correct production are given and that quality and the testing frequency at the manufacturer meet the requirements. In the self-monitoring method, the formaldehyde content is determined according to the perforator method EN 120.

The quality assurance is in compliance with regulations according to the Final Regulation Order of "Airborne Toxic Control Measure to Reduce Formaldehyde Emission from Composite Wood Products"; sections 93120 - 93120.12, title 17, California Code of Regulations.

The audit minutes were handed over to the manufacturer.

Findings
1) The monthly reports of the self-monitoring have to be handed over to the TPC according to the provided template.
2) No non-complying products were produced during the last supervision period.

4 Product testing by the chemical testing laboratory of the TPC

4.1 Investigations carried out within the regular test

The determination of the formaldehyde release according to the test chamber method ASTM D 6007 of the samples was carried out in the period from 7 December 2016 to 16 December 2016.

In addition, the determination of the formaldehyde content of the particle boards according to the perforator method DIN EN ISO 12460-5[1] took place on 15/16 December 2016 (see test report 250073-R4-2016 dated 20 December 2016).

[1] May 2016: EN 120 has been superseded by new Standard ISO 12460-5 approved by the International Organization for Standardization http://www.arb.ca.gov/toxics/compwood/outreach/iso.pdf

4.2 Assessment and evaluation

Product	Formaldehyde release acc. ASTM D 6007 [ppm]	CARB Phase 2 compliant[2]	Quality Control Limit [mg/100 g dry bd.]	Formaldehyde content acc. EN ISO 12460-5 (EPH) [mg/100 g atro bd.]	IKEA-IOS-MAT-0003 specification compliant[3]
1	0.07	yes	3.7	2.4	yes
2	0.04	yes	3.7	1.9	yes
3	0.04	yes	4.5	2.4	yes

The tested product type particle board PB E-LE meet the limit value for particle boards following the CARB regulations Phase 2 regarding the formaldehyde emission and fulfil the requirements according to the California Code of Regulation, title 17, § 93120.2 (a).
Quality Control Limits (QCL) provide each product type with a control limit on their product emissions as measured by EN 120 (perforator method) as small scale quality control test method of manufacturer that are the correlative equivalent of the maximum value allowed in the applicable standard.
Referring to IKEA specification IOS-MAT-0003 (Version no. AA-10899-10; 1.4.1 Table 1), the tested material complies with both limiting values (ASTM D 6007 and EN ISO 12460-5).

Inspection of the internal routine small scale quality control and results of laboratory testing at 'EPH – Laboratory chemical testing' did not reveal any non-conformities.

5 Obligations

The item as specified in Point 3/ Findings 1) shall be fulfilled to the next date of external supervision.

6 Summary

The tested products meet the requirements of the certification according to the Third Party Supervision and Certification Agreement SPL-10-09-17-01.

The Third Party Certifier confirms the certification in the framework of the supervision contract.

7 Next supervision period

Date: I. Quarter 2017

Dresden, 20 December 2016

Dipl.-Chem. C. Osthaar
Person in Charge TPC

[2] Acc. to FRO §93120-93120.12, title 17, California code of Regulations - limit value for particle board: ≤ 0.09 ppm
[3] Acc. to IKEA specification IOS-MAT-0003, Version no.: AA-10899-10 issued 2016-11-16, 1.4.1 Table 1:
Limit values for particle board: ≤ 0.09 ppm (ASTM E 1333/ ASTM D 6007) and ≤ 4 mg/100g atro bd. (EN ISO 12460-5).