



AUTHORIZED BODY NO. 224
Institute for Testing and Certification, a.s., Zlín, Czech Republic

CONSTRUCTION TECHNICAL APPROVAL

No. STO – AO 224 – 1043/2020

issued pursuant to Sections 2 and 3 of the Czech Republic's Government Order No. 163/2002, Collection of Laws, which stipulates technical requirements for selected construction products, as amended by the Government Order No. 312/2005, Collection of Laws and by the Government Order No. 215/2016, Collection of Laws

defines technical characteristics of a product

**PREMIUM terraced board,
type: Solid profile 137x23**

being placed on the market by the company

WPC - Woodplastic a.s.
Na Folimance 2154/17, 120 00 Prague 2

having

IČ (Company Registration Number): 24 17 68 51
DIČ (Company Tax Registration Number): CZ241 768 51

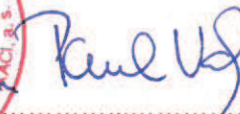
from the site of the manufacture:

WPC - Woodplastic a.s.
Bukovany 181, 257 41 Týnec nad Sázavou

in relation to essential requirements for construction works and to specified roles of the product in the construction work

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Mrg. Jiří Heš
Representative of the Authorized Body

1. Introduction

The present Construction Technical Approval (hereinafter referred to as only „CTA“) was issued by the Authorized Body No. 224 based on the applicant's request for a co-operation in assessing conformity of his construction product in compliance with the Government Order (Decree) No. 163/2002, Collection of Laws, as subsequently amended (hereinafter referred to as only “NV 163”) on the grounds of absence of specified standards or technical regulations making specific - with respect to the intended use of the product in the construction work – all essential requirements related to this product. It specifies technical characteristics of the product, their levels and procedures of their detection in relation to the essential requirements laid down in the Annex 1 of NV 163 and it specifies use of the product in the construction work.

2. Identification of the Authorized Body

The present Construction Technical Approval is being issued by the Authorized Body AO 224, namely Institut pro testování a certifikaci, a.s., (Institute for Testing and Certification, Inc.) Zlín. The Authorized Body No. 224 was granted the authorization for this type of construction products by the Decision of ÚNMZ (Office for Standards, Metrology and Testing) No. 2/2014 on 10/03/2014. Identification data of the Authorized Body 224 are as follows:

*Institut pro testování a certifikaci, a.s. (Institute for Testing and Certification, Inc.)
Třída Tomáše Bati 299,
763 02 Zlín
Czech Republic
IČ (Company Registration Number): 47910381
DIČ (Tax Registration Number): CZ47910381
phone number: (+420) 577 601 612, fax (+420) 577 104 855, e-mail director@itczlin.cz*

3. Identification of the applicant and the manufacturer

3.1. Identification of the applicant

An application for co-operation in the product conformity assessment was submitted by the company WPC-Woodplastic a.s. The applicant's identification data are as follows:

WPC-WOODPLASTIC a.s.
Na Folimance 2154/17, 120 00 Prague 2

IČ (Company Registration Number): 24 17 68 51
DIČ (Tax Registration Number): CZ241 768 51
Telefon: 317 700 556, e-mail: hegr@woodplastic.cz, Mr. Jiří Hegr

3.2. Identification of the manufacturer

WPC-Woodplastic a.s.
Na Folimance 2154/17, 120 00 Prague 2



4. Product identification and specification of its use in the construction

4.1. Identification and description of the product

Terrace boards which are made of wood-plastics composite (WPC), in several colours. by the extrusion technology.

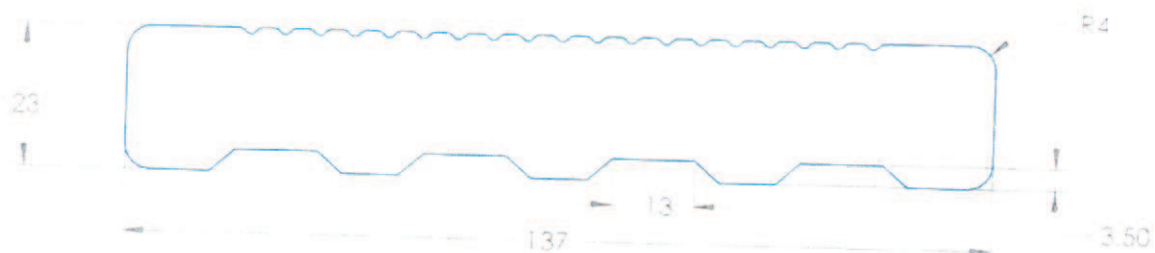
Terrace boards have fine antiskid grooves on one side and rough grooves on the other side. The declared wear side is the side with fine grooves.

Individual boards for the external use are laid on a floor grid (support) and are fixed with assembly clips.

Reaction to fire class according to ČSN EN 13501-1+A1, declared by the applicant: D_{fl} – s1

Declared section modulus of the profile $W_x = 8766.2 \text{ mm}^3$

Declared span of supports $l_1 = 300 \text{ mm}$



4.2. Product marking

Every pallet of the products is supplied with the manufacturer's name, manufacturing date, profile type marking and colour marking.

4.3. Specification of the method for use of the product in the construction work

Horizontal surfaces, mainly outside use – porches, around swimming pools, paths, etc.

4.4. Limitations of the product use

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5. Documentation submitted by the manufacturer or importer

The applicant submitted, together with his application, the following documents:

- Technical description of the product and its use.

6. Technical regulations, standards, sources of scientific and technical knowledge, data on knowledge from practice

In order to elaborate and issue the Construction Technical Approval the documents as follows were used:

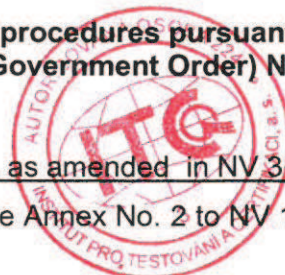


- ČSN EN 15534-1+A1 Kompozity na bázi dřeva a termoplastů (obvykle nazývané kompozity plast-dřevo (WPC) nebo kompozity s přírodními vlákny (NFC) – Část 1: Zkušební metody pro charakterizaci směsí a výrobků (Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC) – Part 1: Test methods for characterisation of compounds and products)
- ČSN EN 15534-4 Kompozity na bázi dřeva a termoplastů (obvykle nazývané kompozity plast-dřevo (WPC) nebo kompozity s přírodními vlákny (NFC) – Část 4: Specifikace pro profily a dlaždice pro terasy (Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) – Part 4: Specifications for decking profiles and tiles)
- ČSN 74 4505 Podlahy-Společná ustanovení (Floors – Common regulations)
- ČSN 73 0810 Požární bezpečnost staveb – Společná ustanovení (Fire protection of buildings – General requirements)
- ČSN EN 13501-1 Klasifikace stavebních výrobků a konstrukcí staveb. Část 1: Klasifikace podle výsledků zkoušek reakce na oheň (Fire classification of construction products and building elements. Part 1: Classification using data from reaction to fire)
- Regulation of MMR No. 268/2009 Coll., on general technical requirements for constructions), as amended
- Regulation of MMR No. 398/2009 Coll., on general technical requirements providing barrier-free use of constructions
- Regulation No. 1907/2006 of European Parliament and of the Council as amended – chapter VIII and Appendix XVII (Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles)/
- Act No. 477/2001 Coll., on packaging, as amended in latter regulations

7. Product classification and conformity assessment procedures pursuant to NV (Government Order) No. 163, as amended in NV (Government Order) No. 312 and in NV (Government Order) No. 215

7.1. Product classification pursuant to NV 163/2002 Coll., as amended in NV 312/2005 Coll.

The product is a specified construction product. Within the Annex No. 2 to NV 163 it falls into group No. 09.15.1.



7.2. Prescribed conformity assessment procedures

For products included in group 09, subgroup 15, the Annex No. 2 to the NV163, as amended in NV312 determines the conformity assessment procedure pursuant to Section 8 or Section 7 (conformity verification) - in case all regulations of paragraph 1, § 8 NV 163 are not met.

Based on Section 10 of NV 163 also the procedure according to Section 5 (certification) can be used at the manufacturer's or importer's request.

7.3. Technical instructions for use employed

For the given group of products, Technical Instruction for Use 09_15_09, was elaborated within coordination activities of the ÚNMZ (Office for Standards, Metrology and Testing).

7.4. Deviations from the technical instruction

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8. Specification of technical properties in relation to essential requirements and methods of their determination

8.1. Essential requirements and specification of technical properties

In compliance with Sections 7.3. and 7.4. of the CTA the technical properties monitored in relation to essential requirements are specified in the second column of Table 1 below

Table No.1: Technical properties and requirements

No	Name of technical property	Testing procedure	Subject of the test	Number of test samples		Required (declared) value
				C/T	D	
1	Heat reversion (at 100°C, 60 min, longitudinal direction)	Table 10 of ČSN EN 15534-4 and Art. 9.3 of ČSN EN 15534-1	product sample	Amount according to test standard	Amount according to test standard	Max. 0.1%
2	Resistance to impact by falling mass (Falling mass impact resistance)	Art. 4.5.1 of ČSN EN 15534-4 and Art. 7.1.2.1 of ČSN EN 15534-1	product sample	Amount according to test standard	Amount according to test standard	0% of damaged test specimens shall show a depth of residual indentation \geq 0.5
3	Slipperiness	Table 1 of ČSN EN 15534-4 and Art. 6.4.2 (Pendulum test) of ČSN EN 15534-1	product sample	Amount according to test standard	-	Min. 36 ⁺)
4	Swelling and water absorption	Table 7 of ČSN EN 15534-4 and Art. 8.3.1 of ČSN EN 15534-1	product sample	Amount according to test standard	Amount according to test standard	Change in thickness: Max. 5% (individual values) Change in thickness: Max. 4% (mean value) Change in width: Max. 1,2% (individual



No	Name of technical property	Testing procedure	Subject of the test	Number of test samples		Required (declared) value
				C/T	D	
						values) Change in width: Max. 0,8% (mean value) Change in length: Max. 0,6% (individual values) Change in length: Max. 0,4% (mean value) Swelling (change in weight): Max. 9% in weight(individual values) Max. 7% in weight (mean value)
5	Flexural properties - Maximum load F_{max} - Deflection under a load of 500 N	Art. 4.5.2 of ČSN EN 15534-4 and Annex A of ČSN EN 15534-1	product sample	Amount according to test standard	Amount according to test standard	Min. 3000 N (individual values) Min. 3300 N (arithmetic mean value) Max. 2,5 mm (individual values) Max. 2,0 mm (arithmetic mean value)
6	Moisture resistance under cyclic test conditions - Decrease of bending strength after cyclic test conditions	Table 7 of ČSN EN 15534-4 and Art. 8.3.2 and 7.3.2 of ČSN EN 15534-1	product sample	Amount according to test standard	-	Max. 30% (individual values) Max. 20% (arithmetic mean value)
7	Reaction to fire ⁺⁺⁾	ČSN EN ISO 11925-2 ČSN EN ISO 9239-1 ČSN EN 13501-1+A1	product sample	Amount according to test standard	-	$D_{fi} - s1$



Notes^{*)} - requirement for the standard value of the pendulum value for floors of all housing and public rooms (premises) (including private terrace) is min. 30 and min. 40 for surfaces of walkable areas of parts of constructions used by the public, according to Art. 4.17 of ČSN 74 4505 standard referenced by Czech Regulation MMR No. 268/2009 Coll,

^{**) – the declared class for the external use (airborne gap and the grid from the identical material as the product) and the internal use (the product is laid on a substrate with classes A1 or A2)}

8.2. Determination of methods to be used in assessing the technical properties

The above table gives also a list of normative regulations used to specify the method for assessing separate monitored technical properties and a necessary number of test samples for certification, resp. a type test (C/T) t and supervision of the due operation of the factory production control system and control over meeting set product requirements (D).

8.3. Required levels of technical properties

For specified applications of the product in the construction work described in Sections 4.3. and 4.4. of the present CTA (Construction Technical Approval), required values shown in the last column of the above table were specified for separate properties.

8.4. Further technical regulations related to the given product

Requirements of the Packaging Act No. 477/2001 Coll. (Collection of Laws), as last amended, relate to consumer, group and transport packages of the product.

“Regulation (EC) 1907/2006 also applies to the product, as amended in latter regulations (REACH), especially in Appendix XVII, which states lists of dangerous chemical substances and dangerous chemical agents which are prohibited or restricted on the market, or their use is restricted.

The manufacturer may apply only such additives (stabilizers, flame retarders, etc.) the use of which is not restricted by the REACH regulation..

9. More specific requirements for assessment of factory production control system

The requirements for the factory production control system are specified in Annex No. 3 of the NV 163 as amended by the NV 312 and are binding for manufacturers of selected construction products.

9.1. Manufacturer's obligations related to factory production control system

The manufacturer is obliged to assure such a factory production control system (hereinafter referred to as only „FPC“) so that all products placed by him on the market correspond to the technical documentation and, in particular, meet the essential requirements.

The minimum extent of the requirements for assurance of the FPC by the manufacturer is given in the Table 2 below:

Table No. 2: Minimal extent of the requirements for assurance of the FPC by the manufacturer

Serial No.	Area of quality system	More specific requirements
1	Responsibility for manufacture	The manufacturer has appointed personnel responsible for purchase of raw-materials, materials and products affecting product quality, for management of the manufacturing process, for inspection and testing, for inspection, measuring and testing equipment and release of the product for its dispatch.

2	Responsibility for total quality management	A management member responsible for total management of the product quality including review and responsibility for corrective and preventive actions has been appointed.
3	Technological process of manufacture	The manufacturer has elaborated the technological process of manufacture in a sufficiently detailed extent. Up-to-date technological or manufacturing instructions are available at the appropriate work sites.
4	Technical specifications	The manufacturer has prepared product technical specifications, a detailed description of technical properties of the product and has specified a method of the product use in the construction work.
5	Maintenance of records	The manufacturer shall maintain records of properties of the input raw-materials, materials and products, of production, of manufacturing and check tests, of verification and calibration of meters, and records of complaints regarding product quality. The records shall be identifiable and legible and archived safely.
6	Manufacturing and handling equipment	The manufacturer shall pay attention to the correct state of the needed manufacturing equipment.
7	Inspection and testing	The manufacturer has elaborated a plan of inspection and testing activities (receiving, in-process and final /outgoing/ inspections). He shall conduct the inspections and tests in conformity with this plan. Up-to-date inspection and testing procedures shall be available at appropriate sites. The manufacturer shall maintain and store (retain) records of the tests and inspections performed.
8	Meters used to secure the process of manufacture, inspection and testing	The manufacturer has specified suitable meters to secure the manufacturing process, keeps them on file and takes care of their correct state. The manufacturer shall maintain and store properly records of verification and calibration of the meters according to the Metrology Act.
9	Packaging and marking of products	The manufacturer has secured the process of product packaging and marking in the extent necessary for assurance of conformity with the specified requirements.
10	Storage spaces	The manufacturer shall have at his disposal space needed for storage of input raw-materials, materials and products and for storage and dispatch of finished products.
11	Instructions for use of the product	The manufacturer has elaborated instructions for use and maintenance of the product in the Czech language.
12	Ensurance of basic preventive actions	The manufacturer shall ensure basic preventive actions (for instance training of the personnel for jobs affecting product quality and use of product quality records and records of customers' complaints).

9.2. Applicant's obligations related to factory production control system

The applicant is obliged to secure a product inspection method so that all products he distributes correspond to the technical documentation and meet the essential requirements.

In specified conformity assessment procedures the applicant is obliged to secure assessment of the factory production control system by an authorized body at the manufacturer's premises or to perform inspections of the distributed products with respect to their conformity with technical documentation and essential requirements at his own or at contract laboratories, and to subject the system used to inspect the distributed products to an assessment by the authorized body.

When securing the assessment of the factory production control system at the production plant abroad, the minimum requirements specified in Table 2 are applied.

The minimum extent of the requirements for assurance of the inspection of the distributed products is shown in Table 3 below:

Table No. 3: Minimal extent of the requirements for assurance of the inspection of the distributed products by the applicant

Serial No.	Quality system area	More specific requirements



1	Inspection and testing	<p>The applicant has elaborated a product inspection procedure making possible to distribute only those products that meet the technical specification. He shall perform the product inspection in conformity with these procedures and the elaborated inspection and testing plan. The personnel conducting the inspection shall meet the specified qualifications requirements and the applicant shall keep records thereof.</p> <p>The applicant shall duly maintain and store (archive) records of inspection and test results. Further, he shall keep records of complaints regarding the product.</p> <p>For testing of the products the applicant has specified meters that are subject to verification or calibration. He shall keep a record of them, take care of their correct state and shall use meters that are validly verified and calibrated.</p>
2	Meters used for inspection and testing	The applicant has specified suitable meters to secure inspection and testing, shall keep a record of them and take care of their correct state. The applicant shall maintain and store properly records of verification and calibration of the meters according to the Metrology Act.
3	Storage space and handling equipment	The applicant shall have at his disposal appropriate space required for product storage and handling including storage equipment and shall pay attention to their correct state.
4	Technical properties of the product	The applicant shall have a detailed description of the product technical properties and a specification of the use of the product in the construction work.
5	Instructions for use of the product	The applicant has elaborated instructions for use and maintenance of the product in the Czech language.
6	Instructions and personnel requirements for product installation	The applicant conducts trainings of customer's and installation firms' employees aimed at correct product installation or provides them with detailed instructions in a written or audiovisual forms.

9.3. Responsibility for supervision of the factory production control system

9.3.1. Procedure according to Section 7 of the NV 312 – Conformity verification

Within conformity assessment by way of the conformity verification pursuant to Section 7 the sole responsibility for implementation, documentation and operation of the FPC including internal supervisions lies with the manufacturer, the same applies to inspection of the distributed products by the applicant.

With respect to the authorized body, only the inspection mechanism based on initial tests of the product type proving conformity with the parameters and criteria specified in Chapter 6 of the present Construction Technical Approval shall be used. After completion of the tests, the authorized body shall issue a report with a period of validity limited to 3 years.

Before expiration of the report the manufacturer or the applicant shall request the authorized body that issued the report for the product retesting and issuing a new report containing up-to-date findings.

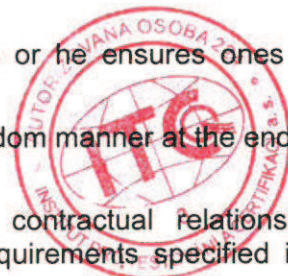
9.3.2. Procedure according to Sections 5 of the NV 312 - Certification

The sole responsibility for implementation, documentation and operation of the factory production control system lies with the manufacturer, in case of distribution of the construction products the responsibility for inspection of the distributed products lies with the distributor.

Manufacturer perform tests using his own means or he ensures ones at an accredited testing laboratory in range of final inspection (check)

Samples shall be taken by the manufacturer in a random manner at the end of the manufacturing line.

Distributor has established with the supplier a contractual relationship guaranteeing deliveries of only those products that meet the requirements specified in Table 3 of the present CTA (Construction Technical Approval).



Authorized body – within its participation in the conformity assessment process – shall conduct regular supervisions of the due operation of the FPC or of the proper functioning of the product inspection at the applicant and carry out a check of adherence to specified product requirements once a 12 months. Validity of the certificate and the possibility to continue distributing the products on the market are conditioned positive inspection results given in the report and handed over to the manufacturer or the applicant.

The authorized body shall select the extent of the supervision over operation of the factory production control system (FPC) so that all elements of the FPC specified in Chapters 9.1. or 9.2. are verified during the period of three years.

During the supervision carried out within the conformity assessment procedure pursuant to Section 5, a worker of the authorized body takes samples in quantity given in column "D" of Table from Chapter 8.1, at the manufacturer's or the applicant's facility in order to check compliance with specified requirements by tests, carried out by laboratories of an authorized body in the following extent at least:

- Heat reversion
- Resistance to impact by falling mass
- Flexural properties

10. Verification tests

Verification tests for determination of declared values were carried out for heat reversion.

Elaborated by: Milan Kovář

