



INSTITUT PRO TESTOVÁNÍ A CERTIFIKACI, a.s.
Třída Tomáše Bati 299, Louky, 763 02 Zlín, Czech Republic
CSI division – Centre of Civil Engineering



AUTHORIZED BODY No. 224
Authorisation Decision No. 11/2023 on 7 August 2023

issues the following

CONSTRUCTION TECHNICAL APPROVAL

No. STO – AO 224 – 1058/2021/a

pursuant to §2 and §3 of Czech Government Regulation No. 163/2002 Coll., as amended by the Government Regulation No. 312/2005 Coll. and Government Regulation No. 215/2016 Coll.

defining technical properties of the product

Coated sheet VIPLANYL

Introduced to the market by

D PLAST a. s. U Tescomy 206, 760 01 Zlín - Lužkovice, Czech Republic
ID: 00544752
VAT: CZ00544752

from the manufacturing site:

D PLAST a. s.
Stráně 460, 760 01 Zlín, Czech Republic

in relation to the essential requirements for constructions and to the intended product use in the construction

Contract No.: 785200275

Number of pages: 8
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Place and date of issue of the revision a): Zlín, 22.1.2024
This Approval shall be valid till: 31.1.2027



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Mgr. Jiří Heš
Representative of the Authorized Body No. 224

1. Introduction

This Construction Technical Approval (hereinafter referred to as “STO”) was issued by the Authorized Body AO 224 based on the application of the manufacturer for cooperation in assessing conformity of its construction product pursuant to Government Regulation No. 163/2002, Collection of Laws, as amended by Government Regulation No. 312/2005, Collection of Laws, and Government Regulation No. 215/2016, Collection of Laws (hereinafter referred to as “GR 163”). The request for the cooperation was made due to the lack of specified standards or technical regulations establishing essential requirements applying to this product in terms of the intended use in construction. It defines technical properties of the product, their levels and the procedures for determining them in relation to the essential requirements set out in Annex 1 of the GR 163 and specifying the extent of use of the product in construction.

2. Identification of the Authorized Body

This Construction Technical Approval is issued by Authorized Body AO 224, – Institut pro testování a certifikaci, a.s. in Zlín. Authorization for this construction product type was granted to this Authorized Body by the Office for Standards Metrology and Testing (ÚNMZ) by the Decision No. 11/2023 of 7 August 2023.

Identification data of the Authorized Body are as follows:

Institut pro testování a certifikaci, a.s.
Třída Tomáše Bati 299, Louky
763 02 Zlín
Czech Republic
Company Registration No.: 47910381
VAT Reg. No.: CZ47910381
Phone: +420 572 779 922, e-mail director@itczlin.cz

3. Identification of the applicant and the manufacturer

3.1. Identification of the applicant

The request for cooperation on the conformity assessment was submitted by D PLAST spol. s r.o., a company engaged in the manufacture of construction products.

Identification data of the applicant:

D PLAST a. s.
U Tescomy 206
760 01 Zlín-Lužkovice
Czech Republic
ID: 00544752
Vat No: CZ00544752
phone 577 243 259, fax 577 142 084, e-mail david.pivonka@dplast.cz

3.2 Identification of the manufacturer

The manufacturer of the product under consideration is D PLAST a. s., manufacturing site Stráně 460, 760 01 Zlín, Czech Republic Czech Republic.

4. Identification of the product and specification of its use in the construction

4.1 Product identification and description

The VIPLANYL coated sheet is a galvanized steel sheet coated on one side with a PVC layer, which provides increased corrosion resistance and protection against weathering. The colour of the PVC layer is light grey or according to the customer's requirements.

4.2. Marking on the product

Sheet metal plates are marked with a label with the manufacturer's name, the product's trade name, the year of manufacture and the furnace number.

4.3 Definition of the use of the product in construction

VIPLANYL is designed as an anchoring and finishing sheet metal element for PVC-based waterproofing membranes for roofing, roof eaves, balcony eaves, roof gutters, soffit cornices, etc.

4.4 Restrictions on the use of the product

According to the manufacturer's company standard PN 752-0313-02.

5. Documents submitted by the manufacturer

The applicant submitted the following documents with his application:

- Manufacturer's quality management system certificate according to ISO 9001:2015 No.12 100 62263/01 TMS (TÜV SÜD Management Service GmbH)

6. Used technical regulations, standards, sources of scientific and technical knowledge, information gained by practical experience

The following documents were used to prepare and issue this CTA:

- PN 752-0313-02 (revision No. 05) Coated sheets VIPLANYL
- PZN 1301-98 Coupling evaluation
- PZN 1306-98 Determination of the thickness of the PVC layer of coated sheets
- PZN 1308-98 Determination of bending resistance
- PZN 1312-98 Determination of adhesion of coated sheets
- ČSN 64 0770 Plastics. Natural and artificial ageing of plastics
- EN 1465:2009 Adhesives - Determination of tensile lap-shear strength of bonded assemblies
- EN 1296:2001 Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roofing - Method of artificial ageing by long term exposure to elevated temperature
- EN 1847:2010 Flexible sheets for waterproofing - Plastic and rubber sheets for roof waterproofing - Methods for exposure to liquid chemicals, including water
- EN ISO 4892-2:2013 Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps

7. Product classification and conformity assessment procedures pursuant to GR 163

7.1 Product classification according to GR 163

VIPLANYL coated sheets are specified building products. Within the framework of Annex 2 of GR 163 they fall under Group No 5 *Protective, thermal insulation materials and products, waterproofing materials, roofing materials and adhesives, subgroup 8c), Cornice and eaves elements, mechanical fasteners for roofing, roofing accessories for other uses.*

7.2 Prescribed conformity assessment procedures

For products of group 5, subgroup 8c), Annex 2 of GR163 sets out the conformity assessment procedure according to § 8 (conformity assessment by the manufacturer). On the basis of § 10 of GR 163, the procedure under § 7 (verification of conformity) or § 5 (certification) may also be applied at the request of the manufacturer or importer.

7.3 Applied Technical Instruction

For this product group, the Technical Instruction 05.08.03.ac was prepared within the coordination activities of the Ministry of Industry and Trade, which became the basis for defining the range of monitored properties and methods for their detection.

7.4 Deviations from the technical instructions

The Technical Instruction referred to in Article 7.3 of this STO has been used as a starting point for the development of the STO. Due to the specification of the product as a sheet with a single-sided PVC coating, elaboration of the STO was further based on the manufacturer's company standard PN 752-0313-02 (revision No. 05) Coated VIPLANYL sheets and the modifications listed in the table in Article 8.1 were made.

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

8.1. Essential requirements and specification of technical properties

In compliance with the Section 7.3. of this Construction Technical Approval the technical properties monitored in relation to essential requirements are specified in the second column of the Table 1 below.

No.	Name of technical features:	Test standard	Subject of the exam:	Number of samples		Required value:
				C/T	D	
1	Thickness of the protective layer	PZN 1306-98	coated sheet metal	1	1	min. 0,6 mm
2	Adhesion of the protective layer	PZN 1312-98	coated sheet metal	1	1	breaks in the material
3	Behaviour of the coupling during shear test	PZN 1301-98 EN 1465	coated sheet metal	1	-	breaking or tearing of the film
4	Joint strength in peeling	PZN 1301-98	coated sheet metal	1	-	min. 6 N/mm
5	Bending resistance	PZN 1308-98	coated sheet metal	1	-	no cracks
6	Corrosion resistance (storage in 5-6 % sulphuric acid, 28 days at 23 °C)	EN 1847	coated sheet metal	1	-	~break in the material ~failure or break in the film ~change in peel strength of the joint min. 5 N/mm
7	Aging in the heat (28 days at 70 °C)	EN 1296	coated sheet metal	1	-	~break in the material ~failure or break in the film ~change in peel strength of the joint min. 4 N/mm
8	Artificial weathering; radiation energy 4.5 GJ/m ² ; cycle and temperature: EN 513, method 1	EN ISO 4892-2, method A	coated sheet metal	1	-	no surface cracks
9	Reaction to fire	EN 13501-1	coated sheet metal	1	-	According to the method of use

Note: C - certification of a product; T - verification of conformity of a product; D - supervision of a certified product

8.2 Definition of the method of assessment of technical characteristics

The table also lists the normative regulations used to define the method of assessment of the individual technical characteristics to be assessed and the necessary number of samples for certification (C), for verification of conformity of products (T) and for supervision of the production management system and control of compliance with the specified requirements for products (D).

8.3 Required levels of technical characteristics

For the specified uses of the product in construction, as described in Articles 4.3 and 4.4 of this STO, the required values in the last column of the table have been set for each property.

8.4 Other technical regulations applicable to the product

Consumer, group and transport packaging of the product is subject to the requirements of Act No. 477/2001 Coll., on packaging, as amended.

The product is also covered by Act 356/2003 Coll. on chemical substances and chemical preparations as amended by the implementing regulation of the Ministry of the Environment 221/2004 Coll. which establishes lists of hazardous chemical substances and hazardous chemical preparations whose placing on the market is prohibited or whose placing on the market, circulation or use is restricted. The manufacturer may only apply additives (stabilisers, flame retardants, etc.) whose use is not restricted by the Regulation.

9. Detailed requirements for assessment of factory production control systém

The requirements for the production management system are listed in Annex 3 of the GR 163

Note: Applicable only for conformity assessment according to § 5.

The requirements for the production control system are set out in Annex 3 to the GR 163 and are binding for the manufacturers of selected construction products.

9.1. Obligations of the manufacturer related to the Factory Production Control system

The manufacturer is required to set up a Factory Production Control system (hereinafter referred to as "FPC") so that all products it markets correspond to the technical documentation and meet the essential requirements.

The minimum scope of requirements for provision of the FPC by the manufacturer is provided in the following Table 2.

No.	Quality system area	Specifying requirements
1	Responsibility for manufacture	The manufacturer has delegated employees responsible for purchasing raw materials, materials and products affecting product quality, for production process control, inspection and testing, control, measurement and testing equipment, and for release of the product for shipment.
2	Responsibility for total quality control	A member of the management team responsible for total product quality control, including review and responsibility for corrective and preventive measures has been appointed.
3	Technological production process	The manufacturer has elaborated the technological process of manufacture in a sufficiently detailed manner. Current technological or manufacturing regulations are available at the appropriate work locations.
4	Technical specification	The manufacturer has established technical specifications and a detailed description of technical properties for the product, and a method of product use in the construction.
5	Record keeping	The manufacturer keeps records of the properties of initial raw materials, materials and products, production, production and inspection tests, gauge verification and calibration, and of complaints about product quality. The records are identifiable and legible and securely archived.
6	Production and handling equipment	The manufacturer ensures that the required production equipment is in good condition.
7	Inspection and testing	The manufacturer has drawn up an inspection and testing plan (incoming, in-process, outgoing inspection and testing). It carries out inspections and tests in accordance with this plan. Current inspection and testing procedures are available at appropriate places. The manufacturer keeps records of the tests and inspections performed.
8	Gauges used in the production, inspection and testing processes	The manufacturer has specified suitable gauges for the production, inspection and testing processes, keeps records of them and keeps them in good condition. The manufacturer keeps records of the verification and calibration of the measuring gauges in accordance with the Act on Metrology.
9	Product packaging and marking	The manufacturer has set up the process of packaging and marking of the products to the extent necessary to ensure compliance of the products with the specified requirements.
10	Storage spaces	The manufacturer has the necessary facilities for storing raw materials materials and products and for storing and dispatching of finished products.
11	Product usage instructions	The manufacturer has instructions for use and maintenance of the product in the Czech language.

No.	Quality system area	Specifying requirements
12	Basic preventive measures	The manufacturer takes basic preventive measures (e.g. employee training for functions affecting product quality, use of quality records, and customer complaints).

9.2 Responsibility for the supervision of the production management system

9.2.1. Procedure according to § 7 of GR 163 - Verification of conformity

In the context of the assessment by way of verification of conformity according to § 7, the sole responsibility for the implementation, documentation and operation of the FPC including internal controls is the sole responsibility of the manufacturer, the same applies to the control of imported products by the importer.

From the point of view of the authorised person, only a control mechanism based on tests of product samples demonstrating compliance with the parameters and criteria set out in Chapter 6 of this STO shall be applied. The authorised body shall issue a test report with a limited validity of 3 years after the tests have been completed. Before the expiry of the test report, the manufacturer or importer shall request the authorised person who issued the test report to re-test and issue a new test report with updated findings.

9.2.2. Procedure according to § 5 of GR 163 - Certification

The manufacturer has the sole responsibility for implementing, documenting and operating the FPC; in the case of imported construction products, the importer is responsible for controlling the imported products.

The manufacturer shall carry out by his own means or arrange for an accredited testing laboratory to carry out tests at least to the following extent as part of the exit inspection:

Thickness of protective layer	1x in 4 hours
Adhesion of the protective layer	1x per week
Coupling behaviour in shear test	with material change
Joint strength in peeling	with material change
Bending resistance	with material change

Samples are taken randomly by the manufacturer at the exit of the process plant.

As part of its participation in the conformity assessment process, the authorised body shall carry out regular surveillance of the proper functioning of the CPR or of the proper functioning of the importer's product control and check the compliance of the product with the specified requirements once every 12 months. The validity of the certificate and the possibility to continue placing products on the market shall be subject to the positive results of the control activities indicated in the report submitted to the manufacturer or importer.

The scope of surveillance of the operation of the production management system shall be chosen by the authorised person so that all elements of the SMS referred to in Chapter 9.1 are verified within three years.

During surveillance, the authorised person's staff shall take samples in the number indicated in column 'D' of the table in Chapter 8.1. to check compliance with the specified requirements by tests carried out by the authorised person's laboratory at least to the following extent:

Thickness of the protective layer
Adhesion of the protective layer

10. Verification tests

It was not necessary to carry out verification tests to define the technical characteristics of the product and to issue the STO.

Elaborated by: Ing. Vladimír Sedláček