

#### ® TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p. Technical and Test Institute for Construction Prague

Akreditovaná zkušební laboratoř, Autorizovaná osoba, Certifikační orgán, Notifikovaná osoba, Inspekční orgán Accredited Testing Laboratory, Authorized Body, Certification Body, Notified Body, Inspection Body Prosecká 811/76a, 190 00 Praha 9 - Prosek, Czech Republic

> Product Certification Body Branch 0100 – Praha issues

# CERTIFICATE

No. 010-031288

for product:

Dilatation profiles

type / variety: SB, SC, SE, SF, SG, KA, KB, KC, KE, KF, DFA, DFE, DFM, DFP, DFA TL, DFE TL, DFM TL, DFP-L

applicant:

#### Dural GmbH & Co. KG

VAT:

DE155205020

Address:

Südring 11, D-56412 Ruppach-Goldhausen, Germany

Producer:

Dural GmbH & Co. KG

Address:

Südring 11, D-56412 Ruppach-Goldhausen, Germany

Plant:

Dural GmbH & Co. KG

Address:

Südring 11, D-56412 Ruppach-Goldhausen, Germany

Order:

Z 010 13 0070

#### Certification Body confirms by this certificate that:

- features of the subjected product sample have complied with requirements of the manufacturers' technical specification concretized by test procedures specified in the technical standards ČSN EN 1849-2 (Thickness, surface density), ČSN EN 1850-2 (visible defects), ČSN EN ISO 527-1,3 (tensile properties), ČSN EN ISO 868 (Shore hardness A), ČSN 73 0212-5 (Dimensions), ČSN EN 13892-5 (wear resistance, for DFA series)
- factory production control complies with relevant technical documentation and ensures that products put on the market meet the requirements given in respective technical specification;

This certificate refers to the Product Certification Report No. 010-031287 from 15 March 2013 issued by Technical and Test Institute of Construction Prague – branch-office Prague which has been handed over to the applicant. The report includes the conclusion of the findings and terms of validity of the certificate. The certificate has 1 annex (1 page), that is to be considered an integral part of this certificate.

The certificate is valid till: 31 March 2016

The person taking overall responsibility for the correctness of this certificate:

Stamp of the certification body

Praha, 15 March 2013

N. R. Pithi

Ing. Iveta Jiroutová
Deputy Manager of the Certification Body



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#### Annex of the certificate No. 010-031288

#### Conditions of validity and using of the certificate:

- 1. Certificate of conformity has to be used only for purposes for which it was issued.
- 2. Certificate holder is obligated to:
  - a) to inform the Certification Body about any changes: modification of product, production process, materials and/or changes of factory production control influencing the product conformity;
  - to inform the Certification Body about any changes of ownership, structure or management;
  - c) to record any complaints relating to non-conformity of certified product;
  - d) to take appropriate actions to eliminate the nonconformity and record actions taken.
  - e) to make records about complaints mentioned above available to the certification body when requested.
- 3. Certification body re-evaluates the product in case of a change of technical specification.
- The certificate is valid on condition positive results of surveillance audits contained in Reports issued by certification body and passed on to the certificate holder.
- 5. The Frequency of surveillance is at least 1x per 12 months

This Annex forms an integral part of the certificate No. 010-031288.

Stamp of the certification body

Praha, 15 March 2013



Ing. Iveta Jiroutová
Deputy Manager of the Certification Body



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> Product Certification Body Branch 0100 – Praha

## REPORT

of the product certification

No. 010-031287

Trade name:

#### Dilatation profiles

type / variety: SB, SC, SE, SF, SG, KA, KB, KC, KE, KF, DFA, DFE, DFM, DFP, DFA TL, DFE TL, DFM TL, DFP-L

applicant:

#### Dural GmbH & Co. KG

VAT:

DE155205020

Address:

Südring 11, D-56412 Ruppach-Goldhausen, Germany

Manufacturer:

Dural GmbH & Co. KG

Address:

Südring 11, D-56412 Ruppach-Goldhausen, Germany

Plant:

Dural GmbH & Co. KG

Address:

Südring 11, D-56412 Ruppach-Goldhausen, Germany

Order:

Z 010 13 0070

Number of pages including the front page: 4 Number of Annexes: -

Stamp of the certification body

Praha, 15 March 2013



Ing. Michal Vindys

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Bank Name: KB Praha 1 Czech Republic, Account Number: 1501-931/0100, INo: 000 15679, VAT: CZ00015679

#### 1. General

#### 1.1. Information about the applicant:

Applicant:

Dural GmbH & Co. KG

VAT:

DE155205020

Address:

Südring 11, D-56412 Ruppach-Goldhausen, Germany

Manufacturer:

Dural GmbH & Co. KG

Address:

Südring 11, D-56412 Ruppach-Goldhausen, Germany

#### 1.2. Information about the product and its intended use

Dilatation profiles

- SB, SC, SE, SF, SG, KA, KB, KC, KE, KF, DFA, DFE, DFM, DFP, DFA TL, DFE TL, DFM TL, DFP-L
- Products are variously shaped dilatation profiles made of a metal matrix (aluminum, stainless steel, brass) combined with elastic parts from EPDM or nitrile rubber. The combination of these materials is mechanically and / or pressure vulcanization. The contact surface of metal arms can be perforated for optimal anchoring.
- These products are used for dilatation of flooring joints, tiles with high and medium mechanical stress (airports, hotel lobbies, parking areas, retail space, factories, warehouses...), but also for building of smaller character (houses, bathrooms, repair, renovation...).

#### 1.3. List of documentation submitted by the manufacturer to the product certification

- · Materials in the extent necessary for the conformity assessment
- Based on the statements of the applicant, there is no reason for examining the effects of construction products in the embedded state whether the requirements of health and environmental are met

#### 1.4. List of other documentation submitted to the product certification

Product data sheets: Dilatation profiles series: SB, SC, SE, SF, SG, KA, KB, KC, KE, KF, DFA, DFE, DFM, DFP, DFA TL, DFE TL, DFM TL, DFP-L

#### 1.5. Technical specification and technical regulations relating to the product certification

- ČSN 73 0212-5:1994 Geometrical accuracy in building industry Accuracy control Part 5: Accuracy control of building components
- ČSN EN 1849-2:2010 Flexible sheets for waterproofing Determination of thickness and mass per unit area Part 2: Plastic and rubber sheets for roof waterproofing
- ČSN EN 1850-2:2001 Flexible sheets for waterproofing Determination of visible defects Part 2: Plastic and rubber sheets for roof waterproofing
- ČSN EN ISO 527-1:2012 Plastics Determination of tensile properties Part 1: General principles
- ČSN EN ISO 527-3:1997 Plastics Determination of tensile properties Part 3: Test conditions for films and sheets
- ČSN EN 13892-5:2004 Methods of test for screed materials Part 5: Determination of wear resistance to rolling wheel of screed material for wearing layer
- ČSN EN ISO 868:2003 Plastics and ebonite Determination of indentation hardness by means of a durometer (Shore hardness)

#### 1.6. Information about previous product certification

Products have not been previously certified by Certification Body

### 2. Result of the review of the documentation submitted by the manufacturer

 Documentation submitted by the manufacturer corresponds to the requirements of Certification Body

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#### 3. Product assessment

#### 3.1. Technical requirements

Assessed properties (according to the documents referred to in part 1.5)
 For EPDM rubber layer: Thickness, surface density (ČSN EN 1849-2), visible defects (ČSN EN 1850-2), tensile properties (ČSN EN ISO 527-1,3), Shore hardness A (ČSN EN ISO 868)
 For dilatation profiles: visible defects (ČSN EN 1850-2), dimensions (ČSN 73 0212-5), tensile properties (ČSN EN ISO 527-1,3), wear resistance (ČSN EN 13892-5, for DFA series)

#### 3.2. List of the Test Reports and assessments

- Report No. 010-031289 of 12.03.2013, issued by TZÚS Praha, s.p., Accredited Testing Laboratory No. 1018.5
- Report No. 010-031290 of 12.03.2013, issued by TZÚS Praha, s.p., Accredited Testing Laboratory No. 1018.5
- Testing Report No. 5245/06 of 19.06.2006, Säurefliesner-Vereinigung e.V. Untersuchungsund beratungsinstitut für Wand- und Bodenbeläge, Burgwedel, SRN

#### 3.3. Evaluation of the results of the product tests and assessment

#### Properties of EPDM rubber layer

Product characteristic	Test Report	The test procedure	Test results	Required / declared level	Evaluation
Thickness	010-031290	ČSN EN 1849-2	4,85 mm	(5±0,2) mm	Pass
Surface density	010-031290	ČSN EN 1849-2	6541,2 g·m <sup>-2</sup>	≥ 6000 g·m <sup>-2</sup>	Pass
Visible defects	010-031290	ČSN EN 1850-2	without visible defects	without visible defects	Pass
Tensile strength at F <sub>max</sub>	010-031290	ČSN EN ISO 527	4,8 MPa	≥ 4,5 MPa	Pass
Elongation at F <sub>max</sub>	010-031290	ČSN EN ISO 527	383,5 %	≥ 250 %	Pass
Hardness Shore A	010-031290	ČSN EN ISO 868	57,6	≥ 50	Pass

#### Dilatation profiles – series SB

Product characteristic	Test Report	The test procedure	Test results	Required / declared level	Evaluation
Visible defects	010-031289	ČSN EN 1850-2	without visible defects	without visible defects	Pass
Visible width	010-031289	ČSN 73 0212-5	37,2 mm	(37±0,2) mm	Pass
Total width	010-031289	ČSN 73 0212-5	115,0 mm	(115±0,2) mm	Pass
Total height	010-031289	ČSN 73 0212-5	14,8 mm	(15±0,2) mm	Pass
Tensile strength at F <sub>max</sub>	010-031289	ČSN EN ISO 527	238 N/50mm	≥ 150 N/50mm	Pass
Elongation at F <sub>max</sub>	010-031289	ČSN EN ISO 527	160,2 %	≥ 140 %	Pass
Elongation at break	010-031289	ČSN EN ISO 527	171,9 %	≥ 140 %	Pass

Dilatation profiles – series DFA

Product characteristic	Test Report	The test procedure	Test results	Required / declared level	Evaluation
Visible defects	010-031289	ČSN EN 1850-2	without visible defects	without visible defects	Pass
Visible width	010-031289	ČSN 73 0212-5	10,1 mm	(10±0,2) mm	Pass
Total width	010-031289	ČSN 73 0212-5	52,0 mm	(52±0,5) mm	Pass
Inner height	010-031289	ČSN 73 0212-5	3,0 mm	(3±0,2) mm	Pass
Tensile strength at F <sub>max</sub>	010-031289	ČSN EN ISO 527	433,8 N/50mm	≥ 250 N/50mm	Pass
Elongation at F <sub>max</sub>	010-031289	ČSN EN ISO 527	54,6 %	≥ 40 %	Pass
Elongation at break	010-031289	ČSN EN ISO 527	82,7 %	≥ 40 %	Pass
Wear resistance	5245/06	EN 13892-5	12000 cycles without changes	min. 10000 cycles	Pass

#### 4. Factory Production Control assessment

### 4.1. Requirement of the technical specification, technical regulations regarding Factory Production Control:

 The factory production control shall ensure that the products placed on the market comply with the technical specification.

#### 4.2. Evaluation of the Factory Production Control Assessment Results:

On the basis of the documents submitted were carried out of 13-14 February 2013 the review
of the system of factory production control. The factory production control corresponds to the
technical specifications and technical regulations and ensures its proper functioning.

#### 5. Conclusion

- The sample of product is in accordance to the requirements of the technical specification and technical regulations specified in part 1.5 and 3.1
- Factory Production Control complies with technical documentation and ensures its proper functioning.
- Findings and conclusions mentioned in this Report are valid providing the conditions under them the conformity assessment was carried out remain unchanged (e.g. technical regulations, technical specifications, production technology, incoming raw materials and manufacturing equipment).
- The technical documentation of the product in accordance with the technical specification.

#### 6. Annexes

No Annexes.