® TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p.
Technical and Test Institute for Construction Prague, SOE
Akreditované zkušební laboratoře, Autorizovaná osoba, Notifikovaná osoba, Oznámený subjekt, Subjekt pro technické posuzování, Certifikační orgány, Inspekční orgán / Accredited Testing Laboratories, Authorized Body, Notified Body, Technical Assessment Body, Certification Bodies, Inspection Body • Prosecká 811/76a, Prosek, 190 00 Praha 9, Czech Republic

Authorized Body 204
empowered by the Decision of COSMT No. 05/2017
Branch 0600 – Brno

REPORT

of the product certification

according to the Article 5 of the Government Decree No. 163/2002 Coll., as amended by the Government Decree No. 312/2005 Coll., 215/2016 Coll. and 119/2024 Coll.

No. 060-062620

Trade name:

Non-metallic bed joint reinforcement for structural use in composite lintels and reinforced masonry

type / variant:

solidian Briksy
HYB-R222/28-HY-661(860)-AGS2-6x30

manufacturer:

Kelteks d.o.o.

INo:	41431665528
Address:	Dr. Slavka Rozgaja 3, 47000 Karlovac, Croatia
Plant:	**Kelteks d.o.o.**
Address:	Dr. Slavka Rozgaja 3, 47000 Karlovac, Croatia
Job No:	Z060260026

Number of pages including the front page: 6 Number of pages of Annexes: 5

Brno, September 21, 2026

TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p. Autorizovaná osoba ZÚS 204

Ing. Marek Sopko
Chief Assessor

1. General

1.1. Information about the manufacturer

Manufacturer:	Kelteks d.o.o.
Address:	Dr. Slavka Rozgaja 3, 47000 Karlovac, Croatia
INo:	41431665528
Plant:	Kelteks d.o.o.
address:	Dr. Slavka Rozgaja 3, 47000 Karlovac, Croatia

1.2. Information about the product and its intended use

The construction product is non-metallic bed joint reinforcement for structural use, intended for incorporation in horizontal mortar bed joints of masonry. The product is mesh-type reinforcement. According to the manufacturer technical specification the type of the glass of fibre grid solidian Briksy is AR glass. The products do not use steel as the load-bearing reinforcement material.

The products are intended to be used as bed joint reinforcement for structural use in horizontal bed joints of masonry walls made of Group 1 and Group 2 masonry units in accordance with Eurocode 6.

The reinforcement may be used in internal or external walls and composite lintels and may be incorporated in normal-purpose mortar or thin-layer mortar of specified compressive strength. The intended mortar shall have minimum compressive strength of 5 N/mm² and the mortar layer between the bed faces of masonry units shall be of 3 mm to 12 mm thickness.

The reinforcement is designed to control crack formation and to improve the mechanical performance and durability of masonry. When used in composite lintels, it transfers the structural load from the masonry's self-weight and other external loads.

The assessment is based on the assumption that the solidian Briksy system of over-opening masonry composite lintels and in masonry designed for flexural strength will be made of blocks, mortar and composite reinforcement with the following properties and designs:

Requirements on masonry blocks:

- characteristic value of compressive strength on a head face of the blocks used shall be at least 3 N/mm2

- width of blocks min. 150 mm and max. 240 mm

- height of blocks min. 235 mm

- apparent density of blocks max. 1000 kg/m3 (only for composite lintels)

- blocks shall be set in two rows above each other with regular masonry bond in ordinary or thin-layer mortar (only for composite lintels)

- bottom layer of masonry under reinforcement made of brick blocks of the same width and bulk density, but with a maximum height of 125 mm, the compressive strength of the blocks of the lower layer is not prescribed (only for composite lintels).

Requirements on mortar:

- ordinary or thin-layer mortar

- compressive strength class of mortar at least M5 according to EN 998-2.

Requirements on composite reinforcement:

- reinforcement width at least 100 mm

- characteristic tensile force in failure min. 13000 N as in the basic state, as after alkaline conditioning

- characteristic tensile force in failure in the anchorage area min. 13000 N

Requirements on composite lintels and masonry construction:

- head joints between blocks in composite lintels above the reinforcement shall be either fully filled with mortar, or blocks tightly knocked together by tapping from the head side, free head joints between blocks are not permitted

- in masonry designed according to EN 1996-1-1 on flexural strength: the outer strand of reinforcement shall be positioned in maximum 25 mm from tensioned face of masonry (only for masonry)

- regular masonry bond shall be held in reinforced masonry.

Installation of solidian Briksy reinforcement shall be carried out in accordance with the manufacturer's instructions, including requirements for overlaps, anchorage, cutting, handling and storage, and with respect to conditions of EN 1996-2.

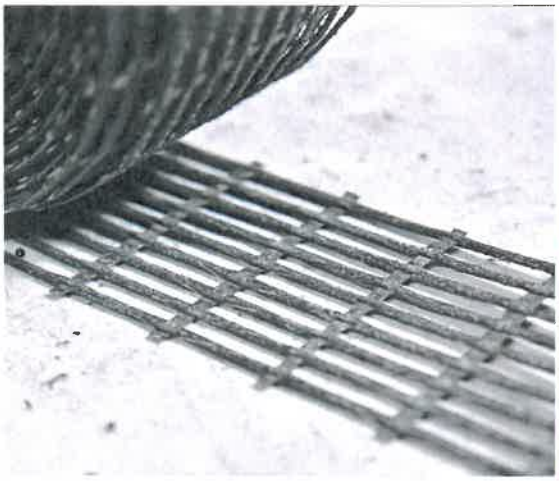

Figure 1 – Example of product

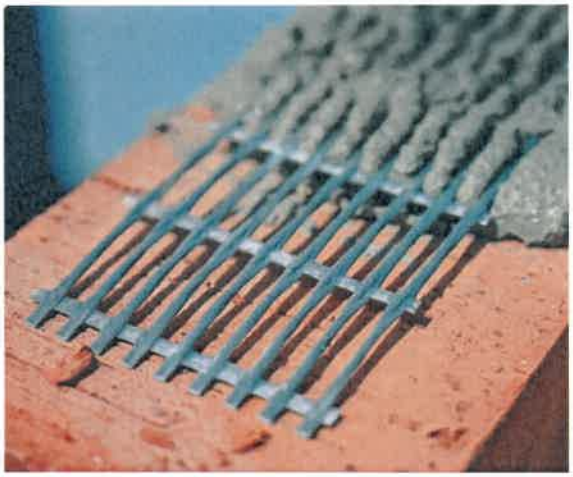

Figure 2 – Typical installation in a horizontal masonry bed joint

1.3. List of documentation submitted by the applicant to the product certification

- Application for performance of activity of Authorized Body 204, dated 7. 1. 2026
- Technical data sheets
- Quality manual and related documents
- Other documentation of FPC
- Test report No. 060-061068, issued by TZÚS Praha, branch Brno, dated 12. 12. 2025
- Test report No. 060-062025, issued by TZÚS Praha, branch Brno, dated 17. 06. 2026
- Test report No. 060-062160, issued by TZÚS Praha, branch Brno, dated 02. 07. 2026
- Test report No. 060-062161, issued by TZÚS Praha, branch Brno, dated 02. 07. 2026

1.4. List of the other documentation used during the product certification

- Act No. 22/1997 Sb. on Technical Requirements for Products and on Amendments to Some Acts
- Government Decree No. 163/2002 Sb., on the Technical requirements for selected construction products, as amended by Government Decree No. 312/2005 Sb., No. 215/2016 Coll. and No. 119/2024 Coll.
- EN 771-1+A1 Specification for masonry units - Part 1: Clay masonry units
- EN 771-2+A1 Specification for masonry units – Part 2: Calcium silicate masonry units
- EN 771-3+A1 Specification for masonry units – Part 3: Aggregate concrete masonry units (Dense and light-weight aggregates)
- EN 771-4+A1 Specification for masonry units – Part 4: Autoclaved aerated concrete masonry units
- EN 772-1+A1 Methods of test for masonry units - Part 1: Determination of compressive strength
- EN 845-3 Specification for ancillary components for masonry - Part 3: Bed joint reinforcement of steel meshwork

- EN 846-2 Methods of test for ancillary components for masonry - Part 2: Determination of bond strength of prefabricated bed joint reinforcement in mortar joints
- EN 846-9 Methods of test for ancillary components for masonry - Part 9: Determination of flexural resistance and shear resistance of lintels
- EN 998-2 Specification for mortar for masonry - Part 2: Masonry mortar
- EN 1052-2 Methods of test for masonry - Part 2: Determination of flexural strength
- EN 1990 ed. 2 Eurocode - Basis of structural and geotechnical design
- EN 1991-1-1 Eurocode 1: Actions on structures - Part 1-4: General actions - Wind loads
- EN 1991-1-4 Eurocode 1: Actions on structures - Part 1-4: General actions - Wind loads
- EN 1996-1-1 Eurocode 6: Design of masonry structures - Part 1-1: General rules for reinforced and unreinforced masonry structures
- EN 1996-2 Eurocode 6 - Design of masonry structures - Part 2: Design considerations, selection of materials and execution
- ISO 2602 Statistical interpretation of test results. Estimation of the mean. Confidence interval
- ČSN 01 0250 Statistical methods in industrial practice. General principles
- ISO 12491 Statistical methods for quality control of building materials and components
- ISO 10406-1 Fibre-reinforced polymer (FRP) reinforcement of concrete – Test methods – Part 1: FRP bars and grids
- EAD 260057-00-0303 Inorganic fibre grids for reinforcement of cement-, anhydrite- or resin-based screeds
- EAD 170008-00-00604 Bed joint reinforcement for structural use
- Technical instruction No. 02.06.01 Clamps, rods, ceiling hangers, brackets, support angles, reinforcement of load joints and lintels, https://koordinacesv.tzus.cz/technicke-navody

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

- National Technical Assessment No. 060-062433 of 18/09/2026 issued by the Authorized Body 204 with validity up to 30/09/2029

1.6. Information about previous product certification

This is the first certification of the product.

2. Result of the review of the documentation submitted by the manufacture

The documentation submitted by the applicant according to § 5, cl. 2 a) GD-163 as amended by GD-312, GD-215 and GD-119 was checked. The documentation is complying with requirements of GD.

3. Product assessment

3.1 Technical requirements

- Technical requirements for the product are specified in the National Technical Assessment No. 060-062433, issued by Technical and Test Institute for Construction Prague, SOE – branch Brno.

3.2 List of the Test Reports:

- Test report No. 060-061068, issued by TZÚS Praha, branch Brno, dated 12.12.2025
- Test report No. 060-062025, issued by TZÚS Praha, branch Brno, dated 17.6.2026
- Test report No. 060-062160, issued by TZÚS Praha, branch Brno, dated 2.7.2026
- Test report No. 060-062161, issued by TZÚS Praha, branch Brno, dated 2.7.2026
- Report No. 060-062409, issued by TZÚS Praha, branch Brno, dated 16.9.2026
- Report No. 060-062551, issued by TZÚS Praha, branch Brno, dated 16.9.2026

3.3 Evaluation of the results of the product tests and assessment

Tab. 1

Characteristic	Test report	Test method	Test result	Required (R) / declared value (D)	Assessment
Grid size, grid opening, coverage ratio	060-062025	EAD 260057-00-0303, Cl. 2.2.5, Cl. 2.2.6, Cl. 2.2.7	Grid size: 8,3 mm x 34,1 mm Grid opening: 5,8 mm x 30,4 mm Coverage ratio: 38 %	R: Tolerance of dimensions - 5 % / +10 % Coverage ratio max. 40 %	satisfactory
Tensile strength and elongation in warp direction of reinforcement - In the initial state - After alkali conditioning	060-062025	EAD 260057-00-0303, Cl. 2.2.9	$R_{50,i}$: 12,5 kN/50 mm ε_u: 1,3 %residual strength after alkalis: 101,1 %	R: $R_{50,i}$: min. 12 kN/50 mm ε_u: max. 2,0 % After alkali conditioning residual strength min. 80 % of $R_{50,i}$	satisfactory
Flexural strength in plane of composite lintels	060-062409	EN 846-9 EAD 170008-00-0604	Min. value 3,75 kN (for effective span 2400 mm, lintel width 190 mm)	R: Design load of composite lintel in bending according to NTA No. 060-062433, Table 2 *)	satisfactory
Shear strength of composite lintels	060-062409	EN 846-9 EAD 170008-00-0604	Min. value 4,00 kN (for effective span 2400 mm, lintel width 190 mm)	R: Design load of composite lintel in shear according to NTA No. 060-062433, Table 2 *)	satisfactory
Flexural strength out of masonry plane perpendicular to bed joint	060-062551	EN 1052-2 EAD 170008-00-0604	factor of flexural resistance 1,15 met	D: Increase factor of flexural resistance: 1,15 **)	satisfactory
Bond strength of reinforcement	060-061068	EN 846-2 EAD 170008-00-0604	F_{max}: 13370 N per area 18750 mm^2	R: Average tensile load in break min. 13000 N per area 25000 mm^2	satisfactory

*) Used design load can be recalculated for separate point forces or any different combination of load provided the same effect of this load as specified uniform continuous load.

**) Valid only for case the outer strand of reinforcement is positioned in maximum 25 mm from tensioned face of masonry. Only in this case flexural strength of reinforced masonry in vertical direction $f_{xk,vert,reinf}$ can be recalculated for design according to EN 1996-1-1 as 1,15 multiple of flexural strength of unreinforced masonry $f_{x,k,vert,un}$, manufactured from the same type of masonry unites and the same type of mortar, i.e. according to equation $f_{xk,vert,reinf} = 1,15 \times f_{x,k,vert,un}$. Condition is valid for clay (EN 771-1), calcium silicate (EN 771-2, concrete (EN 771-3) and/or AAC (EN 771-4) masonry units.

4. Factory Production Control assessment

4.1 Requirements for Factory Production Control:

General requirements of manufacturing control system are listed in Annex No. 3 to Government Decree No. 163/2002 Coll. as amended

4.2 Result of the assessment of the production control system:

- Technical documentation of the manufacturer contains description of the FPC of the product.
- Non conformities or omissions were not observed during the FPC audit.
- On the basis of submitted documents, we certify that the factory production control system at the manufacturer guarantees that the product placed to the market will comply with

the technical specification as contained in the National Technical Assessment No. 060-062433 issued by Technical and Test Institute for Construction Prague, SOE – branch Brno, dated September 18, 2026.

5. Conclusion

- The sample of product is in accordance to the requirements of the technical specification specify in the National Technical Assessment No. 060-062433 issued by Technical and Test Institute for Construction Prague, SOE – branch Brno
- Factory production control by the manufacturer complies with technical documentation and ensures that products put on the market meet the requirements laid down in the Government Decree No. 163/2002 Coll., as amended, and its effective function is ensured by the manufacturer
- The product meets the requirements of the Government Decree No. 163/2002 Coll., as amended.
- Findings and conclusions mentioned in this Report are valid providing the conditions under them FPC assessment was carried out remain unchanged (e.g. technical regulations, technical specifications, production technology, incoming raw and manufacturing equipment).
- In compliance with provision of § 5 Clause 5 of the Government Decree No. 163/2002 Coll., as amended, the technical documentation has to be complemented with annual Surveillance Reports.

6. Annexes

- Checklist – Initial inspection of FPC of the producer, from 08. 09. 2026, plant Kelteks d.o.o., Dr. Slavka Rozgaja 3, 47000 Karlovac, Croatia (copy, 5 pages)

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Accredited Test Laboratory, Authorised Body, Certification Body, Inspection Body

CHECKLIST
of Factory Production Control (FPC)

☒ **initial inspection** ☐ **surveillance**

Product:	Non-metallic bed joint reinforcement for structural use	Technical specification:	STO
Producer:	Kelteks d.o.o.	Date of audit:	08.09.2026
Plant:	Dr. Slavka Rozgaja 3, 47000 Karlovac, Croatia	Chief Assessor:	Marek Sopko
Order No.	Z060260026	Producer´s representative:	Anamarija Bončić

Audit purpose:	to assess conformity of FPC with audit criteria; to assess of the ability of the FPC to ensure that the products meet the relevant requirements				
Audit scope:	Plant, laboratories, storage spaces in relation to the product in question within the scope defined by this checklist				
Audit criteria:	requirements of CPR, technical specification, FPC documentation				
Audit process:	Time schedule	NB	Activity	Place of audit	Audit participants
	09:30 – 10:00	HA	Opening meeting	Office of producer´s representative	Producer´s representative
	10:00 - 13:00	HA	FPC audit	plant, laboratories, storage	Relevant staff
	13:00 – 13:30	HA	Closing meeting	Office of producer´s representative	Producer´s representative

Explanation: **C** (conformity) - shoda **R** (remark) - malá neshoda (odstranit do určeného termínu)
NC (non-conformity) - neshoda

No.	Requirement	C	NC	R
1	**Product**			
	Is the FPC related to more plants? 1) YES ☐ NO ☒			
	Has any new plant been included to FPC? YES ☐ NO ☒			
	Has the producer defined a scope of products which are related to the FPC? 2)	☒	☐	☐
	Has any new product been subjected to the FPC? YES ☐ NO ☒			
	If so, was the initial type testing been carried out?	☐	☐	☐
	Has the production or the technical specification changed since the last surveillance? YES ☐ NO ☒			
	If so, has the producer adapted the documentation to the production control?	☐	☐	☐

Findings, comments:
1) production in Karlovac, HR
2) Instruction for Factory production control, Cl. 2.0 Scope of application, dated 5.7.2024
TDS, Catalogue, web page Kelteks

The company has ISO 9001 certificate No. HR009933, valid till 27.03.2027
ISO 14001 certificate No. HR010988, valid till 18.12.2028

CHECKLIST of FPC

No.	Requirement	C	NC	R
2	**Organization**			
2.1	**Responsibilities and rights**			
	Are the responsibilities and rights of all staff defined in scope of FPC? 1)	☒	☐	☐
	Is the leading representative of FPC defined? Is he given the right to determine that the request are realised and kept? 2)	☒	☐	☐
2.2	**Re-examination of the FPC**			
	Is the re-examination of the FPC realised by the management once a year at least? 3)	☒	☐	☐
	Are any records of re-examination available? 4)	☒	☐	☐
3	**Control procedure**			
3.1	**Documentation of production control**			
	Is the related documentation of production control updated?	☒	☐	☐
3.2	**Control of documents**			
	Are the responsibilities for assessment, issuing, distribution, control of internal and external documents and data and processing, issuing and recording any changes described in the methods? 5)	☒	☐	☐
	Are all external documents necessary for realization of the product identified? 6)	☒	☐	☐
3.3	**External companies**			
	Are any parts of FPC performed by external companies? If so, does the producer have a list of them? 7)	☒	☐	☐
	Do you have system of control of their activities? 8)	☒	☐	☐

Findings, comments:

1) Job systematization, dated 1.3.2026
   Organization chart Kelteks, version 14
2) Anamarija Bončić
3) Operativni plan internih audita 2026.g.
4) Record of internal audits of each department for year 2025 are available
5) Upravljanje dokumentiranim informacijama, dated 04.01.2020, code name POS UDIN KEL
6) document OBR/QC-01- Popis važećih normi I standarda
7) list of approved suppliers 01/2025
8) Yearly Supplier evaluation form, code OBR SUPEV KEL v03

CHECKLIST of FPC

No.	Requirement	C	NC	R
3.4	**Incoming material**			
	Do you have any documentation of incoming material and its origin? 1)	☒	☐	☐
	Do you check content of dangerous substances in incoming material according to valid policy? 1)	☒	☐	☐
4	**Production**			
	Is there a standard operating procedure or work instruction for the process? 2)	☒	☐	☐
	Are all the manufacturing processes recorded in regular periods or continuously?	☒	☐	☐
	Are there any changes in procedure of identification and checking the materials during income, production and outcome? 3)	☒	☐	☐
	Does the producer keep the terms of manipulation and storage with finished product?	☒	☐	☐
	Is the maintenance of machinery carried out properly, regularly and is it documented? 4)	☒	☐	☐
	Are finished products properly marked in accordance with technical specification?	☒	☐	☐

Findings, comments:

1) TDS and SDS of each incoming material
   Quality control plan for raw material (fibres and coating), dated 4.9.2026
2) Production process, version 00, dated 28.10.2024
   for example- Production of carbon grid, dated 15.9.2022; each working process has own work instruction
3) no changes
4) maintenance procedure, dated 6.11.2024
   maintenance plan for each machine

CHECKLIST of FPC

No.	Requirement	C	NC	R
5	**Control tests**			
5.1	**Generally**			
	Are all the needed testing devices and equipment for prescribed control tests available or is it performed by sub-supplier? 1)	☒	☐	☐
	Are the personnel involved in the test laboratory sufficiently qualified and trained to perform and evaluate necessary tests? 2)	☒	☐	☐
5.2	**Test instrumentation**			
	Is necessary machinery and equipment at disposal for checking properties of finished products? Can it be identified?	☒	☐	☐
	Does the testing equipment provide consistent accuracy and function?	☒	☐	☐
	Is the testing equipment correctly maintained and calibrated on a continuous basis to ensure constant accuracy of the tests performed during factory production control and surveillance 3)	☒	☐	☐
	Is all the necessary, required and valid documentation at disposal at relevant places (directions, instructions)?	☒	☐	☐
5.3	**Training of laboratory personnel**			
	Does the producer train the laboratory personnel in the testing laboratory?	☒	☐	☐
	Are any records about the training available?	☒	☐	☐
5.4	**Intervals of tests**			
	Are all processes and procedures of control performed at regular intervals or continuously (number and type of tests)? 4)	☒	☐	☐
5.5	**Records**			
	Do you evaluate the tests which have been performed?	☒	☐	☐

Findings, comments:

1) all the tests are done in own laboratory
2) education plan for laboratory employee
3) document PO KK KEL v03- Register of measuring equipment
4) control test plan for meshes and grids are in accordance with EAD

CHECKLIST of FPC

No.	Requirement	C	NC	R
6	**Non conform products**			
	Does the producer record all defects and deviations to identify those products that are not in accordance with the product specification? 1)	☒	☐	☐
7	**Manipulation, packing and storage**			
	Does the producer keep the terms of manipulation and storage with finished product? 2)	☒	☐	☐
	Is the storage space suitable for such products?	☒	☐	☐
	Does the producer offer the product packed? Yes ☒ NO ☐			
8	**Training of personnel**			
	Are the personnel involved in the production sufficiently qualified and trained to operate and maintain the production equipment? 3)	☒	☐	☐
	Are any records about the training available?	☒	☐	☐
9	**CCZ mark**			
	Does the producer have CCZ mark and declaration of conformity?	☐	☐	☐
	Are there all needed information?	☐	☐	☐

Findings, comments:

1) procedure POS DOCK KEL, dated 26.7.2024
Evidence of non-conformities
2) Procedure packaging, dated 07/2023, Procedure storage, dated 6.2.2024
3) Internal education of production employees, code RU INT ED KEL, ver. 00

At the end of the audit / during the final meeting, the chief assessor / assessor acquainted the responsible representative of the manufacturer with the findings of the audit.

The manufacturer's representative has understood the audit findings, agrees and confirms his agreement with his signature.

AB 204		Manufacturer	
Date	08.09.2026	*Date*	08.09.2026
Name	Marek Sopko	*Name*	Anamarija Bončić
Signature		*Signature*	

The factory production control system is assessed as satisfactory if no requirement has been classified by the NC and if the occurrence of requirements classified as R is less than 20% of all findings.

C – conformity
R – minor non-conformity, problem must be solved within the specified period
NC – non-conformity, must be solved before a certification decision
If a significant non-conformity (NC) and a minor non-conformity (R) are detected, a non-conformity record must be prepared.