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Series: TECHNICAL APPROVALS

NATIONAL TECHNICAL ASSESSMENT ITB-KOT-2021/1919 edition 1

This National Technical Assessment is issued pursuant to the Regulation of the Minister of Infrastructure and Construction of 17 November 2016 on domestic technical assessments (consolidated text: Journal of Laws of 2016, item 1968) by the Building Research Institute in Warsaw, at the request of the companies:

ATLAS sp. z o.o.
91-222 Łódź, ul. Św. Teresy 105

The Technical Assessment ITB-KOT-2021/1919 edition 1 constitutes positive assessment of performance of the product listed below:

Set of products for external thermal insulation of building walls with the system **ATLAS ROKER**

Valid until:
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Assessment and European
Harmonisation
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The document of the National Technical Assessment ITB-KOT-2021/1919 edition 1 contains 23 pages, incl. 4 Attachments. The text of this document may be copied only in its entirety. Written agreement with the Building Research Institute is required in order to publish or disseminate parts of the text of the Technical Approval in any other form. Technical Assessment ITB-KOT-2021/1919 edition 1 refers to products covered by Technical Approval ITB AT-15-2930/2016.

1. PRODUCT TECHNICAL DESCRIPTION

The subject of this ITB National Technical Assessment is a set of products for external thermal insulation of building walls with the ATLAS ROKER system.

The manufacturer of the set of products is Atlas sp. z o.o., 91-222 Łódź, ul. św. Teresy 105. Products included in the set are manufactured in processing plants in Poland.

Set of products ATLAS ROKER includes factory – made products (system components) manufactured by the set producer and/or its suppliers.

This National Technical Assessment includes products types set by the producer and resulting from performance listed in point 3 or mix of the system components.

Set of products ATLAS ROKER includes factory – made thermal insulation material – mineral wool boards (MW), which is adhesively bonded to wall, adhesively bonded to wall with supplementary mechanical fixing or mechanically fixed to wall with supplementary adhesive bonding. The mode of thermal insulation fixing to substrate and products included in the system are listed in Table 1. Thermal insulation material is top coated (top finish) with multiple layers installed on site where one of the layers contains a reinforcing mesh. The top coat is applied directly on the thermal insulation material, with no air gap or intermediate layers.

The set includes also supplementary materials, which are not a subject of this National Technical Assessment and should be used according to a producer's instruction.

The identification properties of products included in ATLAS ROKER set are given in the Attachments C.

Table 1

	Set components	Consumption [kg/m ²]	Thickness [mm]
Method of material fixing to thermal insulation	<p>Adhesively bonded system: Mineral wool lamella boards fixed to the substrate with an adhesive mortar, bonded surface 100%</p> <p>Adhesively bonded system with supplementary mechanical fixing: Mineral wool lamella boards fixed to the substrate with an adhesive mortar with supplementary mechanical fixing, bonded surface 100%</p> <p>Mechanically fixed system with additional adhesive bonding Standard mineral wool boards, fixed to substrate with mechanical fixings, with additional adhesive bonding, surface of bonding not less than 40%</p>		
Thermal insulation material	<ul style="list-style-type: none"> • Mineral wool boards (MW) acc. to the standard PN-EN 13162+A1:2015 <ul style="list-style-type: none"> - Standard boards - Lamella boards <p>Surface dimensions: not more than 600 x 1200 mm Edges: straight, with no gaps Of minimum performance acc. to Attachment A</p>	- -	50 ÷ 300 20 ÷ 300

Adhesive mortars	<ul style="list-style-type: none"> • ATLAS STOPTER K-50 Dry mix to be mixed with water before use, weight ratio 100 : (20 ÷ 22) 	4.0 ÷ 5.0	-
	<ul style="list-style-type: none"> • ATLAS ROKER W Dry mix to be mixed with water before use, weight ratio 100 : (22 ÷ 24) 	4.0 ÷ 5.0	-
	<ul style="list-style-type: none"> • ATLAS ROKER U Dry mix to be mixed with water before use, weight ratio 100 : (22 ÷ 24) 	4.5 ÷ 5.5	-
	<ul style="list-style-type: none"> • ATLAS ROKER W-20 Dry mix to be mixed with water before use, weight ratio 100 : (20 ÷ 25) 	4.5 ÷ 5.5	-
Mechanical fixings	<ul style="list-style-type: none"> • Adhesively bonded system with supplementary mechanical fixing: fixings for thermal insulation, marketed in accordance to current regulations and intended use • Mechanically bonded system with supplementary adhesive bonding: fixings as listed in Attachment B, marketed in accordance to current regulations and intended use 	-	-
Fiberglass mesh	<ul style="list-style-type: none"> • ATLAS 150 Weave type: gauze Length: ≥ 50 m Performance: acc. to Attachment B • ATLAS 165 Weave type: gauze Length: ≥ 50 m Performance: acc. to Attachment B 	-	-
Adhesive mortars for reinforced layer	<ul style="list-style-type: none"> • ATLAS ROKER W-20 Dry mix to be mixed with water before use, weight ratio 100 : (20 ÷ 25) 	4.5 ÷ 5.5	4.0 ÷ 6.0
	<ul style="list-style-type: none"> • ATLAS STOPTER K-50 Dry mix to be mixed with water before use, weight ratio 100 : (20 ÷ 22) 	3.0 ÷ 3.5	2.0 ÷ 5.0
	<ul style="list-style-type: none"> • ATLAS ROKER U Dry mix to be mixed with water before use, weight ratio 100 : (22 ÷ 24) 	3.0 ÷ 6.5	4.0 ÷ 6.0
Priming masses	<ul style="list-style-type: none"> • ATLAS CERPLAST Priming agent for priming reinforced layers beneath rendering coats, delivered ready-mixed. 	cca. 0.30	-
	<ul style="list-style-type: none"> • ATLAS SILKAT ASX Priming agent for priming reinforced layers beneath rendering coats, delivered ready-mixed. 	cca. 0.30	-
	<ul style="list-style-type: none"> • ATLAS SILKON ANX Priming agent for priming reinforced layers beneath rendering coats, delivered ready-mixed. 	cca. 0.30	-
Rendering coats	<ul style="list-style-type: none"> • Mineral rendering coats: 		
	ATLAS CERMIT Dry mix to be mixed with water before use, weight ratio 100 : (18 ÷ 26) Texture "smooth", aggregate grain size: 1.5 mm Texture "spotted", aggregate grain size: 1.5; 2.0 and 3.0 mm Texture "rustic", aggregate grain size: 1.5 and 2.0 mm	2.5 ÷ 4.5	depending on aggregate grain size
	ATLAS CERMIT WN Dry mix to be mixed with water before use, weight ratio 100 : (21 ÷ 24) Texture "smooth", aggregate grain size: 1.0 mm	2.5 ÷ 3.0	min. 1.0 mm

	ATLAS CERMIT BA-M Dry mix to be mixed with water before use, weight ratio 100 : (24 ÷ 26) Texture "smooth", aggregate grain size: 1.5 mm	3.0	min. 1.5 mm
	<ul style="list-style-type: none"> • Silicone rendering coats: 		
	SILICONE RENDER ATLAS (TYNK SILIKONOWY ATLAS) Delivered ready-mixed. Texture "smooth", aggregate grain size: 1.5 mm Texture "spotted", aggregate grain size: 1.5 and 2.0 mm Texture "rustic", aggregate grain size: 2.0 mm	2.2 ÷ 3.5	depending on aggregate grain size
	SILICONE-SILOXANE RENDER ATLAS (TYNK SILIKONOWO-SILOKSANOWY ATLAS) Delivered ready-mixed. Texture "smooth", aggregate grain size: 1.5 mm Texture "spotted", aggregate grain size: 1.5 and 2.0 mm Texture "rustic", aggregate grain size: 2.0 mm	2.2 ÷ 3.5	depending on aggregate grain size
	ATLAS SILKON BA Delivered ready-mixed. Texture "smooth", aggregate grain size: 1.5 mm Texture "spotted", aggregate grain size: 1.5 and 2.0 mm Texture "rustic", aggregate grain size: 1.5 and 2.0 mm	2.2 ÷ 3.5	depending on aggregate grain size
	<ul style="list-style-type: none"> • Silicate rendering coats: 		
	SILICATE RENDER ATLAS (TYNK SILIKATOWY ATLAS) Delivered ready-mixed. Texture "smooth", aggregate grain size: 1.5 mm Texture "spotted", aggregate grain size: 1.5 and 2.0 mm Texture "rustic", aggregate grain size: 2.0 mm	2.2 ÷ 3.5	depending on aggregate grain size
	HYDRPHILIC RENDER ATLAS (TYNK HYDROFILOWY ATLAS) Delivered ready-mixed. Texture "smooth", aggregate grain size: 1.5 mm Texture "spotted", aggregate grain size: 1.5 and 2.0 mm Texture "rustic", aggregate grain size: 2.0 mm	2.2 ÷ 3.5	depending on aggregate grain size
	<ul style="list-style-type: none"> • Silicone-silicate rendering coats: 		
	SILICONE-SILICATE RENDER ATLAS (TYNK SILIKONOWO-SILOKSANOWY ATLAS) Delivered ready-mixed. Texture "smooth", aggregate grain size: 1.5 mm Texture "spotted", aggregate grain size: 1.5 and 2.0 mm Texture "rustic", aggregate grain size: 2.0 mm	2.2 ÷ 3.5	depending on aggregate grain size
	<ul style="list-style-type: none"> • Primer beneath silicate paint ATLAS (optional) Priming agent for priming mineral rendering coats beneath paints, delivered ready-to-use. 		
	<ul style="list-style-type: none"> • Primer beneath silicone paint ATLAS (optional) Priming agent for priming mineral rendering coats beneath paints, delivered ready-to-use. 		
	<ul style="list-style-type: none"> • Façade silicate paint ATLAS SALTA S (optional) used with mineral, silicone, silicate and silicone-silicate rendering coats, delivered ready-mixed. 		
	<ul style="list-style-type: none"> • Façade polysilicate paint ATLAS (optional) used with mineral, silicone, silicate and silicone-silicate rendering coats, delivered ready-mixed. 		
	<ul style="list-style-type: none"> • Façade hydrophilic paint ATLAS (optional) used with mineral, silicone, silicate and silicone-silicate rendering coats, delivered ready-mixed. 		
Rendering coats			
Priming agents			
Paint coatings (paints)			

	<ul style="list-style-type: none"> • Façade silicone paint ATLAS SALTA (optional) used with mineral, acrylic, silicone, silicate and silicone-silicate rendering coats, delivered ready-mixed. 	0.12 ÷ 0.30 (l/m ²)	-
Paint coatings (paints)	<ul style="list-style-type: none"> • Façade silicone paint ATLAS (optional) used with mineral, acrylic, silicone, silicate and silicone-silicate rendering coats, delivered ready-mixed. 	0.12 ÷ 0.30 (l/m ²)	-
	<ul style="list-style-type: none"> • Façade silicone paint ATLAS SALTA N (optional) used with mineral, acrylic, silicone, silicate and silicone-silicate rendering coats, delivered ready-mixed. 	0.12 ÷ 0.30 (l/m ²)	-
	<ul style="list-style-type: none"> • Façade nano-silicone paint ATLAS (optional) used with mineral, acrylic, silicone, silicate and silicone-silicate rendering coats, delivered ready-mixed. 	0.12 ÷ 0.30 (l/m ²)	-
	<ul style="list-style-type: none"> • Façade silicone-siloxane paint ATLAS (optional) used with mineral, acrylic, silicone, silicate and silicone-silicate rendering coats, delivered ready-mixed. 	0.12 ÷ 0.30 (l/m ²)	-
	<ul style="list-style-type: none"> • Silicone impregnating agent ATLAS BEJCA (optional) used with mineral rendering coats, delivered ready-mixed. 	0.20 ÷ 0.25 (l/m ²)	-

2. INTENDED PRODUCT USE

2.1 Determination of intended use

The ATLAS ROKER set of products is intended for thermal insulation of external walls of newly erected buildings and buildings already in use (refurbishment).

2.2. Range and conditions of use

ATLAS ROKER thermal insulation sets are installed on vertical walls. They can also be applied on horizontal or inclined facades if not exposed to atmospheric conditions.

Set of products, covered by this National Technical Assessment, is designed for use on substrates made of masonry elements (bricks, blocks, stone, etc.) or concrete (installed on-site or in form of prefabricates), with or without plasters.

Thermal insulation sets are made of non-loadbearing building elements and do not affect stability of walls which they are fixed to. But, they can affect their durability by improving protection against atmospheric conditions. They are not designed to provide airtightness of a building structure.

Application of thermal insulation consists in fixing a layered set to existing walls, from the outside. The set consists of mineral wool board as a thermal insulation material, reinforced layer (base coat) made of an adhesive mortar and reinforcing mesh, priming mass, rendering coat and optional façade paint, as listed in Table 1.

Mineral wool boards of non-arranged structure of fibres (standard façade boards) should be fixed to substrate with mechanical fixings and adhesive mortar (mechanically fixed system with additional adhesive bonding). Fixings should be installed through thermal insulation and anchored in wall in depth given in the insulation design, depending on the fixing and substrate type.

Mineral wool boards of arranged structure of fibres (lamella boards) can be fixed to substrate with adhesive mortar (adhesively bonded system), on condition that the substrate tear resistance is not lower than 0.08 MPa, or with adhesive and mechanical fixings. Surface of bonding should be 100% of a board surface.

The use of set covered by this National Technical Assessment should follow technical designs prepared for particular objects. The design should include:

- Polish standards (incl. PN-EN ISO 13788:2013) and building regulations, in particular regulation of the Minister of Infrastructure of 12 April 2002 on technical conditions for buildings and their location (Journal of Laws of 2019, item 1065 with further changes),
- decisions of this National Technical Assessment,
- ITB instruction no. 447/2009,
- ITB Technical Conditions of Execution and Acceptance of Building Projects: Part C, Book 8, Warsaw 2020,

and determine at least:

- mode of substrate preparation,
- type and thickness of mineral wool boards,
- type, number and distribution of mechanical fixings, if used,
- mode of processing of particular façade elements (window and door reveals, balconies, plinths, expansion joints and other).

ATLAS ROKER thermal insulation sets applied on non-flammable substrates (minimum reaction to fire class A2-s3, d0 acc. to PN-EN 13501-1:2019) have been classified according to norm PN-B-02867:2013 in regard to fire spread as fire retardant, for mineral wool boards 20 ÷ 300 mm thick.

Thermal insulation of buildings with ATLAS ROKER system should be executed by professional entrepreneurs, take into account guidance of the manufacturer. Ambient temperature during application and setting of products included in ATLAS ROKER set should be from +5 up to +30°C. During installation of thermal insulation systems intervals between application of particular layers should be followed according to producer's manual.

3. PRODUCT PERFORMANCES AND METHODS USED FOR THEIR EVALUATION

3.1 Performances of thermal insulation sets ATLAS ROKER

Performances of insulation sets ATLAS ROKER are given in tables 2 ÷ 5.

Table 2. Thermal insulation sets ATLAS ROKER.

Item	Essential characteristics	Performance	Method of assessment
1	2	3	4
1	Water absorption (capillary action) after 1 hour, kg/m ² : <ul style="list-style-type: none"> reinforced layer top coat 	<ul style="list-style-type: none"> < 0.10 < 0.10 	EAD 040083-00-0404
2	Water absorption (capillary action) after 24 hours, kg/m ² : <ul style="list-style-type: none"> reinforced layer top coat with ATLAS CERMIT render top coat with ATLAS CERMIT BA-M render top coat with ATLAS CERMIT WN render top coat with ATLAS silicate render top coat with ATLAS hydrophilic render top coat with ATLAS SILKON BA render top coat with ATLAS silicone render top coat with ATLAS silicone-siloxane render top coat with ATLAS silicone -silicate render 	<ul style="list-style-type: none"> < 0.20 < 0.45 < 0.20 < 0.20 < 0.60 < 0.60 < 0.25 < 0.20 < 0.20 < 0.40 	
3	Adhesion of the top coat to mineral wool, MPa, in laboratory conditions: <ul style="list-style-type: none"> standard façade boards lamella boards 	<ul style="list-style-type: none"> < 0.08 (damage in MW) ≥ 0.08 	
4	Adhesion of the top coat to mineral wool, MPa, after ageing: <ul style="list-style-type: none"> standard façade boards lamella boards 	<ul style="list-style-type: none"> < 0.08 (damage in MW) ≥ 0.08 	
5	Adhesion of the top coat to mineral wool, MPa, after frost resistance cycles: <ul style="list-style-type: none"> standard façade boards lamella boards 	<ul style="list-style-type: none"> < 0.08 (damage in MW) ≥ 0.08 	
6	Relative diffusion resistance (with paint or without paint), m:	≤ 0.60	
7	Frost resistance of the top coat	No damage: cracking, scores, debonding and blistering	
8	Impact resistance, after ageing	acc. to Table 3	
9	Thermal insulation (thermal resistance and heat transfer coefficient)	acc. to Attachment D	
10	Adhesive mortar adhesion to concrete and thermal insulation material	acc. to Table 4	
11	Resistance to wind loads	acc. to Table 5	
12*	Classification in the extent of fire spread through external walls when exposed to fire from the façade side	Fire retardant	PN-B-02867:2013

*Fire classification refers to thermal insulation sets used on non-flammable substrates (at least reaction to fire class A2-s3,d0 acc. to PN-EN 13501-1:2010)

Table 3. Thermal sets impact resistance

Item	Impact resistance, after ageing, category		
	Thermal insulation set with rendering coat	Mineral wool	
		<i>Lamella boards</i>	<i>Standard façade boards</i>
1	2	3	4
1	Mineral render ATLAS CERMIT	III	I
2	Mineral render ATLAS CERMIT WN	III	III
3	Mineral render ATLAS CERMIT BA-M	III	III
4	Silicate render ATLAS	II	I
5	Hydrophilic render ATLAS	II	I
6	Silicone render SILKON BA	III	III
7	Silicone render ATLAS	III	III
8	Silicone – siloxane render ATLAS	III	III
9	Silicone – silicate render ATLAS	I	I

Table 4. Adhesion of adhesive mortars to concrete and thermal insulation material (MW)

Item	Properties	Performance				Method of assessment
		ATLAS STOPTER K-50	ATLAS ROKER W-20	ATLAS ROKER U	ATLAS ROKER W	
1	2	3	4	5	6	7
1	Adhesion of mortar to concrete, MPa: - in air-dry condition - after 48 h of immersion in water and 2 h of drying - after 48 h of immersion in water and 7 days of drying		≥ 0.25 ≥ 0.08			EAD 040083-00-0404
2	Adhesion of mortar to mineral wool, MPa: - standard façade boards - lamella boards		< 0.08 (damage in MW) ≥ 0.08			

Table 5. Resistance to wind loads .

Refers to fixings acc. to Attachment B, fixed to boards surfaces				
Plate diameter		60 mm		
Mineral wool, standard façade boards performance	Tensile strength perpendicular to faces (TR)			
Destructive force, kN ATLAS 150	Fixings not located on boards joints (fixings pull test), dry conditions	R_{panel}	Minimum: Average:	0.66 0.68
	Fixings not located on boards joints (fixings pull test), wet conditions	R_{panel}	Minimum: Average:	0.40 0.42
	Fixings located on boards joints (static impact test through foam block; scheme 2b acc. to EAD 040083-00-0404)	R_{joint}	Minimum: Average:	0.45 0.48

4. PACKAGING, TRANSPORTATION, STORAGE AND PRODUCT LABELLING

Products included in the set for installation of external thermal insulation of walls ATLAS ROKER can be transported by any means of transport, in a way protecting packages against mechanical damage, according to producers instruction.

Products included in the set should be stored in dry aired rooms, away from heaters, in a way ensuring safety of storage and keeping constant technical performance.

Product labelling should conform to the regulation of the Minister of Infrastructure and Construction of 17 November 2016 on the system of declaration of building materials performance and system of their labelling with a construction mark (Journal of Laws of 2016, item 1966 with further changes).

The labelling with a construction mark should be assisted with the following data:

- two last numbers of a year, when the construction mark was placed on the construction product for the first time,
- name and address of the manufacturer or identification mark allowing unequivocal determination of the manufacturer's name and address,
- name and type marking of the construction product,
- number and year of publication of the National Technical Assessment, according to which the performance is declared (ITB-KOT-2021/1919 edition 1),
- number of the National Declaration of Performance,
- level and class of the declared performance,
- name of the assessment body, which participated in assessment and verification of constancy

of construction product performance,

- address of web site of the manufacturer, if national declaration of performance is published there.

Together with the national declaration of performance one should deliver or publish in particular cases a safety data sheet and/or information on hazardous substances present in the construction product, which are listed in the articles 31 or 33 of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency.

Moreover, labelling of the construction product forming a hazardous mixture according to REACH regulation, should conform to Regulation (EC) No 1616/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

5. ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

5.1. National system of assessment and verification of constancy of performance

According to the Regulation of the Minister of Infrastructure and Construction of 17 November 2016 on the mode of declaration of construction materials performance and mode of their labelling with a construction mark (Journal of Laws of 2016, item 1966 with further changes) the 2+ system of assessment and verification of constancy of performance is in use.

5.2. Test of type

Performance, assessed in point 3, form the test of product type until change of raw materials, components, production lines or processing plant occurs.

5.3. Factory production control

The manufacturer should provide implemented system of production control at a processing plant. Any elements of this system, requirements and decisions, accepted by the manufacturer, should be systematically documented in a form of rules and procedures and should include test reports. Factory production control should be adjusted to the technology of production and should allow continuation of the declared performance of the product in its mass production.

Factory control of production includes specification and check of raw materials and components, control and testing of the manufacturing process and check-up (acc. to point 5.4), led by the manufacturer in accordance to a set plan of tests and according to rules and procedures set in the factory production control documentation.

The results of the factory production control should be systematically registered. The records should confirm that products meet the criteria of assessment and verification of constancy of performance. Particular products and products batches and production details related to them must be available for complete identification and recreation.

5.4. Check-up

5.4.1 Program of check-up. The program includes:

- a) ongoing testing,
- b) periodic testing.

5.4.2. Ongoing testing. Ongoing testing include check of:

- a) adhesive mortars, rendering mortars and masses and façade paints with regard to:
 - external appearance,
 - volume density or bulk density,
- b) fiberglass mesh with regard to:
 - mesh size,
 - mesh width,
 - mass per unit area.

5.4.3. Periodic testing. Periodic testing include check of:

- a) adhesive mortars and mortars for application of reinforced layers with regard to:
 - ash content,
 - adhesion to concrete (applies to adhesive mortars) and to mineral wool,
- b) rendering masses and mortars with regard to:
 - dry matter content (applies to rendering mass),
 - ash content,
- c) priming masses for renders, façade paints with regard to:
 - dry matter content,
 - ash content,
- d) fiberglass meshes with regard to:
 - ash content,
 - breaking force and relative elongation, along warp and weft,
- e) thermal insulation systems with regard to the degree of fire spreading through walls when exposed

to fire from the façade side.

5.5. Frequency of tests

On-going tests should be conducted in accordance with a test plan, but not less frequently than for each batch of products. The product batch size should be specified in the factory production control documentation.

Periodic tests should be carried out at least once every 3 years.

6. INSTRUCTION

6.1. National Technical Assessment ITB-KOT-2021/1919 edition 1 is a positive assessment of the main performances of the set for application of thermal insulation system ATLAS ROKER which, according to the intended use resulting from the Assessment decision, influence fulfilment of basic requirements for construction objects, where the products is to be used.

6.2. National Technical Assessment ITB-KOT-2021/1919 edition 1 is not a document authorising labelling the product with a construction mark.

According to Act on construction materials of 16 April 2004 with further changes (Journal of Laws of 2020, item 215 with further changes) set of products, which this National Technical Assessment refers to, can be marketed on the domestic market if the manufacturer performs assessment and verification of constancy of performance, issues national declaration of performance acc. to. National Technical Assessment ITB-KOT-2021/1919 edition 1 and labelled the products with a construction mark according to current regulations.

6.3. National Technical Assessment ITB-KOT-2021/1919 edition 1 does not affect rights resulting from regulations on industrial property protection, in particular the Act of 30 June 2000 – Industrial property act (Journal of Laws of 2020, item 286 with further changes). Providing these rights is the responsibility of the users of this ITB National Technical Assessment.

6.4 By issuing this National Technical Assessment ITB does not bear responsibility for any violation of exclusive or acquired rights.

6.5. National Technical Assessment does not release the manufacturer from responsibility for proper products quality, and installers from responsibility for their appropriate application.

6.6. Validity of the National Technical Assessment can be extended for further periods, not longer than 5 years.

7. LIST OF DOCUMENTS PROCESSED IN THE ASSESSMENT

7.1. Reports, test reports, assessments, classifications.

1. 01141/20/R126NZP. Classification report with regard to fire spread according to PN-B-

- 02867:2013. Zakład Badań Ogniwych ITB, Warsaw 2021.
2. Reports from periodic and on-going check-ups acc. to AT-15-2930/2016. Atlas Sp. z o.o., Łódź 2020.
 3. LM05-01141/15/R39NM, LM07-01141/15/R39NM, LM09-01141/15/R39NM, LM11-01141/15/R39NM. Report of laboratory testing of products included in the thermal insulation system ATLAS ROKER. Zakład Inżynierii Materiałów Budowlanych ITB, Warsaw 2016.
 4. LZM06-01141/15/R39NM, LZM08-01141/15/R39NM. Tests of ATLAS ROKER thermal insulation sets. Zakład Inżynierii Materiałów Budowlanych ITB, Warsaw 2016.
 5. Expert opinion on the use of new reinforcing meshes in ATLAS ROKER set. Zakład Inżynierii Materiałów Budowlanych ITB, Warsaw 2016.
 6. 0141/15/R42OSK. Opinion on products for application of thermal insulation of external walls with system ATLAS ROKER with a new adhesive mortar ATLAS STOPTER K-50. Zakład Konstrukcji Budowlanych I Budownictwa na Terenach Górniczych OSK ITB. Katowice 2015.
 7. 01141/14/R23NM. Technical assessment of ATLAS Roker thermal insulation system. Zakład Inżynierii Materiałów Budowlanych ITB, Warsaw 2014.
 8. Opinion on extension of use of insulation materials included in ATLAS ROKER thermal insulation system. Zakład Inżynierii Materiałów Budowlanych ITB, Warsaw 2012.
 9. NM-02824R:02/RZ/12. Expert opinion on possibility of including adhesive mortar ATLAS ROCKER W-10 in the revised AT-15-2930 and mineral wools in the ATLAS ROKER G thermal insulation system.
 10. NT-656/A/05. Laboratory tests of sets of products for application of ATLAS thermal insulation systems (based on mineral wool as thermal insulation material) – for the purposes of European Technical Approval. Zakład Nowych Technik Wykończeniowych ITB, Warsaw 2005.
 11. NM-3/02225/A/09. Laboratory tests of Atlas thermal insulation system with the use of fiberglass INTERKOBO / ST 112-100/7 – for the purposes of technical approval. Zakład Materiałów Budowlanych ITB, Warsaw 2009.
 12. NM-3/02357/A/09. Laboratory tests of Atlas thermal insulation system with the use of façade paint ATLAS FASTEL NOVA – for the purposes of technical approval. Zakład Materiałów Budowlanych ITB, Warsaw 2009.
 13. Test report MB/13/09 Laboratorium Badawcze Materiałów Budowlanych i Fizyki Budowli Politechniki Łódzkiej. Łódź 2009.
 14. Test report of ATLAS ROKER thermal insulation sets. Katedra Fizyki Budowli I Materiałów Budowlanych. Politechnika Łódzka. Łódź 2004.

7.2. Norms and related documents.

PN-B-02867:2013	<i>Fire protection of buildings. Method of testing of the range of fire spread through external walls from the outside and classification.</i>
PN-EN 823:2013	<i>Thermal insulating products for building applications. Determination of thickness.</i>
PN-EN 1607:2013	<i>Thermal insulating products for building applications. Determination of tensile strength perpendicular to faces.</i>
PN-EN 1609:2013	<i>Thermal insulating products for building applications. Determination of short term water absorption by partial immersion.</i>
PN-EN 12086:2013	<i>Thermal insulating products for building applications. Determination of water vapour transmission properties.</i>
PN-EN 12087:2013	<i>Thermal insulating products for building applications. Determination of long term water absorption by immersion.</i>
PN-EN 13162+A1:2013	<i>Thermal insulating products for buildings. Factory made mineral wool (MW). Specification.</i>
PN-EN 13501-1:2019	<i>Fire classification of construction products and building elements. Part 1: Classification using data from reaction to fire test.</i>
EAD 040083-00-0404	<i>External thermal insulation composite systems (ETICS) with renderings.</i>
EAD 330196-01-0604	<i>Plastic anchors made of virgin or non-virgin material for fixing of ETICS with rendering.</i>
ITB instruction no. 447/2009	<i>External thermal insulation composite system ETICS. Rules of design and application.</i>
AT-15-2930/2016	<i>Set of products for application of thermal insulation of building outside walls with ATLAS ROKER system.</i>
	<i>Technical conditions for performing and accepting construction projects ITB: Part C, Book 8, Warsaw 2020.</i>

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Attachment A

Table A1. Properties of mineral wool boards (MW)

Factory-made mineral wool boards (MW) according to norm PN-EN 13162+A1:2015		
Description, properties and assessment methods	MW standard façade boards	MW lamella boards
Reaction to fire PN-EN 13501-1:2019	Class A1	
Thermal resistance (m ² K)/W	Set at CE marking	
Thickness PN-EN 823:2013	MW-EN 13162 – T4 MW-EN 13162 – T5	
Length PN-EN 822:2013	EPS-EN 13163 – L2	
Dimensions stability in set conditions of temperature and humidity PN-EN 1604:2013	MW-EN 13162 – DS(70,90)	
Short term water absorption by partial immersion PN-EN 1609:2013	MW-EN 13162 - WS	
Long term water absorption by partial immersion PN-EN 1607:2013	MW-EN 13162 – WL(P)	
Water vapour diffusive resistance coefficient PN-EN 12086:2013	1	
Tensile strength perpendicular to faces, in dry conditions PN-EN 1607:2013	MW-EN 13162 – TR10 MW-EN 13162 – TR15 MW-EN 13162 – TR20	MW-EN 13162 – TR80 MW-EN 13162 – TR100

Attachment B

Table B1. Properties of fiberglass mesh ATLAS 150 and ATLAS 165

Item	Properties	Requirements		Test methods
		ATLAS 150	ATLAS 165	
1	2	3	4	5
1	Width, m	1.0 ± 1 %	1.0 ± 1 %	EAD 040083-00-0404
2	Clear mesh size, mm	(4.5 X 5.0) ± 0.5	(3.7 X 3.9) ± 0.5	
3	Mass per unit area, g/m ²	150 (- 3 / + 10 %)	160 (- 3 / + 10 %)	
4	Ash content at 625 °C, %	80.1 ± 5%	84.3 ± 5%	
5	Breaking force along warp and weft, N/mm, tested on samples stored for 28 days in: - laboratory conditions - alkaline solution (1g NaOH + 4g KOH+ 0.5g Ca(OH) ₂ / 1 dm ³)	≥ 35	≥ 35	
		≥ 20 ¹⁾	≥ 20	
6	Relative elongation along warp and weft, at breaking force, %, tested on samples stored for 28 days in: - laboratory conditions - alkaline solution (1g NaOH + 4g KOH+ 0.5g Ca(OH) / 1 dm ³)	≤ 4.5	≤ 4.5	
		≤ 3.0	≤ 3.5	

¹⁾ minimum 50 % of initial strength (sample stored under laboratory conditions) and not less than 20 N/mm

Table B2. Properties of fixings

Item	Properties	Requirements	Test methods
1	2	3	4
1	Plate diameter d, mm	≥ 60	EAD 330196-01-0604
2	Load destroying plate, kN	≥ 1.64	
3	Plate stiffness, kN/mm	≥ 0.40	
4	Pull-out load capacity	acc. to AT, KOT or ETA	
Fixings can be used with additional pressure plates			

Attachment C.

Table C1. Identification properties of adhesive mortars ATLAS ROKER W and ATLAS ROKER W-20

Item	Properties	Requirements		Test methods
		ATLAS ROKER W	ATLAS ROKER W-20	
1	2	3	4	5
1	External appearance	dry mix, homogeneous, without lumps, homogeneous mass without delamination and lumps is created after processing with water		EAD 040083-00-0404
2	Bulk density, g/cm ³	1.56 ± 10 %	1.35 ± 10 %	
3	Ash content at 450°C, %	97.6 ÷ 98.6	96.2 ÷ 97.0	
4	Resistance to the shrinkage crack formation	no cracks in a layer of thickness up to 8 mm		1)
1) metal mould of wedge shape (wedge length 160 mm, height 8 mm) is filled with mortar; the test result consists in visual evaluation of cracks after 14 days keep in laboratory conditions				

Table C2. Identification properties of adhesive mortars ATLAS ROKER STOPTER K-50 and ATLAS ROKER U

Item	Properties	Requirements		Test methods
		ATLAS STOPTER K-50	ATLAS ROKER U	
1	2	3	4	5
1	External appearance	dry mix, homogeneous, without lumps, homogeneous mass without delamination and lumps is created after processing with water		EAD 040083-00-0404
2	Bulk density, g/cm ³	1.40 ± 10 %	1.43 ± 10 %	
3	Ash content at 450°C, %	98.3 ÷ 98.9	97.2 ÷ 98.3	
4	Resistance to the shrinkage crack formation	no cracks in a layer of thickness up to 8 mm		1)
1) metal mould of wedge shape (wedge length 160 mm, height 8 mm) is filled with mortar; the test result consists in visual evaluation of cracks after 14 days keep in laboratory conditions				

Table C3. Identification properties of priming masses ATLAS CERPLAST, ATLAS SILKAT ASX and ATLAS SILKON ANX

Item	Properties	Requirements			Test methods
		ATLAS CERPLAST	ATLAS SILKAT ASX	ATLAS SILKON ANX	
1	2	3	4	5	6
1	Appearance	homogeneous mass, without lumps and impurity			visual evaluation
2	Volume density, g/cm ³	1.6 ± 10 %	1.45 ± 10 %	1.5 ± 10 %	EAD 040083-00-0404
3	Dry matter content, %	67.5 ± 3.4	61.5 ± 3.1	68.6 ± 3.4	
4	Ash content, %: - at 450°C at 900°C	75.6 ÷ 83.6 61.7 ÷ 68.3	77.9 ÷ 87.5 65.1 ÷ 71.9	78.4 ÷ 86.6 63.5 ÷ 70.3	

Table C4. Identification properties of mineral rendering mortar ATLAS CERMIT

Item	Properties	Requirements	Test methods
		ATLAS CERMIT	
1	2	3	4
1	Appearance	dry mix, homogeneous, without lumps, homogeneous mass without delamination and lumps is created after processing with water	Visual evaluation
2	Bulk density, g/cm ³	1.75 ± 10 %	EAD 040083-00-0404
3	Ash content at 450°C, %	98.5 ÷ 99.2	
4	Resistance to the shrinkage crack formation	no cracks in a layer of thickness even to diameter of largest grain	acc. to Table C1

Table C5. Identification properties of mineral rendering mortar ATLAS CERMIT WN

Item	Properties	Requirements	Test methods
		ATLAS CERMIT WN	
1	2	3	4
1	Appearance	dry mix, homogeneous, without lumps, homogeneous mass without delamination and lumps is created after processing with water	Visual evaluation
2	Bulk density, g/cm ³	1.50 ± 10 %	EAD 040083-00-0404
3	Ash content at 450°C, %	99.2 ÷ 99.9	
4	Resistance to the shrinkage crack formation	no cracks in a layer of thickness even to diameter of largest grain	acc. to Table C1

Table C6. Identification properties of mineral rendering mortar ATLAS CERMIT BA-M

Item	Properties	Requirements	Test methods
		ATLAS CERMIT BA-M	
1	2	3	4
1	Appearance	dry mix, homogeneous, without lumps, homogeneous mass without delamination and lumps is created after processing with water	Visual evaluation
2	Bulk density, g/cm ³	1.53 ± 10 %	EAD 040083-00-0404
3	Ash content at 450°C, %	97.06 ± 4.5	
4	Resistance to the shrinkage crack formation	no cracks in a layer of thickness even to diameter of largest grain	acc. to Table C1

Table C7. Identification properties of silicate rendering masses Silicate render ATLAS and Hydrophilic render ATLAS

Item	Properties	Requirements		Test methods
		Silicate render ATLAS	Hydrophilic render ATLAS	
1	2	3	4	5
1	Appearance	homogeneous mass, without lumps and impurity	homogeneous mass, without lumps and impurity	visual evaluation
2	Volume density, g/cm ³	1.85 ± 10 %	1.85 ± 10 %	EAD 040083-00-0404
3	Dry matter content, %	81.4 ± 4.1	81.4 ± 4.1	
4	Ash content, %: - at 450°C - at 900°C	87.8 ÷ 99.0 56.5 ÷ 62.3	87.8 ÷ 99.0 56.5 ÷ 62.3	
5	Resistance to the shrinkage crack formation	no cracks in a layer of thickness even to diameter of largest grain	no cracks in a layer of thickness even to diameter of largest grain	acc. to Table C1

Table C8. Identification properties of silicone rendering masses Silicone render ATLAS

Item	Properties	Requirements		Test methods
		Silicone render ATLAS		
1	2	3		4
1	Appearance	homogeneous mass, without lumps and impurity		Visual evaluation
2	Volume density, g/cm ³	1.90 ± 10 %		EAD 040083-00-0404
3	Dry matter content, %	83.4 ± 4.2		
4	Ash content, %: - at 450°C - at 900°C	86.3 ÷ 95.3 49.2 ÷ 54.4		
5	Resistance to the shrinkage crack formation	no cracks in a layer of thickness even to diameter of largest grain		acc. to Table C1

Table C9. Identification properties of silicone rendering masses Silicone-siloxane render ATLAS

Item	Properties	Requirements		Test methods
		Silicone-siloxane render ATLAS		
1	2	3		4
1	Appearance	homogeneous mass, without lumps and impurity		Visual evaluation
2	Volume density, g/cm ³	1.90 ± 10 %		EAD 040083-00-0404
3	Dry matter content, %	83.4 ± 4.2		

4	Ash content, %: - at 450°C - at 900°C	86.3 ÷ 95.3 49.2 ÷ 54.4	
5	Resistance to the shrinkage crack formation	no cracks in a layer of thickness even to diameter of largest grain	acc. to Table C1

Table C10. Identification properties of silicone rendering masses Silicone render SILKON BA

Item	Properties	Requirements	Test methods
		Silicone render SILKON BA	
1	2	3	4
1	Appearance	homogeneous mass, without lumps and impurity	Visual evaluation
2	Volume density, g/cm ³	1.88 ± 10 %	EAD 040083-00-0404
3	Dry matter content, %	82.9 ± 4.1	
4	Ash content, %: - at 450°C - at 900°C	81.4 ÷ 90.0 50.5 ÷ 56.1	
5	Resistance to the shrinkage crack formation	no cracks in a layer of thickness even to diameter of largest grain	acc. to Table C1

Table C11. Identification properties of silicone-silicate rendering mass Silicone-silicate render ATLAS

Item	Properties	Requirements	Test methods
		Acrylic render ATLAS	
1	2	3	4
1	Appearance	homogeneous mass, without lumps and impurity	Visual evaluation
2	Volume density, g/cm ³	1.88 ± 10 %	EAD 040083-00-0404
3	Dry matter content, %	82.9 ± 4.1	
4	Ash content, %: - at 450°C - at 900°C	81.4 ÷ 90.0 50.5 ÷ 56.1	

Table C12. Identification properties of priming agents Primer beneath silicate paint ATLAS and Primer beneath silicone paint ATLAS

Item	Properties	Requirements		Test methods
		Primer beneath silicate paint ATLAS	Primer beneath silicone paint ATLAS	
1	2	3	5	6
1	Appearance	homogeneous liquid, without lumps and impurity		visual evaluation
2	Volume density, g/cm ³	1.0 ± 10 %	1.0 ± 10 %	EAD 040083-00-0404
3	Dry matter content, %	13.1 ± 0.6	8.6 ± 0.4	
4	Ash content, %: - at 450°C - at 900°C	47.2 ÷ 52.2 47.1 ÷ 52.1	7.21 ÷ 8.01 6.21 ÷ 6.81	

Table C13. Identification properties of impregnating agent ATLAS BEJCA

Item	Properties	Requirements	Test methods
		ATLAS BEJCA	
1	2	3	4
1	Appearance	homogeneous liquid, without lumps and impurity	Visual evaluation
2	Volume density, g/cm ³	1.02 ± 10 %	EAD 040083-00-0404
3	Dry matter content, %	22.53 ± 1.1	
4	Ash content, %: - at 450°C - at 900°C	11.88 ÷ 13.08 11.19 ÷ 12.39	

Table C14. Identification properties of paints silicate paint Salta S, Poli-silicate paint Atlas and Hydrophilic paint Atlas.

Item	Properties	Requirements			Test methods
		Silicone paint SALTA S	Poli-silicate paint ATLAS	Hydrophilic paint ATLAS	
1	2	3	5	6	7
1	Appearance	homogeneous liquid, without lumps and impurity			visual evaluation
2	Volume density, g/cm ³	1.44 ± 10 %	1.44 ± 10 %	1.44 ± 10 %	EAD 040083-00-0404
3	Dry matter content, %	55.5 ± 2.8	55.5 ± 2.8	55.5 ± 2.8	
4	Ash content, %: - at 450°C at 900°C	83.4 ÷ 92.2 65.3 ÷ 72.3	83.4 ÷ 92.2 65.3 ÷ 72.3	83.4 ÷ 92.2 65.3 ÷ 72.3	

Table C15. Identification properties of paints Silicone paint ATLAS SALTA and Silicone paint ATLAS

Item	Properties	Requirements		Test methods
		Silicone paint SALTA	Silicone paint ATLAS	
1	2	3	5	6
1	Appearance	homogeneous liquid, without lumps and impurity		visual evaluation
2	Volume density, g/cm ³	1.42 ± 10 %	1.42 ± 10 %	EAD 040083-00-0404
3	Dry matter content, %	57.3 ± 2.9	57.3 ± 2.9	
4	Ash content, %: - at 450°C - at 900°C	79.1 ÷ 87.5 54.9 ÷ 60.7	79.1 ÷ 87.5 54.9 ÷ 60.7	

Table C16. Identification properties of paints silicone paint Salta N, Nano-silicone paint Atlas and Silicone-siloxane paint Atlas.

Item	Properties	Requirements			Test methods
		Silicone paint SALTA N	Nano-silicone paint Atlas	Silicone-siloxane paint Atlas	
1	2	3	5	6	7
1	Appearance	homogeneous liquid, without lumps and impurity			visual evaluation
2	Volume density, g/cm ³	1.53 ± 10 %			EAD 040083-00-0404
3	Dry matter content, %	64.0 ± 3.2			
4	Ash content, %: - at 450°C at 900°C	79.0 ÷ 87.6 50.7 ÷ 56.1			