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NOVA	TOP quality	1		

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ONLINE SUPPORT



Product



Technical documentation



3D library

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Warning:

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V: 02/24

NOVATOP FACADE DATA SHEET

CONTEN

NOVATOP FACADE – 3-LAYER PANEL WITH A TONGUE AND A GROOVE				
Technical requirements	EN 13353, EN 13986			
Classes of application	SWP/3 S according to EN 13353			
Wood	Nordic spruce			
Adhesive	MUF			
Thickness (mm)	27 (9-9-9)			
Standard formats – net (mm)	Horizontally: Vertically: Width: 604, 1229 Width: 617, 1242 Length: 2500, 5000 Length: 2500, 3000, 5000			
Dimensional tolerances	Processing tolerance in a thickness of \pm 0.4 mm Tolerance in strength (grinding) of \pm 0.2 mm Tolerance in nominal width and length of \pm 0.5 mm			
Surface	Brushed			
Surface finish	with Adler Lignovit Platin glazing paint			
Colour shades	Quartzgrau 53294 Achtgrau 53292 Topasgrau 53317 Pyritgrau 53316			
Edge sealing	Adler Hirnholzversiegelung 55621 or Remers Induline SW-910			
Edge machining (mm)	4-sided Horizontal machining: NOVATOP FACADE tongue and groove Vertical machining: NOVATOP EASY tongue and groove			
Moisture of wood	8±2%			
Specific weight	490 Kg/m ³			
Reaction to fire	D-s2, d0			
Nominal value of thermal conductivity (λ)	0.13 W/mK with a specific weight of 490 kg/m ³ according to EN ISO 10456 – spruce			
Diffusion resistance (µ)	200/70 (dry/wet)			
Sound absorption	250–500 Hz – 0,1 1000–2000 Hz – 0,3			
Sound insulation (dB)	$R = 13 \times \log (m_a) + 14$ m _a = surface weight kg/m ²			
Specific heat capacity (c _p)	1 600 J/kgK dle EN ISO 10456			



Horizontal machining: NOVATOP FACADE tongue and groove



Vertical machining: NOVATOP EASY tongue and groove

BASIC FORMATS – HORIZONTAL





VERTICAL (ON DEMAND)





INDIVIDUAL FORMATS

We supply other formats based on individual demand, depending on the project.

NOVATOP FACADE SURFACE FINISH

CONTENT

STANDARD



Brushed surface – without surface finish



Brushed – with Pyritgrau 53316 glazing paint



Brushed – with Topasgrau 53317 glazing paint

NON-STANDARD

Also colours of your choice on demand.



Brushed – with Quartzgrau 53294 glazing paint



Brushed – with Achatgrau 53292 glazing paint



Edge protection: ADLER Hirnholzversiegelung 55621 or Remers Induline SW-910

53292 Achatgrau

53316 Pyritgrau

53317 Topasgrau

Brushing without surface finish

NOVATOP FACADE PROTECTION / WARRANTY

CONTENT

NATURAL AGING

NOVATOP SWP three-layer panels are made with exceptional care, the wood is dried to 8%, the lamellas are sorted, the surface is closed and straightened. This guarantees the long-term stability of the panel's exterior, but it is still necessary to take into account the properties of natural wood. Over time, the surface of the panels is subject to natural greying, erosion and slight cracks. We recommend choosing standard surfaces so that the erosion over time is close to these colours. The lifespan of the facade is decisively influenced by the type of weather effects, connections as well as anchoring, etc. In order to maintain a long lifespan, it is necessary to follow the principles of structural protection and maintenance (e.g. removal of dirt from joints, climbing plants, nests, repairs of other defects – in gutters, window sills, sheeting, etc.).



STRUCTURE PROTECTION

- Providing a ventilated gap behind the panels, min.
 40 mm, properly connected to the external environment.
 The depth of the ventilated gap depends on the type of structure, composition and size of the ventilated area.
- Protection against water splashes; installation min.
 300 mm above the ground.
- Installation of the support grill transversely to the fibre direction of the panels.
- The method of anchoring and the number of fastening material depends on local conditions and static assessment.
- In the case of using a grill made of materials other than wood, it is necessary to take into account the different thermal expansion of the materials and the resulting connections (e.g. pre-drilling of the openings for screws in the panels and creating a clearance, increasing the dilatation joint between the panels, etc.).
- The installation of FACADE panels must be arranged in such a way that the horizontal faces of the panels are minimally exposed:
 - Panels for the entire height of the wall.
 - The use of NOVATOP FACADE joint with a tongue and a groove and edge protection.
 - Sheeting of front sides between floors.
- Uniform exposure of the surfaces on the facade to weather effects ensures colour uniformity. E.g., for low walls, a large roof overhang and, for high walls, little or none, a 300 mm plinth, small overhang of sill panels, prevention of local water outflow to the SWP area, etc.).
- In the case of horizontal battens, ventilation must be consistently designed (e.g. a gap behind these battens or the addition of vertical battens).
- Sufficient distance from vegetation (> 1 m), especially the elimination of climbing plants.

SURFACE FINISH MAINTENANCE

For the recommended procedure, see Adler's coating supplier maintenance manual.



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WARRANTY TERMS

Warranty on the SWP panels: 5 years on no loosening of surface lamellas, 3 years on surface treatment, subject to compliance with the principles of structural protection, inspection and recommended measures:

PROTECTION / WARRANTY

- Removal of impurities.
- Cleaning in order to prevent from fungus and algae infestation.
- Insect infestation and damage by hail should be treated by a professional.
- Ensuring the ventilation function.
- Replacement of deformed facade elements.
- In the event of water ingress or detection of damp areas, it is necessary to call an expert.

Respect the natural character of the panel.

- The exterior of the wood. The manufacturer hereby defines defects in the specific panel quality, and the natural behaviour of these permissible defects, is not a defect.

The warranty covers the natural exposure of the product. It does not apply to mechanical damage, damage by hail, storms, exposure to chemicals, aggressive gases, fire, etc. The durability of the joints and the perimeter of the panel is conditioned by the use of surface treatment of the edges or their proper protection (sheeting, dilatation joints...).

- In the event of a product defect during the warranty period, the manufacturer will supply new parts to replace the damaged ones.

Complaint report of the manufacturer AGROP NOVA a.s.



Not allowed











Allowed







NOVATOP FACADE TECHNOLOGY

NOVATOP panels have been distinguished by their craftsmanship for 31 years





Surface lamellas



Central lamellas

- central timber from the trunk, thicknesses of 18–25 cm, which is characterized mainly by small and healthy knots
- We sort the lamellas according to internal regulations, which go beyond required standards
 Surface lamellas are always tangential
- The central lamellas are always radial
- We discard the unplaned lamellas and use them for heating the dryers

Compact centre and panel section



- For the centres, we only use radial lamellas with a width of max. 63 mm (usually 37 mm 59 mm)
- We glue all the central lamellas in the joints
- We repair the middle layers
- The middle layer is compact and closed
- We perform the output inspection personally

NOVATOP FACADE TECHNOLOGY

Minimization of cracks and manual repair of defects



- We dry the timber to 7–8%
- We always assemble the surface lamellas with the right side up on the visual side of the panel
- We glue the surface lamellas in joints by means of high side down pressure
- We repair qualities A, B, C
 We only use natural knots from branches of our own production

Gluing



• We glue using melamine adhesive PVAC gluing on request • (100% formaldehyde-free) or PU





- As a standard, we guarantee high accuracy Of the basic format +/-2 mm diagonally On request, we perform formatting and machining on CNC machines with an accuracy of 0.1 mm



- Quality of sanding corresponds to the grain size of 100
- We guarantee sanding tolerance of +/-0.2 mm

2



CONTENT

NOVATOP FACADE TECHNICAL SOLUTIONS

1. TYPES OF APPLICATIONS

1.1. HORIZONTAL DIRECTION OF FIBRES, TONGUE AND GROOVE, DENSE GRILL











ANCHORING USING TERRACE SCREWS 2x 5 x 60 mm by 312 mm

1:5



ANCHORING USING SPECIFIC SCREWS MUST BE ASSESSED BY A STRUCTURAL ENGINEER

3

1

2

NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

1.2. HORIZONTAL FIBRE DIRECTION, TONGUE AND GROOVE



1:35





VERTICAL JOINT:



ANCHORING USING TERRACE SCREWS 5 x 60 mm

1:5

ANCHORING USING TERRACE SCREWS 2x 5 x 60 mm by 625 mm

1:5

ANCHORING USING SPECIFIC SCREWS MUST BE ASSESSED BY A STRUCTURAL ENGINEER

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NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

1.3. HORIZONTAL DIRECTION OF FIBRES, TONGUE AND GROOVE, DOUBLE GRID



VERTICAL JOINT:

HORIZONTAL JOINT:



ANCHORING USING SCREWS 5 x 60 mm by 312 mm

1:5

1:5



ANCHORING USING SPECIFIC SCREWS MUST BE ASSESSED BY A STRUCTURAL ENGINEER

1

NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

1

2

3

NOVATOP

1.4. VERTICAL DIRECTION OF FIBRES, TONGUE AND GROOVE, DOUBLE GRID



ANCHORING USING SPECIFIC SCREWS MUST BE ASSESSED BY A STRUCTURAL ENGINEER

NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

1.5. VERTICAL DIRECTION OF THE FIBERS, TONGUE AND GROOVE



ANCHORING USING SCREWS WITH WASHERS 5 x 60 mm

1:5

HORIZONTAL JOINT:







ANCHORING USING SPECIFIC SCREWS MUST BE ASSESSED BY A STRUCTURAL ENGINEER

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NOVATOP FACADE TECHNICAL SOLUTIONS

1.6. VERTICAL DIRECTION OF THE FIBERS, BUTTED



1:5

ANCHORING USING SPECIFIC SCREWS MUST BE ASSESSED BY A STRUCTURAL ENGINEER

3

2

NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

2. TYPES OF STRUCTURE AND BASE

2.1. EXAMPLE OF FOUNDATION ON I-GIRDERS

SWP 615 mm



2.2. EXAMPLE OF FOUNDATION ON HARD INSULATION USING ADDITIONAL HORIZONTAL BATTENS





NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

2.3. EXAMPLE OF FOUNDATION ON STEEL PROFILES



2.4. EXAMPLE OF FOUNDATION ON METAL PROFILES, ANCHORING BY GLUING



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NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

3.1. EXAMPLE OF ATTIC SOLUTION



3.2. EXAMPLE OF PLINTH SOLUTION



NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

3.3. EXAMPLE OF CORNER JOINT EXECUTION, WITH CORNER METAL SHEET, TONGUE AND GROOVE



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NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

3.4. EXAMPLE OF CORNER JOINT EXECUTION, BUTTED CORNER, TONGUE AND GROOVE



3.5. EXAMPLE OF HORIZONTAL FLOOR DIVISION



3

NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

3.6. DETAIL OF THE CAPPING



3.8. DETAIL OF THE PLINTH



3.7. DETAIL OF THE WINDOWSILL AND THE DOOR



CUTTING EDGE PROTECTION

We recommend painting the sawn edges during installation on the construction site:

- 1x ADLER Lignovit Lasur coating
- 1x ADLER Hirnholzversiegelung 55621 coating
- 1x ADLER Lignovit Platin coating

If the edge is well ventilated and 100% resistance is not required, it is possible to paint only 2x ADLER Lignovit Platin in the given colour. or Pullex 3in1-Lasur in the specific shade. For deliveries, we offer glazing paints in 0.75/2.5 I packaging.

NOVATOP FACADE TECHNICAL SOLUTIONS

CONTENT

4. SCREWS

Recommended types of screws:

Anchoring of panels with $5 \times 50-70$ mm screws depending on the application. The service life and load-bearing capacity of the screws in the application is guaranteed by the screw manufacturer.

Screws in the tongue:



Screws in the surface:



1

NOVATOP FACADE ASSEMBLY INSTRUCTION

The assembly instructions contain basic information and recommendations. Responsibility for the correct execution is assumed by the implementing company that complies with the current technical standards.

1 ASSEMBLY TOOLS

- Screws
- Drills, screwdrivers, measuring tools, carpenter's squares, flat squares.
- Bars for delimiting the dilatation joint between the panels.
- Ladders, lifting platforms, mobile scaffolding
- The recommended number of workers: min. 2.

2 GENERAL INFORMATION

- NOVATOP FASADE panels should all be machined with standard woodworking tools and machines and their surface be treated using conventional procedures for solid wood.
- Observe the principles for the protection of structural wood.
- Wear gloves when working to avoid possible contamination of the plates and to prevent injuries.

We do not recommend:

- Treading on visual surfaces or otherwise polluting them.
- Exposing the panels to direct sunlight before proper surface treatment, this will prevent possible colour changes and differences.

3 ASSEMBLY

Before assembling the substructure, we recommend creating a plan for laying the panels and the substructure.

The assembly description begins with the supporting structure for the facade (wall, prisms, profiles...).







- Preparation of tools and materials
- Preparation of scaffolding / platforms
- Substructure preparation: alignment, cleaning, possible placement of diffusion foil
- Processing, formatting of panels, indication of anchoring positions, etc.

- Surface treatment of possible panel cuts (we recommend performing it in advance, but we also recommend double-sided surface treatment with each machining, if it has not been carried out by the manufacturer).
- Photo documentation (passages, punctures, installations).
- Preparation of potential sheeting.
 - Installation of NOVATOP FACADE panels:
 - Creating a threshold.
 - Placement of the spacer in the future groove.
 - Adaptation to window and other openings.Fitting the panel and always fixing it in its position (with clamps or holding).
 - Optional insertion of sheeting.
 - Anchoring.

After attaching the panel, checking the flatness and accuracy of the attachment – after checking the attachment with the remaining fasteners (the number and type of fasteners depends on the recommendation and calculation regarding the statics).

- Continuing with other panels (after installation, take care not to damage the panels already installed).
- Installation of cover grills of the ventilated gap (or the installation is to be performed concurrently with the panel).
- Inspection of dilatation joints, flatness, compliance with design principles, etc.

4 NOVATOP FACADE STORAGE

- The panels must be stored in a dry place and protected from the weather.
- The panels must be stored on hard and flat surfaces with the possibility of secure access and manipulation.
- Disposal of packaging materials must be carried out in accordance with the local regulations and directives on waste management.

5 SAFETY IN THE WORKPLACE

When handling the panels, it is necessary to:

- Think about the procedure, the necessary tools and materials, the method of handling and the number of workers for the assembly.
- Comply with all occupational safety measures.
- Use protective equipment.
- Take extreme care when working at heights and on lifting platforms.
- Secure the panels against falling or mechanical damage.



Brushed surface – without surface finish







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2



rushed – with Topasgrau 53317 glazing paint

INDIVIDUAL FACADE PROJECTS























www.novatop-facade.com

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Manufacturer certificates:











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