

# HIDDEN FASTENING SYSTEMS FOR WOODEN TERRACES AND FACADES



**GwozDECK** is a registered trademark.

GwozDECK is a Russian manufacturer of fasteners founded in 2005.

**GwozDECK** today is more than fasteners, it is a package approach to fixing of wooden finish materials based on knowledge and practical experience, test results and innovative solutions and fastening methods.

The ideas translated into fasteners under trademark GwozDECK are covered by patents: 2 for utility models, 5 for industrial designs and 3 for trademarks.

**GwozDECK today** is approximately 100 trading partners within Russia, Kazakhstan, Belarus, Armenia and EU, cooperation with the major Russian trade networks (Leroy Merlin, Krepmarket, Petrovich, Vimos, Maxidom).

Wood is one of the best materials for interior and exterior furnishing with unique properties - texture, color, odor. The beauty of natural wood and the rich assortment make this material indispensible in many architectural solutions. Recently the new wood-based finishing materials have been emerging and growing in popularity. These materials have to be handled with careful attitude and secure mounting.

**Reliability of GwozDECK** means a package of measures focused on preservation of material appearance and provision of long-term service.

#### GwozDECK™ is a registered trademark





# HIDDEN FASTENING SYSTEMS FOR WOODEN TERRACES AND FACADES

	VOLNA fasteners for quick installation	page 4		**
	VOLNA start auxiliary fasteners	page 4		
	CLASSIC fasteners for quick installation	page 6		
	TWIN enhanced reliability fasteners	page 8		**
Top	TWIN mini fasteners for planken and decking planks	page 10		**
	PRO fasteners for slotted planks	page 12		**
	TERRA fasteners for slotted planks	page 14		**
-	THERMO fasteners for THERMO planks	page 16		**
	DUET 30 fasteners for narrow planks	page 18	11/	**
	DUET-facade fasteners for façade and fencing	page 20		**
	DUET 70 fasteners for any kind of planken	page 22	11)	**
6000	DUET 90 best fasteners for terraces	page 24		**
	DUET start auxiliary fasteners	page 20, 22, 2	24	
	A-spacers for measuring gap and alignment of vertical load-bearing structure	page 26		
	B-spacers for measuring gap and alignment of horizontal load-bearing structure	page 26		
	NOMENCLATURE, PART NUMBERS, PACKAGE	page 28		





















planken straight

floor board timber imitation block house

planks



**GWOZDECK VOLNA** – is a multipurpose hidden steel fastener for mounting finish materials from wood and wood-polymer composites. This fastening is manufactured from steel with plant zinc coating. Lack of projections on fastener allows for using it for assembling sheathings with zero clearance which is often desirable if we have to wait for lumber shrinkage. A shape of the fastener permits to employ it for mounting of moldings with any profile and provides long life of finish materials owing to ventilation of their rear sides.

#### **Design features of VOLNA fastening:**

- Layout and shape of holes in the fastener allow for accurate positioning of the upper edge of board providing
- Free sliding of the lower edge in swelling and shrinkage.
- Undulating profile ensures fastening rigidity and ventilation of the board rear side.
- Special marks ensure quick positioning of the fasteners in relation to board edge.
- Shape of the fasteners allows for using countersunk jack point screws.
- All jack point screws used in mounting are equally long.

#### Recommendations

Characteristics	Sheathing	Load-bearing structure
Thickness, mm	20-30	from 50
Width, mm	90-145	from 50
Density, kg/m³	up to 700	no limit
Profile	no limit	no limit
Mounting clearance, mm	0-7*	500
Additional fastening	countersunk jack point screw - 2 pcs	countersunk jack point screw - 2 pcs

 $<sup>\</sup>ensuremath{^{\star}}\xspace$  - depending on sheathing humidity at the time of mounting and operational conditions

#### Recommendations on selection of size of jack point screws

to the contract of the contrac				
Wallboard thickness, mm	Jack point screw	Dimminus &		
wanboard unckness, min	Sheathing	Load-bearing structure		
18	4,5×20 mm			
20	4,5×25 mm			
25	4,5×30 mm			
30	4,5×35 mm			



	Plank width,	Distance between	Mounting	Consumpt	ion pcs/m²
	mm	rack axes, mm	clearance, mm	VOLNA	Jack point screw
	90	500	5	22	88
	120	500	5	16	64
ĺ	140	500	5	14	56















**VOLNA** start

#### **MATERIAL**

Steel

#### PROTECTIVE COATING



Plating (electrolytic) zinc

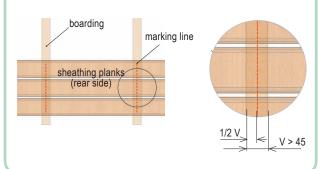
#### **SHEATHING PROFILE**



planken straight, planken skewed, timber imitation, block house

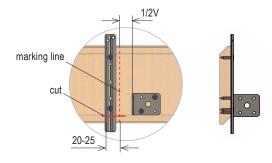


Marking. For convenient marking, we put marking lines that imitate boarding bars on the rear side of the sheathing plank(recommended width of boarding bars is 45 mm at least). Marking may be put on the group of sheathing planks, either in advance or immediately before mounting a fastener on each plank.

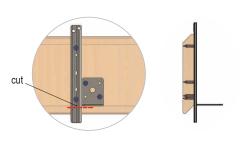


Mounting of the first plank. Select the most convenient attachment method (frontal or lateral) of the first plank. If necessary, fastener VOLNA may be cut off. Attach the seat angle and fastener VOLNA on the first plank with jack point screws. Align with the builder's level the first row of planks. Attach the plank to the façade boarding through holes of the seat angle and VOLNA with jack point screws.

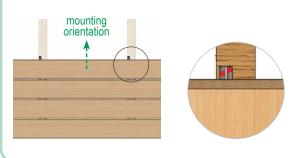
Option 1 - LATERAL attachment of start angle

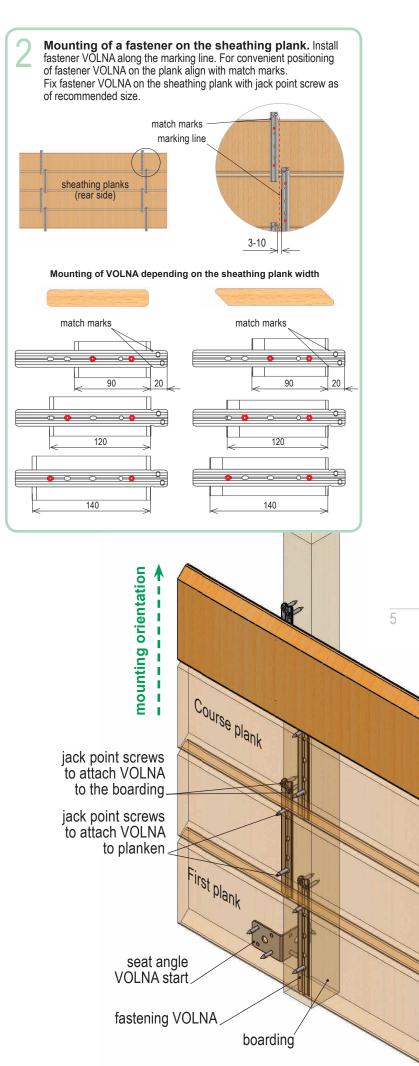


Option 2 - FRONTAL attachment of start angle



Mounting of course planks on the boarding.
Install the plank with fastener VOLNA, through mounting holes of fastener fix it with jack point screws to the boarding. Attach a required amount of planken.







# **GWOZDECK CLASSIC** – hidden fastening elements for wooden flooring that combines the simplicity of nailing and reliability of a screw. This fastening element is advised to be used for heavy-loaded horizontal flooring, it is simple to mount and provides reliability to structure, being

#### **GwozDECK CLASSIC features:**

virtually invisible from the terrace surface.

- Optimal for decking 28 mm thick.
- Decking is pressed evenly due to new design of tenon.
- Allows for hammering fastener into the floor beam at an angle of 45° the distance between basis and tenon = tenon length.
- Efficient water drain through a small technological gap in between decking.
- · A simple tool set is used for assembling.
- Allows for assembling with no electric power available.
- Special shape of GwozDECK CLASSIC anchor and its sloping operating position in a floor beam provides reliable connection of floor beams and decking.

#### Recommendations

Characteristics	Sheathing	Load-bearing structure
Thickness, mm	22-45	from 50
Width, mm	90-140	from 50
Density, kg/m³	up to 700	up to 500
Profile	rectangle	rectangle
Mounting clearance, mm	3-6*	500
Additional fastening elements	nail $3 \times 30$ mm $- 1$ pce (screw, hidden, $3.5 \times 35$ mm $- 1$ pce)	not required

 $<sup>\</sup>ensuremath{^{\star}}\xspace$  - depends on sheathing humidity during assembling and conditions of usage

#### GwozDECK CLASSIC fastening elements consumption per 1 m<sup>2</sup>

Plank thickness, mm	Decking width, mm	Distance by floor beam axes, mm	Recommended gap between planks, mm	Expected consumption, pcs/m²
22-45	90	500	(3-5)	21-22
	120	500	(4-5)	17-18
	130	500	(5-6)	15-16
	140	500	(5-6)	14-15



**MATERIAL** 

Steel

#### PROTECTIVE COATING



Plating (electrolytic) zinc



thermal diffusion

#### **SHEATHING PROFILE**



terrace decking, decking plank



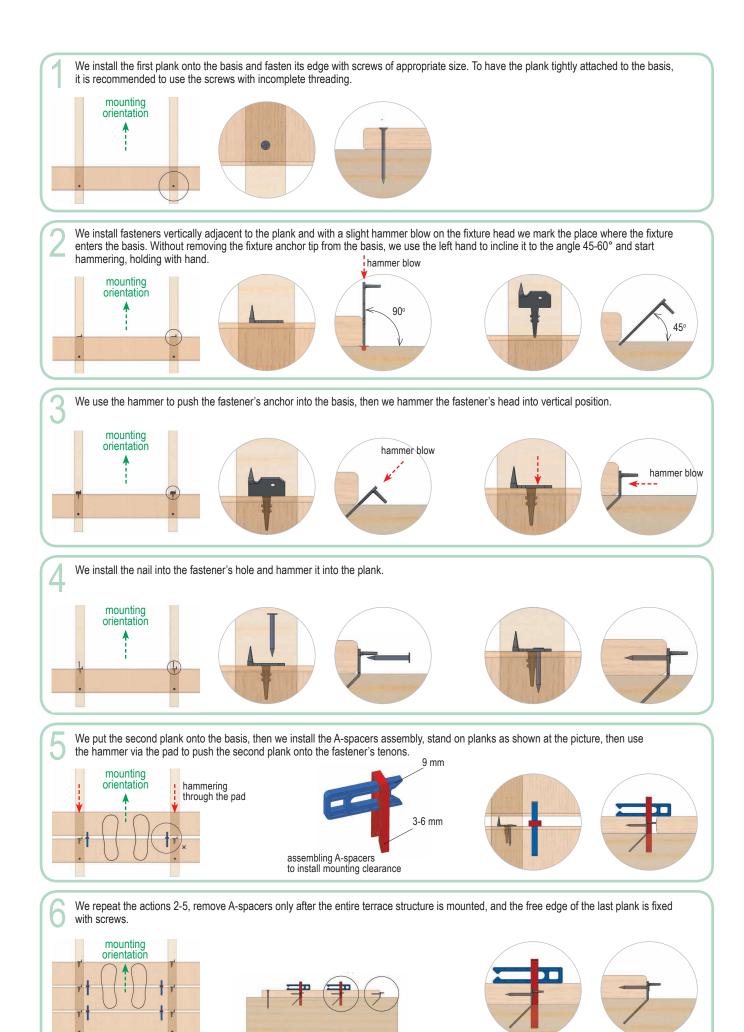














GwozDECK TWIN - hidden fasteners for wood flooring and vented facades, wall finishing.

#### **GwozDECK TWIN features:**

- Fasteners shape provides necessary mounting clearance between the terrace planken boards.
- Any type of wood may be used as material for a floor beam.
- It allows for using a terrace decking or a wooden bar with cross section that is comparable with the screw's length as a floor beam. It is convenient when arranging a wooden flooring on concrete basis.
- It allows for saving materials and time on mounting structures with heading joints of terrace planken boards.



#### **MATERIAL**

Steel

#### Recommendations

Characteristics Sheathing		Load-bearing structure
Thickness, mm	25-45	from 50
Width, mm	90-140	from 50
Density, kg/m³	up to 700	no limits
Profile	rectangle	rectangle
Mounting clearance, mm	6-9*	500
Additional fastening elements	screw, hidden, 3,5 × 35 mm – 2 pcs	screw, hidden., 4,5 × 50 mm – 1(2) pcs

<sup>\* -</sup> depends on sheathing humidity during assembling and conditions of usage

#### PROTECTIVE COATING



Plating (electrolytic) zinc



thermal diffusion

#### GwozDECK TWIN fastening elements consumption per 1 m<sup>2</sup>

Plank thickness, mm	Plank width, mm	Distance by floor beam axes, mm	Recommended clearance between planks, mm	Expected consumption, pcs/m²
	90	500	(5-6)	21-22
25-45	120	500	(6-7)	17-18
	130	500	(6-7)	15-16
	140	500	(7-8)	14-15

Plank thickness, mm	Plank width, mm	Distance by floor beam axes, mm	Recommended clearance between planks, mm	Expected consumption, pcs/m²
25-45	90	500	(5-6)	21-22
	120	500	(6-7)	17-18
	130	500	(6-7)	15-16
	140	500	(7-8)	14-15

# Recommendations for boarding plank profile











#### **SHEATHING PROFILE**



terrace decking, decking plank

#### JACK POINT SCREW TYPE

2 + 1(2)

















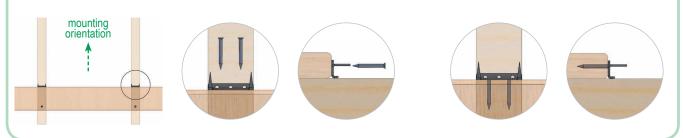




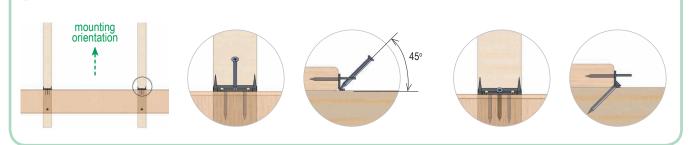


We install the first plank onto the basis and fasten its edge with screws of appropriate size. To have the plank tightly attached to the basis, it is recommended to use the screws with incomplete threading. We install fasteners.

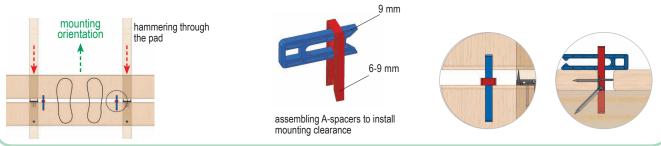
We install the fasteners on basis adjacent to the lateral facet of the plank. We assure tight attachment between the plank and the basis and, via mounting holes, we attract the fasteners to the plank with two screws.



We assure tight attachment between the plank and the basis via the mounting hole fasteners, by screwing it into the basis at an angle 45°.



We put the second plank onto the basis, then we install the A-spacers assembly, stand on planks as shown at the picture, then use the hammer via the pad to push the second plank onto the fastener's tenons.



We repeat the actions 1-4, remove A-spacers only after the entire structure is mounted, and the free edge of the last plank is fixed with a screw.



**NB!** For convenient mounting, we recommend using screwdriver bits longer than 50 mm. Using a screwdriver with rotating torque control is **obligatory!** 

### **GwozDECK TWIN mini** – hidden fasteners for wood flooring and vented facades, wall finishing.

#### **GwozDECK TWIN mini features:**

- Fasteners shape provides necessary mounting clearance between the terrace planken boards.
- Any type of wood may be used as material for a floor beam.
- It allows for using a terrace decking or a wooden bar with cross section that is comparable with the screw's length as a floor beam. It is convenient when arranging a wooden flooring on concrete basis.
- Lower mounting clearance between terrace planken boards is less noticeable, when compared with GwozDECK TWIN.
- · Lower chance to break the terrace decking.

#### Recommendations

Characteristics	Sheathing	Support structure
Thickness, mm	20-38	from 50
Width, mm	90-140	from 40
Density, kg/m³	up to 700	no limits
Profile	rectangle	rectangle
Mounting clearance, mm 4-7*		500
Additional fastening elements	screw, spherical, 4,0 × 30 mm – 1 pce	screw, hidden., 4,0 × 40 mm - 1 pce

<sup>\* -</sup> depends on sheathing humidity during assembling and conditions of usage

#### GwozDECK TWIN mini fastening elements consumption per 1 m<sup>2</sup>

Plank thickness, mm	Plank width, mm	Distance by floor beam axes, mm	Recommended clearance between planks, mm	Expected consumption, pcs/m²
20-38	90	500	(4-5)	21-22
	120	500	(5-6)	17-18
	130	500	(5-6)	15-16
	140	500	(6-7)	14-15

#### Recommendations for boarding plank profile

















#### **MATERIAL**

Steel

#### PROTECTIVE COATING



Plating (electrolytic) zinc



thermal diffusion

#### **SHEATHING PROFILE**



terrace decking, decking plank, planken facade board classic

#### **JACK POINT SCREW TYPE**





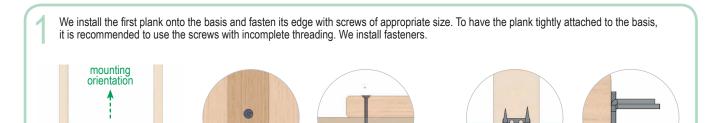






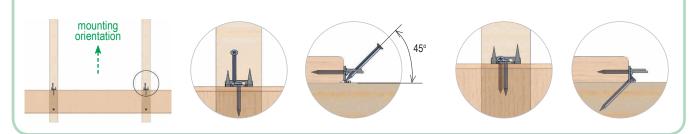


10

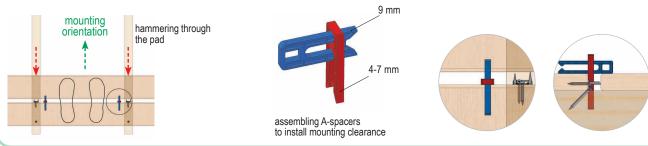


We install the fasteners on basis adjacent to the lateral facet of the plank. We assure tight attachment between the plank and the basis and, via mounting hole, we attract the fasteners to the plank with a screw.

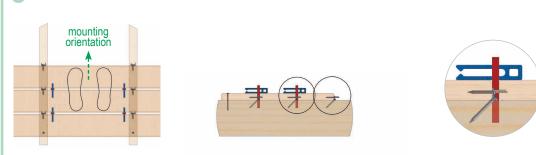
We assure tight attachment between the plank and the basis, using any mounting hole where the fastener bends, for screwing into the basis at an angle 45°.



We put the second plank onto the basis, then we install the A-spacers assembly, stand on planks, then use the hammer via the pad to push the second plank onto the fastener's tenons.



We repeat the actions 2-4, remove A-spacers only after the entire structure is mounted, and the free edge of the last plank is fixed with a screw.



NB! For convenient mounting, we recommend using screwdriver bits longer than 50 mm. Using a screwdriver with rotating torque control is **obligatory!** 

# **GwozDECK PRO**

Part numbers and package on page 28

**GwozDECK PRO** is a universal hidden fastening for any wooden structures, including hardwood structures.

#### **GwozDECK PRO features:**

- The lateral surface of a plank must have a slot.
- No restriction related to wood usage.
  With the vertical position of a screw in a floor beam, the assembled structure may be locally disassempled.
- Produced only with protective thermal diffusional zinc coating.



Characteristics	Gwozdeck PRO			
Characteristics	Sheathing	Load-bearing structure		
Thickness, mm	20-45	from 50		
Width, mm	120-150	from 50		
Density, kg/m³	no limits	no limits		
Profile	rectangle	rectangle		
Mounting clearance, mm	10	500		
Additional fastening elements	screw 5,0 x 60 mm - 1 pce, hidden - sloping mounting, spherical - vertical mounting.			

<sup>\* -</sup> depends on sheathing humidity during assembling and conditions of usage

#### GwozDECK TWIN mini fastening elements consumption per 1 m<sup>2</sup>

Plank thickness, mm	Plank width, mm	Distance by floor beam axes, mm	Recommended clearance between planks, mm	Expected consumption, pcs/m²
	90	500	10	20
20	115	500	10	16
	130	500	10	15
	90	500	10	20
25-28	115	500	10	16
	130	500	10	15
	90	500	10	20
35-38	115	500	10	16
	130	500	10	15
	90	500	10	20
42-45	115	500	10	16
	130	500	10	15



**MATERIAL** 

Steel

#### PROTECTIVE COATING



thermal diffusion

SHEATHING PROFILE

terrace decking, decking plank

JACK POINT SCREW TYPE











12

#### Recommendations regarding the selection of GwozDECK PRO

Sloping method of fastening allows correction of slightly curved planks.

Vertical method of fastening allows for disassembling planks locally.

Combined method of mounting includes the combination of 5-6 rows with sloping fastening and 2-3 rows with vertical fastening. Combined method of mounting allows for using partially deformed planks in sloping fastening rows, while straight planks are used in vertical fastening rows.

Using the planks with asymmetric slot allows for reducing mounting clearance in between planks down to 6-8 mm. Vertical and combined fastening methods are preferable for planks with symmetric slot.

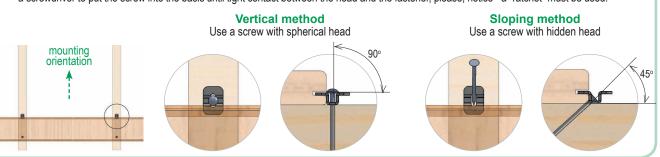




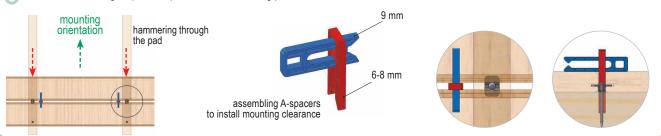
We arrange the first plank face side up, place it on the basis, and fasten the edge with appropriate size screws. To tightly attach the plank using screws with incomplete screwing is recommended.



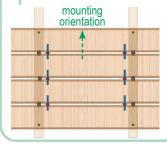
We install a fastener on the basis with any of its wings inserted into the plank's slot. Then we select the screw mounting method into the basis: vertical, sloping, combined. A screw with appropriate shape is to be selected for any mounting method. We put the screw through the mounting hole and use a screwdriver to put the screw into the basis until tight contact between the head and the fastener, please, notice - a "ratchet" must be used.

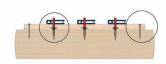


We install the second plank on the basis. If we need a mounting clearance between planks with asymmetric slot, we use an A-spacers assembly. We hammer, through a pad, the plank into the mounting position.



We repeat the actions 2,3. We remove A-spacers only after the entire terrace structure is mounted, and the free edge of the last plank is fixed with screws.











GwozDECK TERRA is a hidden fastening element for mounting of terrace and decking planks with a special slot on two lateral surfaces.

#### **Design features of GwozDECK TERRA fasteners:**

- Made from composite UV-resistant material.
- No moisture condensation.
- Dished part is sufficient and reliable for mounting planks up to 120 mm wide.
- Have 5-mm wood swelling expansion pieces.
- Thanks to bevels along the outline easily inserted in the slot.
- Asymmetric position of jack point screw hole.
- Right position of fasteners while mounting are provided by marking and logo.

#### Each element of TERRA system performs its independent function:

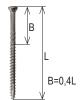
- Jack point screw receives vertical load and pushes planks to the base.
- Dished part of TERRA clip supports load from board shrinkage and distortion.
- Expansion pieces of TERRA clip support horizontal load in case of board swelling. Oblique position of jack point screw provides additional structural reliability. TERRA fasteners can be used for attachment of planks from wood with different density and thickness as well as impregnated plank.

#### Recommendations

Characteristics	Sheathing	Load-bearing structure
Thickness, mm	20-35	from 40
Width, mm	50-120	from 45
Density, kg/m³	up to 1000	up to 900
Plank humidity when mounted	up to 18%	no limit
Mounting clearance, mm	5	500

#### Recommendations on selection of jack point screw length for TERRA fastening

	_	
Plank width, mm	25-30	32-35
B, mm	22,7	28,2
Length of jack point screw L. mm	60	70



#### Consumption of GwozDECK TERRA fasteners per 1 m<sup>2</sup>

Plank width, mm	Distance between joist axes, mm	Consumption rate, pcs/m²
50	500	36
70	500	27
90	500	21
120	500	16













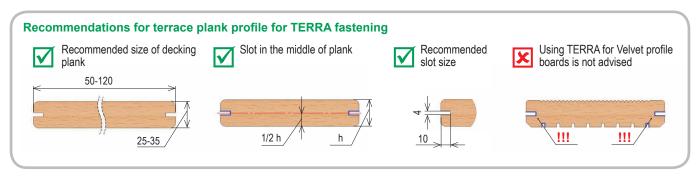
# **MATERIAL**

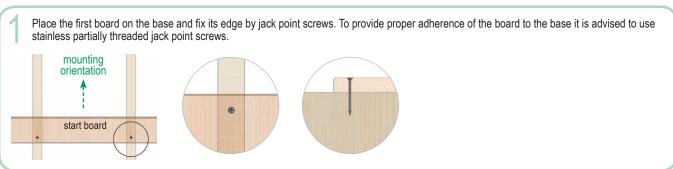
Fiberglass-reinforced Caprolon PA6

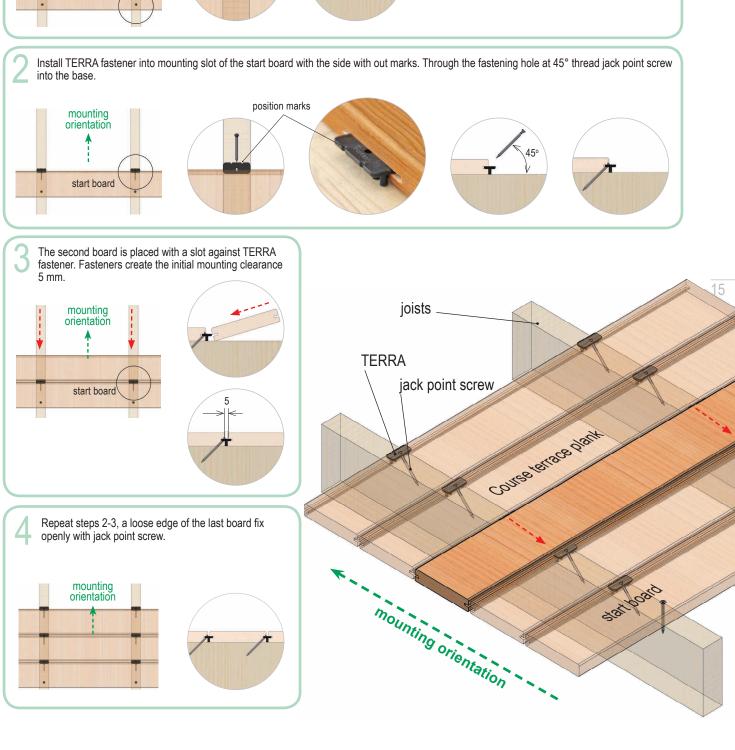
#### **SHEATHING PROFILE**













Heat-treated finishing materials enjoy excellent stable geometric dimensions that makes them indispensible for interior and exterior finishing. Specifically for heat-treated wood the GwozDECK engineers have developed the innovative THERMO fasteners.

**GWOZDECK THERMO** is hidden SMART fasteners for mounting of planken, terrace and decking planks made from heat-treated wood. THERMO fasteners are characterized by high rigidity in the direction perpendicular to floor board and elasticity in the longitudinal direction. These properties of THERMO guarantee a long service life and a plane structure surface. The convenient location of the small torx-head jack point screw allows for disassembling or maintaining a service of flooring in situ if necessary.

#### **Design features of GwozDECK THERMO fasteners:**

- intended for application with jack point screw with the narrow cone-head,
- provide 6-mm mounting clearance,
- made from composite UV-resistant material,
- · need no anticorrosion protection,
- applicable for notched boards with local recesses for fasteners.

#### Recommendations

Characteristics	Sheathing	Load-bearing structure
Thickness, mm	18-30	from 50
Width, mm	70-140	from 30
Density, kg/m³	up to 800	no limit
Mounting clearance, mm	6	330
Auxiliary fasteners	18-30	countersunk jack point screw 4*60 mm, 1 pce

#### Consumption of GwozDECK THERMO fasteners per 1 m2

Board width, mm	Mounting clearance,	Distance between joist Consumption rate, p		ption rate, pcs/m²	
Board Width, Hilli	mm	axes, mm	THERMO	Jack point screw	
70	6	330	39	39	
90	6	330	32	32	
120	6	330	24	24	
140	6	330	21	21	





#### **MATERIAL**

Fiberglass-reinforced Caprolon PA6

#### **SHEATHING PROFILE**



terrace and decking plank from heat-treated wood



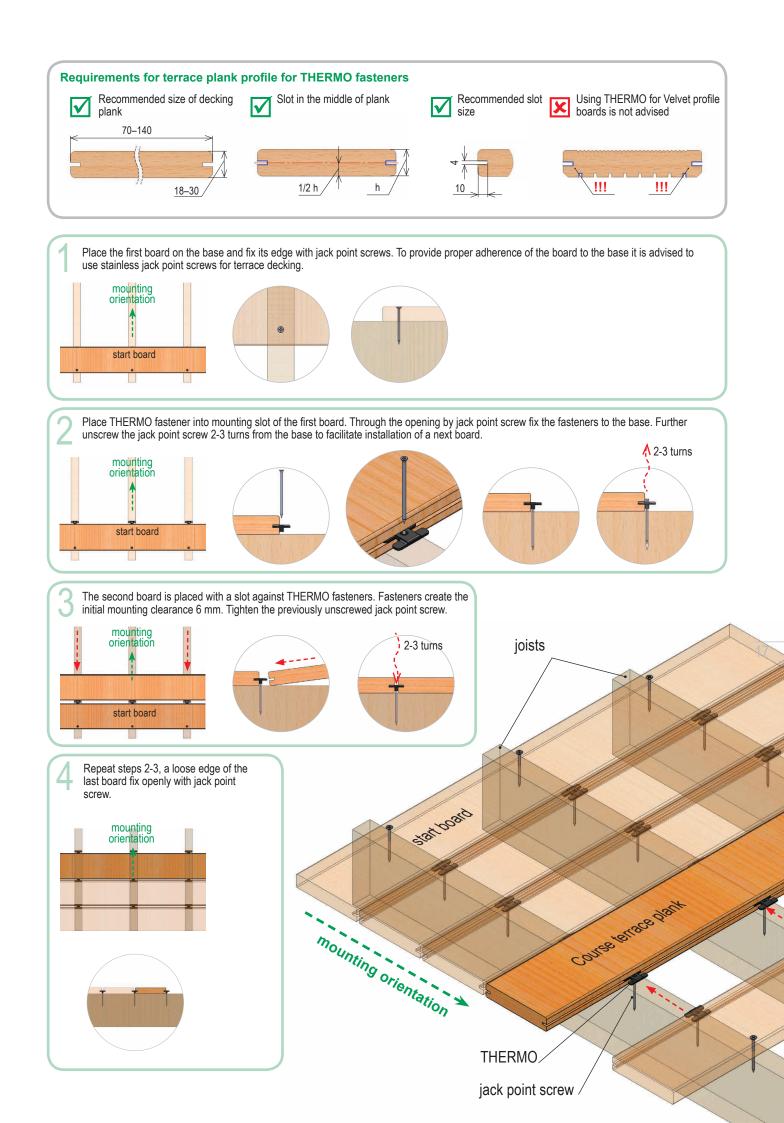














GwozDECK 30 is hidden fasteners made from two identical parts. It is compatible with other fasteners of DUET system. DUET 30 is used for mounting of narrow wooden planks and as a start fastener to fix the lower edge of the first façade board.

#### **DUET 30** as a stand-alone fastener:

- applicable for fastening of planks from 45 to 60 mm wide,
- · allows for widely installing planks,
- provides a wide range of plank horizontal shift,
- · completely hidden,
- · allows for vertical fastening of planks.

#### **DUET 30 as a start fastener:**

- intended for fixing the lower edge of the first board,
  compatible with DUET -70, -90, -FACADE.

#### Recommendations

Characteristics	Sheathing	Load-bearing structure		
Cridiaciensiics	wood/heat-treated wood	wood	metal	
Thickness, mm	15-25/20-45	from 40	from 1,75	
Width, mm	45-60	from 35	from 35	
Density, kg/m³	y, kg/m³ up to 800 no		limit	
Mounting clearance, mm	15-100	500		
Auxiliary fasteners	jack point screw №1 - 2 pcs	jack point screw №2 - 3 pcs (universal)	jack point screw №2 - 3 pcs (for metal)	

#### Consumption of GwozDECK fasteners DUET 30 per 1 m<sup>2</sup>

Plank width Mounting		Distance between		Consumption rate	sumption rate	
H, mm	clearance, mm	joist axes, mm	DUET 30, pair/m²	jack point screw №1, pcs/m²	jack point screw №2, pcs/m²	
45	15	500	32	64	96*	
45	45	500	22	44	66*	
60	15	500	26	52	78*	
60	40	500	20	40	60*	

<sup>\*-</sup>additionally, a jack point screw will be needed for fixation of fastener to the load-bearing structure

#### Recommendations on selection of jack point screws for GwozDECK fasteners DUET 30

Sheathing board thick-	Jack poin	t screw №1	
ness, mm	diameter, mm	length, mm	
20	4,5	25	
25	4,5	30	
30	4,5	35	
35	4,5	40	



Load-bearing structure thickness,	Jack point	t screw №2
mm	diameter, mm	length, mm
45	4,5	45
45	4,5	50
50	4,5	50
50	4,5	50



#### **MATERIAL**

Fiberglass-reinforced Caprolon PA6

#### **SHEATHING PROFILE**



rectangle, trapezium, rhomb



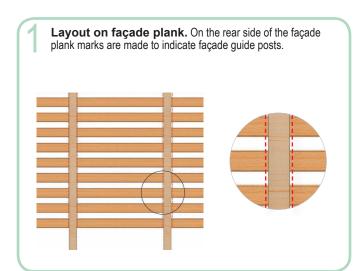


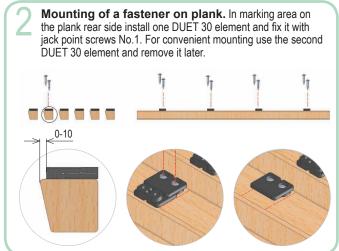








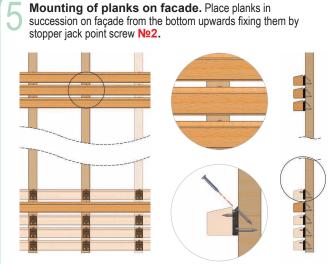


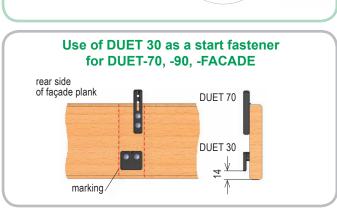


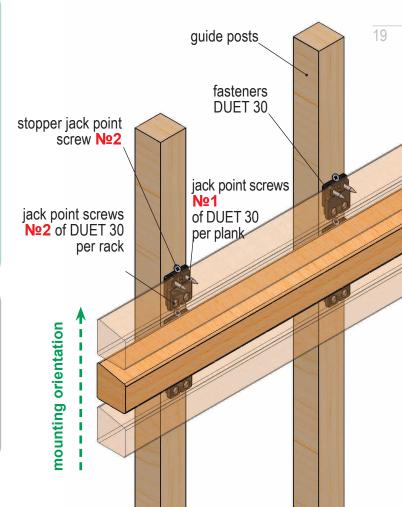
horizontal marks are made to indicate location of the DUET 30 element. It is advised to apply marks at a distance of 10 mm away of the lower edge of the post. Mark spacing should exceed 60 mm.

**Layout on guide posts.** On the face of guide posts

Mounting of a fastener on guide posts. Using marking lines place the DUET 30 element on guide posts and fix it with jack point screws №2.









GwozDECK DUET-facade are fasteners for mounting planks with any shape, they have smooth surface with no sharp cutting edges, simple to use in mounting and do not need any service afterwards. For convenient mounting of the first plank, a starting DUET is used.

#### **Design features of DUET-facade fasteners:**

- Made of composite polymer material and do not adsorb water.
- Guarantee long life of a facade due to efficient venting of the rear side of the sheathing plank.
- Convenient for mounting, as they have a mounting stopper to position the fastener against the edge
- · Compensate swelling-shrinking of the sheathing plank and do not cause its waving.
- May be used with sheathing plank with the width from 90 mm to 200 mm..
- Hiding the screw head in the fastener's gouge makes the facade surface ideally even.
- Due to its elasticity, DUET- facade may be used to fasten a plank less than 20 mm thick.

#### Recommendations

Characteristics	Sheathing	Load-bearing structure	
Thickness, mm	15-25	from 30	
Width, mm	90-200	from 45	
Density, kg/m³	< 700*	no limit	
Mounting clearance, mm	5-7**	500	
Auxiliary fasteners	jack point screw №1 - 4 pcs	jack point screw №2 - 1 pce	

<sup>\* -</sup> with sheathing wood density exceeding 600, preliminary drilling for screws is necessary \*\* - depends on wood humidity during assembling and conditions of usage

#### Consumption of GwozDECK fasteners DUET-facade per 1 m<sup>2</sup>

Plank width. Dis	mm beam axes mm clearar	Mounting		Consumption rate	
			DUET-facade, pair/m²	Screw №1, pcs/m²	Screw №2, pcs/m²
90	500	5	22	88	22
120	500	5	16	64	16
140	500	5	14	56	14
200	500	5	10	40	10

<sup>\* -</sup> accept timber (block house) imitation

#### Recommendations regarding selection of screws for DUET-facade fasteners

Sheathing board thick- ness, mm	Jack point s	screw №1  - (**)  length, mm
15	4,5	20
20	4,5	25
25	4,5	30



Load-bearing structure thickness,	Jack point s	screw №2
mm	diameter, mm	length, mm
40	4,5	40
45	4,5	40
45	4,5	40

# **DUET-facade**

#### **MATERIAL**

Fiberglass-reinforced Caprolon PA6

#### START FASTENER

**DUET** start **DUET 30** 



#### **SHEATHING PROFILE**



planken facade board classic, planken facade board skewed (rhomb), timber imitation, block house







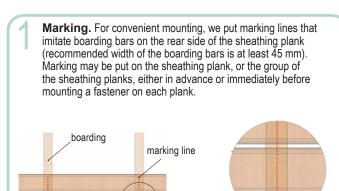




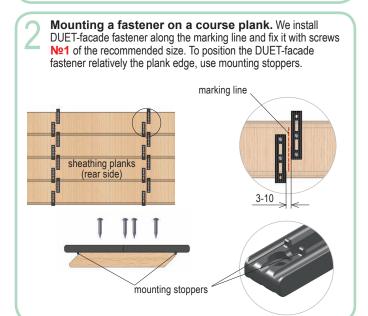


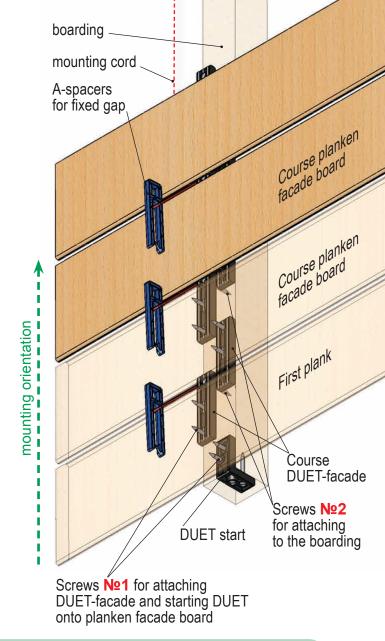


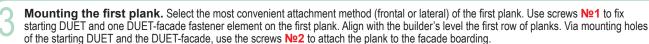




sheathing planks (rear side)







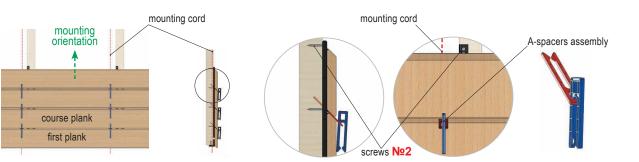




Method 1 - FRONTAL attachment of the starting fasteners

Method 2 - LATERAL attachment of the starting fasteners

Mounting course planks to boarding. We install an A-spacers assembly, hooking it to the mounting cord that was temporarily installed in the boarding zone. We install a course plank with DUET-facade fasteners, use screws №2 to fix it on the boarding via the fasteners' mounting holes. We fasten the needed amount of planken facade board. A-spacers are moved only after fixing 3 or 4 rows. The free edge of the last plank is fixed with the most convenient method.





GwozDECK DUET 70 are fasteners for mounting planks with any shape, they have smooth surface with out sharp cutting edges, simple to use for mounting and do not need any service afterwards. Starting DUET is used to mount the first plank for convenience.

#### **Design features of DUET 70 fasteners:**

- Made of composite polymer material and do not adsorb water.
- Guarantee long life of a facade due to efficient venting of the rear side of the sheathing plank.
- · Convenient for mounting, as they have a mounting stopper to position the fastener against the edge of the
- Compensate swelling-shrinking of the sheathing plank and do not cause its waving.
- May be used with sheathing plank with the width from 70 mm to 150 mm.
- Hiding the screw head in the fastener's gouge makes the facade surface ideally even.

#### Recommendations

Characteristics	Sheathing	Load-bearing structure
Thickness, mm	20-35	from 30
Width, mm	70-150	from 40
Density, kg/m³	< 800*	no limit
Mounting clearance, mm	5-7**	500
Auxiliary fasteners	jack point screw №1 - 4 pcs	jack point screw №2 - 1 pce

<sup>\* -</sup> with sheathing wood density exceeding 600, preliminary drilling for screws is necessary 
\*\* - depends on wood humidity during assembling and conditions of usage

#### Consumption of GwozDECK fasteners DUET 70 per 1 m<sup>2</sup>

Plank width,	Distance by floor	Mounting clearance*,		Consumption rate	
mm	beam axes, mm	mm	DUET 70, pair/m <sup>2</sup>	Screw №1, pcs/m²	Screw №2, pcs/m²
70	500	5	27	108	27
90	500	5	22	88	22
120	500	5	16	64	16
150	500	5	14	56	14

#### Recommendations regarding selection of screws for DUET 70 fasteners

	_	_			
Sheathing board thick-	Jack point screw №1				
ness, mm	diameter, mm	length, mm			
20	4,5	25			
25	4,5	30			
30	4,5	35			
35	4.5	40			



Load-bearing structure thickness,	Jack point s	screw №2
mm	diameter, mm	length, mm
45	4,5	45
45	4,5	50
50	4,5	50
50	4,5	50



#### **MATERIAL**

Fiberglass-reinforced Caprolon PA6

#### START FASTENER

**DUET** start **DUET 30** 



## SHEATHING PROFILE



planken facade board classic, planken facade board skewed (rhomb), timber imitation. block house





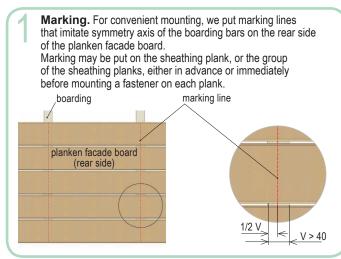


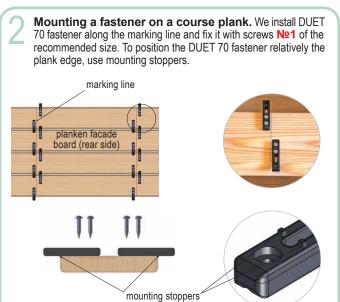


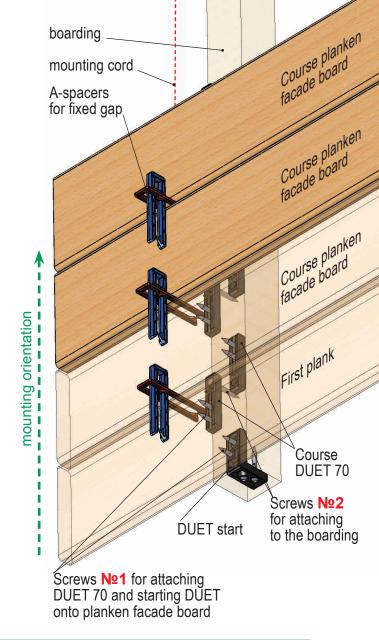




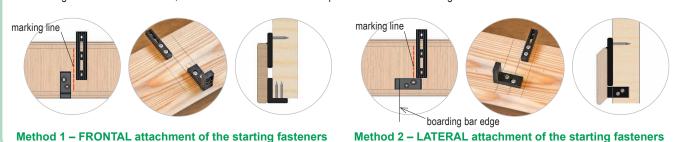




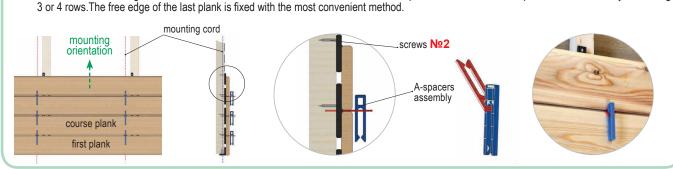








Mounting course planken facade board to the facade boarding. We install a planken facade board with attached DUET 70 fasteners on the boarding. To form the mounting clearances, an A-spacers assembly is used; for convenient usage of spacers behind the planken facade board, we temporarily fix a mounting cord in the planken facade board zone. To attach a planken facade board to the facade boarding via the fasteners' mounting holes, we use screws №2. We fasten the needed amount of planken facade board. A-spacers are moved only after fixing





GwozDECK DUET 90 are fasteners for mounting planks with any shape on the horizontal surface, it has smooth surface with out sharp cutting edges, simple to use for mounting and does not need any service afterwards. DUET 90 may be used to mount planks on the vertical surface. Starting DUET is used to mount the first plank for convenience.

#### **Design features of DUET 90 fasteners:**

- Made of composite polymer material and do not adsorb water.
- Guarantee long life of a terrace due to efficient venting of the hidden part of the structure.
- · Convenient for mounting, as they have a mounting stopper to position the fastener against the edge of the plank.
- · Compensate swelling-shrinking of the sheathing plank and do not cause its waving.
- May be used with a plank with the width from 90 mm to 200 mm.
- · Hiding the screw head in the fastener's gouge makes the facade surface ideally even.

#### Recommendations

Characteristics	Sheathing	Support structure
Thickness, mm	25-45	from 40
Width, mm	90-200	from 45
Density, kg/m³	< 900*	no limit
Mounting clearance, mm	5-7**	500
Auxiliary fasteners	jack point screw №1 - 4-6 pcs	jack point screw №2 - 1 pcs.

- \* with sheathing wood density exceeding 600, preliminary drilling for screws is necessary 
  \*\* depends on wood humidity during assembling and conditions of usage

#### Consumption of GwozDECK fasteners DUET 90 per 1 m<sup>2</sup>

Plank width,	Distance by floor beam axes,	Mounting clearance*,	Consumption rate					
mm	mm DUET 90, pair/m²		Screw №1, pcs/m²	Screw №2, pcs/m²				
90	500	7	21	84	21			
120	500	7	16	64	16			
140	500	7	14	56	14			
200	500	7	10	40	10			

#### Recommendations regarding selection of screws for DUET 90 fasteners

Sheathing board thick-	Jack point screw №1				
ness, mm	diameter, mm	length, mm			
25	5,0	30			
30	5,0	36			
35	5,0	40			
40	5,0	45			
45	5,0	50			



Load-bearing structure thickness,	Jack point screw №2					
mm	diameter, mm	length, mm				
50	5,0	40				
50	5,0	45				
50	5,0	50				
50	5,0	50				
50	5,0	50				



#### **MATERIAL**

Fiberglass-reinforced Caprolon PA6

#### START FASTENER

**DUET** start



#### **SHEATHING PROFILE**



planken facade board classic, planken facade board skewed (rhomb), decking plank, terrace decking, floorboard, timber imitation, block house





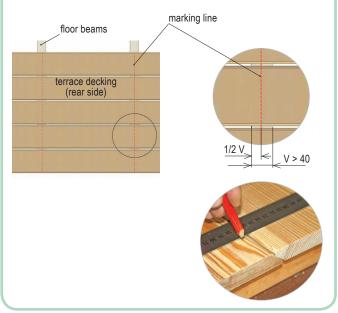


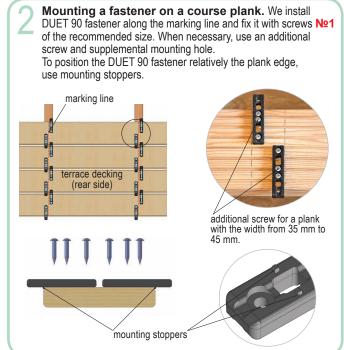






Marking. For convenient mounting, we put marking lines that imitate symmetry axis of the terrace floor beams on the rear side of the decking plank.





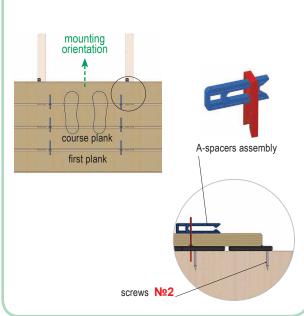
Mounting the first plank. Select the most convenient attachment method (frontal or lateral) of the first plank. Use screws №1 to fix starting DUET and one DUET 90 fastener element on the first plank. Via mounting holes of the starting DUET and the DUET 90, use the screws №2 to attach the first plank to the terrace floor beams.

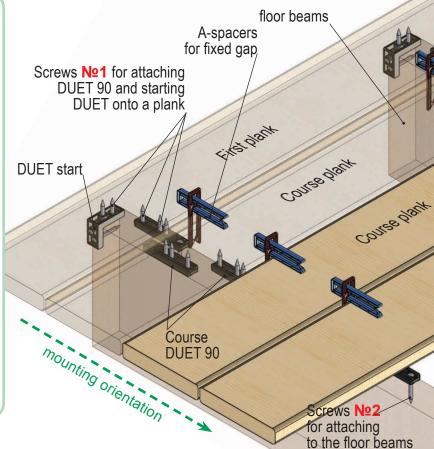






Mounting course planks on the floor beams. We install a decking plank with fixed DUET 90 fasteners on the terrace basis. We use an A-spacers assembly to form mounting clearances. Via the fasteners' mounting holes, we fasten the decking plank to the floor beams with screws №2. We fasten the needed amount of decking planks. A-spacers are moved only after fixing 3 or 4 rows. The free edge of the last plank is fixed with the most convenient method.







## **Spacers GwozDECK** is a new product that comprises a kit of calibrating pads for:

- Setting a measuring gap between the parts of wall final sheathing, facades, floors, terraces, ceilings.
- Point alignment of load-bearing structures in erection.

Spacers are implemented as cells made from a high-quality polymer material that is not vulnerable to UV-radiation, drops of temperature, they do not shrink and do not need any protective coating. Spacers may be used in structures with static load.

**MATERIAL** 

Polypropylen



#### Fields of B-spacers usage (Basic series):

- Aligning the guides before floor pouring.
- Aligning bed timber when mounting houses from rounded logs, frame-houses, terrace supporting structures.
- Aligning load-bearing structure (furring) for finishing operations.
- Setting measuring gaps between façade sheathing planks (classic and rhomb planken), terrace and flooring decking planks, lames de terrasses et panneaux de pont.









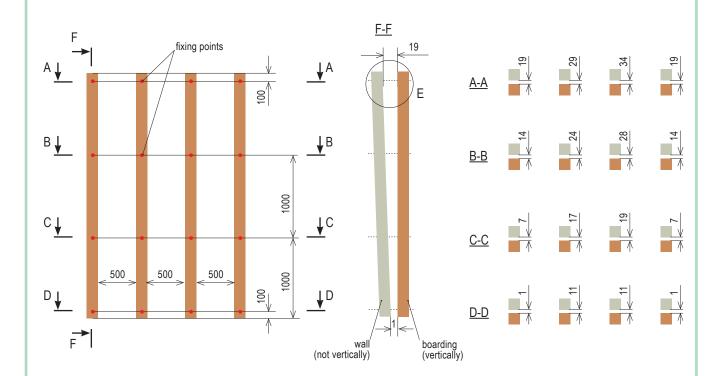




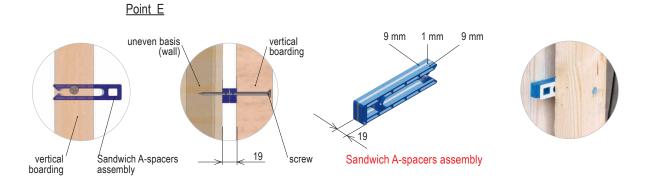


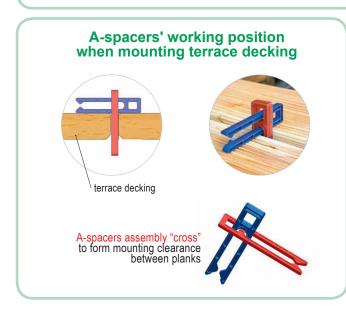
#### 27

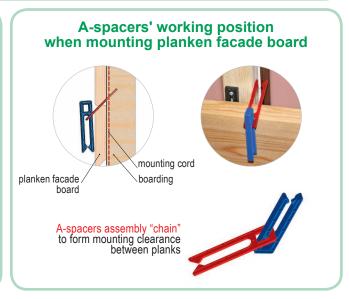
#### USAGE OF A-SPACERS WHEN MOUNTING (ALIGNING) VERTICAL BOARDING



We use countersunk head screws when mounting boarding bars; we choose the screw with the length not less than double thickness of the boarding; then screwing until the screw's head will be at a depth of 3-5 mm within the beam.







# 28

#### NOMENCLATURE, PART NUMBERS, PACKAGE

							Pack	cage			
				Measure-	N	21	N:	2	N	23	
		Part number	Name	ment unit	Amount	Weight, kg	Amount	Weight, kg	Amount	Weight, kg	page
	1	2	3	4	5	6	7	8	9	10	11
1	3	1014.01	fasteners for facade VOLNA, steel, CB	pcs	50	1,8			400	15	
2		1015.01	fasteners VOLNA START, steel, CB	pcs	50	1,8			400	15	4
3	O <sub>2</sub>	1001.01	fasteners for terrace plank CLASSIC, steel, CB	pcs	150	1,9			1200	15,4	
4	7	1001.02	fasteners for terrace plank CLASSIC, steel, CB	pcs					1000*	12,5	
5	1.	1002.01	fasteners for terrace plank CLASSIC, steel, CTD	pcs	150	1,9			1200	15,4	6
6	<b>Q</b> q	5001.01	fasteners for terrace plank CLASSIC (steel, CB) with jack point screw 3,5×35, CB	set	150	2,0			1200	16,5	
7	7	5002.01	fasteners for terrace plank CLASSIC (steel, CTD) with jack point screw 3,5 $\times$ 35, CB	set	150	2,0			1200	16,5	
8	/3000	1003.01	fasteners for terrace plank TWIN, steel, CB	pcs	100	1,7			800	13,8	0
9		1004.01	fasteners for terrace plank TWIN, steel, CTD	pcs	100	1,7			800	13,8	8
10	19	1005.01	fasteners for terrace plank TWIN MINI, steel, CB	pcs	200	1,6			1600	13	10
11		1006.01	fasteners for terrace plank TWIN MINI, steel, CTD	pcs	200	1,6			1600	13	10
12	<b>Q</b>	1007.01	fasteners for terrace plank PRO, steel, CTD	pcs	150	1,6			1200	13	12
13		1014.01	fasteners for terrace plank TERRA (PA6)	pcs	100	0,7			1200	5,9	
14	4	5003.01	fasteners for terrace plank TERRA (PA6) with jack point screw 3,5*55, CZh	set	100	0,9			1200	7,5	14
15	<b>W</b> /	5004.01	fasteners for terrace plank TERRA (PA6) with stainless jack point screw 4,0×60, C1	set	100	0,9			1200	7,5	
16		1015.01	fasteners for terrace plank THERMO (PA 6)	pcs	100	0,4			1200		
17		5010.01	fasteners for terrace plank THERMO (PA 6) with jack point screw 3,5×55, CZh	set	100	0,5			1200	6	16
18		5011.01	fasteners for terrace plank THERMO (PA 6) with stainless jack point screw 4,0×60, S1	set	100	0,5			1200	6	
19		1013.03	fasteners DUET 30, PA 6	pair			100	1.2	400		18
20		1009.02	fasteners DUET-FACADE, PA 6	pair					200*	6,0	20
21	(CCC)	1010.02	fasteners DUET 70, PA6	pair					400*	7,4	22
22	OM CO	1011.02	fasteners DUET 90, PA6	pair					200*	5,5	24
23		1012.01	fasteners DUET START, PA6	pcs	40	0,6			320	5	20, 22, 24

							Pacl	kage			
		Part number	Name	Measure-	N:	21	N:	22	N	23	nago
		raithumber	ivallie	ment unit	Amount	Weight, kg	Amount	Weight, kg	Amount	Weight, kg	page
	1	2	3	4	5	6	7	8	9	10	11
	Sets of A-spacers fo	or wall aligni	ment								
24		5005.03	A-spacer for alignment, PP, the set consists of: 1 mm -10 pcs, 3 mm -10 pcs, 5 mm -10 pcs, 7 mm -10 pcs, 9 mm-10 pcs. Total - 50 pcs	set			1	0,1	10	1,1	
25		1021.03	A-spacer, PP, 1 mm - 50 pcs	set			1	0,1	10	1,1	
26		1022.03	A-spacer, PP, 3 mm - 50 pcs	set			1	0,1	10	1,1	
27		1023.03	A-spacer, PP, 5 mm - 50 pcs	set			1	0,1	10	1,1	
28		1024.03	A-spacer, PP, 7 mm - 50 pcs	set			1	0,1	10	1,1	
29		1025.03	A-spacer, PP, 9 mm - 50 pcs	set			1	0,1	10	1,1	
	Sets of A-spacers fo	or plank asse	embly								
30		5008.03	A-spacer for assembly, PP, the set consists of: 5 mm - 20 pcs, 9 mm - 20 pcs. Total - 40 pcs	set			1	0,1	10	1,1	
31		5009.03	A-spacer for assembly, PP, the set consists of: 7 mm - 20 pcs, 9 mm - 20 pcs. Total - 40 pcs	set			1	0,1	10	1,1	26
	Sets of B-spacers for	or floor align	ment								
32		5006.03	B-spacer for alignment, PP, the set consists of: 1mm -10 pcs, 2 mm -10 pcs, 3 mm -10 pcs, 4 mm -10 pcs, 5 mm -10 pcs, 6 mm -10 pcs. Total - 60 pcs	set			1	0,1	10	1,1	
33		1026.03	B-spacer, PP, 1 mm – 60 pcs	set			1	0,1	10	1,1	
34		1027.03	B-spacer, PP, 2 mm - 60 pcs	set			1	0,1	10	1,1	
35		1028.03	B-spacer, PP, 3 mm – 60 pcs	set			1	0,1	10	1,1	
36		1029.03	B-spacer, PP, 4 mm – 60 pcs	set			1	0,1	10	1,1	
37		1030.03	B-spacer, PP, 5 mm - 60 pcs	set			1	0,1	10	1,1	
38		1031.03	B-spacer, PP, 6 mm - 60 pcs	set							

#### PACKAGE

Nº1



 $(200 \times 100 \times 100 \text{ mm}^3)$ 

Nº2



 $(180 \times 250 \text{ mm}^2)$ 



(200×200×400 mm<sup>3</sup>)





