Decking boards RELAZZO style

General Preliminary Notes

- The RELAZZO boards of company REHAU consist of WPC (wood polymer composite) and have been specially developed for the requirements of outdoor areas.

- REHAU offers a complete decking system with RELAZZO, in which all individual components of the system are coordinated with each other. This reduces assembly work and results in a durable end product, which makes perfect use of the advantages of the WPC material.

- The material RAU-WOOD is used for RELAZZO WPC products. RAU-WOOD is made of a balanced mix of wood fibres and polypropylene. The wood fibre content of min. 50% up to max.55% comes 100 % from proven sustainable forestry. This is certified with a PEFC certificate.
The wood fibres are embedded in a polymer matrix. RAUWOOD's polymer matrix consists of min.40% newly produced polypropylene (PP).
No PVC (polyvinyl chloride) is used due to it not being ecologically harmless

- RELAZZO WPC products are produced in Austria and can be 100 % recycled.

- RELAZZO boards with a hollow section design have a load-optimised profile. The closed outer layer is resistant against external forces and blows. Forces are directly dissipated into the substructure thanks to the vertical supporting ribs. The load optimisation also has the advantage of simple handling and assembly thanks to the reduction of the board weight.

- The physical properties are checked by continuous quality assurance and external quality control in compliance with the inspection and quality regulations for WPC products of the Association of the German Woodworking Industry and the TÜV South Industry Service Ltd and is certified with certificates.

- The visible surfaces of the RELAZZO WPC boards are processed using special brushes, which exposes integrated wood fibres and optimises the tactile as well as natural visual properties of the product. The wood fibres on the brushed RELAZZO WPC board surface undergo a natural change process in the first few weeks. During the process, which may take up to 5 months depending on the location, the wood fibres located on the surface change slightly due to sunlight. Following this, the WPC board will permanently regain its original colour character. This process has no bearing on the mechanical strength of the WPC board.

- The anti-slip class (≥ 24°) R11 to DIN 51097 and the coefficient of sliding friction μ > 0,43° to DIN 5113 is achieved on both surfaces by brushing both sides.

- The RELAZZO WPC boards from company REHAU are tested for resistance against mould fungi based on DIN EN 60068-2-10 and rated with 0-1 i.e. "resistant".

- The RELAZZO WPC boards of company REHAU are checked and certified according to the EN 71-3
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- The boards have a breaking load of at least 4,000 N when delivered and following storage in a humid and hot environment of at least 3300N based on the specifications of the TÜV South Industry Service Ltd.
based on the specifications of the TÜV South Industry Service Ltd. This has been verified and confirmed with a TÜV South certificate.
The storage in a humid and hot environment is to be carried out according to the following load cycle:
Cycle 1: 4 hrs storage in water 80°C
Cycle 2: 115 hrs heat storage,115°C
Cycle 3: 4 hrs storage in water 80°C
Cycle 4: 115 hrs heat storage,115°C
Cycle 5: 4 hrs storage in water 80°C
Cycle 6: 115 hrs heat storage,115°C
Cycle 7: 4 hrs storage in water 80°C
Cycle 8: 115 hrs heat storage,115°C

The boards have undergone the following dimensional changes (average value in %) after 28 days
water storage to EN317. This has been verified and confirmed with a certificate.
Length increase: ≤ 4%
Width increase: ≤ 0.8%
Thickness increase: ≤ 4%
Weight increase: ≤ 7%

- The RELAZZO decking system can be used in environments containing chlorine and salt. This is achieved thanks to the use of a V4A stainless steel alloy in the assembly components (≤3mm wall thickness). V4A has the advantage of a better resistance against corrosion in media containing chlorine and salt compared to stainless steel. The aluminium alloy 6060 (step profile, end trim, substructure), which is suitable for lake water (EN 13195-1), is used for all visible aluminium components. The surface of the visible aluminium areas are additionally anodized. The protective layer formed in this way is min. 20µm thick and protects the component additionally against corrosion and visual changes.

- The joint pattern is not disturbed by the colour adjustment of the assembly components. In addition to this, disturbing light reflections are effectively prevented by colouring and covering reflective RELAZZO components.

Installation instructions

Application:
The WPC profile RELAZZO and the substructure have been specially developed for the use as decking flooring. The products do not have general technical approval and due to this reason, are not to be used for unsupported purposes. The local building regulations are to be observed accordingly.

Installation:
- Substructure and base;
The aluminium or WPC substructure is installed on slabs (e.g.concrete), in a bed of gravel on adjustable feet (30-50mm; 50-90mm, with adjustable foot adapter max. total height 500mm) or on a

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sealed subsoil (concrete surface or similar). In this, the maximum bearing distance of the aluminium substructure is 400 mm and the WPC substructure is 300 mm

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subsoils are levelled out with rubber spacers (EPDM) or adjustable feet.

It is not possible to directly install the aluminium or WPC substructure on the subsoil (e.g.: stone filling, ground, gavel bed etc).

The external aluminium substructure profiles are fastened to the subsoil by means of a fixing system for aluminium substructures (aluminium 6060, V2A).

The outer WPC substructure profiles are fixed to the subsoil (concrete stones, concrete slab etc) with a fixing bracket (V4A steel,black coating) and screws (V4A steel, black coating) alternating on the left and right of the profile every maximum 1,000 mm

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If it is not possible to fix them to the subsoil (e.g. flat roof), the WPC substructure profiles are screwed together using a fixing bracket (V4A steel, black coating) and screws (V4A steel, black coating) to form a continuous frame. The aluminium substructures are screwed together to form a frame using the frame construction set for aluminium substructures (aluminium 6060, V2A).

The maximum bearing distance of the RELAZZO style boards on the WPC substructure is 400 mm.

The WPC boards can be used on both sides (grooved or ridged surface) and is fixed at least every 400 mm.

When using an aluminium substructure, the board is fastened onto the aluminium substructure using a quick-installation clip (optical fibre reinforced polymer), the end bracket (V4A steel, black coated) is screwed on in the corner area. When using quick-installation clips, a centre bracket (V4A steel, black coating) has to be screwed on every maximum two metres across the board width. The flex clip (optical fibre reinforced polymer) is used for special applications (repair, UK board angle <85° >95°) .

The boards is screwed onto the substructure using a centre bracket (V4A steel, black coating), in the corner area using an end bracket (V4A steel, black coating) when using a WPC substructure

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- Ventilation and ventilation at rear

Care should be taken to ensure that there is sufficient ventilation. A distance of the RELAZZO boards of minimum 20 mm is to be observed towards adjacent buildings. If the joint cover profile is used, sufficient ventilation has to be ensured and the clearance between the subsoil and the lower board edge has to be min.100 mm.

- Gradient:

The RELAZZO WPC boards are installed in longitudinal direction at a gradient of min.1% (10 mm / lfm) This drains surface water and helps clean the surface naturally.

- Installation instructions and technical information:

The specifications of the current RELAZZO installation instructions and technical information are to be adhered to.

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System description

RELAZZO style board 169 x 23mm

The RELAZZO style board is designed as a load-optimised 7-chamber hollow section profile. The installation of the substructure is carried out with brackets.

The board serves the purpose of the uppermost top layer and meets the requirements of deckings based on the VHI.

Material: WPC (RAUWOOD)

Profile: 7-chamber hollow section profile

Weight: 2,1kg/lfm

Surface:	Standard:	Natural: grooved-brushed / embossed-brushed (can be used on both sides)
	Non-standard:	Natural: grooved-brushed / brushed (can be used on both sides)
Colours:	Standard:	Terra, Tasso, Pino
Packaging unit (VPE)	Standard:	4m, 6m
	Non-standard:	Up to 12m

Aluminium substructure 30 x 21 mm

The aluminium substructure profile serves the purpose of a support for the WPC board and as a fastening base for various quick-installation connections & assembly systems.

Material: Aluminium 6060

Profile: I-design

Weight: 0,62kg/lfm

Colour: Silver,

Packaging unit (VPE) 4,000 mm:

Note: - bearing distance to the spacer (internal clearance): 40cm

- substructure distance (internal clearance): 40cm

WPC substructure 50 x 30 mm

The WPC substructure profile serves the purpose of a support for the WPC board and as a fastening base for various screw connections.

Material: WPC (RAUWOOD)

Profile: Single hollow section

Weight: 1,3kg/lfm

Colour: Black

Packaging unit (VPE) 4,000 mm:

Note: - bearing distance to the spacer (internal clearance): 30cm

- substructure distance (internal clearance): 47cm

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WPC substructure 60 x 40 mm

The WPC substructure profile serves the purpose of a support for the WPC board and as a fastening base for various screw connections.

Material: WPC (RAUWOOD)
Profile: Single hollow section
Weight: 1,7kg/lfm
Colour: Black
Packaging unit (VPE) 4,000 mm:
Note: - bearing distance to the subsoil (internal clearance): 30cm
- substructure distance (internal clearance): 47cm

Adjustable foot 30-50mm, 50–90mm

Adjustable feet are used between the substructure and the subsoil. They ensure levelling without steps, prevent waterlogging and ensure the adjustment of the required board gradient of min. 1%.

Material: PP
Dimension: Ø200mm
Colour: Black
Packaging unit (VPE) 30-50 mm: 25 pcs.
50-90 mm (using and adapter max. 500mm): 20 pcs.

Adjustable foot screw for aluminium substructure

Adjustable foot screws serve the purpose of permanently fastening the aluminium substructure to the adjustable foot.

Material: V4A stainless steel
Dimension: 30mm:
Colour: black (coated)
Packaging unit (VPE) 20 pcs.adjustable foot screws for aluminium

Adjustable foot screw for WPC substructure

Adjustable foot screws serve the purpose of permanently fastening the WPC substructure to the adjustable foot.

Material: V4A stainless steel
Dimension: 30mm:
Colour: black (coated)
Packaging unit (VPE) 20 pcs.adjustable foot screws for WPC

Adjustable foot adapter

The adjustable foot adapter is used in order to extend the adjustment height of the adjustable foot 50-90mm to up to 500 mm (max. 12 adapters).

Material: PP
Colour: Black
Packaging unit (VPE) 40 pcs. adjustable foot adapter
Note:- The adapter cannot be used for the adjustable foot 30-50 mm.

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Rubber spacer 3mm, 5mm, 10mm

Rubber spacers are used between the substructure and the subsoil. They ensure levelling of uneven grounds, reduce noise, prevent waterlogging and allows the adjustment of the required board gradient of min. 1%.

Material: EPDM
Dimension: 50 x 50 mm
Colour: Black
Packaging unit (VPE) 3 mm: 100 pcs.
5 mm: 100 pcs.
10 mm: 50 pcs.

Fastening system aluminium substructure

The fastening system aluminium substructure is used to fasten the outer aluminium substructures to the base. It also serves the purpose of an interim connection between the aluminium substructure and the aluminium substructure.

Material: Aluminium 6060 / V2A stainless steel
Colour: Silver,
Packaging unit (VPE) 15 pcs. fixing brackets / 20 pcs. hammer-head bolts

Fixing bracket

The fixing bracket set serves the purpose of fixing the WPC substructure to the subsoil and as a corner connection between two WPC substructures.

Material: V4A stainless steel
Colour: black (coated)
Packaging unit (VPE) 20 pcs. fixing brackets / 45 pcs. hammer-head bolts

Joining plate

The joining plate set serves the purpose of the longitudinal connection of two WPC substructures.

Material: V4A stainless steel
Colour: black (coated)
Packaging unit (VPE) 20 pcs. joining plates/ 45 pcs screws for WPC

Quick installation clip

The quick-installation clip serves the purpose of easily, permanently and quickly fastening boards to the aluminium substructure. The bracket compensates for expansions of the boards due to its design and keeps the boards at the correct distance from each other.

The expansion mandrel is used to fix the board in longitudinal direction.

Material: Optical fibre reinforced polymer
Colour: Black
Packaging unit (VPE) 100 pcs. clips / 25 pcs. expansion mandrels

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Flex-Clip

The flex clip (optical fibre reinforced polymer) was developed for special applications such as reassembly or dismantling as well as sloped installations (angle between the board to the substructure <85° >95°)

Material: Optical fibre reinforced polymer/V4A stainless steel
Colour: black (coated)
Packaging unit (VPE) 25 pcs. flex clips/ 25 pcs screws for aluminium

Centre bracket for aluminium substructure

The centre bracket set serves the purpose of fixing boards onto the aluminium substructure. It is used every 2 metres instead of the quick-installation clip. The bracket compensates for expansions of the boards due to its design and keeps the boards at the correct distance from each other.

Material: V4A stainless steel
Colour: black (coated)
Packaging unit (VPE) 25 pcs. centre brackets/ 25 pcs screws for aluminium

End bracket for aluminium substructure

The end bracket set serves the purpose of installing boards at the beginning and the end of the aluminium substructure. The bracket compensates for expansions of the boards due to its design and keeps them in position.

Material: V4A stainless steel
Colour: black (coated)
Packaging unit (VPE) 25 pcs. end brackets/ 25 pcs screws for aluminium

Centre bracket for WPC substructure

The centre bracket set serves the purpose of fixing boards onto the WPC substructure. The bracket compensates for expansions of the boards due to its design and keeps the boards at the correct distance from each other.

Material: V4A stainless steel
Colour: black (coated)
Packaging unit (VPE) 100 pcs. centre brackets/ 100 pcs screws for WPC

End bracket for WPC substructure

The end bracket set serves the purpose of installing boards at the beginning and the end of the WPC substructure. The bracket compensates for expansions of the boards due to its design and keeps them in position.

Material: V4A stainless steel
Colour: black (coated)
Packaging unit (VPE) 25 pcs. end brackets/ 25 pcs screws for WPC

End cap style

The end cap style is used to cover the hollow sections of the RELAZZO style boards.

Material: WPC
Colours: Terra, Tasso, Pino
Packaging unit (VPE) 25 pcs. end caps style
Note: - Use with a straight cut, 90° +- 3° in direction of the longitudinal edge of the board.

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Adhesive

The adhesive is used to additionally fix the RELAZZO end caps style and the flexible end trim onto the boards. In addition to this, the hollow sections of the RELAZZO style boards are covered.

Colour: transparent

Packaging unit (VPE) 1 pc.cartridge 310 ml

Flexible end strip

The flexible end trip ensures a flush edge finish in the front in round or slanted cutting edges.

Material: TPE

Colours: Terra, Tasso, Pino

Packaging unit (VPE) 4.000mm

Groove cutter

The groove cutter is required to produce a groove for the installation of the flexible end trim.

Packaging unit (VPE) 1 pcs.

Aluminium end trim

The aluminium end trip is used to finish the openly visible ends of the RELAZZO boards. The unequal L-profile can be used universally thanks to the visible surfaces anodized on both sides.

Material: Aluminium 6060

Dimension: 60x40mm

Colour: light bronze

Packaging unit (VPE) 4.000mm

Fixing set for aluminium end trim

The fixing set serves the purpose of installing the aluminium end trim onto the WPC board or WPC substructure. The enclosed polymer pipes can be cut to size as required and therefore create a flexible design of the finish of the aluminium end trim.

Material: RAUTITAN / V4A

Colour: neutral / silver

Packaging unit (VPE) 3 pcs spacers (100 mm) / 20 pcs screws

Aluminium step profile 23 mm for aluminium substructure

The aluminium step profile 23 mm for aluminium substructures is used as a reinforcement and design element in corners as well as on steps. The visible surfaces are anodized and grooved in order to increase the anti-slip resistance in these areas.

Material: Aluminium 6060

Colour: light bronze

Packaging unit (VPE) 4.000 mm

Al- step profile 23 mm for WPC substructure

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The Al- step profile 23 mm for WPC substructures is used as a reinforcement and design element in corners as well as on steps. The visible surfaces are anodized and grooved in order to increase the anti-slip resistance in these areas.

Material: Aluminium 6060
Colour: light bronze
Packaging unit (VPE) 4.000 mm

Joint cover

The longitudinal joint between the boards can be closed with elastic joint covers.

Material: EPDM
Colour: Black
Packaging unit (VPE) 100 m
Note: A sufficient ventilation must be ensured, min. 100 mm distance to the subsoil.
Cannot be combined with a quick-installation clip.

LED spotlight set

The LED spotlight set serves the purpose of a lighting element, which can be directly integrated into a board.

Material: Surface stainless steel V4A
Colour: silver/neutral white
Packaging unit (VPE) LED spotlights: 3 pcs. (each 1W), 3 m cable length per LED spotlight, bearing diameter approx. 68 mm, ,
IP 65, light strength approx. 70 lm, light colour neutral white, incl.
Distributor: 1 pcs., 3-way, IP 65, construction height 28 mm, including 6 m cable
Power supply: 1 pc. capacity max. 6W (max. 6 LED spotlights) , IP 67, construction height 28 mm, including 2m cable

LED spotlight extension set

The LED spotlight extension set servers the purpose of adding an additional LED spotlight to the LED spotlights set. Max. 6 LED spotlights can be connected to a transformer.

Material: Surface stainless steel V4A
Colour: silver/neutral white
Packaging unit (VPE) LED spotlights: 1 pc.,1W , 3 m cable length per LED spotlight, bearing diameter approx. 68 mm,IP 65, light strength approx. 70 lm, light colour neutral white, incl.
Distributor: 1 pcs., 3-way, IP 65, construction height 28 mm, including 6 m cable