Technical brochure.

Important information for specialty retailers

megawood®
Made in Germany

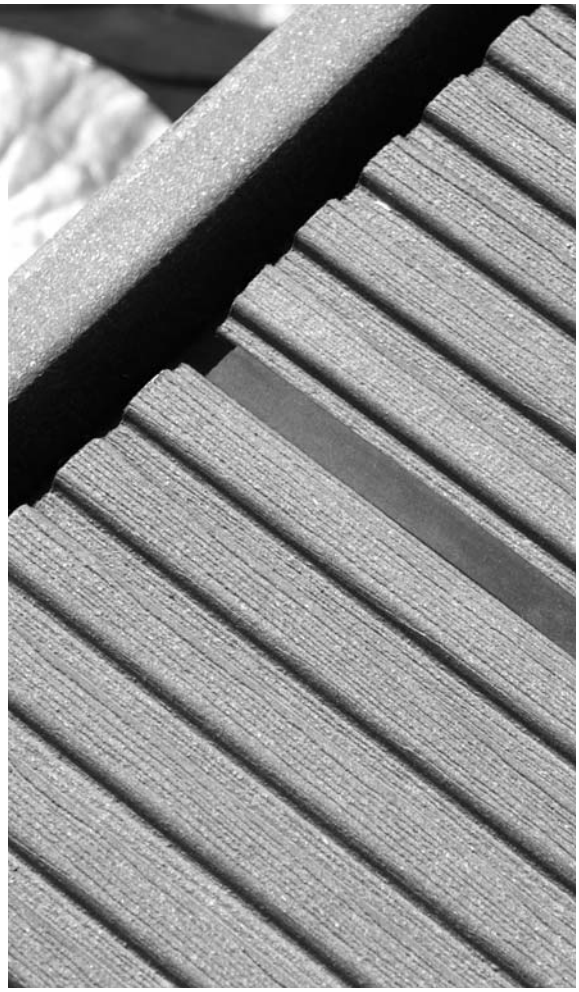


Table of Contents

As of June 2010

List of items.

megawood® decking

megawood®
Made in Germany

megawood® garden decking					
garden decking	Brand	Art. Name	Colour	Length in cm	H x W in mm
NOV0070-300-600FE	megawood®	Solid barefeet use floorboard	nat. brown	300, 360, 420, 480, 540, 600	21 x 145
NEW! NOV0071-300-600FE	megawood®	Solid barefeet use floorboard	basalt grey	300, 360, 420, 480, 540, 600	21 x 145
NOV0073-300-600FE	megawood®	Solid barefeet use floorboard	nut brown	300, 360, 420, 480, 540, 600	21 x 145
NOV0001-300-600FE	megawood®	Barefeet use floorboard	nat. brown	300, 360, 420, 480, 540, 600	25 x 145
NOV0002-300-600FE	megawood®	Barefeet use floorboard	basalt grey	300, 360, 420, 480, 540, 600	25 x 145
NOV0018-300-600FE	megawood®	Barefeet use floorboard	nut brown	300, 360, 420, 480, 540, 600	25 x 145
NOV0050-300-540FE	megawood®	Solid barefeet use floorboard	nat. brown	300, 420, 540	25 x 145
NOV0051-300-540FE	megawood®	Solid barefeet use floorboard	basalt grey	300, 420, 540	25 x 145
NOV0053-300-540FE	megawood®	Solid barefeet use floorboard	nut brown	300, 420, 540	25 x 145
NEW! NOV0090-300-540FE	megawood®	Solid Jumbo barefeet use floorboard	nat. brown	300, 360, 420, 480, 540, 600	21 x 242
NOV0091-300-540FE	megawood®	Solid Jumbo barefeet use floorboard	basalt grey	300, 360, 420, 480, 540, 600	21 x 242
NOV0093-300-540FE	megawood®	Solid Jumbo barefeet use floorboard	nut brown	300, 360, 420, 480, 540, 600	21 x 242
NOV0004-360	megawood®	Construction beam	grey	360	40 x 60
KP001-360GR	megawood®	Construction beam	grey	360	90 x 90
NOV0005-360FE	megawood®	Smooth edge board	nat. brown	360	17 x 72
NOV0006-360FE	megawood®	Smooth edge board	basalt grey	360	17 x 72
NOV0019-360FE	megawood®	Smooth edge board	nut brown	360	17 x 72
NEW! NOV0015-300FE	megawood®	Building joints profile	nat. brown	300	61 x 50
NOV0016-300FE	megawood®	Building joints profile	basalt grey	300	61 x 50
NOV0017-300FE	megawood®	Building joints profile	nut brown	300	61 x 50

List of items.

megawood® decking

megawood® Made in Germany

megawood® accessories decking assembly					
Art. No.	Brand	Art. Name	Colour	Length in cm	H x W in mm
NEW! NOV0016-102	megawood®	Groove strip 21 mm, 25 m/roll	black		
NOV0016-103	megawood®	Groove strip 21 mm, 100 m/roll	black		
NOV0016-100	megawood®	Groove strip 25 mm, 25 m/roll	black		
NOV0016-101	megawood®	Groove strip 25 mm, 100 m/roll	black		
NEW! NOV0008-402	megawood®	Aluminium profile 21 mm	bronze	400	
NOV0008-403	megawood®	Aluminium profile 21 mm	silver	400	
NOV0008-400	megawood®	Aluminium profile 25 mm	bronze	400	
NOV0008-401	megawood®	Aluminium profile 25 mm	silver	400	
NOV0007-01	megawood®	Stainless steel securing clamp			
NOV0007-05	megawood®	Replacement screws 4 x 35 mm	black		
NOV0007-03	megawood®	Securing clamp	black		
NOV0007-04	megawood®	Edge clamp	black		
NOV0016-01	megawood®	Rubber pad 20 x 60 x 100 mm			
NOV0016-11	megawood®	Rubber pad 10 x 60 x 100 mm			
NOV0016-21	megawood®	Rubber pad 3 x 60 x 100 mm			
NEW! NOV0015-12	megawood®	Self-adhesive securing tape 10 mm; 10 m/roll	black		
NOV0016-03	megawood®	Compensation plate 3 mm			
NOV0016-04	megawood®	Compensation plate 5 mm			
NOV0016-02	megawood®	bearing plate 15 mm			
NOV0016-10	megawood®	Spacer 40 x 30 x 10 mm			
NOV0016-110	megawood®	megaclean 1 L			
NOV0016-111	megawood®	megaclean pressure sprayer			

List of items.

megalite / megawood® privacy screen

megawood®
Made in Germany

megawood® accessories decking megalite					
Art. No.	Brand	Art. Name	Colour	Length in cm	H x W in mm
NOV0009-03	megalite	LED floor spotlight "Maxi", Ø 60 mm	warm white		
NOV0009-04	megalite	LED floor spotlight "Maxi", Ø 60 mm	blue		
NOV0009-05	megalite	LED floor spotlight "Mini", Ø 34 mm	blue		
NOV0009-06	megalite	LED floor spotlight "Mini", Ø 34 mm	warm white		
NOV0010-02	megalite	power adapter maxi/mini, 20 watts			
NOV0010-05	megalite	power adapter IP 68 for mounting under the deck, 10 watts			
NOV0010-04	megalite	Connection adapter (CH)			
NOV0012-02	megalite	distributor 3-fold			
NOV0012-03	megalite	distributor 5-fold			
NOV0013-05	megalite	power cable 1,5 m			
NOV0013-03	megalite	power cable 5 m			
NOV0013-04	megalite	power cable 10 m			

megawood® garden privacy screen					
Art. No.	Brand	Art. Name	Colour	Length in cm	H x W in mm
KP002-200BRFE	megawood®	Post	nat. brown	190	100 x 160
KP003-190NUFE	megawood®	Post	nut brown	190	100 x 160
KPA005-200BRFE	megawood®	Wall cover	nat. brown	189	50 x 85
KPA004-190NUFE	megawood®	Wall cover	nut brown	189	50 x 85
SF020-180FE	megawood®	Visual protection board	nat. brown	193	25 x 232
SF023-193FE	megawood®	Visual protection board	nut brown	193	25 x 232

megawood® privacy screen accessories					
Art. No.	Brand	Art. Name	Colour	Length in cm	H x W in mm
NOV0007-09	megawood®	Fastening plate for the wall cover	V2A		
NOV0007-10	megawood®	screw-on anchor incl. screws			
NOV0007-11	megawood®	concrete anchor incl. screws			
NOV0007-12	megawood®	Post cap with ball	V2A		
NOV0007-13	megawood®	Post cap without ball	V2A		
NOV0007-15	megawood®	Post cap with ball	galvanised		
NOV0007-16	megawood®	Post cap without ball	galvanised		
NOV0007-21	megawood®	Sealing tape 20 mm, 8 m/roll			
NOV0016-110	megawood®	megaclean			
NOV0016-111	megawood®	megaclean pressure sprayer			

List of items.

megawood® formwork

megawood® Made in Germany

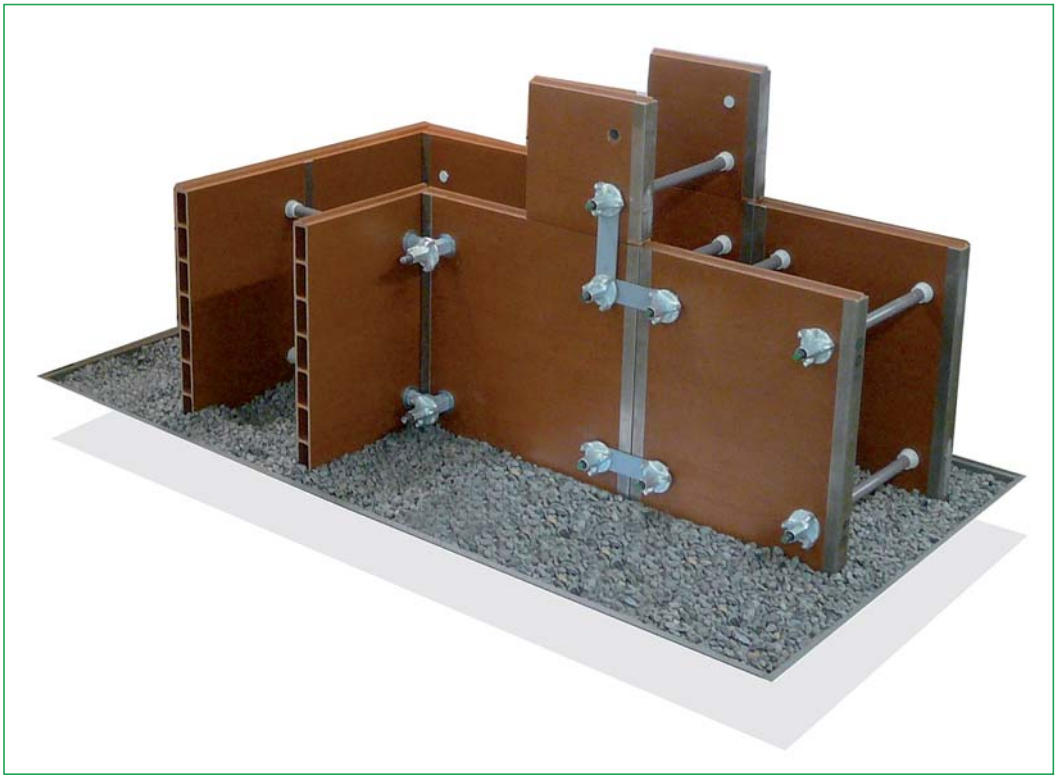
megawood® formwork					
Art. No.	Brand	Art. Name	Colour	Length in cm	H x W in mm
SF001-200	megawood®	Foundation formwork, complete		200	45 x 600
SF002-200	megawood®	Foundation formwork, complete		200	45 x 300
SF002-203	megawood®	Foundation formwork, cut to size		200	45 x 600
SF002-202	megawood®	Foundation formwork, cut to size		200	45 x 300
SD001-240	megawood®	Ceiling formwork, cut to size		240	45 x 600
SD001-360	megawood®	Ceiling formwork, cut to size		360	45 x 600

megawood® formwork accessories					
Art. No.	Brand	Art. Name	Colour	Length in cm	H x W in mm
NOVO007-18		Formwork panel strap			
NOVO007-19		Formwork panel T–profile with DW 15			
NOVO007-20		Formwork panel corner connector, square			

NOVO007-18

NOVO007-19

NOVO007-20



Forms of delivery and packaging units.

megawood® Made in Germany

megawood® decking

NEW!

megawood® Solid barefeet use floorboard (21 x 145 mm)				package content 98 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
300	294,00	9,60	42,63	940,80
360	352,80	11,52	51,15	1.128,96
420	411,60	13,44	59,68	1.317,12
480	470,40	15,36	68,21	1.505,28
540	529,20	17,28	76,73	1.693,44
600	588,00	19,20	85,26	1.881,60

megawood® Barefeet use floorboard (25 x 145 mm)				package content 112 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
300	336,00	7,56	48,72	857,00
360	403,20	9,07	58,46	1.026,00
420	470,40	10,58	68,21	1.197,00
480	537,60	12,10	77,95	1.369,00
540	604,80	13,61	87,70	1.540,00
600	672,00	15,12	97,44	1.711,00

megawood® Solid barefeet use floorboard (25 x 145 mm)				package content 84 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
300	252,00	10,89	36,54	914,76
420	352,80	15,25	51,15	1.280,66
540	453,60	19,60	65,77	1.646,56

NEW!

megawood® Solid Jumbo barefeet use floorboard (21 x 242 mm)				package content 56 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
300	168,00	16,95	40,65	949,20
360	201,60	20,34	48,78	1.133,04
420	235,20	23,73	56,91	1.328,88
480	268,80	27,12	65,05	1.518,72
540	302,40	30,51	73,18	1.708,56
600	336,00	33,90	81,31	1.898,40

Forms of delivery and packaging units.

megawood® Made in Germany

megawood® decking

megawood® Construction beam (40 x 60 mm)				package content 170 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
360	612,00	9,83	-	1.692,00

megawood® Construction beam (90 x 90 mm)				package content 55 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
360	198,00	19,08	-	1.060,00

megawood® Smooth edge board (17 x 72 mm)				package content 112 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
360	403,20	5,79	-	654,00

NEW!

megawood® Building joints profile (61 x 50 mm)				package content 140 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
300	420,00	7,20	-	1.008,00

Forms of delivery and packaging units.

megawood® Made in Germany

megawood® decking

	Package content	Package dimensions	Unit	Forms of delivery
NEW! Solid barefeet use floorboard 21 x 145 mm	98 pcs. per 7 pcs. side by side, per 14 pcs. stacked	1.020 x 400 mm Length 300 bis 600 cm	per 2 pcs. completely foil-covered	Per bundle on untreated square support boards; bundle straps and edge protectors
Barefeet use floorboard (Solid barefeet use floorboard) 25 x 145 mm	112 (84) pcs. per 7 pcs. side by side, per 16 (12) pcs. stacked	1.020 x 500 (400) mm Length 300 bis 600 cm (solid: Length 300 bis 540 cm)	per 2 pcs. completely foil-covered	Per bundle on untreated square support boards; bundle straps and edge protectors
Solid Jumbo barefeet use floorboard 21 x 242 mm	56 pcs. per 4 pcs. side by side, per 14 pcs. stacked	1.020 x 400 mm Length 300 bis 600 cm	per 1 pcs. completely foil-covered	Per bundle on untreated square support boards; bundle straps and edge protectors
Construction beam 40 x 60 mm	170 pcs. per17 pcs. side by side, per 5 pcs. stacked	1.020 x 500 mm Length 360 cm	per 2 pcs. partially foil-covered	Per bundle on untreated square support boards; bundle straps and edge protectors
Construction beam 90 x 90 mm	55 pcs. per 11 pcs. side by side, per 10 pcs. stacked	1.000 x 550 mm Length 360 cm	per 1 pc. partially foil-covered	Per bundle on untreated square support boards; bundle straps and edge protectors
Smooth edge board 17 x 72 mm	112 pcs. per14 pcs. side by side, per 8 pcs. stacked	1.000 x 240 mm Length 360 cm	per 4 pcs. completely foil-covered	Per bundle on untreated square support boards; bundle straps and edge protectors
NEW! Building joints profile 61 x 50 mm	140 pcs. per20 pcs. side by side, per 7 pcs. stacked	1.000 x 530 mm Length 300 cm	per 2 pcs. completely foil-covered	Per bundle on untreated square support boards; bundle straps and edge protectors

Forms of delivery and packaging units.

megawood® Made in Germany

megawood® decking

megawood® accessories	Package content in packing units
Rubber pad 60 x 20 x 100 mm	100 pcs.
Rubber pad 60 x 10 x 100 mm	100 pcs.
Rubber pad 60 x 3 x 100 mm	100 pcs.
Securing clamp 50 pcs. incl. screws and bit	50 pack
Edge clamp 25 pcs. incl. screws and bit	25 pack
NEW! Aluminium profile 55,5 x 45,0 x 1,5 mm / 21 mm Bronze/silver anodised, Length 400 cm	10 pcs.
Aluminium profile 55,5 x 45,0 x 1,5 mm / 25 mm Bronze/silver anodised, Length 400 cm	10 pcs.
Compensation plate 3 mm	50 pcs.
Compensation plate 5 mm	50 pcs.
Bearing plate 15 mm	100 pcs.
Spacer 40 x 30 x 10 mm	100 pcs.
Stainless steel securing clamp 50 pcs.	25 pack
Replacement screws black 25 pcs./pack	25 pack
NEW! Groove strip 21 mm, 25 m/roll	1 roll
Groove strip 21 mm, 100 m/roll	1 roll
Groove strip 25 mm, 25 m/roll	1 roll
Groove strip 25 mm, 100 m/roll	1 roll
NEW! Self-adhesive securing tape 10 mm, 10m/roll	1 roll
megaclean 1l	24 pcs.
megaclean pressure sprayer	24 pcs.
megalite LED floor spotlight mini/maxi (warm white/blue)	20 pcs.
megalite power adapter maxi/mini, 20 watts	5 pcs.
megalite power adapter "Safety Plus" for mounting under the deck IP68, 10 watts	5 pcs.
megalite distributor 3-fold	10 pcs.
megalite distributor 5-fold	10 pcs.
megalite Verlängerungskabel 1,5 m	20 pcs.
megalite power cable 5 m	20 pcs.
megalite power cable 10 m	10 pcs.

Forms of delivery and packaging units.

megawood® Made in Germany

megawood® visual protection

megawood® Visual protection post (100 x 160 mm)				Package content 30 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
190	57,00	11,82	-	354,54

megawood® Visual protection board (25 x 232 mm)				Package content 64 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
193	123,52	7,88	28,66	504,83

megawood® Visual protection wall cover (50 x 85 mm)				Package content 30 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
189	56,70	4,47	-	134,10

megawood® Visual protection accessories	Package content in packing units
screw-on anchor (screwed on) incl. screws	1 pc.
concrete anchor (concrete) incl. screws	1 pc.
Fastening plate for fence cover	2 pcs.
Post cap with ball (V2A)	1 pc.
Post cap without ball (V2A)	1 pc.
Post cap with ball (galvanised)	1 pc.
Post cap without ball (galvanised)	1 pc.
Sealing tape 20 mm, 8 m/roll	1 roll

	Package content	Package dimensions	Unit	Forms of delivery
Visual protection post 100 x 160 mm	30 pcs. per 10 pcs. side by side per 3 pcs. stacked	1.020 x 585 mm Length 190 cm	je 1 pc. not foil-covered	Per bundle foil wrapped on untreated square support boards; bundle straps and edge protectors
Visual protection board 25 x 232 mm	64 pcs. per 4 pcs. side by side per 16 pcs. stacked	1.020 x 500 mm Length 193 cm	je 2 pcs. completely foil-covered	Per bundle on untreated square support boards; bundle straps and edge protectors
Visual protection wall cover 50 x 85 mm	30 pcs. per 6 pcs. side by side per 5 pcs. stacked	510 x 335 mm Length 189 cm	je 1 pc. not foil-covered	Per bundle foil wrapped on untreated square support boards; bundle straps and edge protectors

Forms of delivery and packaging units.

megawood® Made in Germany

megawood® formwork

megawood® foundation formwork, complete (45 x 300 mm)				Package content 80 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
200	160,00	11,40	48,00	912,00

megawood® foundation formwork, complete (45 x 600 mm)				Package content 40 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
200	80,00	22,40	48,00	896,00

megawood® foundation formwork, cut to size (45 x 300 mm)				Package content 80 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
200	160,00	11,40	48,00	912,00

megawood® foundation formwork, cut to size (45 x 600 mm)				Package content 40 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
200	80,00	22,40	48,00	896,00

megawood® ceiling formwork (45 x 600 mm)				Package content 40 pcs.
Length in cm	running meter	kg/pcs.	sqm/pack	kg/pack
240	96,00	26,88	57,60	1.094,40
360	144,00	40,32	86,40	1.612,80

megawood® formwork accessories	Package content in packing units
Formwork panel strap	1 pc.
Formwork panel T-profile with DW 15 (double saddle)	1 pc.
Formwork panel corner connector, square	1 pc.

	Package content	Package dimensions	Unit	Forms of delivery
Formwork Foundation 45 x 300 mm	80 pcs. per 4 pcs. side by side per 20 pcs. stacked	1.200 x 1500 mm Length 200 cm	1 pc.	per bundle on euro-pallet; packaging tapes and edge protection
Formwork Foundation 45 x 600 mm	40 pcs. per 2 pcs. side by side per 20 pcs. stacked	1.020 x 500 mm Length 200; 240; 360 cm	1 pc.	per bundle on euro-pallet; packaging tapes and edge protection

Certificates.
Seal of quality

megawood®
Made in Germany

QUALITÄTSGEMEINSCHAFT HOLZWERKSTOFFE E.V.

Zertifikat

2008 - 01
for WPC-decking profiles

The decking profile of type

megawood

of the manufacturer

NOVO-TECH GmbH & Co. KG
06449 Aschersleben, Germany

confirms with his testing results of the external supervision, done by the independent and certified institute

eph, Entwicklungs- und Prüflabor Holztechnologie GmbH,
Zellescher Weg 24, 01217 Dresden, Germany

and the initial inspection of factory and the supervision of factory production control, done by the Qualitätsgemeinschaft Holzwerkstoffe e.V.*, Ursulum 18, 35396 Gießen (Germany)
the requirements according the quality and testing criteria for decking profiles of Wood-Plastic-Composites (dated 04 December 2007).

The manufacturer is entitled to use the quality label

Qualitätsgemeinschaft Holzwerkstoffe e.V.

- **Wood**
  (from sustainable forestry)
- **Industrial Polymer**
  (pure)

The certificate remains valid unless the quality criteria are changed and the fulfilment of these criteria by the manufacturer is no longer ensured.

Gießen, 15. February 2008

Dr. Peter Sauerwein
Head of Certifying Body

Germany • 35396 Gießen • Ursulum 18 • phone (0049) 641 - 975470 • mail@qg-holzwerkstoffe.de
*) certified as notified body: No. 1344

Certificates.
PEFC

megawood®
Made in Germany

CERTIFICATE

ZERTIFIKAT·CERTIFICATE

AlkoCert

The Certification body
ALKO e.V.
Agrar- und Lebensmittel Kontrollorganisation e. V.,
accredited and notified by PEFC Germany e. V.
certifies hereby that the organisation

NOVO-TECH GmbH & Co KG

Siemensstraße 31
06449 Aschersleben

applies a management system in line with the
Chain-of-Custody-standards of PEFC
(Programme for the Endorsement of Forest Certification schemes)
according to Annex IX of the normative document
(Annex 4 of the technical document PEFC Council)
in the actualy valid version.

PEFC™
PEFC/04-4-0041
PEFC-Logonutzungs-Nr. ALKO e.V.

It was proved
that the requirements with regard to

physical separation method

are fulfilled and applied. The enterprise
NOVO-Tech GmbH & Co. KG
signed a survellance contract with ALKO e.V.
and is audited every year.
This certificate authorizes to sell wood
or wood products as PEFC-certificated.

Deutscher Akkreditierungs Rat
DAR
DAP-ZE-4202.00

Kind of certificate:	**Individual certification**
Registration number ALKO e.V.:	**ALKO-CoC0354-09**
This certificate is valid until:	**31.05.2014**
Initial certification:	**18.05.2009**

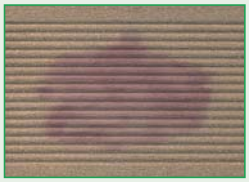
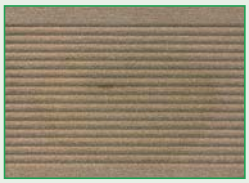
ALKO e.V.
Agrar- und Lebensmittel Kontrollorganisation e. V.
Wollgrasweg 31
70599 Stuttgart
Fon 0711 2538022
Fax 0711 2538024
alko.stuttgart@t-online.de

Skipiol

Dipl.-Ing. agr. Annette Skipiol
Head of the Certification Body

Care tips – timeline.

megawood®
Made in Germany

	Initial cleaning	7 days	14 days
Blackberry			
Coffee			
Mustard			
Ketchup			
Cream dressing			
Red wine			
Copper paste			
Soot, Oil			

Care instructions.

megawood®
Made in Germany

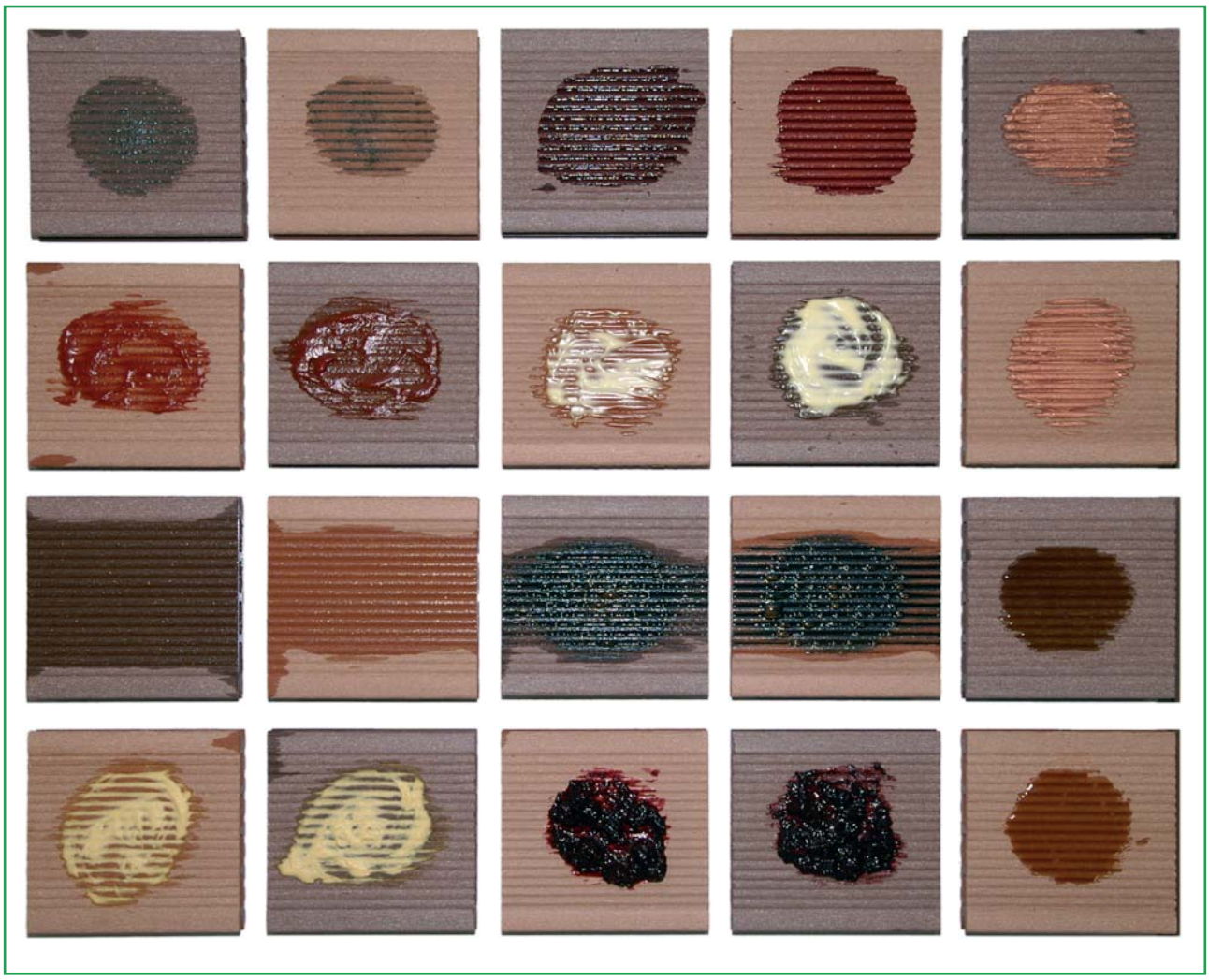
What to do about stains and spots?

Comprehensive and extensive testing in our lab has yielded the following results:

We exposed our boards for bare feet to the most common types of soiling and staining. The results have shown that plain water, commonly used cleaning tools, and a little patience are the best solution with normal stains. After cleaning with plain water and several days of light exposure, most of the stains were no longer visible. Always avoid stains due to fine dusts (such as soot and metal dust). These may permanently stain your floorboards.

Cleaning emulsion for megawood® boards for bare feet

megaclean is a highly effective, biologically degradable concentrate with emulsion effect. The water–soluble degreasing product works incredibly fast and deep down to remove grease, oil, ink, charcoal, kerosene, soot and other tenacious stains. megaclean is diluted with water 1:1 to 1:25 and applied to the surface to be cleaned. Allow to soak for approx. 10 to 15 minutes depending on the degree of staining and dilution strength. Then rinse off with water or wipe off. Mechanical tools are usually not needed. megaclean should only be used at a temperature higher than 15°C. megaclean is nontoxic, has a pleasant fragrance, is non–corroding and nonflammable.



Care instructions.

The very high dosing accuracy results in a very good homogeneity of the product. Our products are not produced in a discontinuous but a continuous process. The materials to be mixed are pressed into the mould using high pressure and a melt extruder. Rotating steel brushes are then used to remove the polymer surface that results in an optically textured wooden surface. The natural wood material contributes to our innovative product with its natural characteristics and properties. The visible colour variations can be caused by the reactions of the lignin.

Once finished, the product starts out with a bright glossy hue. Please note that this is a natural product and as such is subject to colour maturation due to exposure to light, temperature, and air. The processed wood shaving darkens over the first week from a slightly yellowish glow to a deep, elegant colour hue. It is important that the floorboards for bare feet are installed in the direction of the grain (installation arrow) since the fibre orientation may otherwise result in a varying surface effect (lawnmower effect).

1 after being installed 2 depending on insolation 1-2 month 3 depending on insolation 3-4 month

Water stains

Partially covered terraces can be subjected to water stains in the transitional area between the covered and the uncovered area. Rainwater is flushed over the terrace surface to the cover before it drys off later. This subjects dust particles to temporary moisture before they dry off and remain on the surface. This effect occurs only slightly in the uncovered area which is permanently subjected to sun and rain and it is normally caused by the conditions on site. This does not impair the quality and is therefore not deemed to be a ground for complaint. The water stains can normally be removed using water and conventional cleaning devices. This effect lessens in time but cannot be entirely avoided.

Water stains partially covered terraces

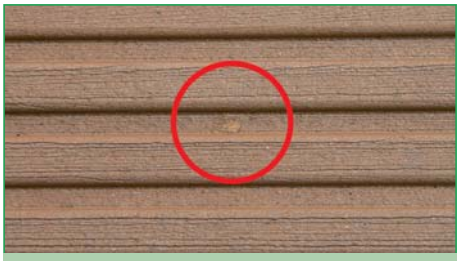
Colour development.

megawood® floorboards / visual protection

Naturally occurring bast fibre content

megawood® consists of up to 75% wood fibre. This is specially treated, dried and added to the production process in a contained environment. The raw materials can contain small quantities of other natural fibres such as bast or skin fibre. These particles can rise to the surface due to water absorption through weathering. This should not exceed a maximum of 0,03% of the surface area, while the particles' size should not exceed 0,5 cm^2 These particles will dissolve over time through normal wear when the terrace is in use. They can also be removed mechanically with tools, without damaging the product.
Following the guidance of the EPLF (European Producers of Laminate Flooring), the accepted size of the particles is estimated from head height under direct vertical light.

Naturally–occurring fibre content before treatment



Naturally–occurring fibre content after mechanical treatment with tools

The natural colour maturation is checked with accelerated weathering test and instruments. Sunlight and humidity is simulated with periodic changes; 1000 hours of weathering correspond with approx. one year of outdoor exposure.

Start

After 18.000 hours

The quality of our products is checked daily. The product is not forwarded to the shipping department until the quality inspection is complete.

Quality standards.
NOVO-TECH

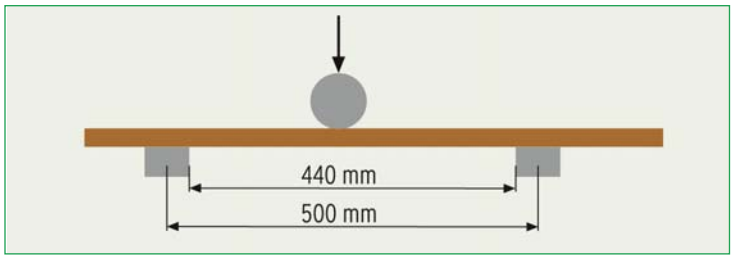
megawood®
Made in Germany

megawood® floorboard for bare feet

1. Mechanical characteristics

Three-point bending:

Bearing distancer:	440 mm
Test speed:	20 mm/min
Breaking load:	3.400 N*



* 3.400N equals ≈ 340 kg/board at a maximum distance of 50 cmbetween the supporting beams.

2. Permissible dimension change after water absorption

Permissible dimension change after water absorption* **megawood®** floorboard for bare feet

Dimension	Measuring point	Permissible dimension change Guaranteed values		Notes
Length	Maximum value	Board length 300 cm	≤ 9,0 mm	
		Board length 360 cm	≤ 10,8 mm	Pay attention to distances of fixed
		Board length 420 cm	≤ 12,6 mm	component parts
		Board length 480 cm	≤ 14,4 mm	
		Board length 540 cm	≤ 16,2 mm	
		Board length 600 cm	≤ 18,0 mm	
			≤ (3 mm/m)	
Width	Middle of board		≤ 2,0 mm	Distance 7,0 mm predetermined by clamp
Thickness	Middle of board		≤ 1,5 mm	

* with outdoor exposure and installation acc. to assembly instructions

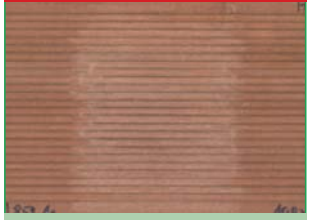
megawood® floorboard for bare feet and Bangkirai

Abrasion resistance comparison test

megawood®

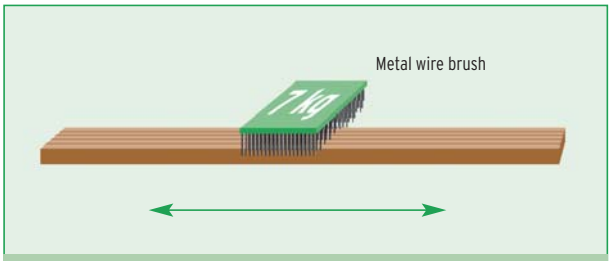
Abrasion 100 cycles: 0,1g 0,07g/dm²

Bangkirai



Abrasion 100 cycles: 0,4g 0,28g/dm²

Abrasion resistance test conditions



100 cycles, stroke 10 cm

Technical Information.

megawood® floorboards for bare feet

megawood® Made in Germany

Material description

megawood® is a polymer-bonded wood material and contains of up to 75% wood fibres, high-value polymers, suitable additives and colorants.

Distinctive characteristics and advantages

- High resistance against external environmental impacts
- Easy to work with same as normal wood
- Installed with clamp system
- Environment-friendly and recyclable
- Up to 75% renewable raw materials
- Dyed throughout and surface-ready
- Resistant to mould fungus
  IHD-Standart 20-25 (2006)

Technical data				
Characteristics		**Measuring unit**	**megawood®**	**Quality seal class**
Density		g/cm³	1,2	-
Breaking strength *)		N	≥ 3.400	3.400
Bending at 500 N		mm	≤ 1,8	1,8
Swelling after water storage	Volume	Weight %	≤ 7,0	7,0
	Lengthwise	%	≤ 0,3	0,3
	Width	%	≤ 0,7	0,7
	Thickness	%	≤ 4,0	4,0
Skid resistance	Friction coefficient		≥ 0,43	0,43
Thermal flexural behaviour		mm	≤ 10	10
Behaviour under alternating load			≤ 20	20
Thermal expansion coefficient		10^{-6} / K	15,6	-

These values have been determined with test specimens and may vary depending on production. They are therefore only approximate values.
*) This value applies to single floorboard upon centre distance between support points (mid of support) of 50 cm!

Production-related measure tolerances **megawood®** floorboard for bare feet (21/25 x 145 mm)		
	Specifications	**Tolerance zone**
Length	300, 360, 420, 480, 540, 600 cm	-0,0 / + 20,0 mm
Width	145 mm	-1,0 / + 3,0 mm
Thickness	21/25 mm	-1,0 / + 1,0 mm

Production-related measure tolerances **megawood®** floorboard for bare feet "Jumbo" (25 x 242 mm)		
	Specifications	**Tolerance zone**
Length	300, 360, 420, 480, 540, 600 cm	-0,0 / + 20,0 mm
Width	242 mm	-1,0 / + 3,0 mm
Thickness	25 mm	-1,0 / + 1,0 mm

Test report.

Fraunhofer Institut for Mechanics of Materials

megawood®
Made in Germany

Fraunhofer IWM Heideallee 19 06120 Halle

Novo-Tech GmbH & Co. KG
Mr. Sasse

Fraunhofer Institut Werkstoffmechanik

Institutsleiter
Prof. Dr. Peter Gumbsch

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066120 Halle

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Steffen Meinicke
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Steffen.Meinicke@iwmh.fraunhofer.de

Halle, 15.03.2006

Test report

Dear Mr. Sasse,

below you can find your floorboard characteristic values (samples taken from production dated 26.01.2006 and 28.01.2006) determined in-house by our company.

1. Determination of thermal expansion coefficient

The determination of the thermal coefficient has been carried out acc. to DIN EN 13471. The determination of the characteristic values hasth-ree directions using a non-contact measuring system. The measurement has been executed within a temperature range of 25°C to 80°C.

The expansion has been measured at the profile surface in length (extrusion direction) and width (laterally to extrusion direction), as well as the profile cross-section width and thickness [depth] of profile).

Vorstand der Fraunhofer-Gesellschaft
Univ.-Prof. Dr.-Ing. habil. Prof. e.h. Dr. h.c.
Hans-Jörg Bullinger, Präsident
Dr. rer. pol. Alfred Gossner
Dr. jur. Dirk-Meints Polter
Prof. Dr. Dennis Tsichritzis
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Bankverbindung: Deutsche Bank, München
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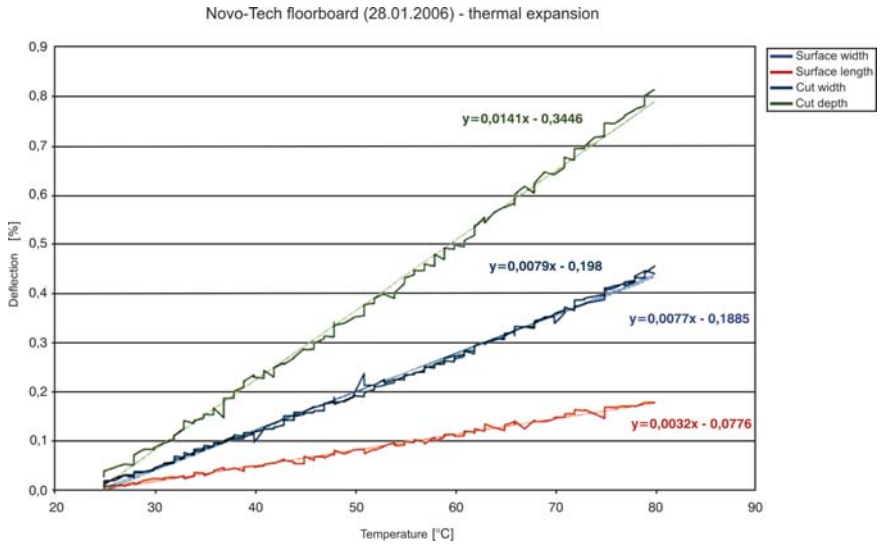
BIC (SWIFT-Code): DEUTDEMM



2. Determination of water absorption and thickness swelling

Determination of thickness swelling after water absorption following DIN EN 317 has been carried out with test specimens prepared from the component part (profile with 145 mm length). The samples have been stored in resting water (pH-value 7 +/- 1) at (20 +/- 2)° C. The swelling measurement is taken at the following times: 1d, 7d, 14d, 28d, 42d. The water absorption is determined gravimetrically (times same as with swelling).

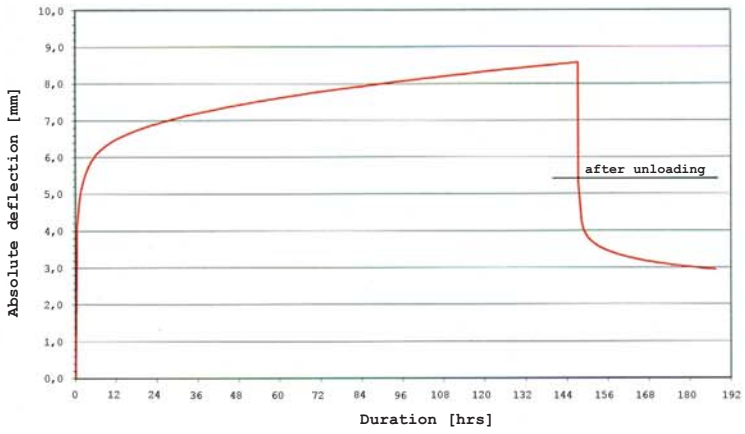
[d]	Floorboard 26.01. [mm]		water absorption
	1	b	[%]
0	145,02	145,58	0,0
1	145,05	145,70	0,9
7	145,16	145,89	2,9
14	145,45	146,15	4,3
21	145,39	146,19	5,2
28	145,49	146,42	5,9
40	145,68	146,72	7,1

[d]	Floorboard 28.01. [mm]		water absorption
	1	b	[%]
0	145,15	145,41	0,0
1	145,10	145,45	1,0
7	145,25	145,65	2,9
14	145,35	145,78	4,4
21	145,41	145,91	5,3
28	145,47	146,09	5,8
40	145,51	146,30	7,0

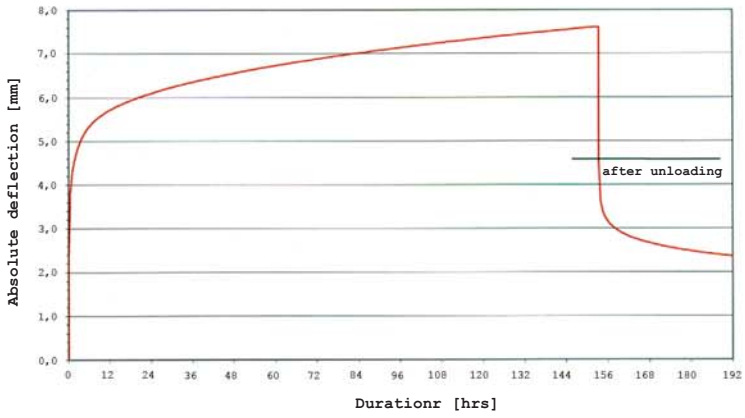
3. Determination of bending creep behaviour at increased temperature

The creep behaviour has been determined according to DIN ISO 899-2 using a bending creep test with a three-point bending procedure. The measurement has been executed in a climatic chamber. The test has been carried out within a period of 150 hours and at 50° C as well as 50% r.H. The support distance was 440 mm. The samples have been impinged with a constant load of 100 kg. The following table lists the test results.

Floorboard Novo-Tech NP 2801 (creep test)



Floorboard Novo-Tech NP 2801 (creep test)



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4. Determination of E modulus in 3-point bending test

To determine the E-modulus, breaking strength and maximum deflection, a 3-point test with a support distance of 440 mm has been conducted with profiled parts 550-mm in length.

Sample	E-modulus [N/mm²]	Max. strength [N]	Max. deflection [mm]
26.01.2006	3576	3643	14
28.01.2006	3392	3514	14
14.02.2006	3489	3544	26
15.02.2006	3467	3570	26

If there are any questions concerning this test report, please do not hesitate to contact me.

Sincerely yours

Steffen Meinicke

Test report.

Measurement of coefficient of sliding friction

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The coefficient of sliding friction, also known as the friction coefficient (formula symbol μ, non-dimensional), is a measure of the dimension of the frictional forces acting between two solid bodies. The coefficient of sliding friction was measured with FLOOR SLIDE CONTROL 2000 print. A "plastic sole" was used as the sliding body.

Measurement contition: Humidity 35%
Air temperature 26°C

Place of measurement: Novo-Tech-GmbH & Co. KG
Siemensstraße 31
06449 Aschersleben
Germany
Date: 7 Nov. 2007

Measuring results megawood®

	Profile	
Surface	Trapezoid	Wave
Nut brown, dry/brushed	μ = 0,47	μ = 0,57
Nut brown, wet/brushed	μ = 0,64	μ = 0,61
Natural brown, dry/brushed	μ = 0,60	μ = 0,59
Natural brown, wet/brushed	μ = 0,63	μ = 0,60
Basalt grey, dry/brushed	μ = 0,72	μ = 0,69
Basalt grey, wet/brushed	μ = 0,71	μ = 0,70

These measuring results comply to average of values that have been measured with FSC 2000 print.

Evaluation

A coefficient of sliding friction of 0.47 to 0.72 was determined for our megawood® products. The measured values are within the slipping classes **"safe"** to **"very safe"** with a majority of the values corresponding with the slipping class **"very safe"** (0,8-0,6).

Test report 225 009.

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1. Test of resistance to mould fungi

1.1 Test information

Test principle:
Shaped test specimens have been exposed to mould fungi attack by inoculating defined mixture of spores. Because test material is intended for outdoor use, one portion of test specimens was put to strain by washing–out prior to biological test. In order to simulate nutrient dragging by pollution in practise, testing additionally has been executed under intensified conditions, i.e. by adding a nutrient solution. The test formulations have been incubated for four weeks under conditions that support growing and germinating of mould fungi. The evaluation of mould fungi vegetation as test criterion has been carried out after 7, 14 and 28 days according to defined bonitation key.

Test variants:
– Standard test without nutrient solution without aging
– Standard test without nutrient solution and strain of washing–out
– Intensified test with nutrient solution without aging
– Intensified test with nutrient solution and strain of washing–out

Underlying test procedure:
The test has been carried out in accordance with IHD Standard [Institute for Wood Technology Dresden] 20-25 (2006): "Test of resistance to mould fungi of construction and wood materials" based on EN 60068-2-10:2005 "Environmental influences – Parts 2-10: Test procedures – Test J and guideline: mould growth" (IEC 60068-2-10:2005).

Tested fungi:
Aspergillus niger, Paecilomyces variotii, Penicillium funiculosum, Trichoderma viride, Chaetomium globosum

Cultivation conditions:
28 days' incubation in incubator at 29°C and 95% relative air humidity

Sterilisation procedure:
Pressure cooker (100°C, 2 x)

Aging strain prior to test:
Saturation without vacuum during 7 days with 6 times water exchange (following DIN EN 84)

Test specimen dimensions:
Test material: 50 x 20 x 5 mm^3
Reference material: 50 x 25 x 15 mm^3 (pine splint), 60 x 60 x 20 mm^3 (MDF)

Date of test specimen installation / removal:
26.01.2006 / 23.02.2006

Test report 225 009.

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1.2 Results

Table 3: Test **without prior strain of washing–out:**
Vegetation on test specimen top surface after 28 days (Average values each time from 6 individual values)

No.	Material	Average rating number			
		External infection		Self infection	
		Standard–test	Intensified test	Standard–test	Intensified test
1)	WPC H40-05, grey	1	1	1	1
2)	WPC H41-05, brown	1	1	1	1
3)	Bangkirai	1	3	1	3

Table 4: Test **after prior strain of washing–out:**
Vegetation on test specimen top surface after 28 days (Average values each time from 6 individual values)

No.	Material	Average rating number			
		External infection		Self infection	
		Standard–test	Intensified test	Standard–test	Intensified test
1)	WPC H40-05, grey	1	1	1	1
2)	WPC H41-05, brown	1	1	1	1
3)	Bangkirai	1	3	1	3

Evaluation scheme:

0 No mould fungi detectable on the test specimen surface upon examination under reflected–light microscope at 50-fold enlargement

1 Mould fungi not or barely detectable with unaided eye; however, clearly at 50-fold enlargement detectable

2 Mould fungi vegetation clearly detectable with unaided eye and clearly lower than on comparison test specimen

3 Mould fungi vegetation clearly detectable with unaided eye and equal to or stronger than on comparison test specimen

Test report 225 009.

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Table 5: Wood humidity after test **without prior strain of washing–out**
(average values each time from 6 individual values)

No.	Material	Average rating number			
		External infection		Self infection	
		Standard–test	Intensified test with nutri–ent solution	Standard–test	Intensified test with nutri–ent solution
1)	WPC H40-05, grey	13,7	13,3	12,0	13,1
2)	WPC H41-05, brown	12,0	11,7	11,4	12,1
3)	Bangkirai	21,6	21,3	19,3	20,2
4)	Ref. pine splint	26,9	27,4	26,8	27,0
5)	Ref. light MDF	26,4	26,2	29,2	25,1

Table 6: Wood humidity after test **with prior strain of washing–out**
(average values each time from 6 individual values)

No.	Material	Average rating number			
		External infection		Self infection	
		Standard–test	Intensified test with nutri–ent solution	Standard–test	Intensified test with nutri–ent solution
1)	WPC H40-05, grey	13,7	14,9	13,5	12,6
2)	WPC H41-05, brown	13,1	12,7	12,1	12,3
3)	Bangkirai	21,7	20,9	20,4	21,6
4)	Ref. pine splint	27,2	27,6	27,1	27,4
5)	Ref. light MDF	25,3	26,3	26,9	27,6

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1.4 Photos

Fig. 3: Selected test specimen after mould fungi test: no vegetation macroscopically detectable

Fig. 4: Reference test specimen after mould fungi test: vegetation clearly detectable (above: MDF, below: pine splint)

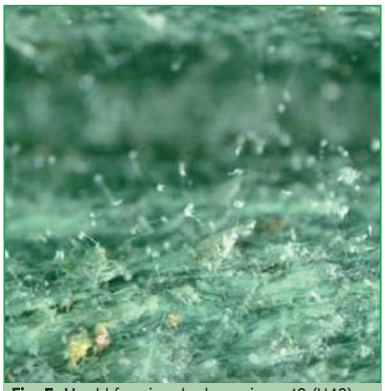

Fig. 5: Mould fungi on test specimen 10 (H40), 40-fold enlargement

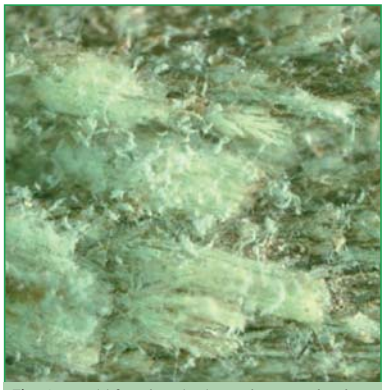

Fig. 6: Mould fungi on test specimen 22 (H41), 40-fold enlargement

Fig. 7: Mould fungi on test specimen 59 (H40), 40-fold enlargement

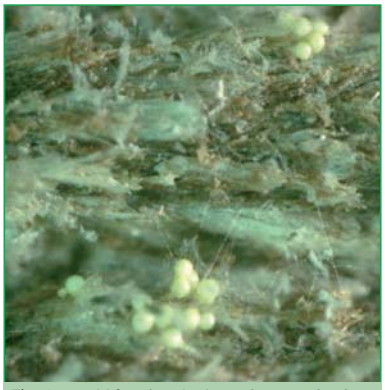

Fig. 8: Mould fungi on test specimen 72 (H41), 70-fold enlargement

Fig. 9: Mould fungi on test specimen 77 (Bangkirai), 50-fold enlargement

Fig. 10: Mould fungi on test specimen 122 (H41), 40-fold enlargement

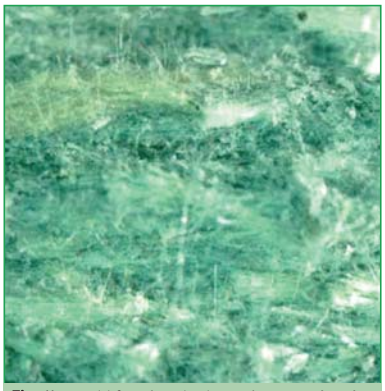

Fig. 11: Mould fungi on test specimen 161 (H40), 40-fold enlargement

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1.5 Evaluation / summary

As a result of structure and colour of WPC material, mould fungi vegetation was not detectable with unaided eyes (Fig. 3). Inspection under reflected–light microscope, however, has provided evidence, that mould fungi were grown on tested variants "H40-05" and "H41-05" (Fig. 5 to 11), but at a clearly lower level than on both comparison test specimens from MDF and pine splint. The vegetation on Bangkirai was low with standard tests and strong with intensified test conditions when additional nutrients were supplied. The strain of washing–out on WPC and Bangkirai had no significant influence on resistance to mould fungi.

Evaluation of resistance to mould fungi is based on following scheme:
(IHD works standard VA20-25):

Bonitation level	Field of application	
	Internal area [1]	External area [2]
0	resistant	resistant
1	reduced resistant	resistant
2	not resistant	reduced resistant
3	not resistant	not resistant

[1] All areas, where material is in contact with room air of restrooms

[2] All areas, which do not comply with internal area's definition

Because the tested materials are terrace covering for external area, result of test variant "Intensified Test with strain of washing–out" will be used for final evaluation: According to that, WPC variants "H40-05" and "H41-05" have proved resistant to mould fungi for outdoor use, however, Bangkirai by contrast was not resistant.

.....

Katharina Plaschkies, Master's in Biology
Responsible person in charge

Dresden, 28.02.2006

Technical Safety Information.

megawood®
Made in Germany

1.) Material/Manufacturer Designation

Product designation:	megawood®
Material/substance type:	Polymer bonded wood material
Use:	Production of extruded profiles and injection moulding elements
Manufacturer:	NOVO-TECH • Siemensstraße 31 • 06449 Aschersleben Tel.: +49 (0) 3473 / 22503 -0 Fax: +49 (0) 3473 / 22503 - 15

2.) Chemical Composition/Information about Components

Composition:

Cellulose	CAS-Nr.: 9004-34-6	30 – 40 %
Hemicellulose	CAS-Nr.: 9025-53-2	18 – 24 %
Lignin	CAS-Nr.: 9005-53-2	12 – 16 %
Polyethylene	CAS-Nr.: 9002-88-4	0 – 40 %

3.) Possible Hazards

No risks to health and environment if used and handled appropriately.

4.) First Aid Measures

No special measures required.

5.) Fire Prevention Measures

Suitable extinguishing agents:	Water spray, foam, CO_2, powder.

6.) Measures in Case of Unintentional Release:

For people:	No special measures required.
Cleaning:	Absorb mechanically (e.g. vacuuming)

7.) Handling and Storage

Storage:	Smoking prohibited in storage area.
Fire protection measures:	No open flame.
Handling:	To avoid electrostatic discharges, the production and transport equipment should be made from electrically conductive material and be well earthed.
With thermal processing:	Extract vapours and/or ensure working areas are sufficiently ventilated.

8.) Exposure Limit and Personal Protective Equipment

Work hygiene:	Comply with general protective and hygiene measures: Always wash hands before eating, drinking, smoking or using the W.C.
General safety measures:	Ensure that working areas are sufficiently ventilated and have adequate extraction systems.
Skin protection:	Not required
Eye protection:	Not required

9.) Physical and Chemical Properties

Form:	Pellet
Colours:	Brown, black, multicoloured
Odour:	Woody
pH value (with 100g/l H_2O and 20°C):	4,5 – 6,5
Melting point:	Not applicable
Fire protection classification:	normal flammable material to DIN EN 13501-1 material range S2 (B2)

Technical Safety Information.

megawood®
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Boiling point (1013 hPa):	Not applicable
Flashpoint:	Not applicable
Ignition point:	Approx. 420°C (DIN 51 795)
Explosion limits:	Not applicable
Vapour pressure (20°C):	Not applicable
Density (20°C):	700 kg/m^3 - 1.200 kg/m^3
Bulk density:	400 kg/m^3 - 500 kg/m^3
Solubility in water (20°C):	Insoluble
Product designation:	Polymer bonded wood material

10.) Stability and Reactivity

Stability:	Product is stable under normal conditions. Thermal decomposition starts at approx. 180°C
Dangerous reactions:	None known.
Hazardous decomposition products:	Incomplete combustion releases carbon monoxide and possibly other hazardous substances such as soot, for example.

11.) Toxicological Information

No damaging effects when handled appropriately

12.) Ecological Information

The product is a wood polymer mixture insoluble in water with no negative environmental impact on ecosystems. Up to 75% of the product is made from renewable resources.

13.) Disposal Notes

According to the European Waste Catalogue (EWC), wood PE belongs to the group of wastes from wood processing and the manufacturing of boards and furniture and to the waste type of sawdust, chips, cut waste, wood, chipboard and veneers without toxic substances,**Code 03 01 05**. The product can be recycled 100% using suitable process technology. The product must be disposed of in accordance with disposal and treatment rules and regulations of the local authorities (e.g. waste incineration, waste dumps).

14.) Transport Information

Not subject to mandatory labelling/marking acc. to Directive 67/548/EEC, the Hazardous Substances Ordinance (GefStoffV) and other rules and regulations.
Not a hazard acc. to applicable transport rules and regulations.

15.) Rules and Regulations

EEC marking:	Not subject to mandatory marking acc. to EEC rules and regulations.
Hazard symbols, R–phrases and S–phrases:	Not required.
Water pollution class:	WPC 0 (not hazardous).

16.) Additional Information

The information supplied here corresponding with current findings, knowledge, and experiences, are to describe the product's safety aspects. However, this information is not associated with any warranty or guarantee of product properties.

This product safety sheet was prepared according to the second revision of Directive 91/155/EEC based on Directive 2001/58/EU of the commission dated July 27, 2001.

This safety data sheet applies to the following:	megawood® Polymer bonded wood material
Rev. Level:	10.09.2007

Imprint:

Publisher:
NOVO-TECH GmbH & Co.KG • Siemensstraße 31 • 06449 Aschersleben • Germany
www.novo-tech.de • info@novo-tech.de

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Tel.: +49 (0) 5201-189-330 • Fax: +49 (0) 5201-10312
www.megawood.de • distribution@megawood.de

Design/layout:
NOVO-TECH-INNOVATION GmbH & Co. KG, 06449 Aschersleben • Germany
info@novo-tech-innovation.de

Photographs:
Harald Eichler, Daniel Becher, Totolia, toolboxx-Archiv

Notes:

All of the information applies to the product being assembled and installed acc. to the corresponding instructions and when used according to its intended use with outdoor exposure conditions. This leaflet may be changed or revised without prior notice to reflect or comply with new technical findings. Colours of photos and in graphics may differ due to technical printing aspects.

Juni 2010/Englisch – The right to make changes is reserved. Colours shown on photos and in graphics can deviate for printing reasons.