



## SYSTEM BROCHURE

WELCOME TO THE WORLD  
OF THE AGEPAN<sup>®</sup> SYSTEM.



## TABLE OF CONTENTS

Material for better living .....	4
Attractive constructions using the AGEPAN® SYSTEM .....	6
Healthy living .....	10
The all-round feel-good climate .....	12
Sustainable and ecological .....	14
Easy to work with .....	16
Quality at its best .....	18
From floor to ceiling .....	20
Robust and durable .....	22
Fire protection .....	24
Sound insulation .....	26
The products in the system .....	28
AGEPAN® DWD protect .....	30
AGEPAN® DWD 600 .....	31
AGEPAN® DWD black .....	32
AGEPAN® UDP T+G .....	33
AGEPAN® THD T+G .....	34
AGEPAN® THDmax Vario .....	35
AGEPAN® THD Static .....	36
AGEPAN® THD Static Putz .....	37
AGEPAN® THD Install .....	38
AGEPAN® UDP Inside T+G .....	39
AGEPAN® THD Putz 050 .....	40
AGEPAN® OSB Ecoboard® .....	41
AGEPAN® TEP .....	42
AGEPAN® Floor System .....	43
Technical data and product range .....	44
Recommended reference projects .....	48

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# AGEPAN® SYSTEM

## MATERIAL FOR BETTER LIVING

+ Short construction times

+ Low energy costs

+ Unlimited design possibilities

+ Ecological building and living

**AGEPAN® SYSTEM, Sonae Arauco's constructive brand comprises perfectly compatible quality products that are used to create the tried and tested AGEPAN® SYSTEM components for roofs, walls and floors.**

Modern timber frame construction opens up almost unlimited design possibilities. Not only does it offer the best future prospects in eco-friendly construction but also brings substantial economic advantages. Short construction times, low energy costs, summer heat protection and a pleasant indoor climate with a high feel-good factor are just some of the advantages of the multi-talent wood fibre. Rely on the AGEPAN® SYSTEM products, which are manufactured exclusively in Germany. As a strong partner, we will convince you with our comprehensive service and optimum project-related support.



# ATTRACTIVE BUILDING WITH AGEPAN® SYSTEM

The dry construction method used with AGEPAN® SYSTEM products generates considerably less noise and dust.

**Individually planned dream properties with an excellent indoor climate can be realised in next to no time because the panel elements can be prefabricated in the carpentry, unaffected by weather conditions.**

The quick construction method reduces the length of the financing period for constructors, subsequently saving money. Other potential savings are those of energy costs. Homes built with the AGEPAN® SYSTEM offer excellent insulation values even with thin wall thickness and create additional space. Tested sound and fire protection constructions provide planning security.





+ Robust

+ Wear-resistant

+ Abrasion resistant

+ Asymmetrical bulk density profile with high-density surface layer

# PRESSURE-RESISTANT AND STABLE

## UNIQUE: THE ASYMMETRICAL BULK DENSITY PROFILE

...works  
harder!

**Our wood fibreboard insulation materials are known for their outstanding compressive strength, load capacity and durability.**

The AGEPAN® THD product range special production process generates a unique asymmetrical bulk density profile, which gives these products a particularly strong surface layer with an increased fibre content on one side. This gives our AGEPAN® THD product family a light core with excellent insulating properties, as well as exceptional stability and resistance. AGEPAN® SYSTEM toughens things up!



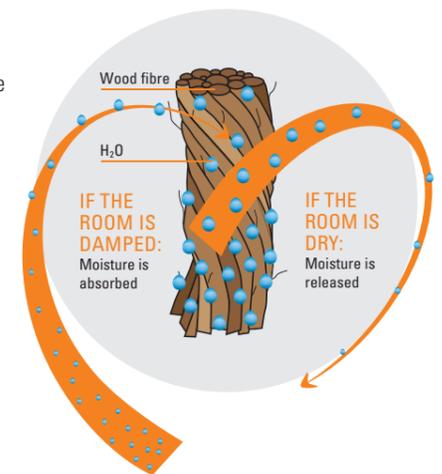
# HEALTHY LIVING QUALITY OF LIFE AND WELL-BEING



## FUNKTIONSHOLZ®

OF THE AGEPAN® SYSTEM: FOR A COMFORTABLE INDOOR CLIMATE OF WELL-BEING.

The wood fibres either absorb or release moisture depending on the relative humidity of the ambient air. This guarantees an optimum indoor climate – particularly for rooms under the roof.



**Our aim is to create healthy living spaces. Thanks to their excellent properties, AGEPAN® SYSTEM solutions contribute to a better quality of life and well-being.**

- AGEPAN® wood fibre insulation boards, DWD and OSB Ecoboard® products are formaldehyd-free glued
- Excellent indoor climate due to products that are open to diffusion and their moisture-regulating properties
- AGEPAN® SYSTEM solutions support an optimal room climate due to diffusion-permeable products and their moisture-regulating properties
- AGEPAN® wood fibre boards achieve class A and A+ indoor air quality according to the French VOC regulation



\* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).



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ECOBOARD 



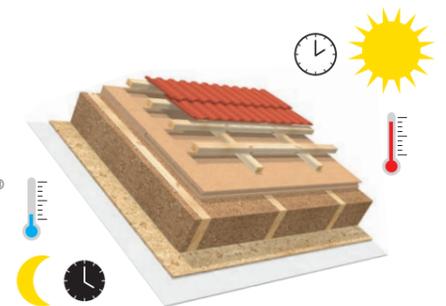
# THE ALL-ROUND FEEL-GOOD CLIMATE

COSY AND WARM IN WINTER,  
PLEASANTLY COOL IN SUMMER



## NATURAL AIR CONDITIONER

- Roof tile
- Tile batten
- Counter batten
- AGEPAN® THD T+G
- AGEPAN® OSB 3 Ecoboard®
- Gypsum board



## SUMMER HEAT PROTECTION

**Conventional insulation materials provide insufficient heat protection during the summer months. Wood fibre insulation boards from AGEPAN® SYSTEM, on the other hand, have an excellent heat storage capacity.**

Exterior components insulated with AGEPAN® SYSTEM prevent thermal bridges and the formation of condensation. AGEPAN® SYSTEM products absorb the heat during the day and produce a positive phase shift. At the height of summer, the rooms are optimally protected from overheating, as a large proportion of the heat does not even reach the interior. Especially for rooms directly under the roof, this "natural air conditioning" contributes to an increase in living quality.

## WINTER COLD PROTECTION

**Due to their low thermal conductivity, AGEPAN® SYSTEM wood fibre insulating materials are also ideal for protection against the cold in winter.**

When it's windy and snowing outside, AGEPAN® SYSTEM products keep the heat inside and prevent draughts. As the rooms cool down less, energy and heating costs are saved, the environment is protected and a consistently pleasant climate is achieved that enhances well-being.



+ AGEPAN® SYSTEM products can help meet the challenges of climate change

+ Sonae Arauco binds approx. 2 million tons of CO<sub>2</sub> annually with its products available on the market

# SUSTAINABLE AND ECOLOGICAL FOR THE SAKE OF THE ENVIRONMENT

**Respecting the environment is part of our nature. At Sonae Arauco, we commit ourselves to adhering to the concept of the sustainable use of raw materials and actively respect these principles throughout the entire production process.**

- Environmentally and health-friendly products, as they are made from the renewable raw material wood
- AGEPAN® SYSTEM products have a positive effect on global warming by improving the energy efficiency of buildings
- IBU seal confirms responsible handling of timber for sustainable building materials and products
- The environmental management of all Sonae Arauco production sites in Germany is certified according to international standards (ISO 14001)
- The Environmental Product Declaration (EPD) offers a transparent insight into product information
- The Ecolabel (type III) guarantees ecologically responsible practices throughout the entire production process
- At the end of their useful life, our products can be recycled and transformed into new products, thus becoming part of a continuous recycling cycle



Das Zeichen für verantwortungsvolle Waldbirtschaft  
FSC® C008049



FSC®- and PEFC-certified products can be delivered on demand and within availabilities. Please specify when ordering.



# EASY TO WORK WITH AN EFFICIENCY BOOST

**AGEPAN® SYSTEM stands for innovative, ecological and modern building systems. Builders need products that are optimally matched to each other, saving time and costs.**

- High degree of prefabrication
- Large boards formats also available
- Stable tongue and groove connection for quick installation
- Very high abrasion resistance of the wood fibre insulation boards, thus saving primer (cuts back costs and time)
- Dry products, immediate further processing possible
- AGEPAN® wood fibre insulation boards can be cut to size individually



# QUALITY AT ITS BEST

## OUR COMMITMENT



**There is nothing better than a house built or refurbished with the AGEPAN® SYSTEM. Quality certification is an integral part of our philosophy on continual improvement and customer focus.**

- High quality confirmed by regular external monitoring
- Health and Safety at Work Management according to OHSAS 18001
- Quality management according to ISO 9001
- CE-certified products approved by the building authorities
- Product excellence "Made in Germany"

AGEPAN® SYSTEM is a long-standing member of "Holzbau Deutschland Leistungspartner":





# FROM FLOOR TO CEILING

## A COMPLETE ONE-STOP SOLUTION



+ Wood fibre insulation boards, DWD and OSB Ecoboard® products from a single source

+ Use system advantages



✓ AGEPAN® Wood fibre insulation boards



✓ AGEPAN® DWD



✓ AGEPAN® OSB Ecoboard®

**Perfectly compatible components such as AGEPAN® OSB Ecoboard® and AGEPAN® wood fibre insulation boards enable the creation of vapour-permeable roof and wall construction elements – without the use of foil.**

- For new builds, renovations and addition storey
- Use in in roof, wall and floor areas
- Wood fibre insulation boards, DWD boards and OSB Ecoboard® from a single source
- Quick and efficient to work with and cost-saving manufacturing
- Especially suited to the prefabrication of elements



**ROBUST  
AND DURABLE  
WIND AND WEATHER RESISTANT**



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## FUNCTIONAL CLADDING FOR YOUR HOUSE

AGEPAN® SYSTEM products create a “breathing skin” on the building structure: moisture can escape to the outside through the diffusion-open wood fibre boards, yet no moisture can penetrate the structure from the outside. The robust and solid boards also reliably keep out wind.



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**Whatever the weather has in store, AGEPAN® SYSTEM products always demonstrate a heavy load capacity and durability during installation and the final result offers outstanding protection from outer influences such as sun, rain, wind, snow and hail.**

- Vapour-permeable, windtight, rain-proof and water-repellent
- Emergency roof solution of the AGEPAN® sarking boards for max. 8 weeks in event of exposure to elements
- In case of storm damages, AGEPAN® sarking boards protect the roof and offer a second water-repellent layer
- Hail-resistant: AGEPAN® DWD protect and AGEPAN® THD T+G
- Resistant to high salt atmosphere concentration: AGEPAN® DWD protect and AGEPAN® DWD 600



# FIRE PROTECTION FOR A SAFE HOME

**Structural fire protection has become indispensable in modern timber frame constructions, because the safety of the occupants is of paramount importance. Here, too, constructors, manufacturers, planners and architects can rely on our AGEPAN® SYSTEM constructions.**

- Extensively tested fire protection system structures according to DIN 4102-2 and DIN EN 13501-2
- Fire resistance classes of up to F 90-B (REI 90) in the AGEPAN® SYSTEM
- Exceptionally strong, load-bearing and robust products



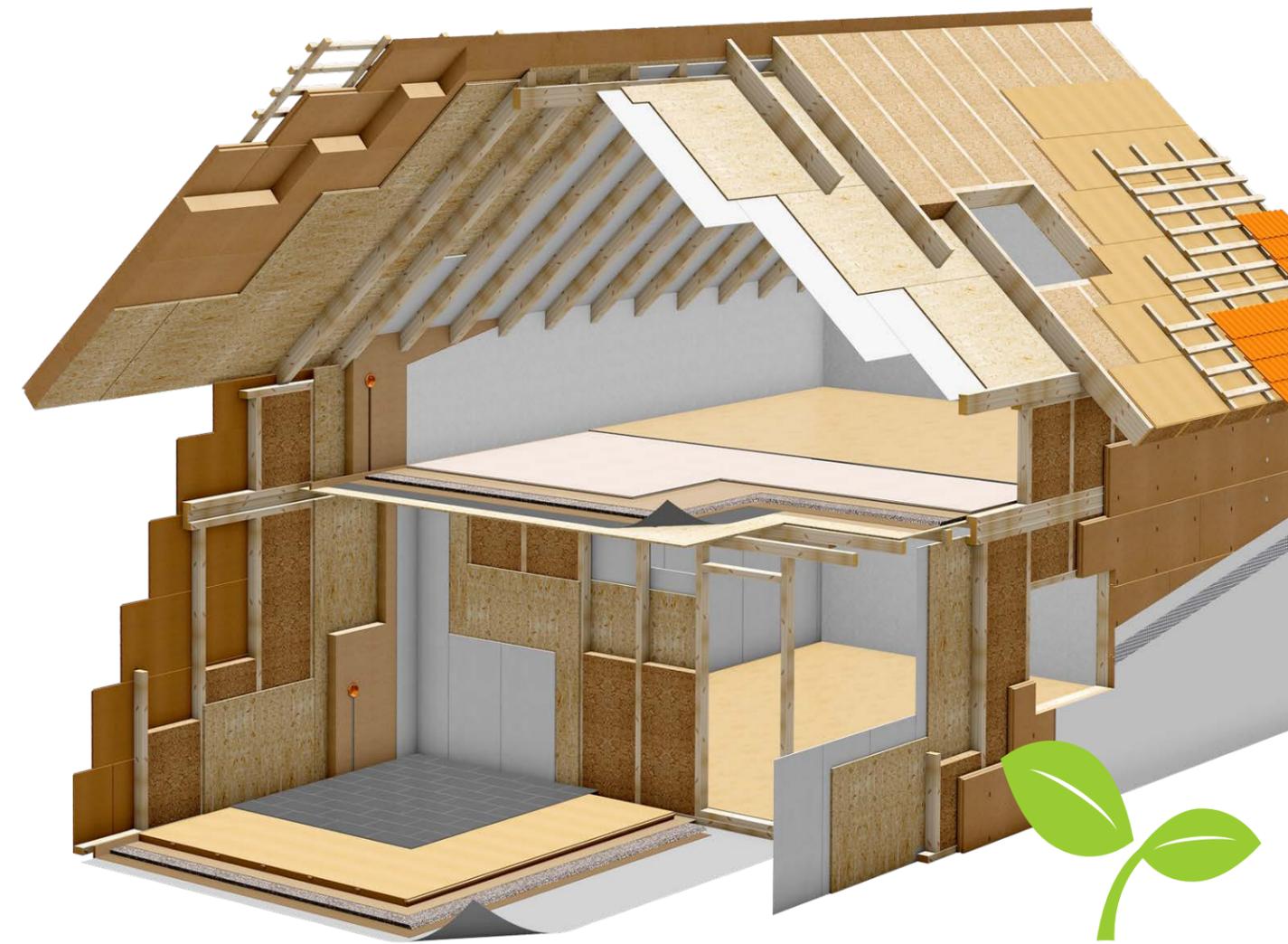
# SOUND INSULATION FOR A QUIET HOME

**Noise pollution can be greatly reduced with our system constructions. Through the efficient use of the tested system structures, an excellent sound insulation and a pleasantly quiet home can be ensured.**

- Tested sound insulating system structures according to DIN EN ISO 10140-2 in compliance with DIN 4109
- Sound insulation values of up to 50 dB in the AGEPAN® SYSTEM
- Excellent sound insulation properties due to the asymmetrical bulk density profile of the AGEPAN® THD product range
- Effective sound insulation due to absorbing fibre structure

# WOOD FIBRE INSULATION, DWD AND OSB ECOBOARD® PRODUCTS

FOR A HOME TO FEEL GOOD IN



FUNKTIONSHOLZ®

## ROOF

 **AGEPAN® DWD protect**  
The original

 **AGEPAN® THD T+G**  
The insulation specialist

 **AGEPAN® DWD 600**  
With increased bulk density

 **AGEPAN® OSB Ecoboard®**  
The load-bearing one

 **AGEPAN® UDP T+G**  
The stable sarking board

## WALL

 **AGEPAN® DWD protect**  
The original

 **AGEPAN® UDP T+G**  
The stable sarking board

 **AGEPAN® DWD 600**  
With increased bulk density

 **AGEPAN® THD Static**  
The load-bearing wood fibre insulation board

 **AGEPAN® DWD black**  
Ecological wood fibre board with outstanding visual appeal

 **AGEPAN® THD Static Putz**  
The wood fibre insulation board with temporarily structural an load-bearing function in the ETICS

 **AGEPAN® THD T+G**  
The insulation specialist

 **AGEPAN® THD Putz 050**  
The wood fibre insulation board in the ETICS

 **AGEPAN® THDmax Vario**  
The insulation specialist in large format

 **AGEPAN® OSB Ecoboard®**  
The load-bearing one

## FLOOR

 **AGEPAN® TEP**  
The dry screed board

 **AGEPAN® OSB Ecoboard®**  
The load-bearing one

 **AGEPAN® Loose Fill**  
To level out uneven floors

## INTERIOR ROOF / WALL

 **AGEPAN® THD Install**  
The pressure-resistant installation layer

 **AGEPAN® UDP Inside T+G**  
The practical interior board

 **AGEPAN® THD Putz 050**  
The wood fibre insulation board in the ETICS

 **AGEPAN® OSB Ecoboard®**  
The load-bearing one



- + Stable underlay board for roof and wall
- + Available with butt edges and T+G profile
- + In large format as AGEPAN® DWDmax



- + With a bulk density of  $\geq 600 \text{ kg}^3$
- + Available with butt edges and T+G profile

## AGEPAN® DWD protect

### THE ORIGINAL

The AGEPAN® DWD protect is a vapour-permeable MDF. RWH wood fibre board according to EN 622-5, which complies with the German technical approval certificate abZ / aBG Z-9.1-382 and the European standard DIN EN 14964.

- + Vapour-permeable, windtight and rain-proof
- + Stable underlay board and second water-repellent layer
- + F 60-B (REI 60) construction in the AGEPAN® SYSTEM
- + Good tape adhesion
- + Emergency roof solution for max. 8 weeks in event of exposure to elements and after storm damage
- + Hail resistance class as tested by the IBS Institute
- + Resistance to rodent infestation officially confirmed
- + Resistant to high salt atmosphere concentration
- + No nail sealing tape required as defined by ZVDH (Central Federation of German Roofing Contractors)

#### AREAS OF APPLICATION

- Rear-ventilated curtain wall in accordance with DIN 68800-2
- Sarking board according to EN 14964 type IL and UDP-A classified according to ZVDH regulations for roof pitches  $\geq 16^\circ$  (taking into account the standard roof pitch)
- Load-bearing cladding for stabilizing bar-shaped ribs at risk of buckling or tilting in accordance with abZ/aBG Z-9.1-382

Not recommended for cold, uninsulated roof constructions and attics as well as for porch roofs.



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\* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions)



## AGEPAN® DWD 600

### WITH INCREASED BULK DENSITY

The AGEPAN® DWD 600 is a vapour-permeable MDF. RWH wood fibre board according to DIN EN 622-5, can be used according to DIN EN 14964 as sarking board. Our AGEPAN® DWD 600 is ideal for the use as sheathing in rear-ventilated facades and as a second water-repellent layer in roof and wall.

- + Available with butt edges and with T+G profile
- + Vapour-permeable, windtight and rain-proof
- + Stable underlay board and second water-repellent layer
- + For fire protection constructions in accordance with DIN 4102-4 (bulk density  $\geq 600 \text{ kg/m}^3$ )
- + Resistant to high salt air concentration
- + Good tape adhesion
- + Emergency roof solution for max. 8 weeks in event of exposure to elements and after storm damage
- + No nail sealing tape required according to ZVDH (Central Federation of German Roofing Contractors)

#### AREAS OF APPLICATION

- Rear-ventilated curtain wall in accordance with DIN 68800-2
- For fire protection constructions in accordance with DIN 4102-4 (bulk density  $\geq 600 \text{ kg/m}^3$ )
- Sarking board according to EN 14964 type IL and UDP-A classified according to ZVDH regulations for roof pitches  $\geq 16^\circ$  (taking into account the standard roof pitch)
- Load-bearing cladding for stabilizing bar-shaped ribs at risk of buckling or tilting in accordance with abZ/aBG Z-9.1-382

Not recommended for cold, uninsulated roof constructions and attics as well as for porch roofs.



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#### CONSTRUCTION EXAMPLE WITH REAR-VENTILATED FACADE

PRODUCT	THICKNESS [mm]
AGEPAN® DWD 600	16
Solid construction timber (KVH)	$\geq 60 \times 140$
Cavity insulation	$\geq 140$
AGEPAN® OSB 3 Ecoboard®	$\geq 15$
AGEPAN® THD Install	$\geq 40$
Gypsum board (GKB)	$\geq 12,5$



+ Diffusion-open constructions without additional façade membrane – environmentally friendly and recyclable

+ Stable tongue and groove profile – quick to install

+ Abrasion-resistant, good adhesion of adhesive tapes – saves primer and time

+ Particularly solid due to troughlike bulk density profile

+ Can be used on both sides

## AGEPAN® DWD black

### ECOLOGICAL WOOD FIBRE BOARD WITH OUTSTANDING VISUAL APPEAL

This black-coloured wood fiberboard, type MDF.RWH according to DIN EN 622-5, for ventilated curtain façades with horizontal rhomboid claddings.

- + Attractive appearance due to consistent black colour throughout
- + Suitable for diffusion-open constructions without the need for additional facade membranes
- + Stable tongue-and-groove profile – quick installation
- + Resistant to abrasion with good tape adhesion – saves primer and time
- + Strong and durable – making it resistant to damage
- + Economical – easy to work with, safe to handle
- + Hydrophobic throughout
- + Formaldehyde-free glued
- + Quality controlled
- + UV-stable

#### AREAS OF APPLICATION

- Suitable for fire protection constructions according to DIN 4102-4 (bulk density  $\geq 600 \text{ kg/m}^3$ )
- Ventilated exterior wall cladding with defined open joint proportion according to DIN 68 800-2
- Can be used in damp areas in accordance with DIN EN 13986

The expert statement from Fraunhofer WKI Braunschweig / Germany is available upon request.

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## AGEPAN® UDP T+G

### THE STABLE SARKING BOARD

The particularly stable and moisture-resistant AGEPAN® UDP T+G is an wood fibre insulation board with a tongue and groove profile on all four sides, which complies with DIN EN 13171. The surface of AGEPAN® UDP T+G is extremely robust due to its troughlike bulk density profile.

- + Windtight and water-repellent
- + Vapour-permeable:  $s_d \leq 0.2 \text{ m}$
- + Particularly solid and robust due to troughlike bulk density profile
- + Extremely pressure-resistant with  $\geq 250 \text{ kPa}$
- + Thermal-insulating and sound-absorbing
- + AGEPAN® UDP T+G can be plastered in window reveals
- + F 60-B (REI 60) construction in the AGEPAN® SYSTEM
- + Good tape adhesion
- + Emergency roof solution for max. 8 weeks in event of exposure to elements and after storm damage
- + No nail sealing tape required as defined by ZVDH (Central Federation of German Roofing Contractors)
- + Little waste as boards can be turned sideways

#### AREAS OF APPLICATION

- External panelling in the roof and wall area
- Sarking board according to EN 14964 type IL and UDP-A classified according to ZVDH (Central Federation of German Roofing Contractors) regulations for roof pitches  $\geq 16^\circ$  (taking into account the standard roof pitch)
- Second water-repellent layer in various constructions
- Reveal board can be plastered
- Room-side insulation in the floor area
- Areas of application acc. to DIN 4108-10 table 13: DAD-ds / WAB-ds / WH / DEO-ds

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\* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions)





+ Unique solid with the asymmetrical bulk density profile

+ Particularly abrasion-resistant and thus good tape adhesion



+ Fewer joints, thus higher construction safety in the facade area

+ Extremely fast and economical

## AGEPAN® THD T+G

### THE INSULATION SPECIALIST

AGEPAN® THD T+G is a wood fibre insulation board according to DIN EN 13171 which is entirely hydrophobic, vapour-permeable and hygroscopic. AGEPAN® THD T+G can therefore be used as sarking board in compliance with ZVDH regulations. It is used as over-rafter insulation and sarking and as external sheathing when creating roof and wall elements.

- + Vapour-permeable, windtight, rain-proof and water-repellent
- + High pressure resistance
- + Minimization of thermal bridges
- + Excellent insulating properties keep homes cool in the summer and warm in the winter
- + Extremely stable and moisture-resistant, therefore no deflection of the board
- + Particularly abrasion-resistant and thus good tape adhesion
- + F 90-B (REI 90) construction in the AGEPAN® SYSTEM
- + Hail resistance class as tested by the IBS Institute
- + No nail sealing tape required as defined by ZVDH (Central Federation of German Roofing Contractors)
- + Emergency roof solution for max. 8 weeks in event of exposure to elements and after storm damage

#### AREAS OF APPLICATION

- Sarking board according to EN 14964 type IL and UDP-A classified according to ZVDH (Central Federation of German Roofing Contractors) regulations for roof pitches  $\geq 16^\circ$  (taking into account the standard roof pitch)
- Second water-repellent layer in various constructions
- Over-rafter insulating board for new builds and for the renovation of inadequately insulated roofs
- Timber frame wall sheathing with rear-ventilated exterior cladding
- Areas of application acc. to DIN 4108-10 table 13: DAD-ds / WAB-ds / WH

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## AGEPAN® THDmax Vario

### THE INSULATION PROFESSIONAL IN LARGE FORMAT

AGEPAN® THDmax Vario is a wood fibre insulation board that complies with DIN EN 13171. AGEPAN® THDmax Vario is permanently hydrophobic, vapour-permeable and sorption capable. Thanks to its large format, elements can be prefabricated quickly and economically. It is used as wall cladding and insulation for ventilated facades.

- + Unique asymmetrical bulk density profile, making it stable and particularly resistant to abrasion
- + Width of 2.5 m is adapted to the usual timber construction pattern
- + Trimmed edges
- + Fewer joints, thus higher construction safety in the facade area
- + Panelling of wall elements without horizontal panel joints
- + Ideal for prefabrication
- + Fast, time-saving and therefore cost-effective processing
- + Diffusion-open and windproof

#### AREAS OF APPLICATION

- Second water-draining layer for various wall constructions
- Wall cladding of timber frame constructions with rear-ventilated exterior cladding in accordance with DIN 68800-2
- Application areas according to DIN 4108-10 Table 13: WAB-ds / WH

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+ Unique solid with the asymmetrical bulk density profile

+ Structural and load-bearing according to German technical approval certificate



+ Unique solid with the asymmetrical bulk density profile

+ Temporarily structural and load-bearing function according to German technical approval certificate

## AGEPAN® THD Static

### THE LOAD-BEARING INSULATION FIBRE BOARD

Die AGEPAN® THD Static is a structural wood fibre insulation board which complies with DIN EN 13171 and the German technical approval certificate abZ / aBG Z-9.1-725. AGEPAN® THD Static is vapour-permeable, thermal insulating and entirely hydrophobic. The asymmetrical bulk density profile makes the board extremely stable and it can be used as structural sheathing with vapour-permeable wall elements. A high level of prefabrication is possible.

- + Suitable for prefabrication of shell-only houses and elements
- + Quick and time-saving use
- + Exceptionally pressure-resistant thanks to asymmetrical bulk density profile
- + Facade renovation with prefabricated elements
- + Excellent insulating properties keep homes cool in the summer and warm in the winter
- + Minimization of thermal bridges
- + Fastening with standard broad back staples

#### AREAS OF APPLICATION

- Sheathing of frames subject to in-plane shear forces
- Structural use in compliance with abZ / aBG Z-9.1-725
- Areas of application acc. to DIN 4108-10 table 13: WAB-ds / WH

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## AGEPAN® THD Static Putz

### THE INSULATION FIBRE BOARD WITH TEMPORARILY STRUCTURAL AND LOAD-BEARING FUNCTION IN THE ETICS

AGEPAN® THD Static Putz is a wood fibre insulation board, vapour-permeable, thermal insulating and entirely hydrophobic. The asymmetrical bulk density profile makes the board extremely stable and it can be used as structural sheathing with vapour-permeable wall elements.

- + In large format 3000 mm x 1250 mm
- + Ideal for prefabrication of shell-only houses and elements
- + Exceptionally pressure-resistant due to the asymmetrical bulk density profile
- + Facade renovation with prefabricated elements
- + Excellent insulating properties keep homes cool in the summer and warm in the winter
- + Minimization of thermal bridges
- + Fastening with standard broad back staples

#### AREAS OF APPLICATION

- ETICS acc. to abZ / aBG Z-33.47-1401
- Structural use in compliance with abZ / aBG Z-9.1-725

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+ Unique solid with the asymmetrical bulk density profile

+ Directly plasterable

+ Quick and easy installation with screws or clamps



## AGEPAN® THD Install

### THE PRESSURE-RESISTANT INSTALLATION LAYER

AGEPAN® THD Install is a butt-edged wood fibre insulation board with an asymmetrical bulk density profile, which complies with DIN EN 13171. AGEPAN® THD Install is vapour-permeable, thermal insulating and hygroscopic, and can be used as an installation layer or as pressure-resistant internal insulation in roof and wall areas. The solid surface layer enables plasterboards to be fastened directly to AGEPAN® THD Install.

- + Ideal as a quick-to-lay installation layer
- + "Solid" layer - no cavity (room acoustics)
- + Fastening of loads weighing up to 25 kg per screw (6 x 50 mm)
- + Very good sound insulation due to uncoupling of the gypsum boards
- + Minimization of thermal bridges through full surface thermal insulation
- + High labor savings due to easy installation, as no battens are required
- + Exceptionally pressure-resistant thanks to asymmetrical bulk density profile
- + Quick integration of ducts
- + F 90-B (REI 90) constructions in AGEPAN® SYSTEM (inside /outside)
- + Direct attachment to AGEPAN® OSB Ecoboard®
- + Gypsum boards can be fitted directly to AGEPAN® THD Install using approved screws and staples, fastening to the AGEPAN® OSB Ecoboard® behind is not required

#### AREAS OF APPLICATION

- Can be used as internal insulation in wall and roof areas
- Installation layer can be plastered directly with approved product (e. g. Rotkalk, Knauf Gips KG)
- Clayboard systems with CLAYTEC®, Viersen (Germany)
- Areas of application acc. to DIN 4108-10 table 13: DI-dm / DEO-ds / WI-dm / WTR / WH

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Fastening of loads weighing up to 25 kg per screw (6 x 50 mm)



+ Ecological and healthy living environment

+ Lightweight, particularly stable and plasterable

+ Small format, ideal for the craftsman: 1.60 m x 0.61 m

## AGEPAN® UDP Inside T+G

### THE PRACTICAL INTERIOR BOARD

The lightweight, particularly stable and plasterable AGEPAN® UDP Inside T+G is a wood fibre insulation board for interior construction with a circumferential tongue and groove profile that complies with DIN EN 13171. Due to its handy format, the AGEPAN® UDP Inside T+G can be easily processed. With its diffusion-open and moisture-regulating properties, the ecological wood fibre insulation board contributes to a pleasant and healthy indoor climate.

- + Ecological AGEPAN® wood fibre insulation interior board
- + Lightweight, particularly stable and thermally insulating
- + Summer heat protection
- + Easy handling: as a small-format board, it is ideal for the craftsman
- + Laying of flying butts
- + Can be used in drywall grid dimensions of 62.5 cm
- + Can be used on both sides, less wastage
- + Simple processing with commercially available woodworking machines
- + Extremely pressure resistant with  $\geq 250$  kPa
- + Lighter than commercially available interior finishing boards based on gypsum (bulk density = 270 kg/m<sup>3</sup>)

#### AREAS OF APPLICATION

- For interior fittings
- Cladding of substructures made of wood or metal in the wall area
- Panelling of wooden structures in the ceiling and roof slope area
- Can be plastered with clay or mineral plaster, for recommended manufacturers see detailed processing instructions

ECOBOARD 

FUNKTIONSH 



\* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions)





+ Unique solid with the asymmetrical bulk density profile

+ Letterboxes and outside lights can be easily attached



+ Part of tested AGEPAN® SYSTEM constructions

+ Ideal as an airtight layer in timber frame construction

## AGEPAN® THD Putz 050

### THE WOOD FIBRE INSULATION BOARD IN THE ETICS

AGEPAN® THD Putz 050 is a structural wood fibre insulation board with a tongue and groove profile on all four sides, which complies with DIN EN 13171 and the German technical approval certificate abZ / aBG Z-33.47-1724 / Z-33.47-673. AGEPAN® THD Putz 050 is vapour-permeable, thermal insulating and entirely hydrophobic. It offers exceptional surface strength and resistance when used in the external thermal insulation composite system thanks to its asymmetrical bulk density profile.

- + High compression strength and stability
- + Simple plaster structure
- + Vapour-permeable ETICS acc. to abZ / aBG Z-33.47-1724 / Z-33.47-673
- + 'Wet on wet' base coat application possible
- + Minimization of thermal bridges
- + Excellent insulating properties keep homes cool in the summer and warm in the winter
- + Easy fixation using approved staples and system wall plugs
- + Little risk of damage from impacts due to hardened surface
- + Easy to use due to high dimensional precision
- + Letterboxes and outside lights can be easily attached
- + F 90-B (REI 90) construction in AGEPAN® SYSTEM

#### AREAS OF APPLICATION

- ETICS with German technical approval certificate abZ / aBG Z-33.47-1724 / Z-33.47-673
- Plastered facades in external thermal insulation composite systems on timber frame walls or solid wood constructions
- Areas of application acc. to DIN 4108-10 table 13: WAP-zh / WH
- Please observe the plaster manufacturer's instructions (see detailed data sheet P335.de, Knauf Gips KG)

ECOBOARD 

FUNKTIONSHILFZ 



## AGEPAN® OSB Ecoboard®

### THE LOAD-BEARING BOARD

AGEPAN® OSB Ecoboard® is a high-performance wood-based panel which complies with EN 300/DIN EN 13986. It can be used as an airtight layer or vapour barrier in a vapour permeable construction, so that use of additional foil is unnecessary. Use of AGEPAN® OSB 3 Ecoboard® and AGEPAN® OSB 4 Ecoboard® in constructions is governed by the specifications of DIN EN 1995-1-1 (Eurocode 5) and DIN 68800.

**AGEPAN® OSB 3 Ecoboard®** offers excellent results in the construction sector, and can be used as a multi-purpose board and for load-bearing and structural purposes in roof, wall and floor areas.

**AGEPAN® OSB 4 Ecoboard®** for all construction applications and for load-bearing and structural purposes in roof, wall and floor areas requiring excellent load-capacity and dimensional stability heavy-duty constructions.

- + Exceptional strength and stability
- + Use as an airtight layer or vapour barrier
- + Formaldehyde-free and moisture-resistant glueing
- + Reduced swelling and shrinkage
- + Available in multiple sizes with blunt edges and with T+G profile
- + Bulk density suitable for timber frame constructions in accordance with EC 5 and fire protection in accordance with DIN 4102-4
- + Non-detrimental to health – independent confirmation that it is safe to use with foodstuffs

#### THE CONTIFACE SURFACE

The Contiface surface of AGEPAN® OSB 3 Ecoboard® and AGEPAN® OSB 4 Ecoboard® is a finish which is applied to the board surface during the production process: It offers protection from abrasion and contamination, and acts as a short-term water repellent. As the Contiface surface is the equivalent of a seal, AGEPAN® OSB 3 Ecoboard® and AGEPAN® OSB 4 Ecoboard® – Contiface are only conditionally suited to surface coating. In this case, we recommend use of the sanded AGEPAN® OSB Ecoboard®.

#### AREAS OF APPLICATION

- Floor construction
- Wall cladding
- Structural wall elements and roof panelling
- Shopfitting and exhibition stand construction
- Load-bearing ceiling sheathing
- Transport packaging
- Furniture production
- As sanded board for decorative areas

ECOBOARD 



+ Unique with the asymmetrical raw density profile, therefore an additional load-bearing layer is not necessary

+ MDF tongue included in delivery

+ Dry, immediately walkable

+ Extra pressure resistant

## AGEPAN® TEP

### THE DRY SCREED BOARD

AGEPAN® TEP is a wood fibre insulation board with a lengthwise groove and insertable MDF tongue, in compliance with DIN EN 13171. Thanks to its resistant surface, AGEPAN® TEP can be used as a dry floor construction element and covered directly with laminate, parquet flooring or floorboards. Floorboards are screwed directly into the MDF tongue. An additional load-bearing layer is not necessary. AGEPAN® TEP is an ideal substrate with a comfortable walking surface.

- + Ideal system component for dry screed structures
- + No drying phase unlike conventional wet screeds, can be walked on immediately
- + Floorboards can be screwed directly into the MDF tongues
- + Can be tiled directly according to tested system
- + Extremely comfortable walking surface: warm underfoot and resilient
- + Boards are fixed in place when laid, no shifting possible
- + MDF tongue included in delivery
- + Cable ducts etc. can be directly integrated
- + No acoustic or thermal bridges thanks to MDF tongues within the boards
- + No second board generally required on AGEPAN® TEP to spread the load
- + Floating installation of laminate or pre-fabricated parquet flooring and floorboards on AGEPAN® TEP
- + Can be laid directly on suitable fill

### AREAS OF APPLICATION

- Robust, easy to use dry screed element for floor area
- Dry screed on level, load-bearing surface
- Suitable as direct underlay for floating parquet or laminate flooring or floorboards
- Can be tiled as per Permat Floor System from Blanke, Iserlohn (Germany)
- Areas of application acc. to DIN 4108-10 table 13: DEO-ds / DES-sg

ECOBOARD 

FUNKTIONSHOLZ®



\* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions)



## AGEPAN® Floor System

### THE SOLUTION FOR FLOORS

AGEPAN® Floor System is dry, quick to install, can be walked on immediately, and is elastic and shock-absorbing to protect joints. The AGEPAN® SYSTEM offers a variety of flooring constructions suitable for new builds and renovations.

- + All components from a single source
- + Comfortable walking surface
- + Sound-absorbing and thermal-insulating when combined with suitable insulating materials
- + No drying phase unlike conventional wet screeds

### AREAS OF APPLICATION

- For renovation and new builds
- Levelling of old floorboards
- Floating installation
- Removable floors
- Work platforms and many other special floors



AGEPAN® Loose Fill is manufactured from the natural raw material shale, in a special thermal process. AGEPAN® Loose Fill does not contain any chemical additives and is therefore a high quality, environmentally-friendly material with outstanding grain strength. Loose fill is used as footfall soundproofing and thermal insulation to level out uneven floors.



# TECHNICAL DATA AND PRODUCT RANGE

AGEPAN® SYSTEM products	Nominal thickness (mm)	Coverage, length x width (mm)	Calculation dimension (mm)	(Pcs/package)	PU (Pcs/pallet)	Certification	Fire classification	Formaldehyde emission class	Bulk density (kg/m³)	Specific thermal capacity (J/kg K)	Rated thermal conductivity (W/mK) - λ <sub>R</sub>	Nominal thermal conductivity (W/mK) - λ <sub>D</sub>	Tear strength, tensile strength, panel plane (kPa)	Hydrophobic group	Water vapour diffusion equivalent air layer thickness - S <sub>d</sub>	Compressive strength (kPa)		
	16	2800 x 1196*	2800 x 1196*	48	48													
		3000 x 1247	3000 x 1247	48	48													
	16	2500 x 625	2510 x 635	40	40	Z-9.1-382	D-s1, d0*2	E1 – formaldehyde-free glued	565	2100	0,090	-	-	-	0,18	-		
		2500 x 1000	2510 x 1010															
	20*	2500 x 625	2515 x 640	32	32													
	16	3000 x 1250	3000 x 1265	40	40										0,22			
	16	lgw. unedged	6000 x 2500	28	28										0,18			
	16	3000 x 1247	3000 x 1247	48	48	EN 622-5 EN 13986	D-s2, d0	E1 – formaldehyde-free glued	≥ 600	2100	0,100	-	-	-	0,19	-		
		2500 x 625	2515 x 640	40	40													
		2500 x 1000*	2515 x 1015*															
	16	2500 x 625	2515 x 640	40	40	EN 622-5 EN 13986	D-s2, d0	E1 – formaldehyde-free glued	≥ 600	2100	0,100	-	-	-	0,19	-		
	22	2500 x 590	2520 x 610	48	48	EN 13171	E	E1 – formaldehyde-free glued	270	2100	0,054	0,051	≥ 10	WS 1,0	0,11	≥ 250		
	25*			42	42										0,13			
	32*			33	33										0,16			
	25	1870 x 590	1890 x 610	42	42										0,13			
	40	1875 x 585	1890 x 600	26	52										0,12			
	50*			21	42										0,16			
	60			17	34										0,18			
	80			13	26										0,24			
	40	3000 x 2500*	3000 x 2500*	28	28	EN 13171	E	E1 – formaldehyde-free glued	230	2100	0,049	0,047	≥ 7,5	WS 1,0	0,12	≥ 200		
	40	lgw. unedged	6000 x 2500*	6000 x 2550*	16										16		0,12	
	60	3000 x 2500	3000 x 2500	18	18										0,18			
	60	lgw. unedged	6000 x 2500*	6000 x 2550*	12										12		0,18	
	80	3000 x 2500	3000 x 2500	14	14										0,24			
	40*	3000 x 1250*	3000 x 1250*	28	28										0,12			
	60	3000 x 1250	3000 x 1250	18	18										0,18			
	80	3000 x 1250	3000 x 1250	14	14										0,24			
	40	3000 x 1250	3000 x 1250	28	28	EN 13171 Z-9.1-725	E	E1 – formaldehyde-free glued	290	2100	0,060	0,057	≥ 7,5	WS 1,0	0,12	≥ 200		
	60			18	18										0,18			
	80*			14	14										0,24			
	60	3000 x 1250	3000 x 1250	18	28	EN 13171 Z-9.1-725 Z-33.47.1401									0,18			
	80*			14	14										0,24			
	40	2650 x 600	2650 x 600	28	28	EN 13171	E	E1 – formaldehyde-free glued	230	2100	0,049	0,047	≥ 7,5	WS 1,0	0,12	≥ 200		
	60			18	18										0,18			
	80			14	14										0,24			
	40	1875 x 585	1890 x 600	26	52	EN 13171 Z-33.47-673 Z-33.47-1724	E	E1 – formaldehyde-free glued	230	2100	0,050	0,047	≥ 7,5	WS 1,0	0,12	≥ 200		
	50*			21	42										0,16			
	60			1875 x 585	1890 x 600										17		34	0,18
				2500 x 1000*	2515 x 1015*										17		17	0,18
	80*			1875 x 585	1890 x 600										13		26	0,24
	2500 x 1000	2515 x 1015	13	13	0,24													
	40*	1880 x 500	1890 x 500	26	52	EN 13171	E	E1 – formaldehyde-free glued	230	2100	0,049	0,047	≥ 7,5	WS 1,0	0,12	≥ 200		
	60*			17	34										0,18			
	80*			13	26										0,24			

\* on request  
\*2 does not apply to AGEPAN® DWD protect T+G in 20 mm

The respective building regulations must be observed.  
The area of application or use of the product must be chosen in compliance with / taking into account the respective national building law.  
Attention! In accordance with the regulations of the German ZVDH (Central association of German Roofers) all sarking boards made of wood fibres listed here are not safe to walk on. Load transfer in the area between the rafters is not permitted. The products are safe to tread on in the rafter area. Accident prevention regulations must be observed.

# TECHNICAL DATA AND PRODUCT RANGE

AGEPAN® SYSTEM products	Nominal thickness (mm)	Coverage, length x width (mm)	Calculation dimension (mm)	(Pcs/package)	PU (Pcs/pallet)	Certification	Fire classification	Formaldehyde emission class	Bulk density (kg/m³)	Specific thermal capacity (J/kg K)	Rated thermal conductivity (W/mK) - $\lambda_R$	Nominal thermal conductivity (W/mK) - $\lambda_D$	Tear strength, tensile strength, panel plane (kPa)	Hydrophobic group	Water vapour diffusion equivalent air layer thickness - $S_d$	Compressive strength (kPa)
 AGEPAN® OSB 3 Ecoboard® standard board – Contiface	9   18	2440 x 1220	–	106   54	106   54	EN 300 EN 13986	D-s2, d0	E1 – formaldehyde-free glued	≥ 600	2100	0,130	–	6 to 10 mm: 340 > 10 and < 18 mm: 320 18 to 25 mm: 300	–	$\mu$ -value = 150 – 200 $s_d$ -value = $\mu$ x OSB 3 Ecoboard® thickness (m)	–
	6*   8*   9*   10*   12   15   18   20   22   25	2500 x 1250	–	80   64   54   49   44   39	80   64   54   49   44   39											
	12   15	2650 x 1250	–	68   54	68   54											
	9*   12	2800 x 1196	–	106   68	106   68											
	12   15   18	2800 x 1250	–	68   54   44	68   54   44											
	12   15   18	3000 x 1250	–	68   54   44	68   54   44											
	15	3000 x 2500	–	27	27											
	15   18   22   25	5000 x 1250	–	30   26   22   18	30   26   22   18											
 AGEPAN® OSB 3 Ecoboard® flooring board 4-edge T+G – Contiface	12   15   18   22	2440 x 590	–	80   64   54   44	80   64   54   44	EN 300 EN 13986	D-s2, d0	E1 – formaldehyde-free glued	≥ 600	2100	0,130	–	6 to 10 mm: 340 > 10 and < 18 mm: 320 18 to 25 mm: 300	–	$\mu$ -value = 150 – 200 $s_d$ -value = $\mu$ x OSB 3 Ecoboard® thickness (m)	–
	18	2440 x 1220		54	54											
	12   15   18   22   25	2500 x 625		80   64   54   44   39	80   64   54   44   39											
	12   15   18   22   25   30	2500 x 675		80   64   54   44   39   32	80   64   54   44   39   32											
	12   15   18   22   25	2500 x 1250		80   64   54   44   39	80   64   54   44   39											
 AGEPAN® OSB 3 Ecoboard® flooring board 4-edge T+G – sanded	12   15   18   22   25	2500 x 675	–	80   64   54   44   39	80   64   54   44   39	EN 300 EN 13986	D-s2, d0	E1 – formaldehyde-free glued	≥ 610	2100	0,130	–	6 to 10 mm: 500 > 10 and < 18 mm: 450 18 to 25 mm: 400	–	$\mu$ -value = 200 – 250 $s_d$ -value = $\mu$ x OSB 4 Ecoboard® thickness (m)	–
 AGEPAN® OSB 3 Ecoboard® roof board 2-edge T+G – Contiface	22	6250 x 675	–	22	22											
		5000 x 1250	–	22	22											
 AGEPAN® OSB 4 Ecoboard® standard board – Contiface	15   22	2500 x 1250	–	64   44	64   44	EN 300 EN 13986	D-s2, d0	E1 – formaldehyde-free glued	≥ 610	2100	0,130	–	6 to 10 mm: 500 > 10 and < 18 mm: 450 18 to 25 mm: 400	–	$\mu$ -value = 200 – 250 $s_d$ -value = $\mu$ x OSB 4 Ecoboard® thickness (m)	–
	15	2800 x 1250 2650 x 1250 3000 x 1250		54	54											
 AGEPAN® OSB 4 Ecoboard® flooring board 4-edge T+G – Contiface	15   18   22   25	2500 x 675	–	64   54   44   39	64   54   44   39	EN 300 EN 13986	D-s2, d0	E1 – formaldehyde-free glued	≥ 610	2100	0,130	–	6 to 10 mm: 500 > 10 and < 18 mm: 450 18 to 25 mm: 400	–	$\mu$ -value = 200 – 250 $s_d$ -value = $\mu$ x OSB 4 Ecoboard® thickness (m)	–
	15   18   22   25	2500 x 1250		64   54   44   39	64   54   44   39											
 AGEPAN® Loose Fill*	Bagged goods 50 l	–	–	–	24	EN 13055	–	–	ca. 650 ± 100	–	–	–	–	–	–	–

\* on request

Only complete pallets are delivered.

AGEPAN® SYSTEM products are available with FSC® (C009049) and PEFC (PEFC/04-32-0767) certifications on demand and according to availability. Please specify when ordering.

The instructions of use of the AGEPAN® SYSTEM must be observed.

# REFERENCE PROJECTS

## NEW BUILDING: 4 ROW HOUSES

Used Products:



AGEPAN® THD Static



AGEPAN® THD Install

AGEPAN® OSB Ecoboard®



AGEPAN® THD T+G



AGEPAN® OSB Ecoboard®



## NEW BUILDING: DETACHED HOUSE

Used Products:



AGEPAN® THD Static



AGEPAN® OSB Ecoboard®



AGEPAN® OSB Ecoboard®



# REFERENCE PROJECTS

## EXTENSION AND ADDITION STOREY: DETACHED HOUSE

### Used Products:

-  AGEPAN® THD Putz 050 T+G
-  AGEPAN® THD T+G
-  AGEPAN® THD Install
-  AGEPAN® OSB Ecoboard®
-  AGEPAN® OSB Ecoboard®



## NEW BUILDING: PASSIVE HOUSE

### Used Products:

-  AGEPAN® DWD protect
-  AGEPAN® THD T+G
-  AGEPAN® OSB Ecoboard®
-  AGEPAN® OSB Ecoboard®
-  AGEPAN® THD Install



## FUNKTIONSHILFEN® OF THE AGEPAN® SYSTEM: FOR A COMFORTABLE INDOOR CLIMATE OF WELL-BEING.



Your AGEPAN® SYSTEM Partner