

SYSTEM BROCHURE

WELCOME TO THE WORLD
OF THE AGEPAN[®] SYSTEM.



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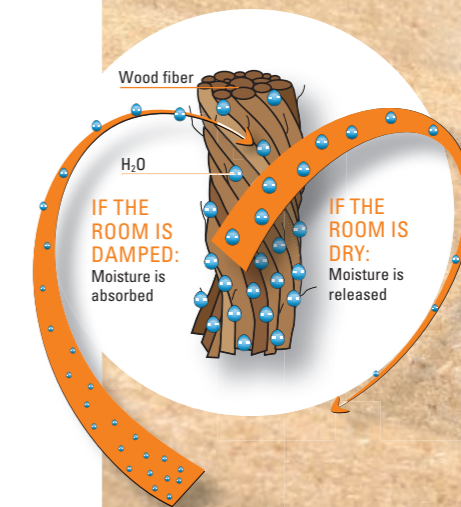
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FUNKTIONSHOLZ®

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



The wood fibers also 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.

AGEPAN® SYSTEM MATERIAL FOR BETTER 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, floors and ceilings.

Functionality, sustainability, ecology and healthy living are becoming increasingly important in building projects. 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 CONSTRUCTIONS USING THE AGEPAN® SYSTEM

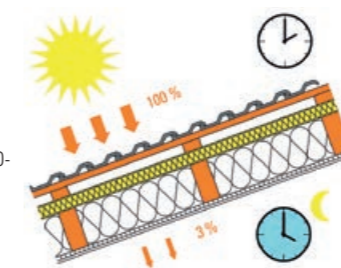
The dry construction method used with AGEPAN® SYSTEM products generates considerably less noise and dust. Individually planned dream properties with an excellent indoor climate can be realised in next to no time because the panel elements can be prefabricated in the carpentry shop, unaffected by weather 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.



PHASE-SHIFTING AND HEAT TRANSFER

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



External construction elements insulated with the AGEPAN® SYSTEM prevent thermal bridges and the formation of condensation on inside walls. Rooms are also kept cool during hot summer months. AGEPAN® SYSTEM products absorb heat during the day and demonstrate a positive phase shift. The stored heat is only released at night when temperatures are at their coolest.



Asymmetrical bulk density profile with high-density surface layer. ✓



PRESSURE-RESISTANT AND STABLE

UNIQUE: THE ASYMMETRICAL BULK DENSITY PROFILE

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



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



SUSTAINABILITY AND HEALTHY LIVING

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.

SUSTAINABLE

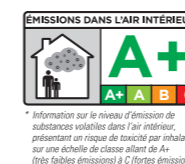
- AGEPAN® SYSTEM products are available with PEFC™-/FSC®-certifications within availabilities
- Environmentally-friendly and non-detrimental to health as made from sustainable timber
- IBU seal confirms responsible handling of timber for sustainable building materials and products
- The environmental 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

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

HEALTHY LIVING

- Formaldehyde-free glueing **ECOBOARD** 
- Protection from the heat in summer and from the cold during the winter months
- Optimum room climate due to diffusion-permeable products and their moisture-regulating properties
- AGEPAN® fiberboard insulation materials are rated with an A+ label, which is the best emission class according to French legislation on VOC

Use products that are certified accordingly:
FSC®- and PEFC™-certified products can be delivered on demand and within availabilities.
Please specify when ordering.





OUR COMMITMENT QUALITY AT ITS BEST



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

Perfectly compatible components such as AGEPAN® OSB ECOBOARD and AGEPAN® Insulating fiberboards 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
- Insulating fiberboard, DWD and OSB boards from a single source
- Quick and efficient to work with, and cost-saving manufacturing
- Especially suited to the prefabrication of elements



AGEPAN® SYSTEM

WIND AND WEATHER RESISTANT

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 elements, such as sun, rain, wind, snow and hail.

- Excellent protection against cold in winter and heat in summer
- 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
- High abrasion resistance and hard surface layer of the insulating fiberboards
- Hail-resistant: AGEPAN® DWD protect and AGEPAN® THD T+G
- Rodent-proof: AGEPAN® DWD protect
- Resistant to high salt atmosphere concentration: AGEPAN® DWD protect



AGEPAN® SYSTEM

THE RIGHT CHOICE WHEN IT COMES TO
FIRE PROTECTION AND SOUND INSULATION

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.


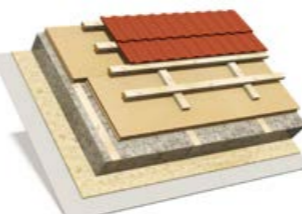
- Tested sound insulating system structures according to DIN EN ISO 10140-2 in compliance with DIN 4109
- Sound insulation values of up to 50 dB in the AGEPAN® SYSTEM
- Excellent sound insulation properties due to the asymmetrical bulk density profile of the THD product range
- Effective sound insulation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

YOUR ADVANTAGES IN THE SYSTEM – FIRE PROTECTION AND SOUND INSULATION AS STANDARD

FIRE PROTECTION

	STRUCTURE	PRODUCT	THICKNESS [mm]
 <p>F 30-B (REI 30)</p>	INSIDE	Gypsum board	≥ 12,5
		AGEPAN® OSB 3 ECOBOARD	≥ 15
		Solid construction timber	≥ 60 x 160
		Mineral wool (Ultimate)	≥ 160
	OUTSIDE	AGEPAN® DWD protect	16
 <p>F 60-B (REI 60)</p>	INSIDE	Gypsum board	≥ 12,5
		AGEPAN® THD Install	≥ 40
		AGEPAN® OSB 3 ECOBOARD	≥ 15
		Solid construction timber	≥ 60 x 140
	OUTSIDE	Mineral wool (Klemmrock)	≥ 140
		AGEPAN® DWD protect	16
		and/or AGEPAN® UDP N+F	≥ 22
 <p>F 90-B (REI 90)</p>	INSIDE	Gypsum board	≥ 12,5
		AGEPAN® THD Install	≥ 40
		AGEPAN® OSB 3 ECOBOARD	≥ 15
		Solid construction timber	≥ 60 x 140
	OUTSIDE	Mineral wool (Klemmrock)	≥ 140
		AGEPAN® THD Putz 050	≥ 40
		Mineral plastering system	10
 <p>REI 45</p>	INSIDE	AGEPAN® OSB 3 ECOBOARD	≥ 15
		Solid construction timber	≥ 60 x 160
		Cellulose (Isocell)	≥ 160
		AGEPAN® THD Putz 050	≥ 60
	OUTSIDE	Mineral plastering system	10

SOUND INSULATION

	STRUCTURE	PRODUCT	THICKNESS [mm]
 <p>External wall $R_{w,p} = 50$ dB</p>	INSIDE	Gypsum board (GKB)	≥ 12,5
		AGEPAN® THD Install	≥ 60
		AGEPAN® OSB 3 ECOBOARD	≥ 15
		Solid construction timber	≥ 60 x 140
	OUTSIDE	Mineral wool (Klemmrock)	≥ 140
		AGEPAN® THD T+G	≥ 40
		and/or AGEPAN® THD Putz 050	
 <p>Roof – new build $R_{w,p} = 50$ dB</p>	INSIDE	Gypsum board	≥ 12,5
		AGEPAN® OSB 3 ECOBOARD	≥ 15
		Rafters	≥ 80 x 200
		Cellulose (Isocell)	≥ 200
	OUTSIDE	AGEPAN® THD N+F	≥ 80
		Tile and counter battens	60 x 40
		Roof tiles	
 <p>Roof – refurbishment $R_{w,p} = 49$ dB</p>	INSIDE	Gypsum board	≥ 12,5
		AGEPAN® THD Install	≥ 60
		AGEPAN® OSB 3 ECOBOARD	≥ 15
		Solid construction timber	≥ 100 x 160
	OUTSIDE	Cellulose (Isocell)	≥ 160
		AGEPAN® THD T+G	≥ 80
		Tile and counter battens	60 x 40
Roof tiles			

Examples of tested structures. We will be pleased to provide you with test certificates on request.

THE PRODUCTS IN THE SYSTEM

Also available as AGEPAN® DWDmax



1 AGEPAN® DWD protect
The original

Stable, structural and load-bearing roof and wall sheathing

NEW



2 AGEPAN® DWD 600
With increased bulk density

Sheathing for facades with specific fire protection requirements

NEW



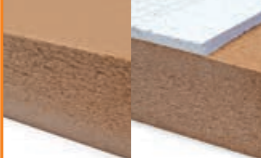
3 AGEPAN® DWD black
The black one

For facades with open joints



4 AGEPAN® UDP T+G
The stable sarking board

Thermal-insulating and sound-absorbing in roof and wall areas



5 6 AGEPAN® THD Static
The load-bearing insulating fiberboard

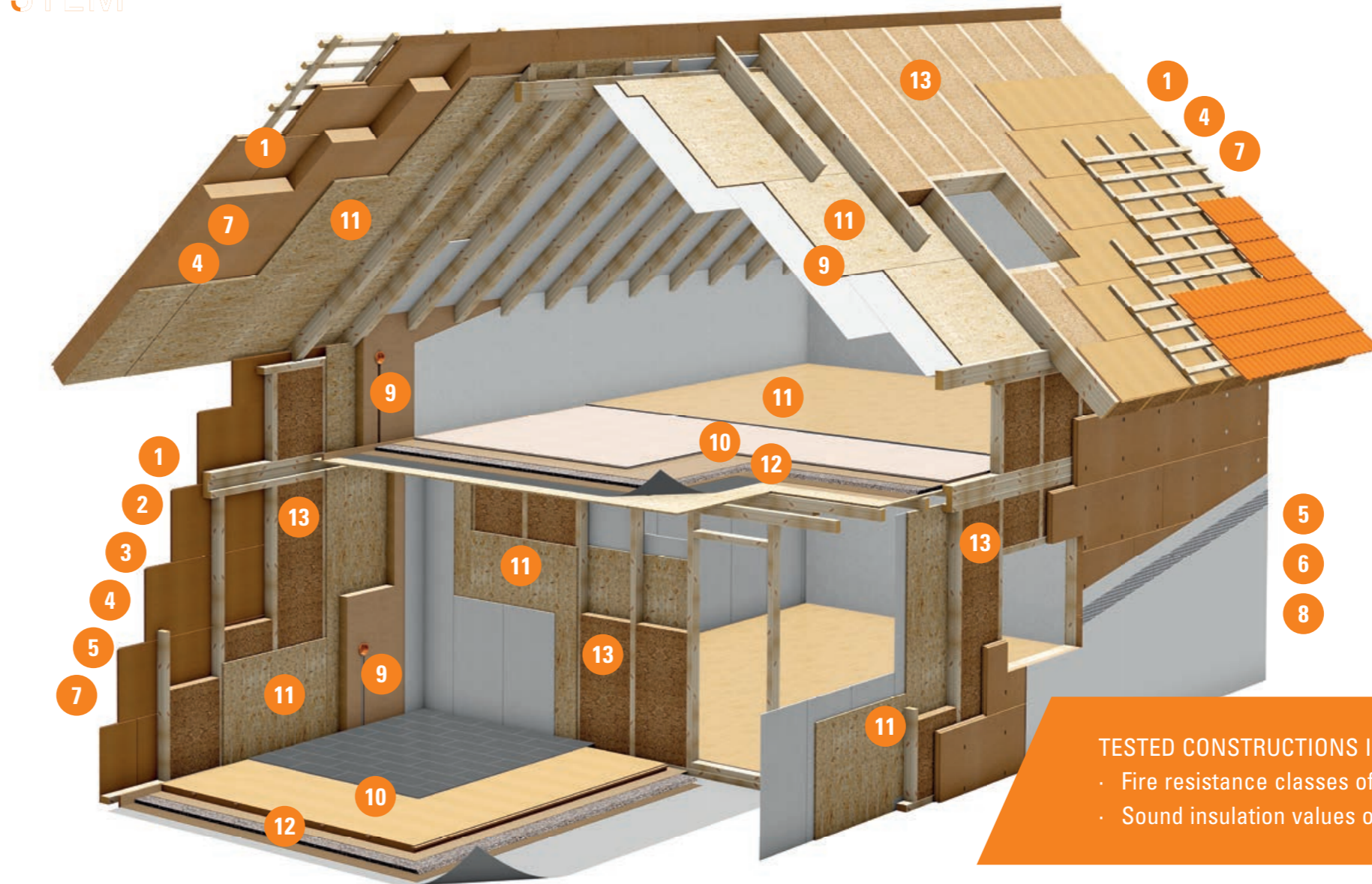
- Suitable for structural use in wall areas
- For the use in external thermal insulation composite systems as AGEPAN® THD Static Putz with temporarily structural function, can be plastered

Also available as AGEPAN® THDmax



7 AGEPAN® THD T+G
The insulation specialist

Exceptionally pressure-resistant thanks to the asymmetrical bulk density profile



TESTED CONSTRUCTIONS IN THE AGEPAN® SYSTEM

- Fire resistance classes of up to 90-B (REI 90)
- Sound insulation values of up to 50 dB



8 AGEPAN® THD Putz 050
The insulating fiberboard in external thermal insulation composite systems (ETICS)

For plastered facades in external thermal insulation composite systems

Can be tiled!



10 AGEPAN® TEP
The dry screed board

Robust and quick-to-lay dry screed element in the floor area



12 AGEPAN® Loose fill
To level out uneven floors

User-friendly and promoting healthy living because it is manufactured from the natural raw material shale



9 AGEPAN® THD Install
The alternative to the conventional installation layer

Suitable as internal insulation and installation layer for wall and ceiling which can be plastered directly



11 AGEPAN® OSB ECOBOARD
The load-bearing one

For universal use in timber frame constructions



13 AGEPAN® Flex
The flexible cavity insulation

Cavity insulation between the supporting structure in roof and wall areas

Greater protection from moisture penetration due to improved surface protection. ✓

NEW!

AGEPAN® DWD protect

THE ORIGINAL

The AGEPAN® DWD protect is a vapour-permeable MDF. RWH fiberboard according to EN 622-5, which complies with the German technical approval certificate Z-9.1-382 and the European standard DIN EN 14964. Our AGEPAN® DWD protect offers greater protection from moisture penetration due to improved surface protection. It ensures break and bend reinforcement when used as load-bearing and structural sheathing and acts as a second water-repellent layer.

- ✓ Available with blunt edges or with T+G profile
- ✓ Special large size as AGEPAN® DWDmax
- ✓ Vapour-permeable, windtight and rain-proof
- ✓ Solid sheathing and second water-repellent layer
- ✓ Improved surface protection against new build moisture
- ✓ 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

- Break and bend reinforcement
- Structural and load-bearing roof and wall sheathing
- Structural use in compliance with the German technical approval certificate Z-9.1-382
- Stable sarking board and second water-repellent layer
- Sarking board in compliance with ZVDH regulations: UDP-A, acc. to EN 14964: type IL
- Sufficient ventilation must be ensured in cold, uninsulated attics



* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de nocivité 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 fiberboard according to DIN EN 622-5, can be used according to DIN EN 14964 as sarking board or rather as cladding 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
- ✓ Solid sheathing and second water-repellent layer
- ✓ Increased bulk density ($\geq 600 \text{ kg/m}^3$)
- ✓ Good tape adhesion

AREAS OF APPLICATION

- Rear-ventilated facade
- Stable cladding board and second water-repellent layer
- Suitable for fire protection constructions according to DIN 4102-4 (bulk density $\geq 600 \text{ kg/m}^3$)

CONSTRUCTION EXAMPLE WITH REAR-VENTILATED FACADE

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



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



NEW!

AGEPAN® DWD black

THE BLACK ONE

The AGEPAN® DWD black is a vapour-permeable MDF. RWH fiberboard according to EN 622-5, can be used according to DIN EN 14964. Our AGEPAN® DWD black is ideal for use in facades with open strip lining. Whether for rhomboid cladding or other modern facade solutions, this is the optimal substructure. An additional facade membrane is not required.

- ✓ Perfect for use in open facades
- ✓ UV and moisture-resistant, according to test report U-ZELUBA-2018-001 WKI Braunschweig
- ✓ Excellent appearance due to the uniform black dyeing
- ✓ Available with butt edges and with T+G profile
- ✓ Vapour-permeable, windtight and rain-proof
- ✓ Solid sheathing and second water-repellent layer
- ✓ Quick and efficient to work with, and cost-saving prefabrication possible
- ✓ Good tape adhesion

AREAS OF APPLICATION

- Rear-ventilated facade with open strip lining (rhomboid cladding)
- Stable cladding board
- Suitable for fire protection constructions according to DIN 4102-4 (bulk density $\geq 600 \text{ kg/m}^3$)



CONSTRUCTION EXAMPLE WITH REAR-VENTILATED FACADE

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



ECOBOARD

FUNKTIONSHOLZ® CE



* 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).



THIRD-PARTY VERIFIED
ISO 14025 and EN 15804
Institut Baum und Umwelt e.V.

Particularly solid due to troughlike bulk density profile. ✓

Can be used on both sides. ✓

AGEPAN® UDP T+G

THE STABLE SARKING BOARD

The particularly stable and moisture-resistant AGEPAN® UDP T+G is an insulating fiberboard 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. The advantage is that the boards can be used on both sides. It is also entirely hydrophobic, vapour-permeable and hygroscopic, and can therefore be used as sarking board in compliance with ZVDH regulations. It is used to minimise thermal bridges in roof and wall areas with rear-ventilated cladding.

- ✓ Windtight and water-repellent
- ✓ Vapour-permeable: $sd \leq 0.2 \text{ m}$
- ✓ Particularly solid and robust due to troughlike bulk density profile
- ✓ Extremely pressure-resistant with $\geq 300 \text{ kPa}$
- ✓ 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 in compliance with ZVDH regulations: UDP-A
- Second water-repellent layer in various constructions
- Reveal board can be plastered
- Areas of application acc. to DIN 4108-10 table 13: DAD-ds / WAB-ds / WH



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).



THIRD-PARTY VERIFIED
ISO 14025 and EN 15804
Institut Baum und Umwelt e.V.

CE

Unique with the asymmetrical bulk density profile. ✓

Particularly abrasion-resistant and thus good tape adhesion. ✓

Unique with the asymmetrical bulk density profile. ✓

Structural and load-bearing according to German technical approval certificate. ✓

AGEPAN® THD T+G

THE INSULATION SPECIALIST

AGEPAN® THD T+G is an insulating fiberboard 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.

- ✓ Special large size as AGEPAN® THDmax
- ✓ 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 in compliance with ZVDH regulations: UDP-A
- 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



AGEPAN® THD Static

THE LOAD-BEARING INSULATING FIBERBOARD

Die AGEPAN® THD Static is a structural insulating fiberboard which complies with DIN EN 13171 and the German technical approval certificate 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.

- ✓ Load-bearing, structural insulating fiberboard according to Z-9.1-725 for rear-ventilated curtain-wall facades
- ✓ 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 Z-9.1-725
- Areas of application acc. to DIN 4108-10 table 13: WAB-ds / WH



* 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).



* 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 with the asymmetrical bulk density profile. ✓

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

AGEPAN® THD Static Putz

THE INSULATING FIBERBOARD WITH TEMPORARILY STRUCTURAL AND LOAD-BEARING FUNCTION IN THE ETICS

AGEPAN® THD Static Putz is an insulating fiberboard with temporarily structural function which complies with DIN EN 13171 and ETICS approved by the building authorities acc. to Z-33.47-1401. AGEPAN® THD Static Putz 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.

- ✓ AGEPAN® THD Static Putz according to ETICS approved by the building authorities acc. to Z-33.47-1401
- ✓ Insulating fiberboard with temporarily structural and load-bearing function acc. to Z-9.1-725
- ✓ 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

- Sheathing of frames subject to in-plane shear forces
- Structural use in compliance with Z-9.1-725
- ETICS acc. to Z-33.47-1401
- Areas of application acc. to DIN 4108-10 table 13: WAP-zh / WH



ECOBOARD

FUNKTIONSHQZ



* 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 with the asymmetrical bulk density profile. ✓

Gypsum boards can be fastened directly to AGEPAN® THD Install. ✓

AGEPAN® THD Install

THE ALTERNATIVE TO THE CONVENTIONAL INSTALLATION LAYER

AGEPAN® THD Install is a butt-edged insulating fiberboard 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
- ✓ Exceptionally pressure-resistant thanks to asymmetrical bulk density profile
- ✓ Saves working hours due to easy laying, no battens required
- ✓ Quick integration of ducts
- ✓ F 90-B (REI 90) constructions in AGEPAN® SYSTEM (inside and 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



Loads weighing up to 25 kg per screw (6 x 50 mm)

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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 with the asymmetrical bulk density profile. ✓

Letterboxes and outside lights can be easily attached. ✓

AGEPAN® THD Putz 050

THE INSULATING FIBERBOARD IN THE ETICS

AGEPAN® THD Putz 050 is a structural insulating fiberboard with a tongue and groove profile on all four sides, which complies with DIN EN 13171 and the German technical approval certificate 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 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

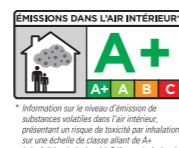
- ETICS with German technical approval certificate Z-33-47-673
- Plastered facades in external thermal insulation composite systems on timber frame walls or solid wood constructions
- Suitable for new builds and renovation
- Areas of application acc. to DIN 4108-10 table 13: WAP-zh / WH
- Please observe the plaster manufacturer's instructions (see detailed data sheet p.335.de, Knauf Gips KG)



SYSTEM COMPONENTS

- Plinth banding
- Reinforced mortar
- Reinforcement mesh
- Joint sealing tape
- Mesh corner angles
- System wall plugs
- Finishing coat
- Paint

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AGEPAN® Flex

THE FLEXIBLE CAVITY INSULATION

AGEPAN® Flex is an insulating fiberboard with butt edges, which complies with the requirements of DIN EN 13171. The woodfibers are interlaced in a three-dimensional manner, using special technology, to create a uniform matting-effect. AGEPAN® Flex is also vapour-permeable and hygroscopic. It fulfils high ecological standards and is used as cavity insulation between the supporting structure in roof and wall areas.

- ✓ Wall and roof cavity insulation
- ✓ Dimensionally stable and flexible
- ✓ High stability under load, preventing it sagging and falling out of the supporting structure
- ✓ Hygroscopic and vapour-permeable
- ✓ Excellent insulating properties keep homes cool in the summer and warm in the winter
- ✓ Compensates for indoor moisture fluctuations

AREAS OF APPLICATION

- Flexible insulating fiberboard as cavity insulation in roof, ceiling and wall areas
- Additional insulation for masonry renovation
- Areas of application acc. to DIN 4108-10 table 13: DZ / DI-zk / WH / WTR



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

No additional, costly connector required. Floorboards can be screwed directly into the MDF tongues already included in delivery. ✓

Part of tested AGEPAN® SYSTEM constructions. ✓

AGEPAN® TEP

THE DRY SCREED BOARD

AGEPAN® TEP is an insulating fiberboard 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
- ✓ Floating installation of laminate or pre-fabricated parquet flooring and floorboards on AGEPAN® TEP
- ✓ 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
- Part of AGEPAN® Floor System



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



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.

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 board.

- ✓ 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
- ✓ Neat and attractive appearance
- ✓ 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
- ✓ Abrasion-resistant, dirt- and water-repellent Contiface surface

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





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
- ✓ Different flooring constructions tested for footfall sound improvement
- ✓ Comfortable walking surface
- ✓ Sound-absorbing and thermal-insulating when combined with suitable insulating materials
- ✓ No drying phase unlike conventional wet screeds

AREAS OF APPLICATION

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



Floorboards with AGEPAN® TEP



Wooden beam ceiling with AGEPAN® TEP

AGEPAN® FLOOR SYSTEM COMPONENTS



AGEPAN® TEP

AGEPAN® TEP can be used as a dry floor construction element and covered directly with laminate, parquet flooring or floorboards. There are no acoustic or thermal bridges thanks to MDF tongues within the boards.



AGEPAN® Natural Insulation Board

The AGEPAN® Natural Insulation Board with butt edges, which complies with DIN EN 13986/DIN EN 622-4, is used as a footfall sound insulation in the AGEPAN® Floor System. It also provides additional sound insulation as part of the AGEPAN® Floor System.



AGEPAN® OSB ECOBOARD

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.



AGEPAN® Loose Fill









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 _R	Nominal thermal conductivity (W/mK) - λ ₀	Tear strength, tensile strength, panel plane (kPa)	Hydrophobic group	Water vapour diffusion equivalent air layer thickness -S _d	Compressive strength (kPa)		
	AGEPAN® DWD protect STD	16	3000 x 1247	3000 x 1247	48	48	Z-9.1-382	D-s1, d0	E1 – formaldehyde-free glued	565	2100	0,090	-	-	0,18	-		
	AGEPAN® DWD protect T+G	16	2500 x 625	2510 x 635	40	40												
	AGEPAN® DWD protect lgs T+G	16	2500 x 1000	2510 x 1010	40	40												
	AGEPAN® DWDmax	16	6000 x 2550	6000 x 2550	18	28												
	AGEPAN® DWD 600	16	2500 x 625	2515 x 640	40	40												
			3000 x 1247	3000 x 1247	48	48	EN 622-5 EN 13986	D-s2, d0	E1 – formaldehyde-free glued	≥ 600	1700	0,14	0,1	-	-	0,19	-	
	AGEPAN® DWD black	16	2500 x 625	2515 x 640	40	40	EN 622-5 EN 13986	D-s2, d0	E1 – formaldehyde-free glued	≥ 600	1700	0,14	-	-	0,19	-		
				3000 x 1247	3000 x 1247	48											48	
	AGEPAN® UDP T+G	22	2500 x 590	2520 x 610	48	48	EN 13171	E	E1 – formaldehyde-free glued	270	2100	0,063	0,051	15	WS 1,0	0,11	≥ 300	
						42										42		0,13
						32										33		0,16
	AGEPAN® THD T+G	40	1875 x 585	1890 x 600	26	52	EN 13171	E	E1 – formaldehyde-free glued	230	2100	0,050	0,047	≥ 8	WS 1,0	0,12	≥ 200	
						21										42		0,16
						17										34		0,18
						13										26		0,24
	AGEPAN® THDmax	40*	5500 x 2500	5500 x 2500	18	18										0,12		
		60	6000 x 2550	6000 x 2550	12	12										0,18		
		80*			-	-										0,24		
	AGEPAN® THD Static	40	3000 x 1250	3000 x 1250	26	26	EN 13171 Z-9.1-725	E	E1 – formaldehyde-free glued	230	2100	0,055	0,052	≥ 8	WS 1,0	0,12	≥ 200	
		60			17	17										0,18		
		80			13	13										0,24		
	AGEPAN® THD Static Putz	60	3000 x 1250	3000 x 1250	26	26	EN13171 Z-33.47-1401	E	E1 – formaldehyde-free glued	230	2100	0,055	0,052	≥ 8	WS 1,0	0,12	≥ 200	
		80			17	17										0,18		
	AGEPAN® THD Install	40	2650 x 600	2650 x 600	26	26	EN 13171	E	E1 – formaldehyde-free glued	230	2100	0,050	0,047	≥ 8	WS 1,0	0,12	≥ 200	
		60			17	17										0,18		
		80*			13	13										0,24		
	AGEPAN® THD Putz 050	40	1875 x 585	1890 x 600	26	52	EN 13171 Z-33.47-673	E	E1 – formaldehyde-free glued	230	2100	0,050	0,047	≥ 8	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		
	AGEPAN® Flex	40 60 80	1200 x 625*1	1200 x 625*1	-	120 80 60	EN 13171	E	E1	50	2100	0,040	0,038	-	μ-value = 3 s _d -value = μ x Flex thickness (m)	-		
		40 50 60 80 100 120 140 160 180 200 220 240	1220 x 575	1220 x 575	-	120 90 80 60 48 40 32 30 24 24 20 20												
	AGEPAN® TEP	40	1880 x 500	1890 x 500	26	52	EN 13171	E	E1 – formaldehyde-free glued	230	2100	0,050	0,047	≥ 8	WS 1,0	0,12	≥ 200	
		60*			17	34										0,18		
		80*			13	26										0,24		

* on request
*1 dry construction format

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_R	Nominal thermal conductivity (W/mK) - λ_D	Tear strength, tensile strength, panel plane (kPa)	Hydrophobic group	Water vapour diffusion equivalent air layer thickness - S_d	Compressive strength (kPa)
	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	–	μ -value = 150 – 200 s_d -value = $\mu \times$ OSB 3 ECOBOARD thickness (m)	–
	6 8 9 10 12 15 18 20 22 25	2500 x 1250	–	156 120 106 96 80 64 54 49 44 39	156 120 106 96 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 18 22 25	5000 x 1250	–	30 26 22 18	30 26 22 18											
	12 15 18 22 25	5000 x 2500	–	20 16 13 11 10	20 16 13 11 10											
	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	–	–	μ -value = 150 – 200 s_d -value = $\mu \times$ 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											
	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	–	μ -value = 200 – 250 s_d -value = $\mu \times$ OSB 4 ECOBOARD thickness (m)	–
	22	6250 x 675 5000 x 1250	–	22	22											
	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	–	μ -value = 200 – 250 s_d -value = $\mu \times$ OSB 4 ECOBOARD thickness (m)	–
	15	2650 x 1250 2800 x 1250 3000 x 1250		54	54											
	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	–	μ -value = 200 – 250 s_d -value = $\mu \times$ OSB 4 ECOBOARD thickness (m)	–
	15 18 22 25	2500 x 1250		64 54 44 39	64 54 44 39											
	10 19	1250 x 1200	–	228 120	228 120	EN 622-4 EN 13986	E	E1	230	2100	0,070	0,050	≥10	–	0,05 0,10	≥100
	50 sack	–	–	–	24	EN 13055	–	–	ca. 570	2100	–	–	–	–	–	–

* on request

Only complete pallets are delivered.

AGEPAN® SYSTEM products are available with PEFC™/ FSC®-certifications on demand and according to availability. Please specify when ordering.

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

RECOMMENDED REFERENCE PROJECTS



Living space: 150 m² | Construction time: 12 weeks



Living space: 167 m² | Construction time: 10 weeks



EXTENSION AND ADDITION STOREY: DETACHED HOUSE

Products used:

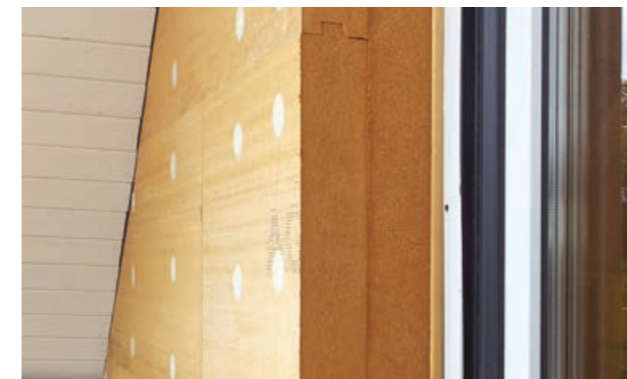
- Facade: AGEPAN® THD Putz T+G in 80 mm doubled to 160 mm
- Roof: AGEPAN® THD T+G in 60 mm
- Wall: AGEPAN® THD Install in 60 mm
- Roof and wall: AGEPAN® OSB 3 ECOBOARD in 15 mm



Living space: 265 m² | Construction time: 6 months



Warehouse/office space: 300/200 m² | Construction time: 18 days



NEW BUILDING: DETACHED HOUSE

Products used:

- Wall: AGEPAN® THD Static in 40 mm



NEW BUILD: PASSIVE HOUSE

Products used:

- Facade: AGEPAN® DWD protect in 16 mm
- Wall: AGEPAN® OSB 3 ECOBOARD in 15 mm and AGEPAN® THD Install in 60 mm
- Roof: AGEPAN® THD T+G in 80 mm
- Floor: AGEPAN® OSB 4 ECOBOARD in 25 mm



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



Your AGEPAN[®] SYSTEM Partner