

PRODUCT APPLICATIONS

The best wood fibre insulation for
roofs, walls and interiors



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PRODUCT OVERVIEW

Ecological Wood Fibre Insulation for New and Refurbished Buildings

- From Roof to Cellar Ceiling

GUTEX ecological insulation products are the ideal choice for a host of applications, including external thermal insulation composite systems, wall insulation for vented facades (rainscreens), insulation above rafters and/or between frame members with rain-tight sheathing, insulation of ceilings, interior insulation of exterior walls, insulation of service cavities, acoustic underlayment in various floor assemblies and under many floor coverings. We source the raw material for our manufactured products from fir and spruce grown and harvested using solely sustainable forestry practices. The products conform to the highest quality standards and their KEYMARK certification mark confirms their compliance with all applicable EU standards.



GUTEX Multiplex-top®
Certified rain-tight sarking board.



GUTEX Ultratherm®
Unique rain-tight sarking board with patented tongue and groove interlocking system and an excellent U-factor.



GUTEX Multitherm®
Moisture-resistant insulation board for rainscreen applications, supplemental above-rafter roof sarking or under-rafter insulation.



GUTEX Thermosafe-homogen®
Universal wood fibre insulation board with excellent insulation properties for roofs and exterior walls.



GUTEX Thermofibre®
Wood fibre blow-in insulation for enclosed cavities or as loose fill in unenclosed horizontal spaces.



GUTEX Thermoflex®
Flexible wood fibre batt for use between rafters and cavities.



GUTEX Thermoflat®
Compression-resistant wood fibre insulation board for flat roofs with wood, concrete or sheet metal construction.



GUTEX Thermoinstal®
Compression-resistant insulation board for service cavities.



GUTEX Thermoroom®
Wood fibre insulation board for the interior insulation of exterior walls.



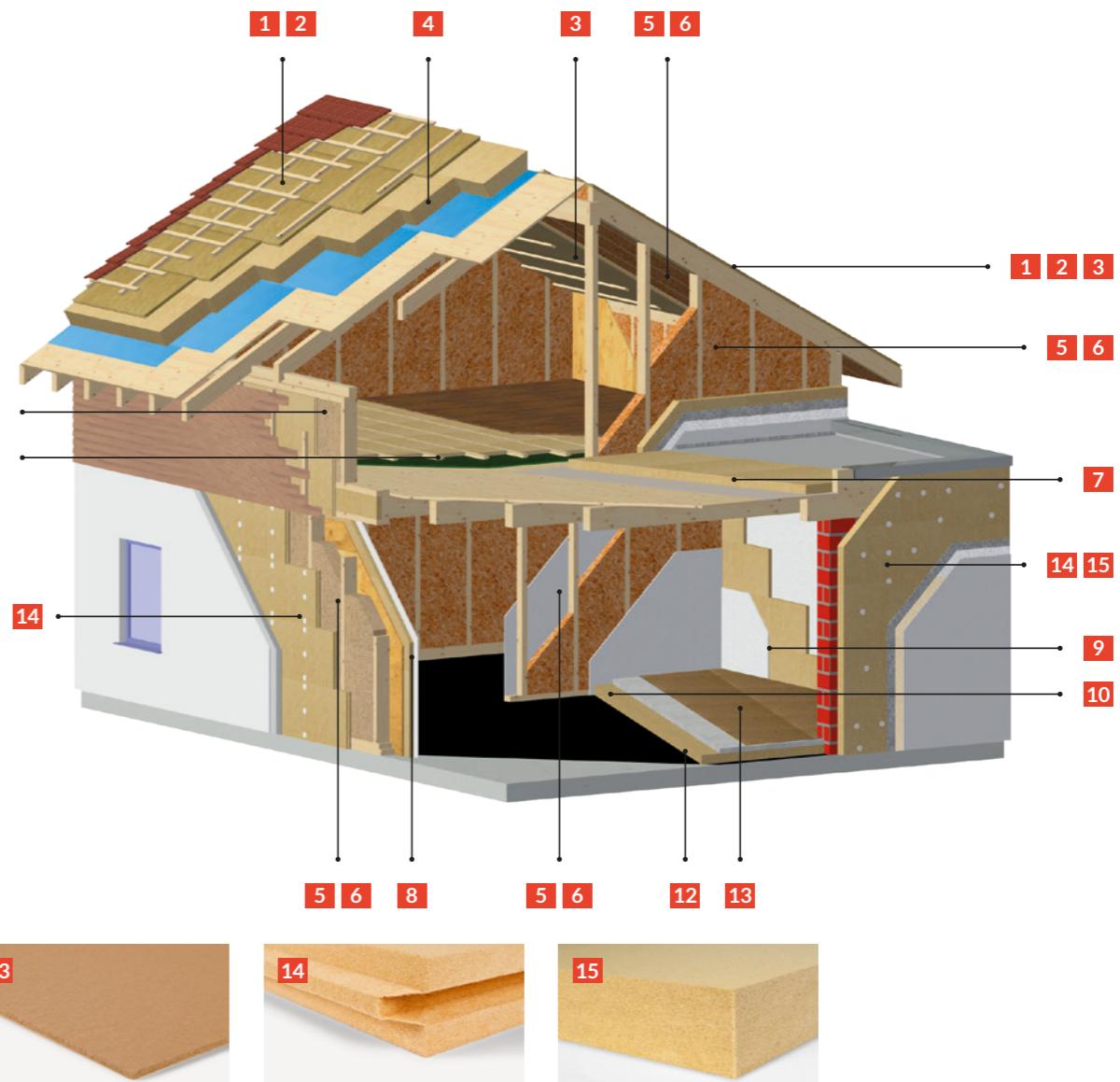
GUTEX Thermosafe-wd®
Compression-resistant insulation for interior floors and walls.



GUTEX Thermosafe-nf®
Impact insulation board with spruce joint strips for screw-fastened solid wood floor planking and short plank wood flooring.



GUTEX Thermofloor®
Impact insulation board for all floor assemblies.



GUTEX Happy Step®
Underlayment softens the impact of footfall for more pleasant walking and quieter floors, such as wood planking.



GUTEX Thermowall®-gf/NF
Plasterboard for the ecological Thermowall® ETICS.



GUTEX Thermowall®-L
Lighter plasterboard delivers superb insulation with the ecological Thermowall® ETICS. Particularly ideal for installation over uninterrupted masonry or wood substrates.



GUTEX Thermowall® Durio®
Specifically designed board for use in Durio® facade systems finished in render and timber rainscreens.



GUTEX Pyroresist® wall
Ignition-resistant wood fibre insulation board for exterior walls subject to higher fire code rating standards.

NOTE

You'll find more information about properly using our insulation products at:
www.gutex.de

APPLICATIONS AND SOLUTIONS



Exterior Walls

- **Thermowall® ETICS**
external thermal insulation composite
system
- Render
- Rainscreen
- Brick facing
- **Durio® system for unique facade design**
- **Implio® window integration system**
- Cavity insulation
(GUTEX Thermoflex® batts)
- Cavity insulation
(GUTEX Thermofibre® blow-in insulation)

Roofs

- **Tecadio® GUTEX roof refurbishment system**
- Above-rafter insulation
- Sarking boards
- Flat roof insulation
- Cavity insulation
(GUTEX Thermoflex® batts)
- Cavity insulation
(GUTEX Thermofibre® blow-in insulation)

Interior

- **Intevio® GUTEX interior insulation system**
- Vapour permeable underlay installed from interior between rafters
- Rafter underside insulation boards
- Insulation under screed (dry / wet)
- Top storey ceiling
- Suspended ceiling
- Solid wood flooring / Solid wood plank flooring
- Service cavity insulation course
- Partition walls
- Cavity insulation
(GUTEX Thermoflex® batts)
- Cavity insulation
(GUTEX Thermofibre® blow-in insulation)

↑ ROOFS

Protection against heat, cold and dependable resistance against rain

With GUTEX insulation products, your house or building stands secure against the elements. Our sarking boards are not just rain-tight, but as per TÜV Rheinland, they're hail-safe. And our insulation products deliver dependable protection against cold and excellent insulation against heat thanks to their lower thermal conductivity and greater volumetric thermal capacity. Significant diffusion openness, moisture absorption and release capacities ensure built structures and materials remain sound and healthy. High compression resistance and superb bend (flexural) strength mean the insulation products are stronger and more resistant to impact, making them more durable in the hands of contractors. Moreover, the durability and consistent dimensional trueness speed up their installation. Nail tape or strip sealant products are not required to seal temporarily exposed roofs. Such roofs remain weatherproof for up to twelve weeks.



GUTEX Multiplex-top®



GUTEX Ultratherm®



GUTEX Thermofibre®

ADVANTAGES

- Sarking and sheathing boards with patented tongue and groove joints deliver dependable protection against rain and superb durability
- TÜV-certified hail protection (Hagelschutzklasse HW5)
- Cross-brand cooperation between system designers, e.g. manufacturers of membranes, vapour barriers and adhesives
- Seminars for system knowledge transfer

Systems and Products

- **Tecadio® GUTEX roof refurbishment system**
- GUTEX Ultratherm® rain-tight sarking board
- GUTEX Multiplex-top® rain-tight sarking board
- GUTEX Thermosafe-homogen® universal insulating board with homogenous cross-section
- GUTEX Multitherm® moisture-resistant insulation board
- GUTEX Thermoflex® flexible wood fibre insulation batt
- GUTEX Thermofibre® blow-in insulation

WALLS

Energy efficiency, comfort, wholesome living

Building with GUTEX systems and products to insulate exterior walls allows you to build compliant with energy efficiency standards, such as those stipulated by the KFW ("Effizienzhaus") in Germany, that may qualify you for rebates, preferred mortgage rates, etc. In addition, you have the assurance that your home will be comfortable and healthy. GUTEX Thermowall® is the ETICS product for wood and masonry structures, while Durio® provides you with the greatest design freedom. Implio® gives you the assurance that your windows integrate tightly and effectively in your building's ETICS. And you may like to know that our wood fibre insulation boards are highly suitable in rainscreens installed on masonry, solid wood or timber-framed structures.



ADVANTAGES

- › Thermowall® ETICS' certification offers you the freedom of choosing render systems from 13 different manufacturers
- › ETICS installs directly to timber framing
- › Very diffusion-open insulation, which provides long-lasting integrity and performance
- › Cross-brand cooperation between system partners, e.g. manufacturers of render
- › Greater transparency and dependability in planning and installation thanks to the available 340 certified wood construction designs

Systems and Products

- ›  **Thermowall® ETICS**
external thermal insulation composite system
- ›  **Durio® system for unique facade design**
- ›  **Implio® window integration system**
- › GUTEX Multitherm® moisture-resistant insulation board
- › GUTEX Thermoflex® flexible wood fibre insulation batt
- › GUTEX Thermofibre® blow-in insulation



GUTEX Thermowall® Durio

INTERIOR

Improved thermal insulation, effective acoustic insulation and comfortable living spaces

Intevio® interior insulation system installs easily and quickly, and provides dependable protection against mould and mildew. Thanks to lower costs and higher energy savings, the expense of refurbishment quickly pays for itself with this system. GUTEXinsulation floorboards are suitable for use over concrete and in wooden joist ceiling constructions, as well as a host of different assemblies, delivering very good acoustic insulation, for example, under wet screed, mastic asphalt, particle or chipboard, OSB substrate floorboards, dry screed, engineered wood flooring, laminate flooring and solid wood planking. Application-specific solutions are also available for service cavities and light-weight partition walls.



ADVANTAGES

- › Moisture-resistant interior insulation
- › Highly effective insulation against impact and airborne noise
- › Many available certified and quantified acoustic insulation assemblies
- › Floor insulation with excellent impact resistance and good thermal conductivity performance



GUTEX Multitherm®



GUTEX Thermoroom®



GUTEX Thermoflex®



GUTEX Thermosafe-wd®



GUTEX Thermoinstal®

Systems and Products

- ›  **Intevio® GUTEX interior insulation system**
- › GUTEX Thermosafe-homogen® universal insulating board with homogenous cross-section
- › GUTEX Thermosafe®-nf
- › GUTEX Thermosafe-wd® compression-resistant insulation for interior floors and walls
- › GUTEX Happy Step®, a universal underlay for high-quality interior floor coverings
- › GUTEX Thermoroom®, specially designed to insulate interior sides of outer walls
- › GUTEX Thermoflex® flexible wood fibre insulation batt
- › GUTEX Thermofibre® blow-in insulation
- › GUTEX Thermoinstal® compression-resistant insulation for service cavities
- › GUTEX Thermofloor® versatile impact insulation board

Product	Multiplex-top®			Ultratherm®								Thermosafe-homogen®										
Joint Type	Tongue and Groove			Tongue and Groove								Butt					Rebate					
	DIN EN 13171			DIN EN 13171								DIN EN 13171										
Thickness (mm)	22	28	35	50	60	80	100	120	140	160	40	60	80	100	120	140	160	180	200	220	240	
Length x width (mm)	2500 x 750			1780 x 600								1200 x 625										
Weight per sheet (kg)	8.25	10.5	13.12	9.6	11.5	15.4	19.2	23.1	26.9	30.8	3.3	4.95	6.6	8.25	9.9	11.55	13.2	14.85	16.5	18.15	19.8	
Weight per m ² (kg)	4.4	5.6	7.0	9.0	10.8	14.4	18	21.6	25.2	28.8	4.4	6.6	8.8	11	13.2	15.4	17.6	19.8	22	24.2	26.4	
Borads per pallet	45	35	28	40	36	26	20	18	14	12	112	70	56	42	36	32	28	24	22	20	18	
Square metres per pallet (m ²)	84.38	65.63	52.50	42.72	38.44	27.77	21.36	19.22	14.95	12.82	84	52.5	42	31.5	27	24	21	18	16.5	15	13.5	
Actual coverage, length x width (mm)	2480 x 728			2480 x 722								1749 x 569 (0.995 m ²)										1185 x 610
Square metres per sheet (m ²)	1.875			1.07								0.75										
Weight per pallet (kg)	430			430	445	430			400			430	390									
Density (kg/m ³)	~ 200			~ 180								~ 110										
Nominal thermal resistivity R _D (m ² K/W)	0.50	0.60	0.75	1.15	1.40	1.90	2.35	2.85	3.30	3.80	1.05	1.55	2.10	2.60	3.15	3.65	4.20	4.70	5.25	5.75	6.30	
Thermal resistivity R (m ² K/W)	0.45	0.60	0.70	1.10	1.35	1.80	2.25	2.70	3.15	3.60	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	
sd-value (m)	0.066	0.084	0.105	0.15	0.18	0.24	0.30	0.36	0.42	0.48	0.16	0.24	0.32	0.40	0.48	0.56	0.64	0.72	0.80	0.88	0.96	
Vapour diffusion factor (μ)	3			3								4										
Specific heat capacity (J/kgK)	2100			2100								2100										
Nominal thermal conductivity λ_D (W/mK)	0.044			0.042								0.038										
Thermal conductivity λ (W/mK) as per German reg.	0.046			0.044								0.040										
Compressive stress/ strength (kPa)	200			150								50										
Tensile strength perpendicular to board surface (kPa)	30			20								5										
Short-term water absorption (kg/m ²)	≤ 1			≤ 1								≤ 2										
Dynamic stiffness (MN/m)																						
Compressibility (mm)																						
Air flow resistivity (kPa·s/m ²)	100			100								100										
Fire reaction ¹⁾	E			E								E										

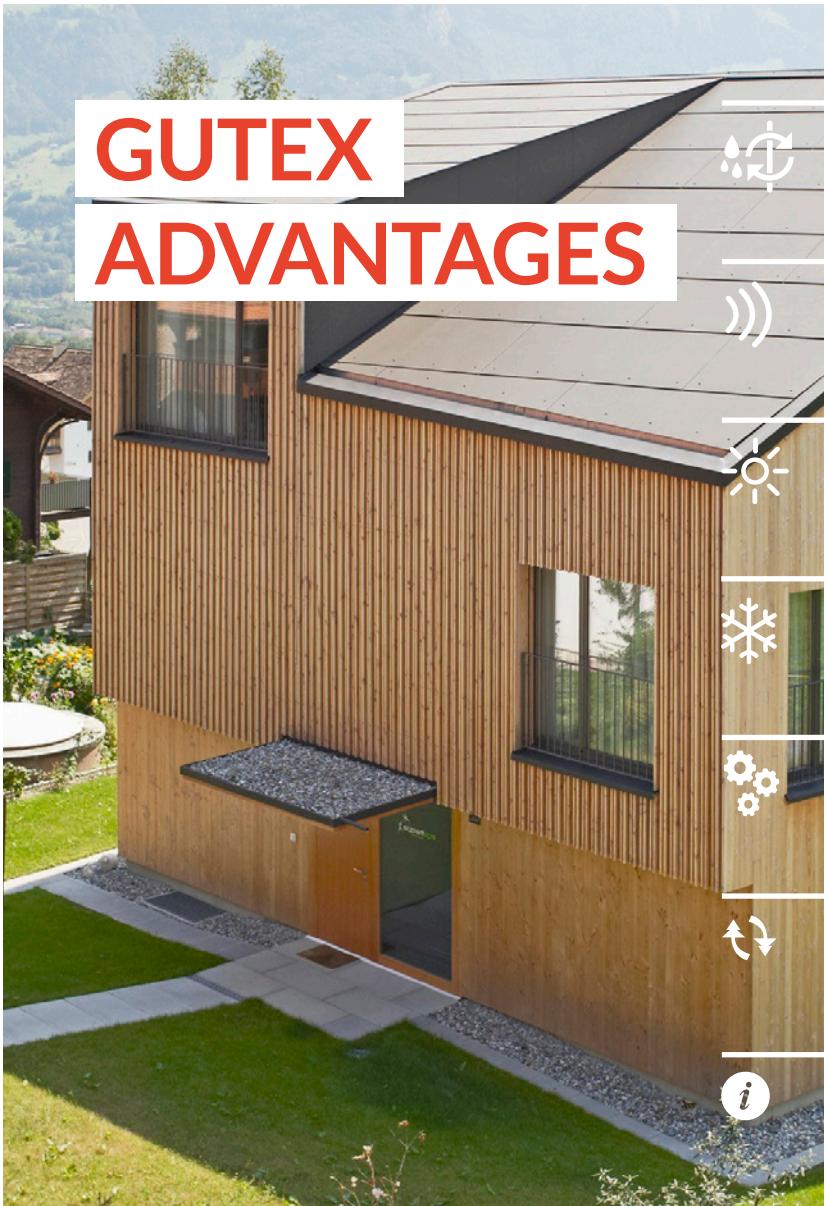
Product	Thermoroom®						Thermosafe-wd®						Thermosafe-nf®		Thermofloor®		Happy Step®		Standard-n®	
Joint Type	Butt						Butt						Tongue and Groove		Butt		Butt		Butt	
	DIN EN 13171						DIN EN 13171						DIN EN 13171		DIN EN 13171		DIN EN 13171		DIN EN 13171	
Thickness (mm)	20	40	50	60	80	100	20	30	40	60	80	100	120	41	21	31	6	6-18		
Length x width (mm)	1200 x 500						1250 x 600						1190 x 380	1200 x 600		860 x 590		2500 ²⁾ x 1000		
Weight per sheet (kg)	1.6	3.1	3.9	4.7	6.2	7.8	2.1	3.2	4.2	6.3	8.4	10.5	12.6	2.41	2.4	3.6	0.8	3.8-11.3		
Weight per m ² (kg)	2.6	5.2	6.5	7.8	10.4	13	2.8	4.2	5.6	8.4	11.2	14	16.8	5.3	3.4	5	1.56	1.5-4.5		
Balls per pallet	96	48	36	30	24	18	224	140	112	70	56	42	36	75	180	120	640	170-55		
Square metres per pallet (m ²)	57.60	28.80	21.60	18.00	14.40	10.80	168	105	84	52.5	42	31.5	27	33.92	129.6	86.4	324.74	175-637.5		
Actual coverage, length x width (mm)	1200 x 500						1250 x 600						1170 x 360							
Square metres per sheet (m ²)	0.6						0.75						0.45	0.72		0.51		2.50		
Weight per pallet (kg)	190						490						210	450		540		700		
Density (kg/m ³)	~130						~140						~130	~160		~260		~250		
Nominal thermal resistivity R _D (m ² K/W)	0.50	1.00	1.25	1.50	2.05	2.55	0.50	0.75	1.00	1.50	2.05	2.55	3.05	1.05	0.50	0.75	0.10	0.10-0.35		
Thermal resistivity R (m ² K/W)	0.45	0.95	1.20	1.45	1.95	2.40	0.45	0.70	0.95	1.40	1.90	2.35	2.85	1.00	0.50	0.70	0.10	0.10-0.35		
sd-value (m)	0.06	0.12	0.15	0.18	0.24	0.3	0.06	0.09	0.12	0.18	0.24	0.30	0.36	0.12	0.11	0.16	0.03	0.03-0.09		
Vapour diffusion factor (μ)	3						3						3	5		5		5		
Specific heat capacity (J/kgK)	2100						2100						2100	2100		2100		2100		
Nominal thermal conductivity λ _D (W/mK)	0.039						0.039						0.039	0.040		0.046		0.046		
Thermal conductivity λ_{perp} (W/mK) as per German reg.	0.041						0.042						0.041	0.042		0.048		0.048		
Compressive stress/ strength (kPa)	50						70								100		100			
Tensile strength perpendicular to board surface (kPa)	7.5																			
Short-term water absorption (kg/m ²)													≤ 2.0		≤ 2.0					
Dynamic stiffness (MN/m)													50	30						
Compressibility (mm)													2	2						
Air flow resistivity (kPa·s/m ²)	100						100						100	100		100		100		
Fire reaction 1)	E						E						E	E		E		E		

Legend is on page 9

Product	Thermowall®-L ⁴⁾					Pyroresist® wall			
Joint Type	Butt				Tongue and Groove				
	DIN EN 13171					DIN EN 13171			
Thickness (mm)	120	140	160	180	200	60	80	100	120
Length x width (mm)	1250 x 590					1800 x 600 ⁵⁾			
Weight per sheet (kg)	9.74	11.36	12.98	14.6	16.23	12	16	20	24
Weight per m ² (kg)	13.2	15.4	17.6	19.8	22.00	11.10	14.80	18.50	22.20
Boards per pallet	36	32	28	24	22	36	26	22	18
Square metres per pallet (m ²)	26.55	23.6	20.65	17.7	16.23	38.88	28.08	23.76	19.44
Actual coverage, length x width (mm)						1780 x 580			
Square metres per sheet (m ²)	0.738					1.08			
Weight per pallet (kg)	370					460			
Density (kg/m ³)	~110					190			
Nominal thermal resistivity R _D (m ² K/W)	3.15	3.65	4.2	4.7	5.25	1.35	1.85	2.30	2.75
Thermal resistivity R (m ² K/W)	3	3.5	4	4.5	5.0	1.30	1.75	2.20	2.65
sd-value (m)	0.36	0.42	0.48	0.54	0.60	0.24	0.32	0.40	0.48
Vapour diffusion factor (μ)	3					4			
Specific heat capacity (J/kgK)	2100					2100			
Nominal thermal conductivity λ_D (W/mK)	0.038					0.043			
Thermal conductivity λ (W/mK) as per German reg.	0.040					0.045			
Compressive stress/ strength (kPa)	50					150			
Tensile strength perpendicular to board surface (kPa)	7.5					10			
Short-term water absorption (kg/m ²)	≤ 1.0					≤ 1.0			
Dynamic stiffness (MN/m)									
Compressibility (mm)									
Air flow resistivity (kPa·s/m ²)	100					150			
Fire reaction ¹⁾	E					C-s1, d0 ⁶⁾			

¹⁾ Euro class as per DIN EN 13501-1²⁾ Other dimensions available by request³⁾ Suitable for REI 90 compliance-tested structures.⁴⁾ Certification pending⁵⁾ Custom sizes are available; consult factory or sales agent

Non-smouldering PB-Hoch-180895 as per EN 16733



GUTEX ADVANTAGES

Pleasant indoor climate

Ideal acoustic insulation

Insulation in summer

Insulation in winter

Systems deliver greater dependability

Sustainability

Service

Certified quality

All GUTEX products are manufactured from fir and spruce obtained solely from the Black Forest using sustainable forestry practices – truly the best basis for high quality wood fibre insulation. In addition, the natureplus® certificate indicates the product is biologically safe and manufactured using environmentally safe techniques and practices. It also verifies its suitability and usability for the specified applications.



OUR PRODUCT AND SERVICE DESIGNATIONS



Roof



Wall



Interior

Your stockist / Advisor:



Ecological Building Systems

For full technical support for your project, please contact Ecological Building Systems at info@EcologicalBuildingSystems.com or visit www.EcologicalBuildingSystems.com

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GUTEX®
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*Knowing you've
done the right thing.
getroffen zu haben. Das
GUTEX effect.*

**THE
GUTEX
EFFECT**