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www.eibe.net



## ĕibe

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Playground Equipment 2008/09



Umschlag.indd

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## Playground Equipment 2008/09

17.12.2007 12:00:13 Uhr

_						on for Children – Quality an nups Can Rely On	d Safety	
for 0 to 3 year olds	for 3 to 6 year olds	for 6 to 12 year olds	for 12 to 30 year olds	over 30 year olds	It is <b>eibe</b> 's goa times. For this reason, in the interest o tural material t	I to provide safe, top quality play equi we reserve the right to change design and f product improvement. Please note that v nat will change when exposed to the weat	construction vood is a na-	
for	for	for	for	N0		w of the Chapters:		
×	×	×			themed play	<b>play combinations</b> nature, Western, Maritim, Jungle, Witc forest, Space travel and North pole ad ventures		
	×	×			Play world	Wood quadraWood circplay combinationsplay combinationssand playsand playhill installationhill install	pinations play combinations sand play	n page 124
	×	×	×	×	Integrative Play	themed play play combinations swings from page	roundabouts from page fron sand and water play	n page 222
×	×	×	×		motion play	Sliding, Slide Platforms and Craw Tunnels Swings and aerial cableways Spring rockers and roundabouts	ling Climbing units from Sand and Water Play playhouses and play boards Balancing equipment	n page 252
	×	×	×	×	sport play	Ball sports Fitness Skating sports	from	1 page 448
×	×	×	×	×	seating and park furniture	Seating furniture Litter bins Bicycle stands	Hexagonal pavilion from Sun protection systems	n page 494
×	×	×	×	×	Impact Protection	Interlocking impact-attenuating tiles, Impact-attenuating floor covering, Gro Granulate animals		1 page 512
×	×	×	×	×	Spare Parts and Accessories	spring rockers, climbing and swinging aerial cableways, accessories acqua, P Wood preservation, glazes		page 522
					Materials		fron	n page 540
					Index		from	ı page 544

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## eibe

#### eibe Services

#### Service basis

- Advise on site by an **eibe** specialist
- Individual planning of play systems
- Creating budgets and offers
- Modern, large-size 3D planning (total and detailed plans)
- Detailed, clearly understandable installation and maintenance instructions
- Extensive list of spare parts and article numbers
- eibe 5 years' warranty
- eibe 10 year's warranty for rotting
- and fungal decay • TÜV safety inspection
- Worldwide sales network
- Maintenance and service all over the world

#### Premium services

- Main inspection of playgrounds
- Mounting of play equipment
- Site supervision
- Maintenance contracts for **eibe** playground equipment
- Project management







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#### Advice

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eibe sales agencies are to be found all over the world. The sales system intends to help all customers to find the solution that fits their application best. Our eibe specialists are at your disposal and happy to advise you free of charge with your projects and problems, for example by:

- visiting you on site,
- advising you on site,
- submitting well-structured offers,
- offering after-sales service.

#### Planning

The **eibe** planning team looks forward to drawing up an individual, custommade offer for your application. The eibe offer tailored to your requirements provides an ideal basis for your purchase decision. Make use of our experience and creativity.

#### **Project management**

You have an idea. We will convert it into a concrete graphic conceptual design. Based on your idea, these drafts focus on feasibility. In cooperation with you, we specify the individual steps and costs for the implementation of your project.

in-company specialists. Thus, you will profit from the wide range of special know-how of all involved departments of our house while dealing with one dedicated responsible contact person.

Our project managers work in a team of







#### Wooden Play Equipment

#### Why use wood for play equipment?

- Wood is agreeable to the touch
  Wood is a renewable, natural, and organic material
- With structural, biological or chemical wood preservation, wood is resistant to pests
- The CO<sup>2</sup> balance of wood products is neutral
- Wood is a natural material. The natural growth process of wood results in small branches, pitch pockets and dry cracks. They do not present a danger for the safe use of the product and do not restrict its use in any way.

#### High-quality joining technique is characteristic for all eibe play equipment!

- Our long years of experience in developing and building play equipment is visible from the positive joints and the design which is sophisticated down to the last detail.
- Realization by state-of-the-art woodworking machines.

#### eibe wood is FSC certified!

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- The amount of timber harvested does not exceed the amount of timer regrown - recycling management. The sustainable forestry is strictly supervised and thus assured.
- Legal regulations and social standards in forestry are supervised.
- Sustainable forestry supports and protects the forest as a cultural land-scape and a recreation area.
  - By buying products with the FSC label you are supporting the growth of responsible forest management worldwide SGS-COC-1315

© 1996 Forest Stewardship Council A.C.



Wooden Play Equipment

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## eibe uses round or square timbers with the pith removed!

- Timber with the pith removed is mainly cut from the higher-quality butt log and middle trunk of the trees.
- Cracks develop in the pith or core area. This area is not used for timbers with the pith removed. Thus, timber with the pith removed is less crack-prone than single-stem timber and is less susceptive for rotting and fungus. Less cracking means greater stability and longer service life of the components.



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The free ends of **eibe** round timbers are finished with round-head milling!

- Better structural wood preservation as water cannot collect on the face sides
- Improved safety and less risk of injury thanks to round post ends
- Attractive design that appeals to children's tastes





### eibe round timbers are treated with shell grinding!

- Less risk of injury by splinters as the whole surface and the round head are ground (shell surface grinding).
- Improved wood preservation by finer-grade surface. Reduces the risk of penetration by fungus and wood pests.
- The surface of **eibe** play equipment is attractive and agreeable to the touch.

#### eibe solid wood play equipment is pressure-impregnated and RAL tested!

- 10 years' warranty against rot in RAL-impregnated timbers for increased economic efficiency and useful life, compared to non-impragnated or non-RAL tested and RAL-supervised impregnation.
- The wooden play equipment requires little maintenance as the impregnation penetrates into the depth and protects not only the surfaces but also the edges.
- Environmentally friendly system, as no solvents are released. No elutriation of salts, no ground contamination. Chromium-free impregnation agent permissible for children's play equipment.
- Does not harm health or environment.









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#### For you and for the children: eibe for safety!

eibe play equipment is produced and delivered to meet all standards: from the start of the development phase, statics are tested, dangers are identified during the digital planning stage, and continuous coordination with the TÜV takes place to meet all the requirements We are happy to advise you! for safe playing. Other elements of the play equipment safety test are modelmaking, testing of dynamically stressed equipment, and evaluation of the function model by the TÜV.

Guaranteed safety for you: TÜV GS certificate according to EN 1176/77. This means that independent experts certify that eibe products meet all safety regulations.

Our certificate shows that the equipment of your playground is in accordance with the latest European safety standards. After the play equipment has been mounted, we offer an extensive range of services by qualified personnel to keep up the high safety standards.

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#### Environmentally friendly to benefit the children

The ecobalance of the developed products in context with all influencing factors, e.g. production and processing of the material, freight, mounting etc., is constantly taken into consideration during the development process.

This is assured by our environmental management, certified according to DIN EN ISO 14001, and according to the Eco Audit of the European Community.

Striving for continuous improvement, we do environmental audits on a regular basis, use environmentally friendly design and recyclable packaging according to the RESY regulations and endeavor to reduce emissions, waste, dangerous substances, waste water and energy consumption.

eibe timber is FSC certified. Nr. SGS-COC-1315





## Safety





**Play value** 

## Quality

#### We assure top quality for your benefit

We use only choice material of the best quality: pressure-impregnated timbers with the pith removed, with milled round heads.

Our timbers are machined with great care: all surfaces are planed, smooth, and grinded off.

Well thought-out application of materials: all materials are used in the place best suited to their specific properties. This creates a mix of materials that assures a long useful life of all play equipment.

5 years' warranty for equipment with the **eibe** head symbol: 🔁 🕉 but from experience we know that the useful life is much longer.

Reliable service: your well-established manufacturer offers an extensive range of services.

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eibe Play equipment 2008/09

Process-oriented quality management system: certified according to DIN EN ISO 9001: 2000



#### A sea of ideas for children

Consistent, attractive design, high play value and a layout this is based on the users' needs are the key factors on which we proceed when developing our play equipment.

A team of designers and engineers create attractive play equipment suitable for the specific requirements of the targeted age group. See the information in the catalog on the age groups.

eibe playground equipment has a high play value and promotes active, creative playing by offering interesting play elements, extravagant ascents and transitions and attractive shapes and colors.

The design of all equipment and systems is conducive to promoting the children's physical dexterity: walking, crawling, and playing on our equipment is always an entertaining challenge. The following symbol stands for a joyful shared experience:

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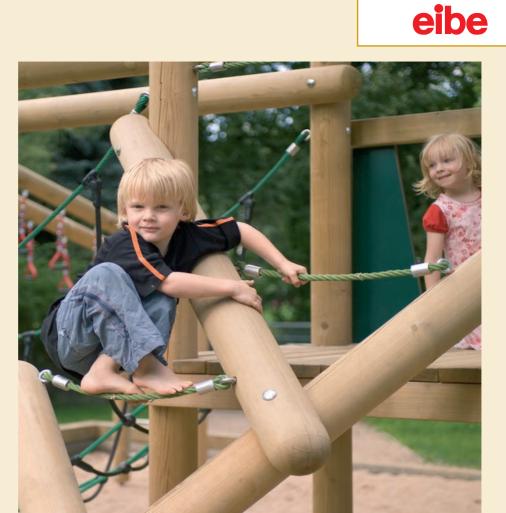












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Safety, Environment, Quality, Play value



#### **Inspection and Maintenance**

Statutory requirements for inspecting and maintaining playground equipment

#### 1. Statutory basis for safety on children's playgrounds

In Germany, the regulations for playground equipment are specified in the following acts, codes and standards:

#### Acts:

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Bundesbaugesetz (Federal Building Act).

Bürgerliches Gesetzbuch (German Civil Code) (§ 823),

Geräte- und Produktsicherheitsgesetz (German Code on Equipment and Product Safety) (GPSG).

#### **Technical basis:**

Accident prevention regulations of the Public Sector Accident Insurers, DIN standards, DIN EN standards.

#### Bürgerliches Gesetzbuch (German Civil Code) § 823 [Tort liability]

"Someone who by an unlawful act or omission intentionally or negligently causes damage to another person's life, health, freedom, property, or another right, shall be liable to compensate for the resulting damage."

The question of liability is subject to this paragraph.

#### **German Act on Technical** equipment (Geräte- und Produktsicherheitsgesetz – GPSG / Code on Equipment and Product Safety)

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§§ 4 and 5 of the GPSG regulate the basic requirements in safety and health compatibility of technical equipment (§4) and consumer products (§5).

§ 5 para. 1 through 2 stipulates requirements in the material properties of consumer products beyond the requirements of § 4 para. 1. To meet the stipulations of the GPSG, eibe closely cooperates with TÜV Süd, LGA, and other external test organizations.

#### 2. Organization of inspection, maintenance and repair

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Inspection and Maintenance

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When the technical regulations are observed during design and construction of the play equipment, it is largely guaranteed that the children will be safe when using it.

But is is important that this degree of safety is kept up by duly inspecting, maintaining and repairing the equipment.

Standard DIN EN1176, part 7 "Instructions for installation, inspection, maintenance and operation" provides regulations for this aspect.

To see all information on inspection. maintenance and repair of play equipment, please go to

www.eibe.net under Service - Maintenance



#### We are offering the eibe Main Inspection:

#### Scope of services:

- Inspection of play equipment and its environment pursuant to DIN EN 1176/1177
- Generation of a detailed report listing all deviations from the standard
- eibe equipment and competitors' equipment is inspected, subject to provision of the manufacturer's technical documents
- Offer on maintenance for the eibe products



#### How do you benefit from having eibe do the main inspection?

- eibe is actively involved in the European standards committes (NA 112-07-01 AA Committee for playground equipment, standardization project playground inspectors) where, amongst others, the safety criteria for the products are defined.
- eibe works on an international basis and integrates the resulting experiences
- the eibe inspectors have proof of competence.

The annual main inspection is COM-PULSORY for all playgrounds. Your eibe sales expert can offer it for a fair price - just ask us.



#### **Proof of competence:**

Individuals are considered competent who, based on their specialist training and experience, have sufficient knowledge in the field of the equipment to be inspected and are deeply familiar with the respective regulations, codes, rules and the generally acknowledged engineering rules so that they are able to judge if the equipment to be inspected is safe. They may for example be engineers, master craftsmen or qualified craftsmen, or service technicians.

The knowledge of the accident prevention regulations for playgrounds and of the DIN and DIN EN standards applicable to playgrounds must be proved by examinations of competence that have to be documented at regular intervals.





#### Steps for planning a playground

#### General

- · How much space do you need? Minimum required space can be seen from the Infobox and the top view of the play equipment, see (1)
- How much money do you need? See the price list for the budget required for play equipment, freight and product assembly
- Digging and foundation work? See the price list under "Mounting" for conditions and prices

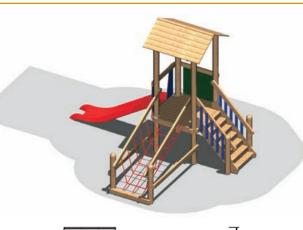
#### Product

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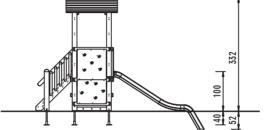
- Play value functionality? See (2)
- Age range? See (3)
- Requirements made in the users (see page 472, Integration)?
- Scope of delivery? Have a look at what our competitors are offering! See (4)
- Slides? Basic version: GRP; special versions: GRP with stainless steel cover. or stainless steel slide, see (5)
- Material data? High-quality materials are used, see (4)

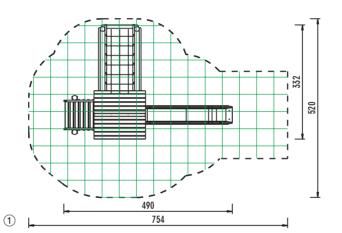
#### How is the play equipment anchored to the ground?

• Anchoring to hard surfaces, i.e. areas covered in concrete, tar or asphalt - If required, play equipment is anchored to hard surfaces. Hard surfaces are areas covered e.g. in concrete, tar, or asphalt. Ask eibe.



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#### eibe ibondo Play System Sofia

5 66 502 5

The ideal play equipment for small children because the platform height of 100 cm makes it easy for parents to lend a hand if required.

#### Play Value:

#### 2 Climbing ..... Sliding Dexterity . . . . . . . Hand/leg coordination Infobox: 3 Age range:..... 4 years and up

( <u>9</u> )	Free falling height:	
~	Largest section:	
	Heaviest section:	
	Replacement parts:available	5
8	Foundations:	5
	Assembly: 2 persons/5 h	
(11)	Ground constitution D: at least sand	
(11)	Ground const. except D: at least sand	-
$\overline{\mathcal{O}}$	Guaranteed safety:TÜV product service, 🗑	5
10	EN 1176 🖅	
	Impact protection net:	

#### e**i**be ibondo Play System Sofia

Scope of delivery / material data:	4
1 slide PH 110: GFRP	(5)
1 slide entry plate: HPL1 staircase: pressure	
impregnated pine	
1 roof: pressure impregnated pine	
1 net ascent: plastic coated steel cable	
2 climbing boards including climbing grips:	
HPL, GFRP	
Wood construction: pressure impregnated	
pine	_
Post shoes: hot-galvanised steel	6)
5 63 070 0	<u>(8)</u>
Prefabricated Foundation	0

#### 5 58 600 0 5 Surcharge for straight add-on slide, stainless steel cover, PH 110

5 58 601 0 (5) Surcharge for straight stainless steel slide, PH 110

#### Foundations

Ready-made foundations - See the Infobox under (8) for the number of foundations required; all Art. Nos. of the ready-made foundations (FF) are grouped with the respective play equipment. You do not have to wait for the concrete to set

The ready-made foundations are available as "PF":

• Standard ready-made foundation (5630700)

Ready-made foundation (5591600) or ground anchor (5632100) for spring-operated equipment

- or as "PFI":
- ready-made foundation plates (5630730) for higher static loads and "CF" for job-mixed concrete.

#### Surface/safety

Falling height (see (9)) and areas (see (10)): From the falling height, a falling area is calculated. It must be equipped with impact-attenuating surface materials in accordance with the free falling height (impact-attenuating floorings if applicable).

The Technology Infobox shows you at one glance the data on the required impact-attenuating floorings and the falling height of the product in question. See the available options for impact-attenuating floorings for the respective falling height (see p. 512)

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The required quantities can be calculated from the dimensions data given. The dimensions data are net ((10)), i.e. you will have a waste of approx. 5% when using impact-attenuating tiles.

#### Materials for impact-attenuating floorings

See the Technology Infobox for the minimum requirements, (11). The minimum requirement is pursuant to EN 1177. This is to say that **eibe** follows the statutory requirements.

Furthermore, eibe recommends to select the impact-attenuating flooring material in consideration of the following factors: Environmental influences (weather, location, etc.), the users' requirements (children with special needs, etc.) and the play value functions (ramps, slides etc.).

#### Legend (Infobox)

Equipment information in the "Technology Infobox"

In this catalog, you will find a summary of the main technical information for outdoors play equipment in a "Technology Infobox".

#### Legend of the symbols:

with each other and for each other - suitable for people with special needs

chromium-free, pressure-impregnated pursuant to the regulations of the "Gütegemeinschaft Imprägnierte Holzbauelemente e.V."

safety tested by TÜV-Product Service

safety tested by TÜV-Rheinland

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- = 5 years' warranty
- safety tested by TÜV
   Thüringen



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**eibe playo Railway, Mallorca** The city of Palma erected an underground train station at the beginning of 2005/end of 2006. A bus station for regional and city buses and a multi-storey car park was also integrated into the new transport platform.

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Upon completion of the train station, **eibe** had the task of playfully expanding upon the theme of the project and implementing it within the bounds of the 56,000 m<sup>2</sup> parking facility. An expansive and beautiful play world thus evolved at the beginning of 2007, positioned directly over the train station. Children can explore the blue **eibe** *playo* Railway under the motto "A journey, that's fun!". The smoke rises out of the locomotive's red funnel and the ride begins. Merry and lively, the passengers alternate between the four wagons, each one differently and delightfully outfitted. It is a challenge for the train conductor to maintain an overview here. Fare dodgers can get away quickly via an array of exits and can then climb aboard again unnoticed at the other end. It is never boring for the happy travellers. This train travels through all possible fantasy landscapes.



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#### eibe ibondo Train Station, Mallorca

The children's Train Station on the premises of the new train station in Palma is monumental. As of late, the real trains come in underground.

Thanks to the **eibe** *ibondo* system construction scheme, our project team has successfully created a nostalgic train station in historical style. It is clear at just a glance that a depiction of the noble playground alongside the renowned monuments in the tourist brochures would be thoroughly justifiable. It offers everything: nave, portal with staircase, side wing, arcades, towers – a real tourist attraction.

The children's train station effectively combines beauty with play value. The numerous railway children discover the playground with an inexhaustible curiosity and an array of questions – "Which tower should we explore first? How do we get to the west tower? Is Alfredo ahead of me, right at the top? Which slide is the quickest? What can I see from the net tunnel? Am I a good building climber?" – all of which have to be answered. The two station clocks never stand still and time flies for the children.

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## eibe





#### **eibe** ibondo City Mouse, Everland Park Korea

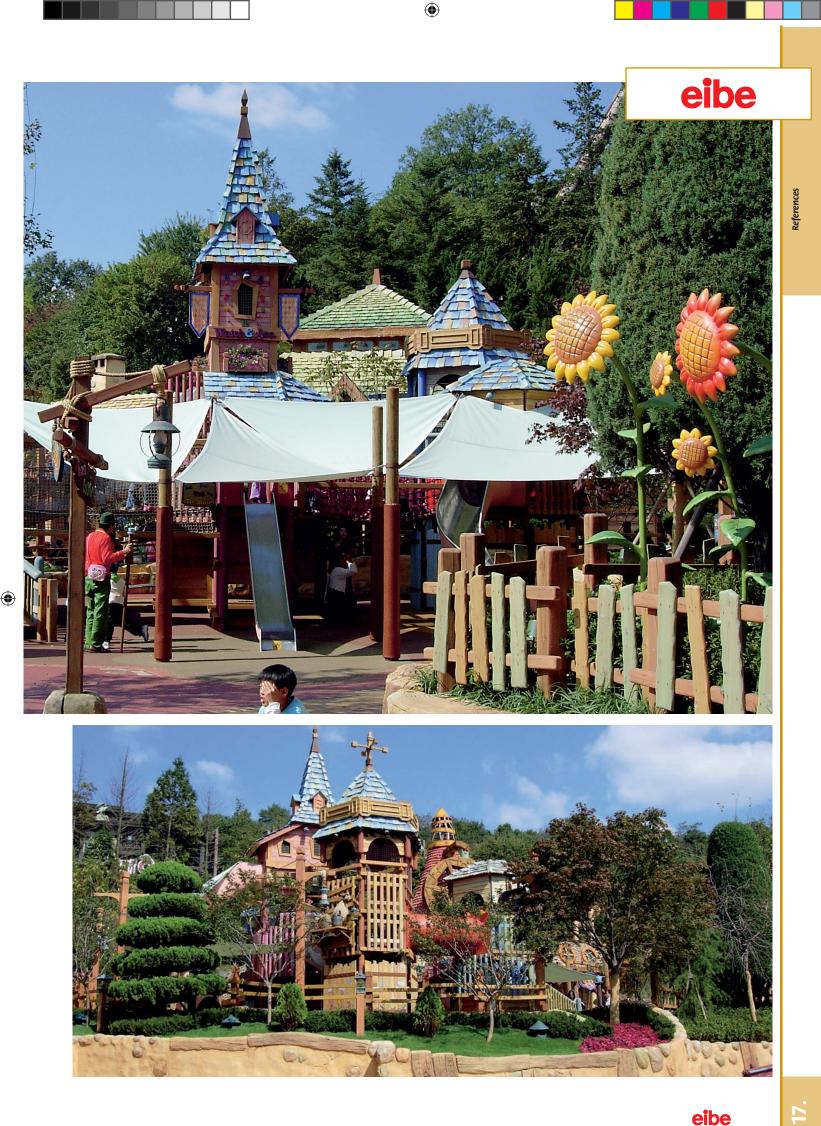
The Samsung Everland Theme Park is the largest amusement park in Korea and the fourth largest in the world.

The further extension of the existing park in 2002 was planned and implemented in a collaboration between the Park Management, a Canadian architecture firm and **eibe**. The collectively created attraction "Aesop's Village" was inspired by the fable "The City Mouse and the Country Mouse" by Aesop. Two giant and unique play landscapes are the result: one for the city mouse and one for the country mouse. The city mice flit around gleefully in their ostentatious city across a range of walkways from magnificent tower to magnificent tower. Fantastic slides animate the children to scale all the various heights. An extraordinary fable setting and just the right thing for city mice. Exactly as suggested in the fable, when it comes to pomp and beauty, nothing has been spared. Colours, shapes and a wealth of loving details also invite the country mouse to visit. City and country mice can play together frolicsomely and light-heartedly.



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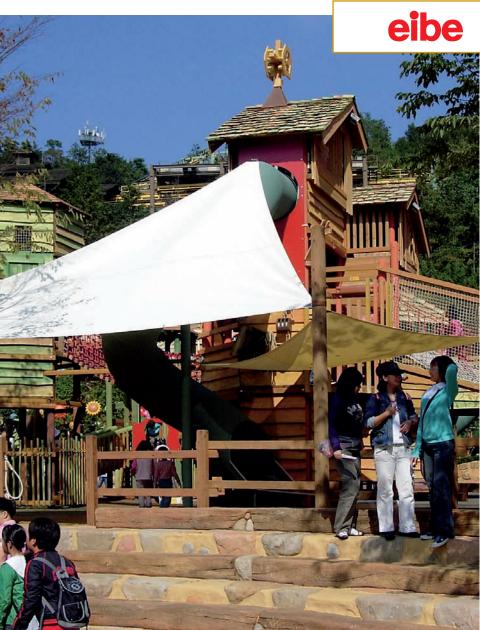
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#### eibe ibondo Country Mouse, Everland Park Korea

In the Samsung Everland Theme Park, the largest amusement park in Korea, you will find a real public magnet: "Aesop's Village".

Aesop's fable "The City Mouse and the Country Mouse", offers the foundation for the creation of two jolly **elbe** play worlds. Both have been individually planned and charmingly equipped so that one quickly realises in which of the two settings the play is taking place: the city or the countryside.

Following an extensive visit to the city (pages 16 and 17), the country mice can once again indulge with delight in their play in their countryside play world. The village idylle offers a multitude of play variations for all mice. Mice always come up with a whole heap of "nonsense" in the countryside. Here, they can really give their need to move free reign. Interesting walkways between the play towers allow the children to cross. A short wait in the queue at the beautiful spiral slide ascent is always rewarded with pure sliding pleasure afterwards. The "mouse parents" can observe the sprightly activity and skylarking between the delightful play towers with enormous pleasure.

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**eibe Whin Park, Inverness UK** The city of Inverness in the Scottish Highlands created a successful play world for its youngest residents right in the middle of a large park. But above all, the **eibe** *ibondo* play system impresses with its highest tower – at an extremely alluring height ubular slide runs from the tower at a

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The **eibe** *tema* Albatros, the largest in our **eibe** aeroplane fleet, is an integral part of this play world. The wings provide access to the cockpit that is equipped with an instrument panel and a movable gearshift lever. The pilot reaches the hull of the aeroplane by way of a mountainclimbing ramp variation. An attached climbing net helps with the loading of the aeroplane from the outside. In case of an undesired emergency landing, the entire crew can rescue itself by way of the emergency slide. But above all, the **eibe** *ibondo* play system impresses with its highest tower – at an extremely alluring height of almost seven metres. Whilst the giant tubular slide runs from the tower at a height of ca. 4.5 metres, the spiral slide begins at a height of about 3.7 metres. Two other smaller towers are just as excitingly designed and round the playground off perfectly.



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#### **eibe** ibondo De Waal, Rotterdam NL

The Play Association has thematically expanded its extensive play facility "De Waal" in the Rotterdam suburb Oud Charlois. And **elbe** is the perfect, experienced partner for this. Themed playgrounds have an integral place in the **elbe** range. In addition to the well-known **terna** individual play equipment, we also offer our play landscape system **ibondo** with 4 different themes.

"Jungle" is one of the most popular **eibe ibondo** themes. The unusual roofs, parapets and facades all contribute to making this programme something really special. Like all **eibe** playgrounds, the entire play facility fulfils the most exacting quality and safety requirements and the most current norms. The new themed play parks are not only attractive but are also distinguished as being especially good at encouraging movement.

Little primeval forest dwellers shimmy their way through the wilderness. All ascents and walkways are unique. Familiar agility activities are extremely helpful here. Young jungle visitors are thrilled to discover that most of the challenges are just like in a real expedition.

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