

POLYSPORT **IMPACT WALLS**



WHO WE ARE

WE HAVE BEEN AN
INNOVATIVE PARTNER
FOR THE CONSTRUCTION OF SPORTS HALLS
ACROSS **EUROPE** FOR
MORE THAN **40 YEARS**

YOUR **NO.1** IN EUROPE FOR THE INTERIOR DESIGN OF **SPORTS HALLS**

POLYSPORT guarantees the very highest levels of performance with an extensive network of partners specialising in sports hall construction in Germany and other European countries. Each individual component is selected for its quality and its properties are inspected in advance. Each and every day we live up to the high standards we set ourselves for the manufacture of **sports flooring, impact walls and acoustic elements.**

OUR CLAIM



HIGHEST SAFETY STANDARDS

The components used in POLYSPORT systems are selected based on safety-relevant specifications to protect users from dangerous substances. Selected impact wall systems are tested and classified for both fire behaviour as well as emissions.



OPTIMUM PERFORMANCE

Our impact wall solutions meet the highest protective standards, making them optimally suited to the athlete's needs. As a parameter of a system's protective function, the force reduction of our impact walls of at least 60% places them within the highest required range. We ensure that our products are durable and robust in use by inspecting the impact resistance and ball impact safety in the system in accordance with DIN 18032-7.



CERTIFIED QUALITY

All key properties concerning the emissions of impact walls are measured not only at the start of their service life, but are also subject to annual external inspections. Trained partner companies guarantee flawless installation of the POLYSPORT systems.



IMPACT WALLS









INDIVIDUALLY TAILORED TO EVERY PROJECT

The impact wall modules and the installation elements are manufactured in our production facility and individually tailored to each project. Detailed sections for e.g. openings for sports equipment or inspection flaps, or custom openings for doors and gates, can be planned and manufactured in advance on request to ensure quick and smooth installation. Our after-sales service boasts high levels of customer satisfaction.

Installation is performed exclusively by a specially trained POLYSPORT partner or with close technical support based on construction plans specific to the property in question.










POLYSPORT systems fulfil the specifications for force reduction as well as ball impact safety and impact resistance pursuant to DIN 18032-7. POLYSPORT offers system solutions with TÜV certification.

IMPACT WALL TABLE OF REQUIREMENTS

	POLYSPORT MPW	POLYSPORT FPW	POLYSPORT SPW
ELASTIC TYPE	• Area-elastic	• Area-elastic	• Area-elastic
ELASTIC LAYER	• Wooden swing beam	• Spring system	• Spring system
CONSTRUCTION	• High-quality multiplex strips	• High-quality multiplex strips	• Steel tubes
MINIMUM INSTALLATION DEPTH	• 78 mm	• 66 mm	• 78 mm
INSTALLATION	• Complex installation • Specialised companies	• Complex installation • Specialised companies	• Complex installation • Specialised companies
SURFACES	• Wooden materials or Silence	• Wooden materials or Silence	• Wooden materials or Silence
PRICE			
SERVICE LIFE			

Impact walls made from wood and textiles have been successfully used in sports halls for many years. These exhibit a wide variety in the range of colours and design. Apart from this, they mainly differ in terms of their technical parameters and installation type – while impact walls based on

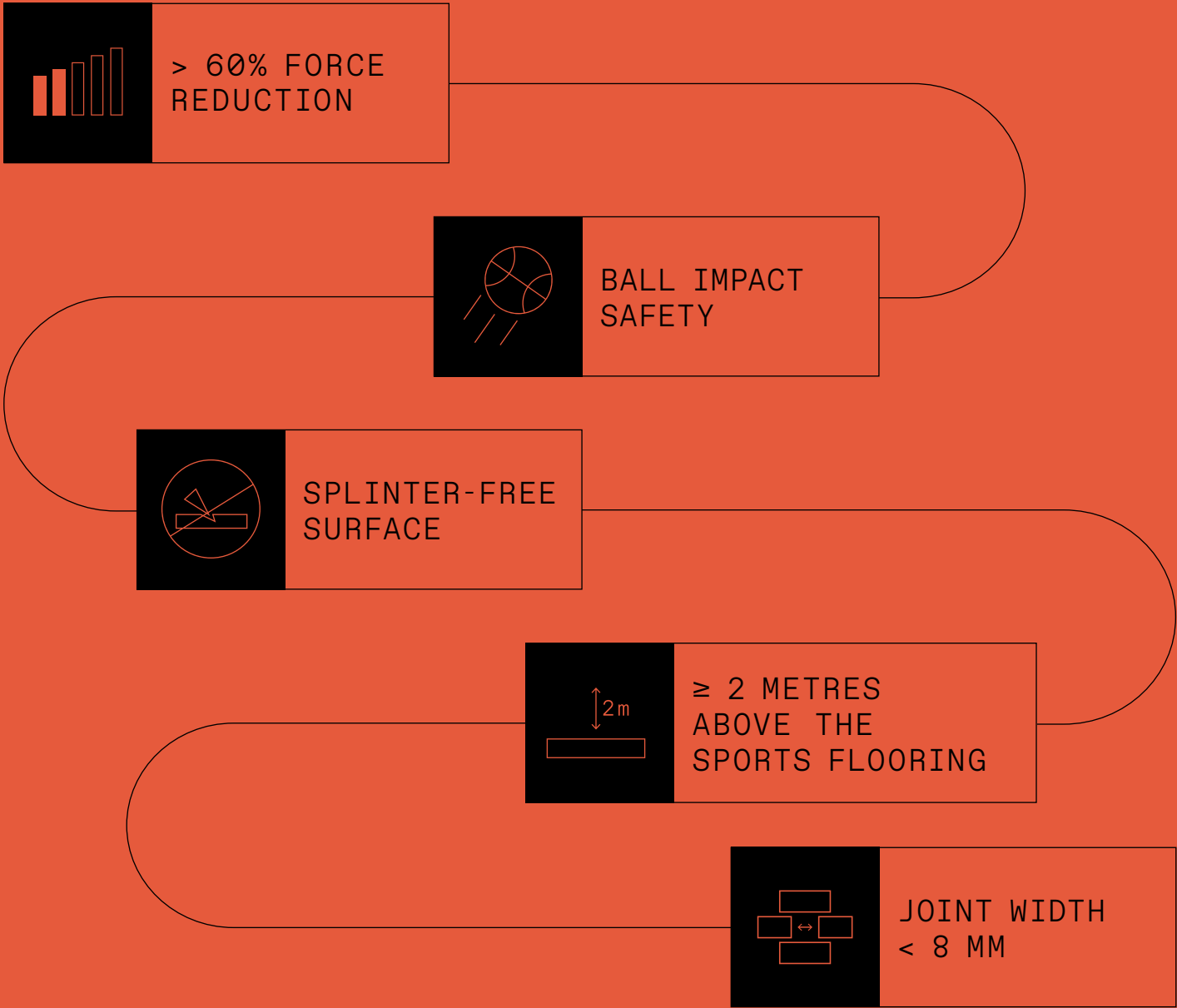
wooden- or Silence panels and glass elements are area-elastic impact walls constructed on a spring-loaded, supported or shock-pad-damped substructure, point-elastic textile impact walls or Silence 25_3000 are bonded directly to the existing substructure.

POLYSPORT GLASS	POLYSPORT FPX	POLYSPORT SILENCE	POLYSPORT TEXTILE
• Area-elastic	• Area-elastic	• Point-elastic	• Point-elastic
• Spring system	• Foam pads	• Polyester fibres	• Foam
• Freely selectable	• High-quality multiplex strips	• Directly on the substrate	• Directly on the substrate
• Installation variable/ optional	• 42 mm	• 25 mm	• Approx. 20 mm
• Complex installation • Specialised companies	• Complex installation • Specialised companies	• Simple installation	• Simple installation
• Glass	• Wooden materials	• Polyester panels in different colours and digitally printed designs	• Selected textures and colours
			
			
			

IN ADDITION TO THEIR EXCELLENT PROTECTIVE FUNCTIONALITY, THE HIGH-QUALITY POLYSPORT SILENCE ACOUSTIC PANELS ALSO FEATURE OPTIMUM ACOUSTIC PROPERTIES WITH ULTRA-LOW EMISSIONS AND A HIGH FIRE SAFETY CLASSIFICATION – AVAILABLE IN ANY DESIGN THANKS TO DIGITAL PRINTING TECHNOLOGY.

THE BACKBONE OF THE IMPACT WALL – SPECIFICATIONS AND PARAMETERS

The primary concern is the protection of the athlete and the durability of the impact wall as a result of its multiple uses in the sports hall. These are ensured by measuring force reduction, impact resistance and ball impact safety in the system pursuant to the specifications of **DIN 18032 part 7**.



POLYSPORT SILENCE MEETS ALL OF THE ABOVE SPECIFICATIONS.

HIGH PERFORMANCE

In addition to their protective function, impact walls also need to meet high standards in terms of ball impact safety and impact resistance for deployment in sports halls. In addition to guaranteeing the protection of the athlete and the robustness/durability of the impact wall, increasingly high standards in terms of emissions, acoustics and fire safety classification for internal areas also need to be met. Additionally, ever more design requirements are encountered on the planning side as customers seek to take advantage of eye-catching concepts for the unbound joy of sports.

WE CONSIDER **IMPACT WALLS, SPORTS EQUIPMENT AND INSTALLATION ELEMENTS** AS A **WHOLE**

In addition to an attractive aesthetic, a functionally sound integration of installation elements and a wide range of sports equipment into the wall systems are central to an optimally harmonised sports hall concept.

That is why we at POLYSPORT consider impact walls, sports equipment and installation elements as a whole from the planning phase onwards. The impact wall systems can be fitted with a wide range of surfaces to satisfy the customer's specific wishes and acoustic requirements.

POLYSPORT can use wood, textile or glass for the top layer to create all manner of variations.





IMPACT WALL SYSTEMS

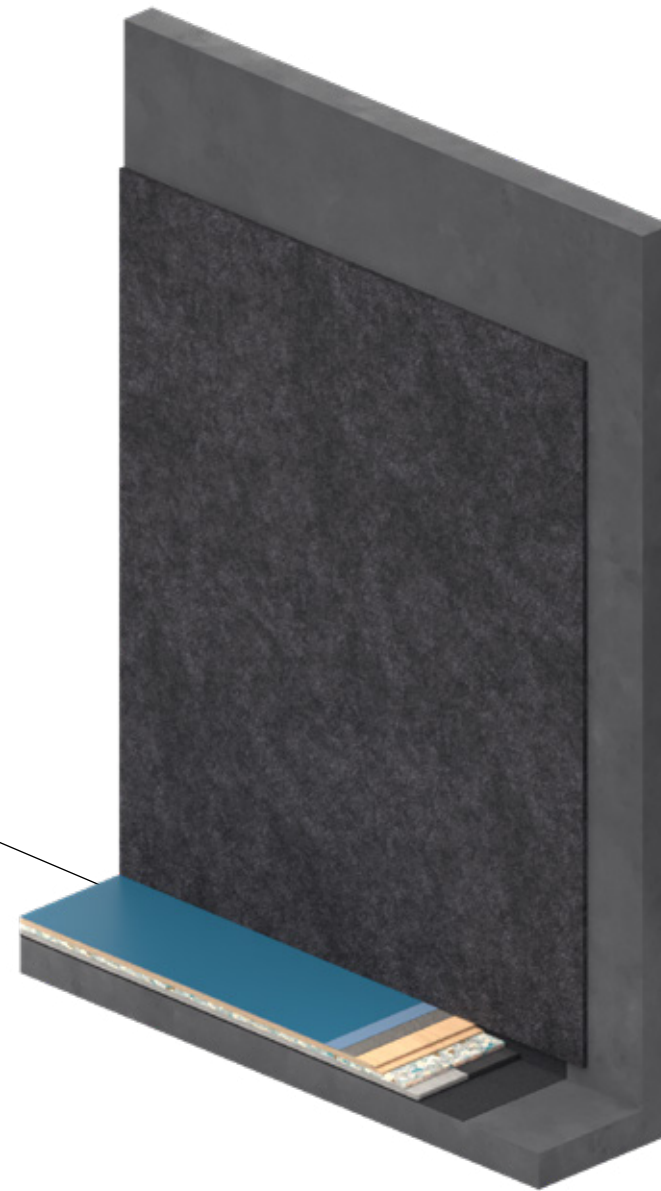
WE WILL BE HAPPY TO
ADVISE YOU IN YOUR
SELECTION OF THE
RIGHT **IMPACT WALL**

SILENCE

A POLYSPORT **SILENCE**

CONSTRUCTION

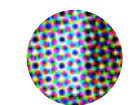
- 25 mm minimum thickness
- Force reduction > 60%
- Optionally with substructure



ELASTIC
LAYER



DESIGN



DIGITAL
PRINTING



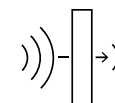
PLAIN
COLOURS



HEATHER
GREY

SILENCE

PERFORMANCE



HIGH
NOISE
ABSORPTION

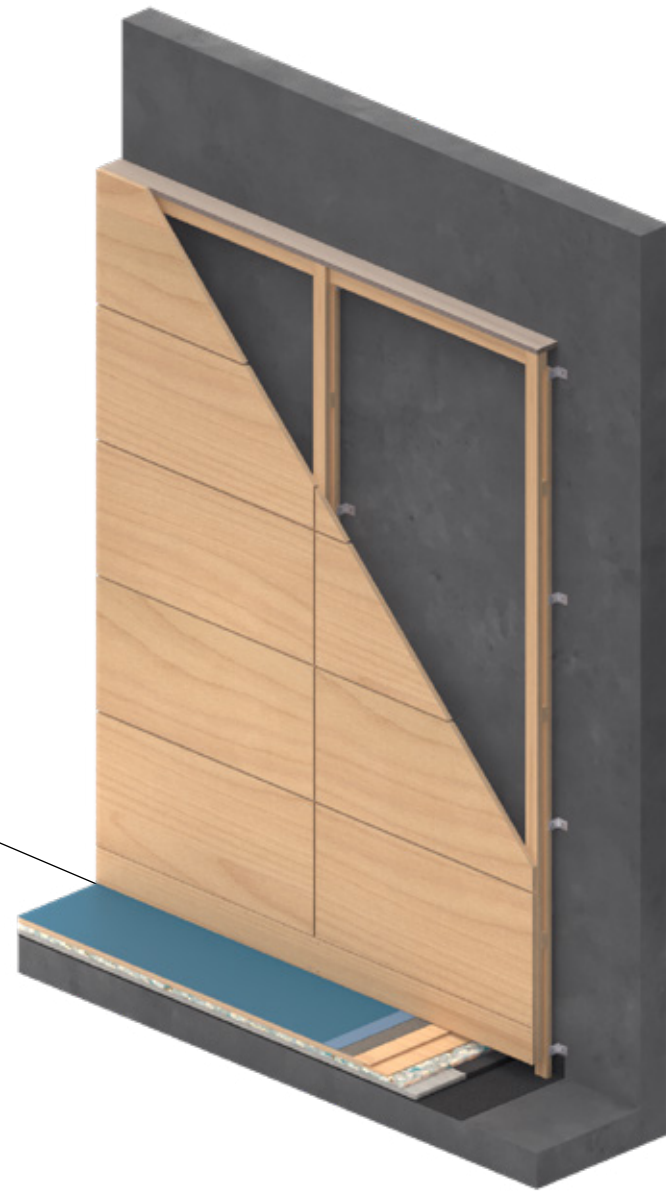


LIMITLESS
DESIGN
OPTIONS



FIRE-
RESISTANT

B POLYSPORT **MPW**



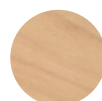
SUB CONSTRUCTION

- 60 mm vertical swinging supports consisting of:
 - 18 mm multiplex strips with 12 mm intermediate supports
 - 18 mm multiplex strips
 - 12 mm offset supports
- Steel bracket mount to the raw wall
- 80 mm minimum thickness
- Force absorption > 60%

SWING
BEAM
SYSTEM



DESIGN



WOOD
VENEER



DESIRED
COLOUR

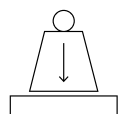


SILENCE

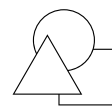
PERFORMANCE



HIGH
PROTECTIVE
FUNCTION



HIGH
ROBUSTNESS



LIMITLESS
DESIGN
OPTIONS

C POLYSPORT **FPW**



SUB CONSTRUCTION

- 18 mm vertical swinging supports made from multiplex strips
- 21 mm steel compression spring
- 60 mm minimum thickness
- Force absorption > 60%

SPRING
SYSTEM



DESIGN



WOOD
VENEER



DESIRED
COLOUR

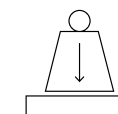


SILENCE

PERFORMANCE



HIGH
PROTECTIVE
FUNCTION



HIGH
ROBUSTNESS



LIMITLESS
DESIGN
OPTIONS

D POLYSPORT **SPW**



- SUB CONSTRUCTION
- 30 × 50 × 1.5 mm thick vertical, galvanised steel profiles
 - 21 mm compression springs
 - 70 mm minimum thickness
 - Force absorption > 60%

SPRING
SYSTEM



DESIGN



WOOD



DESIRED
COLOUR



SILENCE

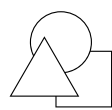
PERFORMANCE



HIGH
PROTECTIVE
FUNCTION



FLAME-
RETARDANT



LIMITLESS
DESIGN
OPTIONS

E POLYSPORT **FPX**



- SUB CONSTRUCTION
- 12 mm vertical multiplex strips with PUR composite foam pads
 - 36 mm minimum thickness
 - Force absorption > 60%

ELASTIC
PADS



DESIGN



WOOD



DESIRED
COLOUR

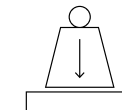


SILENCE

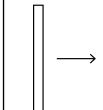
PERFORMANCE



HIGH
PROTECTIVE
FUNCTION



HIGH
ROBUSTNESS



LOW
INSTALLATION
DEPTH



F

POLYSPORT GLAS

CONSTRUCTION

- Variable depth/selectable
- Force absorption > 50%

SPRING SYSTEM

DESIGN

PERFORMANCE

HIGH PROTECTIVE FUNCTION

HIGH ROBUSTNESS

SURFACES


CUSTOM-DESIGNED
IMPACT WALLS –
FROM **WOOD EFFECT**
THROUGH TO **DIGITAL**
PRINTING

SURFACE COMPARISON

Alongside their protective properties, impact walls should also look the part for your sports hall. At POLYSPORT you can choose from a wide range of surfaces for the impact wall depending on the substructure. From the almost unlimited design options of the POLYSPORT Silence impact wall through a range of wood veneers, lacquered wooden surfaces or glass – have a browse:

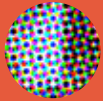
A

SILENCE WITH DESIGN PRINTING




E.G. SILENCE PANELS WITH DIGITALLY PRINTED WOOD DESIGN

In addition to their excellent protective functionality, the high-quality POLYSPORT Silence acoustic panels also feature optimum acoustic properties with low emissions and a high fire classification – available in any design thanks to digital printing technology.



DESIGN PRINT

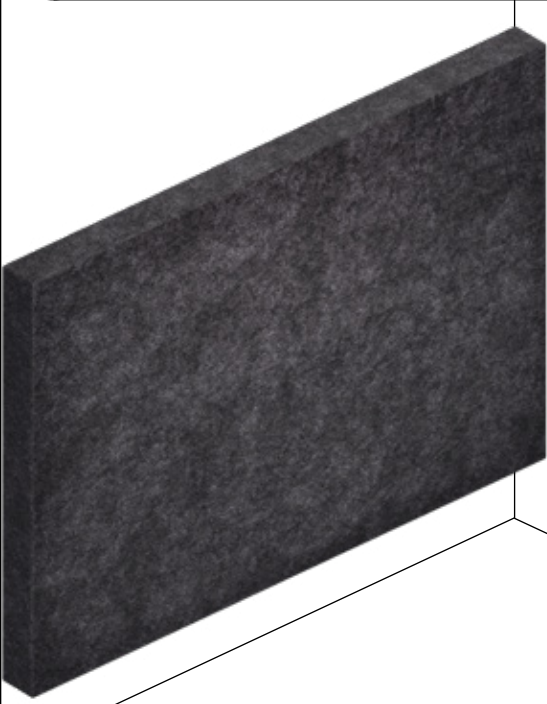


ALL COLOURS POSSIBLE

SILENCE

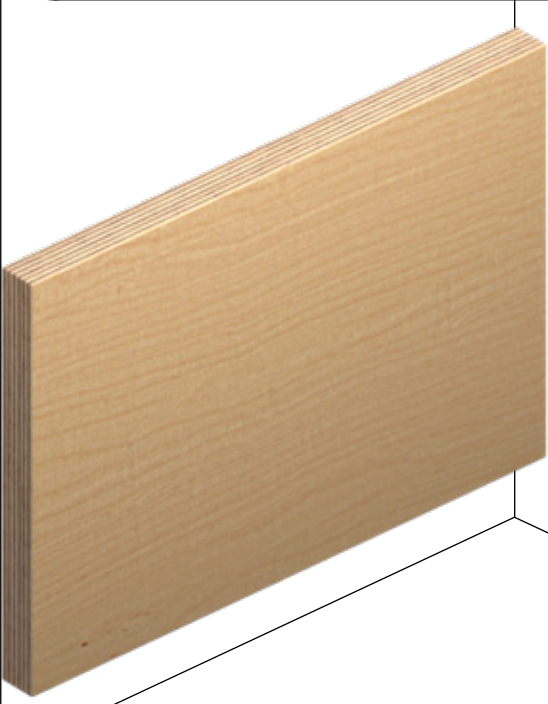
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SILENCE



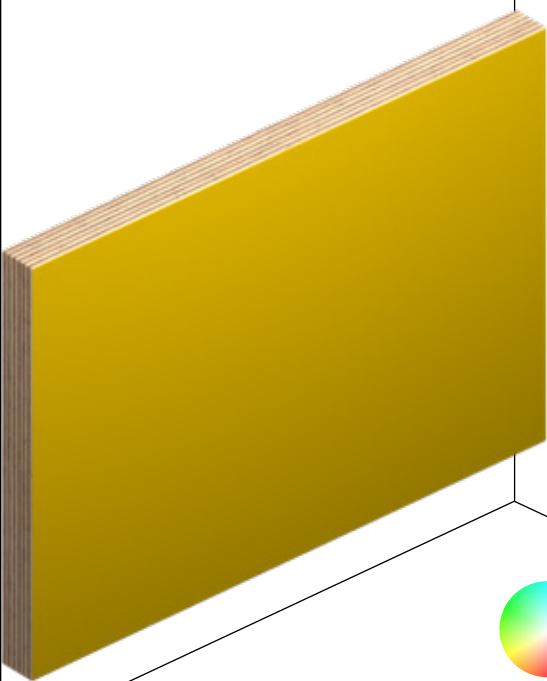
C


WOOD



D

LACQUERED WOOD







ALL COLOURS POSSIBLE

E

GLASS





CERTIFIED
INSTALLATION

Installation is performed exclusively by a specially trained POLYSPORT partner. All POLYSPORT systems satisfy DIN specifications.

POLYSPORT

IMPACT WALLS

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POLYSPORT

IMPACT WALLS

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INSTALLATION ELEMENTS

LATEST TECHNOLOGY,
HIGHEST QUALITY AND
PERFECT INSTALLATION



CLOSE COLLABORATION WITH THE BEST – HIGHEST **QUALITY** IS OUR STANDARD

Alongside the wide range of protective functions and designs, POLYSPORT impact wall systems also offer customised and harmonised solutions for the installation elements that are integrated into the impact wall. From equipment room gates through access doors and revolving doors for sports halls up to fire and smoke-protection doors, POLYSPORT offers a wide range of opportunities for adding custom installation elements to your project.



INSTALLATION ELEMENTS

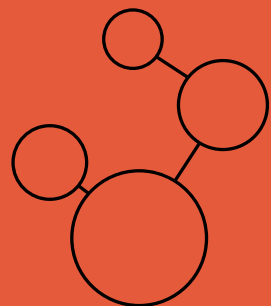
<p>EQUIPMENT ROOM GATES</p> <ul style="list-style-type: none">● CE certification pursuant to DIN EN 13241-1● TÜV-certified drop guard	<p>SPORTS HALL SMOKE PROTECTION DOORS with general building-regulation Test certificate (DIN 18095)</p> <ul style="list-style-type: none">● Robust steel stop profile tube construction with welded hinges● Smoke-proof light cut-outs and skylights in various designs and dimensions also with surface-elastic baffle function possible● Optional panic and full-panic function pursuant to DIN EN 179	<p>SPORTS HALL REVOLVING DOORS</p> <ul style="list-style-type: none">● Single-sash execution in front of climbing ropes, ring facilities, variable climbing apparatuses/swings, climbing poles and extendible wall bars● Double-sash execution in front of fixed wall bars, climbing poles and lattice systems, bouldering walls, etc.	<p>MOBILE IMPACT WALL ELEMENTS/ MODULAR STAGE</p> <ul style="list-style-type: none">● Integration of underfloor storage carts
<p>SPORTS HALL INTERIOR DOORS</p> <ul style="list-style-type: none">● Steel or steel-glass construction with area-elastic baffle function● Optional panic and full-panic function pursuant to DIN EN 179		<p>SPORTS HALL INSPECTION DOORS</p> <ul style="list-style-type: none">● Hinges suitable for sports halls, also available as a concealed-hinge construction with opening angle of 90°/180°● Lockable version and cable outlet possible	<p>FOLDING STAGE CONSTRUCTIONS</p> <ul style="list-style-type: none">● The folding elements as a forestage● Integration of underfloor storage carts
<p>SPORTS HALL EXTERIOR DOORS</p> <ul style="list-style-type: none">● All-round structural connection (pursuant to DIN 18531)● Optional panic and full-panic function pursuant to DIN EN 179● Optional magnet and bolt switch contacts (for connection to building's intruder alarm) <p>SPORTS HALL FIRE PROTECTION DOORS</p> <ul style="list-style-type: none">● with general building inspectorate approval (DIN 4102)	<p>CONTROL ROOM WINDOW ELEMENTS</p> <ul style="list-style-type: none">● Execution in front of separate fire-resistant window with side-hung sash fitting <p>SPORTS HALL REBOUND BOARDS</p> <ul style="list-style-type: none">● Execution as steel-glass construction with area-elastic impact wall function or closed with impact protection or wooden impact protection covering	<p>SPORTS HALL DIVIDING WALL ELEMENTS</p> <ul style="list-style-type: none">● Division of equipment or control rooms, indoor shoe area, etc.● Complete steel-glass constructions with area-elastic impact wall function	<p>AREA-ELASTIC GLASS IMPACT WALLS</p> <ul style="list-style-type: none">● Version with all-round steel frame or with glass point holders● Special pivoting sashes can be opened for inspection and cleaning purposes <div><p>ALL INSTALLATION ELEMENTS</p><p>Ball-impact-safe, also with area-elastic impact wall function</p></div>



SUSTAIN- ABILITY

**QUALITY AND
ENVIRONMENTAL
CERTIFICATES** ARE
CORE COMPONENTS
OF OUR WORK

WE TAKE RESPONSIBILITY

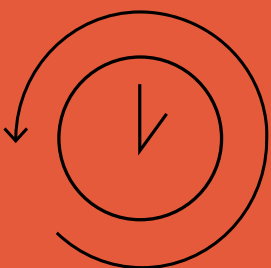
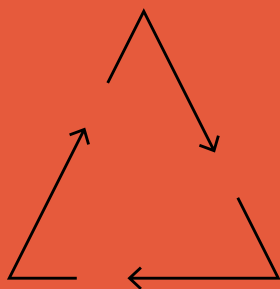


INGREDIENTS

There is a direct link between the impact walls selected and health. The impact walls make up a large part of the surfaces in the sports hall and strongly influence the quality of the air. What matters most to us is people's well-being, which is why our materials are low-emission and free from VOCs and plasticisers. We work exclusively with controlled ingredients which are conducive to good health and are inspected on an ongoing basis.

RECYCLING

We want our sustainability strategy to be about more than 'just' future-proofing our own products. For that reason, our products consist of up to 60% renewable materials such as plywood, natural oils, mineral-based fillers and a large share of recycled components such as polyester fibres for acoustic panels and acoustic insulation. We are also in the process of increasing the proportion of recycled ingredients further to demonstrate our responsible management of resources and the environment.



ROBUST AND DURABLE

The components we use are selected in accordance with the highest quality standards to ensure the durability of our products across the total life cycle due to the increasing strain they are exposed to. We also consider renovation options that are gentle on the environment and energy-saving, which additionally have a positive influence on the life cycle costs.

CERTIFICATION

Certainty for owners and planners thanks to the independent inspection and certification of our products. That means continuous monitoring of the products for harmful substances to guarantee quality and protection from product risks.



Das Zeichen für verantwortungsvolle
Waldwirtschaft
FSC® C106855



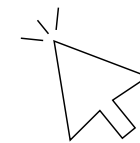


SPORTS HALL, BERLIN, 2022
PUR SPORTS FLOORING AND WOOD-EFFECT IMPACT WALL

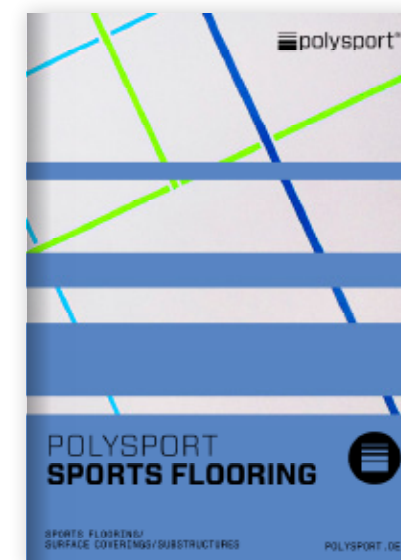
THE **POLYSPORT** RANGE

- Sports flooring
- Point- and area-elastic impact walls
- Certified installation elements like gates and doors
- Acoustic solutions for ceiling and wall

We will be happy to provide you with no-obligation advice on interior planning for your sports hall or to send you our portfolio.



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