



by the good plastic company



May 2023

Technical guide

Content

3	OUR MISSION
4	MATERIAL
5	FORMATS
6-7	MATERIAL PROPERTIES
8	TRANSPORT AND STORAGE
9	SAFETY MEASURES
10	PROCESSING RECOMMENDATIONS
11	CUTTING
12-13	CNC PROCESSING
14	DRILLING
15	MILLING: EDGE PROCESSING
16-19	TYPES OF EDGES AND CORNERS
20-21	FASTENING ASSEMBLIES: GLUING
22-23	GLUED FIXINGS: WALLS
24	MECHANICAL FASTENERS
25	REGULAR MAINTENANCE AND REPAIR
27	CONTACTS

OUR MISSION

The Good Plastic Company is an international manufacturer of surface materials that helps brands to make a visible commitment to sustainability.

Polygood is a range of 100% recycled and recyclable plastic panels that can be used to create modern-looking and environmentally-conscious furniture and interior or exterior design elements.

We demonstrate to companies that they can make beautiful and functional new goods from locally produced waste and make a visible commitment to the circular economy.

We believe that by generating demand for products made from recycled plastic we can keep this valuable material from ending up in landfill, the oceans, or incinerators.

Recycling centres process thousands of tonnes of plastic each month. However, uses for this recycled material remain limited. The Good Plastic Company's Polygood panels enable new applications for this valuable resource.

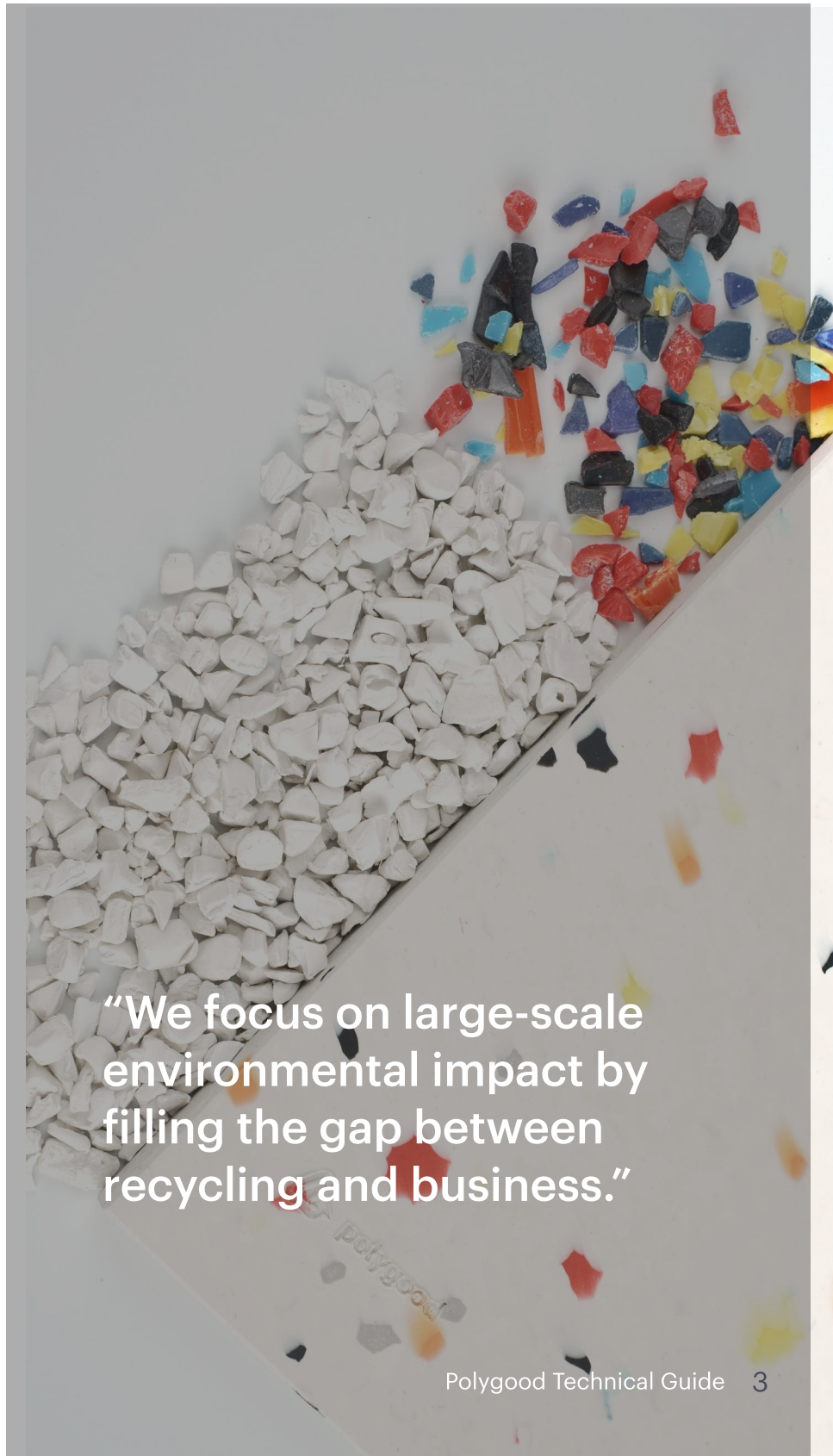
On the other hand, businesses all around the world are implementing circular economy business models, driven by regulation and market demand. This sustainability transformation is a substantial challenge but also represents an opportunity for all companies in the value chain.



Certificate Number 230064 – ISO 9001

Certificate Number 230870 – ISO 14001

Certificate Number 230871 – ISO 45001



“We focus on large-scale environmental impact by filling the gap between recycling and business.”

MATERIAL

Polygood is a surface material made from 100% recycled plastic by The Good Plastic Company.

The sustainable advantages of this material are equalled by its distinctive aesthetics. Each pattern has its own unique back story. Polygood panels are produced from a wide range of post-consumer and post-industrial plastic waste sources, from refrigerators to single-use cutlery, electronics and industrial consumables.



Waterproof and rot-proof.
Chemical resistant.

The material can be machined, drilled, cut (by CNC, woodworking saw blades, router and waterjet).

The surface can be sanded and polished to achieve any finish from matte to a mirror gloss.

Panels can be thermoformed to create distinctive shapes for your designs.

The material is easily joined with glue, screws or special fixings.

As The Good Plastic Company manufactures panels solely from 100% recycled plastics, some colour variance between batches is possible. As the sources of waste change over time, so colour pigment consistency can also vary. We therefore have limited control over batch colours. These variations are subtle and do not greatly change the appearance of Polygood panels. Contact us if you have any questions.

Plastic granules that appear identical to the human eye can turn out to have minor colour differences when they are melted into a panel. As a result, for black patterns shades may vary from deep black to matte ashy black, and for white patterns shades may range from a bleached/snow white to a mottled effect comprising off-white and milky white shades. This results from the origin of the material – household refrigerators – and reflects differences in the whiteness of the original appliances before recycling.

FORMATS

Sizes:

1. 2800x1400mm
2. 1400x1400mm

Standard THICKNESSES:

12mm and 19mm

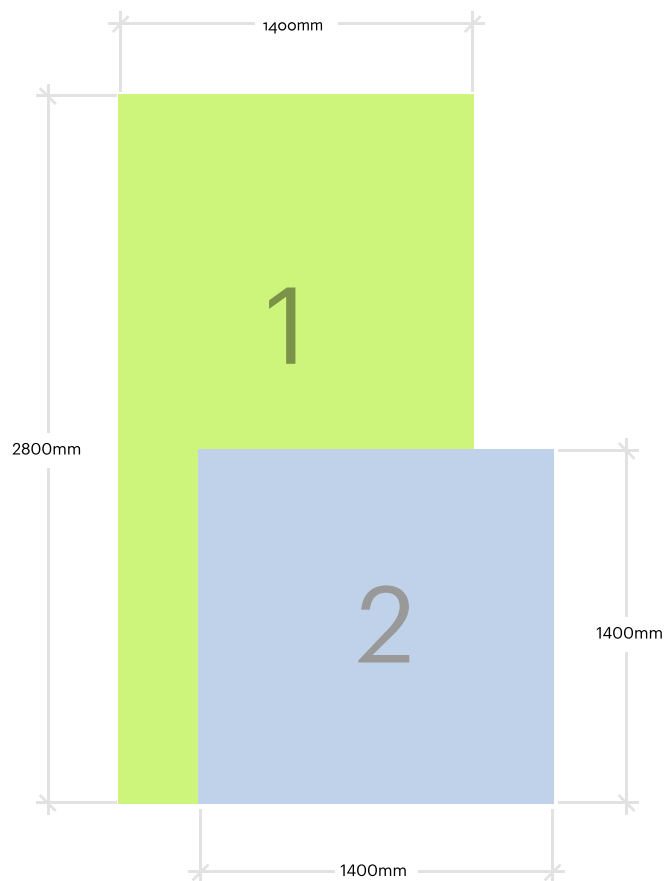
Finishes: matte (standard; gloss on request)

Stiffness: high

Scratch resistance: medium

Moisture absorption: none

Composition: 100% recycled and recyclable polystyrene (PS)



TYPES OF POLYGOOD PANELS

Polygood panels are produced in two types:

- Single-faced panel: one side of the panel has a matte or gloss coating, and the other side has a rough surface
- Double-faced panel: both sides of the panel have a matte or gloss surface

Note: for furniture manufacturing we recommend using single-faced panels.

matte or gloss surface



SINGLE-FACED



unfinished face

Thickness tolerance:
12mm ± 0.5mm
19mm ± 0.5mm

matte or gloss surface



DOUBLE-FACED



matte or gloss surface

Thickness tolerance:
12mm ± 2mm
19mm ± 2mm

MATERIAL PROPERTIES

GROUP 1 - Light



Victorious
#PS1507

Sea Foam Grey
#PS2404

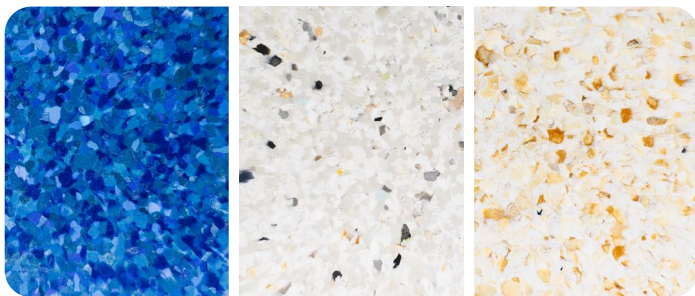
White Terrazzo
#PS2107

White Lollipop
#PS1601

Timeless Duo
#PS1201

Vintage Pearl
#PS1101

GROUP 2 - Terrazzo

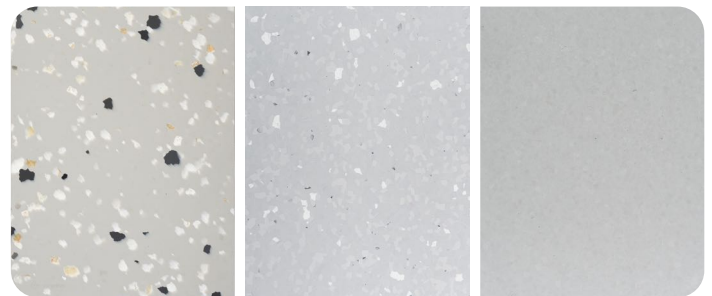


Sapphire
Terrazzo
#PS1801

Terrazzo Nuovo
#PS1901

Marbellous
#PS2001

GROUP 3 - Grey

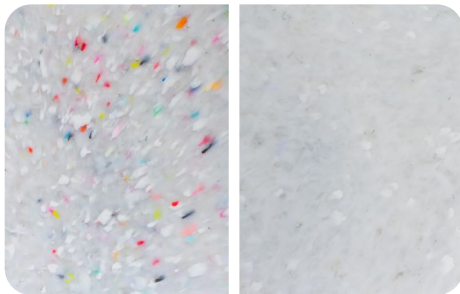


Marble Desert
#PS2110

Greycious
#PS1702

Pure Grey
#PS1102

GROUP 4 - Semi-opaque



Glaze
Sprinkles
#PS1604

Salt Dune
#PS1701

GROUP 5 - Translucent



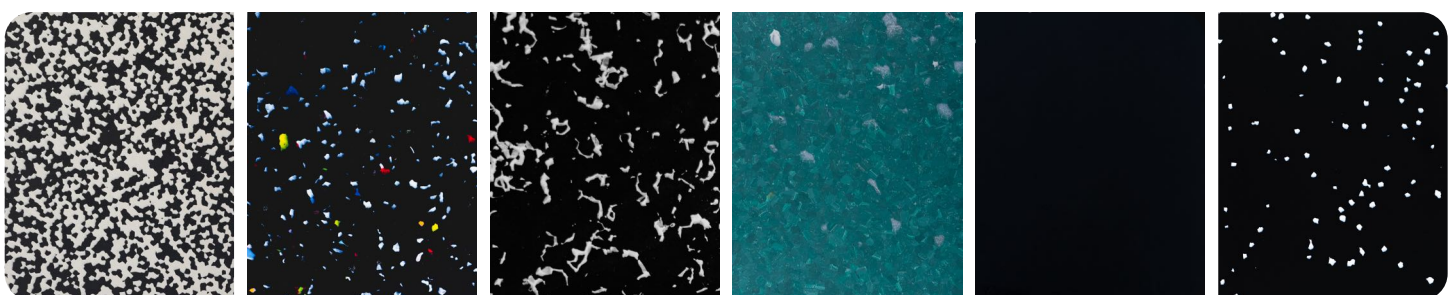
Translucent
Clear
#PS1305

Coral reef
#PS1501

Potpourri
#PS1402

Translucent
Green
#PS1306

GROUP 6 - Dark



Pattern No. 5
#PS1203

Black Lollipop
#PS1602

Sea Foam Dark
#PS2401

Emerald Ghost
#PS1706

Dark Knight
#PS1103

Reverse
Timeless Duo
#PS1202

	Pattern	ID	Tolerance		Hardness*	Porosity*	Tendency to chip during milling and cutting*	Sanding, grit range	Mitigation of shallow localised damage
			Singe-faced panel	double-faced panel					
GROUP 1 Light	Victorious	#PS1507	±0.5	±1.5	3	2	1	P600–P1500	Transparent glue, sanding, polishing
	Sea Foam Grey	#PS2404							
	White Terrazzo	#PS2107							
	White Lollipop	#PS1601							
	Timeless Duo	#PS1201							
	Vintage Pearl	#PS1101							Transparent glue, sanding, polishing
GROUP 2 Terrazzo	Sapphire Terrazzo	#PS1801	±0.5	±1.5	4	0	1	P600–P1500	Transparent glue, sanding, polishing
	Terrazzo Nuovo	#PS1901				2**	3		
	Marbellous	#PS2001				2**	3		
GROUP 3 Grey	Marble Desert	#PS2110	±0.5	±1.5	3	2	1	P600–P1500	Transparent glue, sanding, polishing
	Greycious	#PS1702							
	Pure Grey	#PS1102							
GROUP 4 Semi-transparent	Glaze Sprinkles	#PS1604	±0.5	±1.5	5	1	1	P600–P1500	Transparent glue, sanding, polishing
	Salt Dune	#PS1701							
GROUP 5 Semi-transparent	Translucent Clear	#PS1305	Not calibrated	±2.0	5***	1	3	P800–P1500	Transparent glue, sanding, polishing
	Coral Reef	#PS1501							
	Potpourri	#PS1402							
	Translucent Green	#PS1306							
GROUP 6 Dark	Pattern No. 5	#PS1103	±0.5	±1.5	3	1	1	P1000–P1500 very carefully	Transparent glue, sanding, polishing
	Black Lollipop	#PS1602							
	Sea Foam Dark	#PS2401							
	Emerald Ghost	#PS1202							
	Dark Knight	#PS1103							
	Reverse Timeless Duo	#PS1202							

* on a five-point scale

** small voids are possible in the panel, which can be filled with putty, please contact us for advice

*** fragile

Properties common to Polygood materials:

Specific weight of Polygood panel	1.0–1.1kg/dm ³
Mass of 1m ² of Polygood panel with thickness of 12mm	12–13kg/m ²
Mass of 1m ² of Polygood panel with thickness of 19mm	19–21kg/m ²
Flexural strength, ISO 178:2010 Method B	49–56N/mm ²
Tensile strength, ISO 527 2:2012 Method A	22–26MPa
Heat deflection temperature, ISO 75 2:2013 Method A	72–76°C
Vicat softening temperature, ISO 306:2013	95–98°C
Coefficient of Linear Thermal Expansion (CLTE) of Polystyrene (for comparison: wood 5, brick 5.5, glass 9, iron 12, concrete 15, aluminum 22, cast acrylic 81, polyethylene 200)	70 x10 ⁻⁶ °C ⁻¹

Cutting on sliding table saws	Use plastic-cutting circular saw blades; fix panel on sliding table
Cutting and milling on CNC	Milling cutters for plastic
Thermoforming	Press with contact heating, contact us for advice

TRANSPORT AND STORAGE

TRANSPORT

During transportation, it is important to avoid exposing Polygood panels to dust and abrasive substances that may cause damage. While the panels are protected by a film, small debris can still be problematic if this rule is not followed.

To ensure safe transportation, secure the panels to prevent sliding and lift them when loading or unloading. Do not push or pull them by the edge.

STORAGE

Polygood panels should always be stored in their original packaging. When storing, stack the panels horizontally on a flat, stable, and raised surface with a soft lining.

During storage, protect the upper panel by covering it with another board material (such as chipboard).

It is important to ensure that panels are adjacent to each other over their entire area.

After removing panels, reseal the remaining panels in their original packaging.

Important: Panels must completely overlap each other. After removing the panels, the remaining panels shall be resealed in the original packaging.

SAFETY MEASURES

It is important to wear appropriate personal protective equipment and follow basic safety rules to ensure efficient and safe work. We recommend using standard protective equipment for the relevant type of activity, such as work clothes and safety shoes.



After cutting, the edges of Polygood panels are sharp and may pose a risk of injury. We recommend using Protection Category II gloves with a minimum cut resistance when working with freshly cut Polygood panels.



During the mechanical processing of Polygood panels, the sound level can exceed 80dBA. Therefore, always wear appropriate ear protection when working with panels.



To prevent eye injuries during mechanical processing, use safety glasses or a protective mask.



To prevent dust inhalation when cutting or sanding Polygood panels we recommend using a mask with an appropriate level of protection (such as FFP2 or FFP3) and a dust extraction system.



PROCESSING RECOMMENDATIONS

For sliding table saws

For straight cutting of Polygood panels using sliding table saws with a saw spindle positioned beneath the workpiece and a circular saw blade with a positive cutter angle, please follow these steps:

- Ensure that the pattern side is facing upwards.
- Apply pressure to the Polygood panel on the work table, close to the saw blade.
- Verify that the saw blade has been properly extended.

Circular saw blade specification:

- Suitable for use with sliding table saws.
- Intended for finishing cuts on various thermoplastic synthetic materials.

We recommend using a blade with the following tooth type:

- TR-F
- TR-F-F DU

Important: Before cutting a panel, apply protective tape to the panel along the cut. This will help to avoid surface scratches. If the panel has a protective film, this step is not necessary.

CUTTING WITH HAND TOOLS

When cutting Polygood panels with hand-held circular saws, it is recommended to use a stop bar or track saw guide rail and a vacuum cleaner or aspirator.

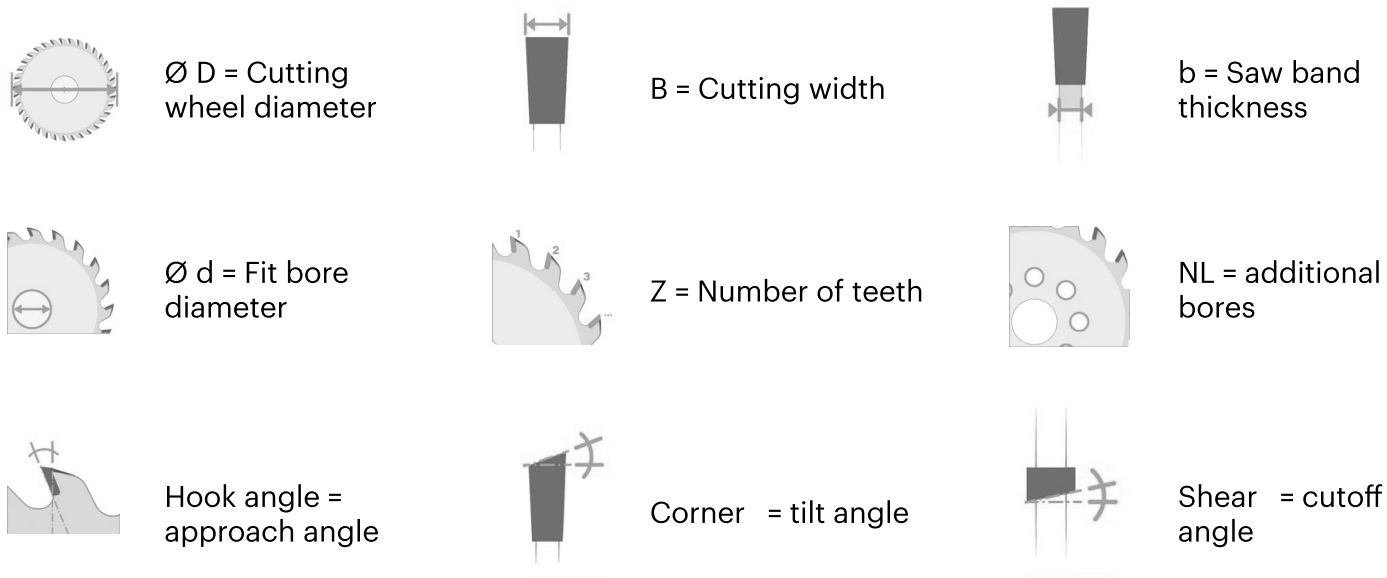
For sawing, it is recommended to use saws with the following types of teeth:

- TR-F
- TR-F-FA

NOTE: Recommendations are from LEUCo, www.leuco.com. We recommend LEUCo products for processing Polygood panels. Use similar tool parameters when selecting other brands.

PROCESSING RECOMMENDATIONS: CUTTING

TABLE LEGEND



Sizes of format disc saws with tooth shape "TR-F-FA" plastics and "TR-F"

ØD mm	B mm	b mm	Ød mm	Z	Additional bores	Tooth shape	Approach angle	LEUCo SKU
250	3.2	2.5	30	80	2/7/42 + 2/9/46 + 2/10/60	TR-F	5	189877
300	3.2	2.2	30	96	2/7/42 + 2/9/46 + 2/9.5/46.5 + 2/10/60	TR-F	5	192779
303	3.2	2.2	30	84	2/7/42 + 2/9/46 + 2/9.5/46.5 + 2/10/60	TR-F-FA	5	193109

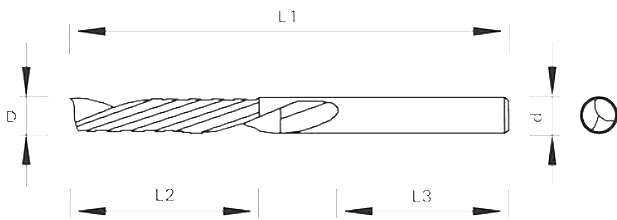
Recommended cutting modes

Saw	LEUCo SKU	Cutting speed Vc [m/msec]	Rotation frequency [rpm]
Sizing saw blade HW "TR-F-FA" — plastics	193109	40–60	2,700–4,000
Sizing saw blades HW — LowNoise "TR-F"	192779	40–60	2,700–4,000

Note: Recommendations are from LEUCo, www.leuco.com. We recommend LEUCo products for processing Polygood panels. Use similar tool parameters when selecting other brands.

PROCESSING RECOMMENDATIONS: CNC PROCESSING

VHW HIGH-PERFORMANCE END MILLS FOR POLYMER MATERIALS – Z1



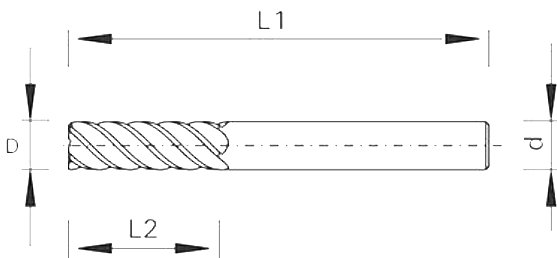
MACHINE /APPLICATION

- CNC milling machines
- for planing, chamfering and grooving in polymer materials
- for drilling with simultaneous feeding along the z axis and along the x or y axis

BENEFITS

- best chip removal and excellent cutting quality thanks to the polished channel for chip removal and the positive spiral turn

VHW POLISHING END MILL



MACHINE/APPLICATION

- CNC milling machines
- for finishing with relatively transparent surfaces

Attention: these tools are not designed for formatting and cutting, only for polishing!

INSTRUCTIONS

- finish milling (removal of 0.05 – 0.1mm) at a feed rate of approx. 0.5 – 1m/min
- high RPM is recommended (18,000 – 24,000 rpm or higher)
- application against feed
- good quality can only be achieved with a precision clamping element

Processing type	Mill	Z	Ø D	Material milled off aE [mm]	Feed Vf [m/min]	Rotation frequency [rpm]
Roughing	VHW Plastics cutter	Z=1	3 – 12	≤ ØD	2 – 6	18,000
Finishing	VHW Plastics cutter	Z=1	3 – 8	0.1 – 0.4	0.5 – 1.5	18,000 – 24,000
	VHW Plastics cutter	Z=1	10 – 12	0.1 – 0.4	1 – 3	18,000 – 22,000
	VHW Polishing cutter	Z=5	6 – 8	0.05 – 0.1	0.5 – 1.5	20,000 – 22,000

Milling

Pre-milling/roughing:

- Standard end mill VHW or
- end mill for processing plastic VHW, polished Z=1

Final milling/finishing:

- End mill for plastic processing VHW Z=1 (with polished chip pocket)
- VHW polishing end mill, polished Z=5

Overhung table

- Use as many suction devices as possible.
- The distance between the workpiece and the suction device should be as small as possible.
- Cleaning the suction device surfaces with plastic cleaner might improve the result.

Nesting table

Alternatively, the panel can be milled in two passes: the roughing cut depth should be approximately 1/10 to 2/10 less than the panel thickness, and the finishing cut depth should be approximately 1/10 to 2/10 greater than the panel thickness.

Clamping elements

High-precision clamping tools: TRIBOS system, shrink chucks. Hydraulic clamping system in some cases.

Heat output reduction

To prevent heat output and whitish traces, we recommend using compressed air for chip removal. In addition, chip suction with an AEROTECH turbine clamping system can improve milling quality, reduce panel and tool heating, and increase working life.

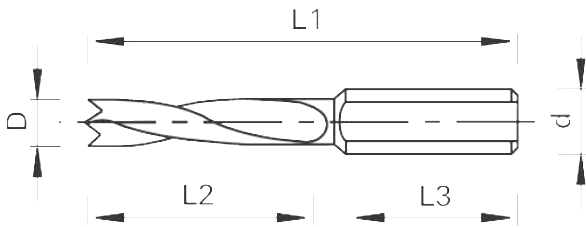
Dimensions of high-productive end mills VHW for plastics – Z1

Ø D	L2	Ø d	L1	Z	Spiral direction	LEUCo SKU
3	12	3	50	1	positive	184715
4	15	4	50	1	positive	184716
5	17	5	50	1	positive	184717
6	22	6	60	1	positive	184718
8	22	8	70	1	positive	184719
8	32	8	70	1	positive	184720
10	32	10	70	1	positive	184721
12	32	12	80	1	positive	184722

NOTE: Recommendations are from LEUCo, www.leuco.com. We recommend LEUCo products for processing Polygood panels. Use similar tool parameters when selecting other brands.

PROCESSING RECOMMENDATIONS: DRILLING

VHW BLIND DRILLS - TOPLINE



The provided data are standard values. The best values for each application should be found by testing or during machining.

MACHINE

- Stationary boring machines, automatic boring machines, CNC machining centres

APPLICATION

- Perfectly suitable for dowel and through-hole drills in very hard materials, deep bore holes, composite materials

SPECIFICATION

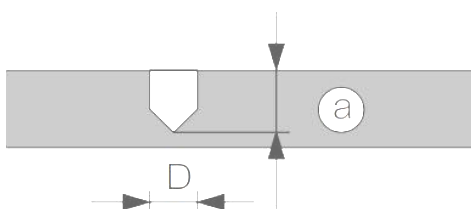
Feed Vf [m/ min]	Rotation frequency n [rpm]	Drilling mode
3.5 – 4	3,500	S-S (fast-fast)

DRILLING

Solid twist or dowel drills made of hard metal are used for drilling. In machining centres, we recommend using a main spindle instead of drill beams at a rotation speed of 2,500–3,500min and a feed rate of 1.5–3m/min.

When drilling blind fastening holes perpendicular to the plane of the panels, ensure as follows:

- Diameter of the drill for thread holes (D) = diameter of the screw minus appr. 1x turn depth
- Drilling depth (a) = panel thickness minus 2mm
- Screwing depth = drilling depth minus 1mm



When drilling holes for threaded joints parallel to the plane of the panel, attention should be paid to the following parameters:

- The residual thickness (b) of Polygood panels should be at least 3mm.
- The diameter of the hole when drilling parallel to the surface of the panel should be selected to prevent the Polygood panel breaking when the screws are tightened.
- Screws for metal sheets and chipboard can be used for threaded joints in the plane of the panel.
- A minimum drilling depth of 25mm is required to ensure proper stability.
- In each case, drilling tests are required to determine the correct drilling diameter.



IMPORTANT: Be sure to carry out testing to determine the correct drill diameter.

MILLING: EDGE FINISHING

FINISHING USING HAND TOOLS

For milling panels and chamfering, you can use manual electric milling cutters and milling trimmers. Manual cutters can also be used for such types of work as cutting holes for washbasins, curvilinear cuts etc.

Use protective tape around the area to be processed.

We recommend using hardened metal-tipped cutters, which are also available with replaceable inserts. For better tool operation, we advise using height-adjustable milling cutters.

MANUAL FINISHING

Sandpaper can be used to finish edges. The direction of the sanding movement should be from the decorative side to the core. For broken edges, you can successfully use sandpaper (100-150 grit).

PROCESSING ON STATIONARY MACHINES

For milling Polygood panels, the best ratio of teeth, cutting speed and feed speed should be observed.

If the chips are too small, the machine will melt the material and therefore quickly become blunt, which means that its service life will be shortened. On the other hand, if the chips are too large, the edges will be wavy with an unclean surface. High rotation frequency is not the only criterion for a high-quality edge!

For safety reasons, it is vital to stay within the indicated range of the machine's rotation frequency.

FINISHING OF MILLED EDGES

Chamfers, various types of edges, and corners are processed by sanding papers of varying grits. For best results, use polishing pastes etc. (see page 25 for details).

TYPES OF EDGES AND CORNERS

When using Polygood panels as worktops, no edge protection is required. Several basic edge finishes are possible:



Type 1
(Milling cutter N°2)



Type 2
(Milling cutter N°3)



Type 3
(Milling cutter N°2)



Type 4
(Milling cutter N°3)



Type 5
(Milling cutter
N°2 + N°4)



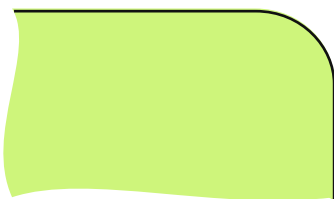
Type 6
(Milling cutter
N°3 + N°4)



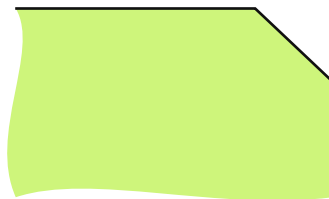
Type 7
(Milling cutter
N°1 or N°6)



Type 8
(Milling cutter N°5)



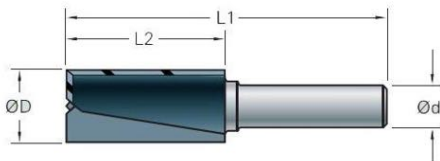
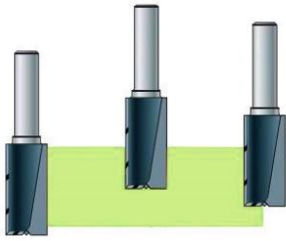
Type 9
(Milling cutter
N°1 or N°6)



Type 10
(Milling cutter
N°1 or N°6)

Examples of standard cutters for manual milling machines:

Nº1 SIDE-TOOTH GROOVING CUTTER



Machines/application

- manual mill cutter
- for milling, chamfering, grooving and rebating of board materials

Design

- straight cut
- HW milling cutters with brazed hard-alloy
- VHW milling cutters made of solid hard alloy

Benefits

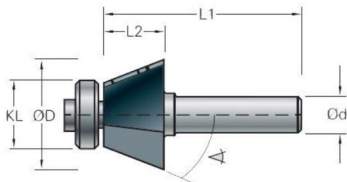
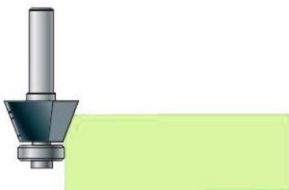
- precise/even groove

Recommendations

- drilling is possible thanks to the version with a face cutter suitable for 8 mm collets

Ø D (mm)	L1 (mm)	L2 (mm)	Ø d (mm)	Z	Stehle SKU
10	54.0	20	8	2+1	58502118

Nº2 CHAMFERING CUTTER



Machines/application

- manual milling machine
- for chamfering hard panel materials

Design

- straight cut
- HW milling cutters with brazed hard-alloy
- VHW milling cutters made of solid hard alloy

Benefits

- diameter cutting

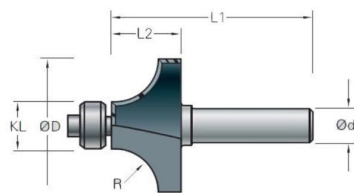
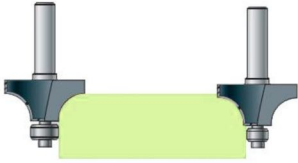
Recommendations

- for collet chuck tools

Ø D (mm)	L1 (mm)	L2 (mm)	Ø d (mm)	Z	Chamfer, radius	KL Ø bearing	Stehle SKU
19.0	45.0	15.0	8.0	2	15	13.0	50512033

Note: A complete list of sizes can be found on the manufacturer's website: www.stehle-int.com.

Nº3 RADIAL EDGE CUTTER



Machines/application

- manual milling machine for
- rounding of coated and uncoated panel materials

Design

- straight cut
- HW milling cutters with brazed hard-alloy

Benefits

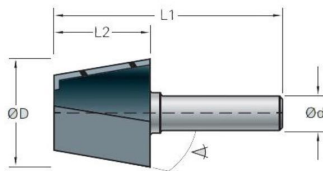
- Circular cutting edge and side cutting edge

Recommendations

- additional bearing 9.5 mm
- for collet chuck tools

Ø D (mm)	L1 (mm)	L2 (mm)	Ø d (mm)	Z	Chamfer, radius	KL Ø bearing	Stehle SKU
14.7	51.0	8.0	8.0	2	R=1.0	12.7	58512087

Nº4 CHAMFERING CUTTER



Machines/application

- manual milling cutter
- for rebating and chamfering solid wooden and board materials

Design

- straight cut
- HW milling cutters with brazed hard-alloy

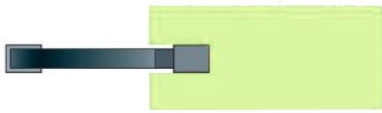
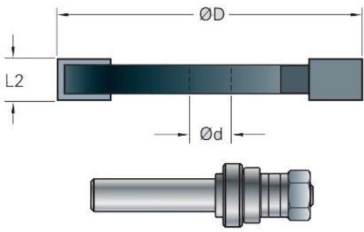
Recommendations

- drilling impossible
- for collet chuck tools

Ø D (mm]	L1 (mm)	L2 (mm)	Ø d (mm)	Z	Chamfer, radius	Stehle SKU
24	40	10	8.0	2	45	50502257

Note: A complete list of sizes can be found on the manufacturer's website: www.stehle-int.com.

№5 RADIAL EDGE CUTTER



Machines/application

- manual milling machine
- for chamfering, grooving and rebating of board materials

Design

- straight cut
- HW milling cutters with brazed hard-alloy

Benefits

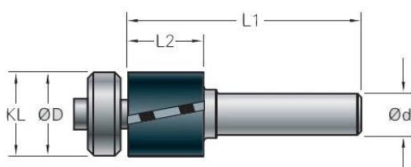
- accurate/even groove

Recommendations

- when mounting the tool on the mandrel, make sure that it is securely fastened

Ø D (mm)	L1 (mm)	L2 (mm)	Ø d (mm)	Z	Stehle SKU
47.6		2	8.0	3	68402078

№6 CHAMFERING CUTTER



Machines/application

- manual milling machine
- for accurate joining of board materials etc.

Design

- straight cut
- HW milling cutters with brazed hard-alloy

Benefits

- diameter cutting

Recommendations

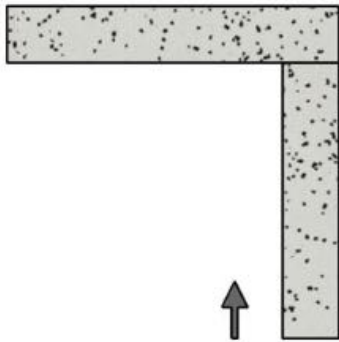
- for collet chuck tools

Ø D (mm)	L1 (mm)	L2 (mm)	Ø d (mm)	Z	KL Ø bearing	Stehle SKU
9.5	70.0	25.0	8.0	2	9.5	58512003

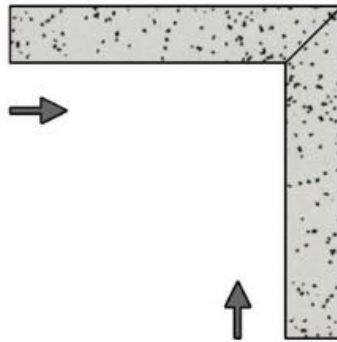
Note: A complete list of sizes can be found on the manufacturer's website: www.stehle-int.com.

FASTENING ASSEMBLIES: GLUING

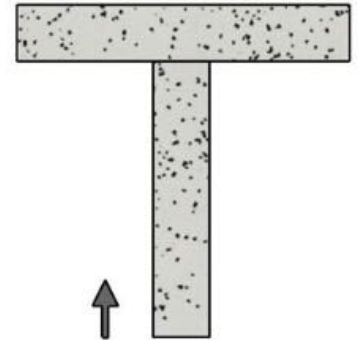
Basic fastening assemblies for Polygood panels



Type 1
Butt joint with exposed
panel end



Type 2
Mitre joint with concealed
panel ends



Type 3
Tee joint

PROCESS	DESCRIPTION
Pre-treatment	<p>The ends of the Polygood panel that are going to be glued together should have flat and smooth surfaces, without any burrs or roughness that may occur during the material processing stage.</p> <p>The ends must be free of dust and other contaminants. Cleaning should be carried out without solvents or alcohol. Basic cleaning is done by washing contaminated areas with water.</p> <p>If oils get on the surface of the end, clean the affected area with sandpaper to remove dust.</p>
Gluing – Opaque Materials	<p>Two-component ACRIFIX® 190</p> <p>Two-component adhesive MMA based; curing time variable, depending on the amount of catalyst and ambient temperature. Liquid. Fills voids in the joint between polystyrene, PVC, ABS parts. Transparent and clean seam, excellent adhesion.</p> <ul style="list-style-type: none"> • Initial gluing: 20-25 minutes with 3-5% of ACRIFIX® CA 0020 catalyst, pressure required • Full cure time: 60-70 minutes with 3-5% of ACRIFIX® CA 0020 catalyst <p>A protective film should be applied around the gluing area to protect the surface. Adhesive is applied inside the joint.</p>

PROCESS

DESCRIPTION

Gluing – Transparent Materials

Single-component ACRIFIX® 192

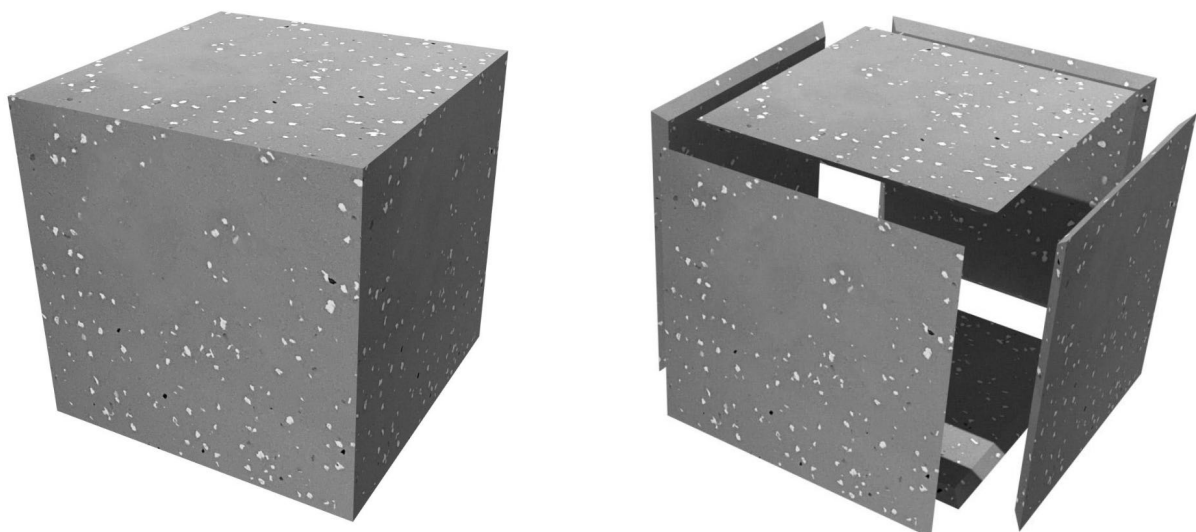
Single-component adhesive (MMA-base); cures under light or ultraviolet radiation (fluorescent lamps, ultraviolet lamps, sunlight). Liquid. Fills voids between transparent pieces of polystyrene or polycarbonate. Transparent and clean seam.

- Comments: cures under UV radiation or normal daylight
- Initial gluing: 10-20 minutes under UV light, or 3 hours under normal daylight
- Complete curing period: 3 hours after gluing

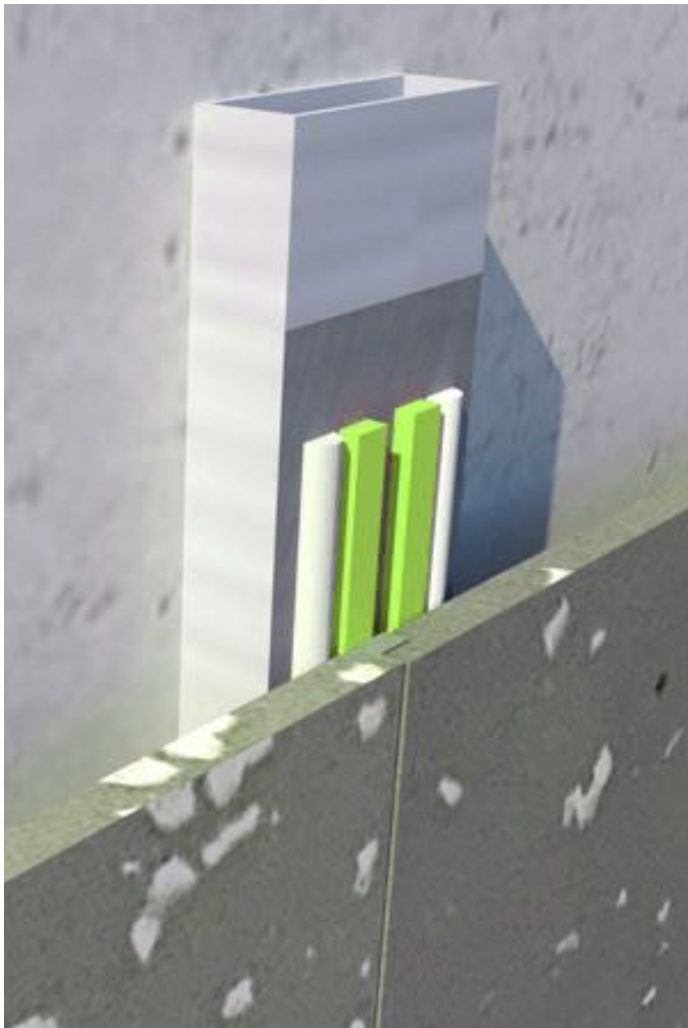
The gluing process is similar to ACRIFIX® 190. The only significant difference is that ACRIFIX® 192 only cures when exposed to a light source. The pieces are usually placed under standard fluorescent lamps immediately after gluing. The material can be used 3–6 hours after bonding.

The corners of the glued panels (Group 2) can be polished to match the appearance of the main surface of the material. In some cases, the corners of the joint may be chamfered to solve the issue of sharp corners, which can also be polished and brought to the appearance of the main surface.

EXAMPLE OF SEAMLESS GLUING OF A SIX-SIDED CUBE WITH MITRED EDGES



GLUED FIXINGS: WALLS



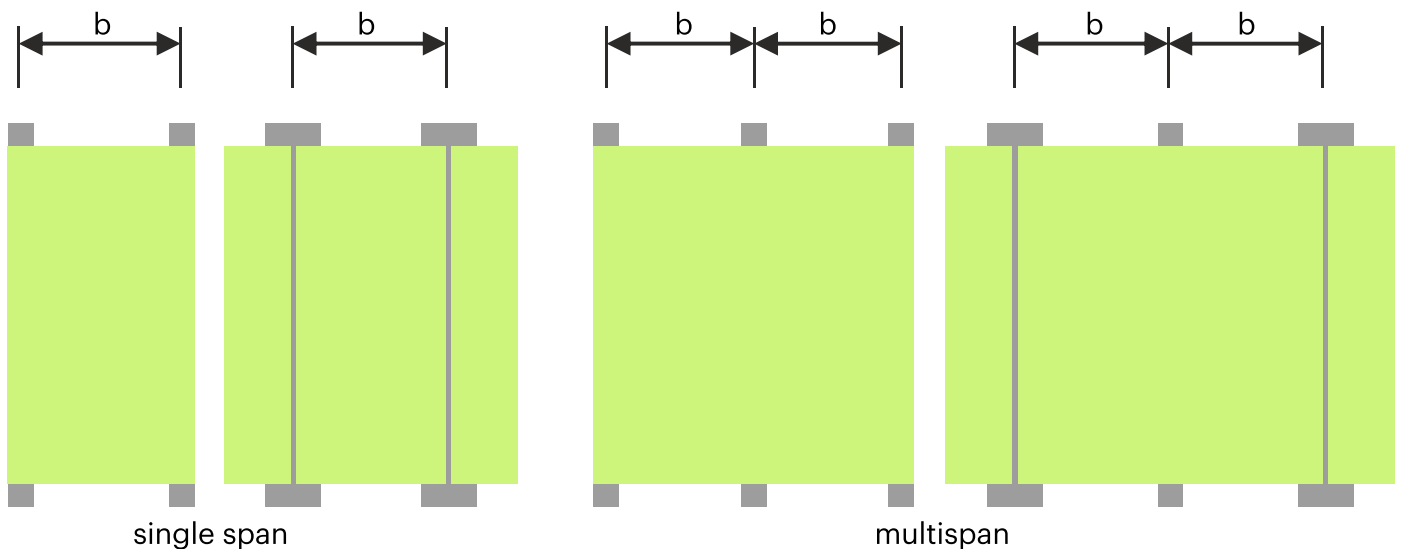
ESSENTIALS

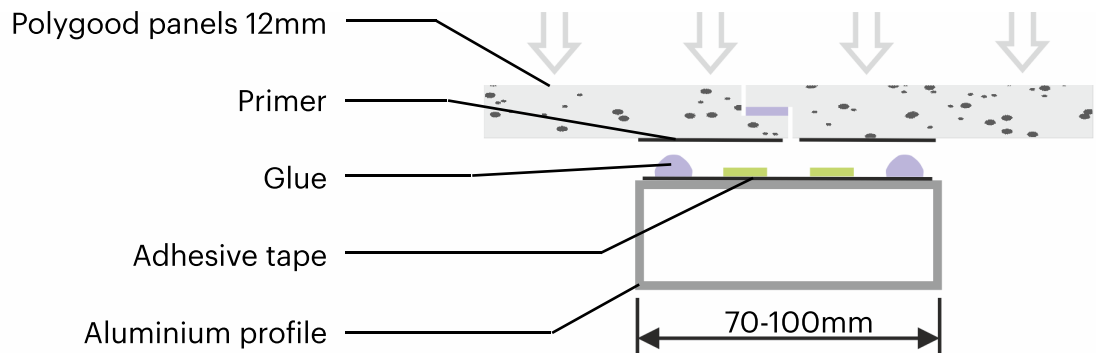
- Ambient temperature should be between 5°C and 35°C.
- Relative air humidity should not exceed 75%.
- The temperature of the structural elements to be glued should be at least 3°C higher than the dew point temperature of the air.
- The substructure must always be placed vertically.

STRUCTURE

For the required span, see the drawings below.

panel thickness	single span panel max. b	multispan panel max. b
12mm	500mm	600mm

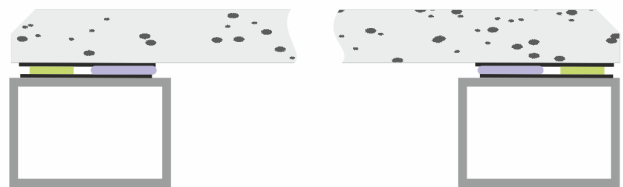
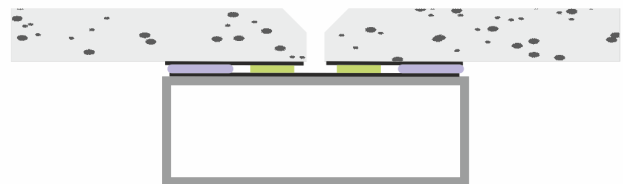
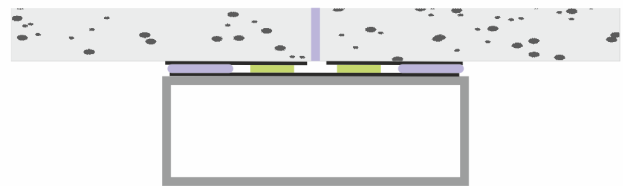
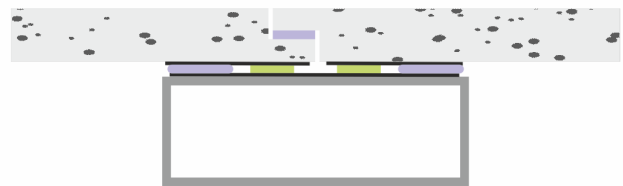




PRE-TREATMENT OF THE POLYGOOD PANEL

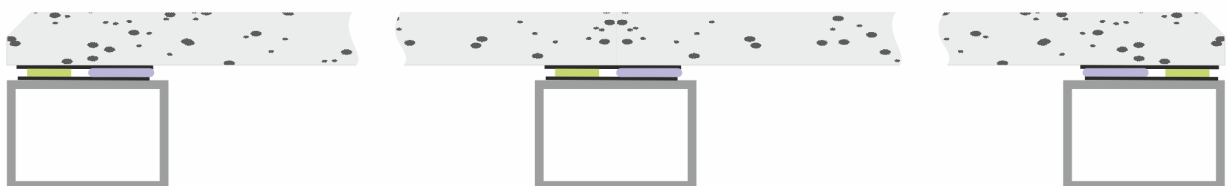
- Clean with a suitable detergent
- Apply the primer
- Wait during the cleaner and primer drying period

Follow the glue manufacturer's instructions for each step.



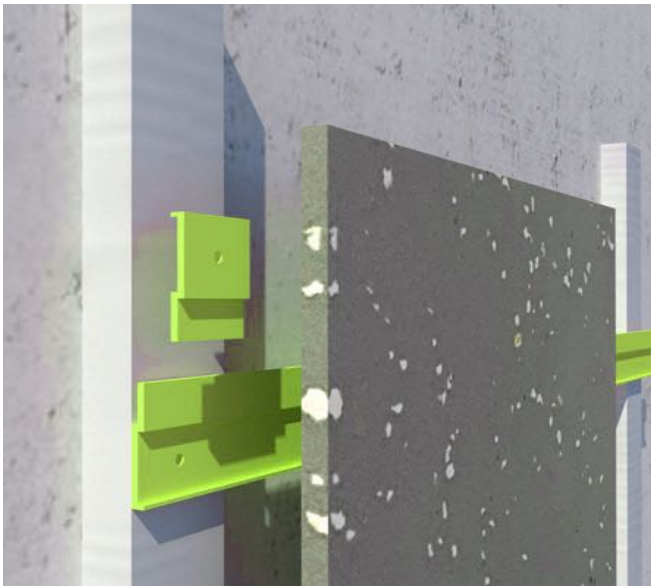
GLUING

- Apply mounting tape along the entire length of the vertical profiles (do not remove the protective film)
- Apply the glue: the glue should be applied in the form of a triangular bead according to the system recommendations of the glue manufacturer.
- Install the panel: Remove the protective film from the mounting tape. Align the panels precisely so that they are flush with the mounting tape. Press the panel evenly to the tape starting from the bottom of the panel.



We recommend SikaTack® Panel Adhesive. Detailed instructions can be obtained from a Sika representative. See www.sika.com for more information.

MECHANICAL FASTENING

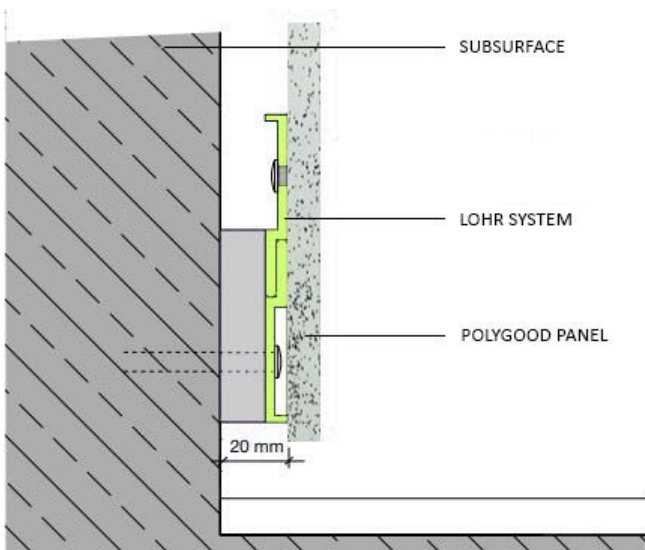


MECHANICAL FASTENERS

Polygood panels can be fastened to walls with hidden mechanical fasteners using expansion bolts or threaded sockets.

The ideal option is to use screws or sockets with a rough metal thread.

In both cases, remember that the hole in the Polygood panel should be pre-drilled one thread pitch smaller.

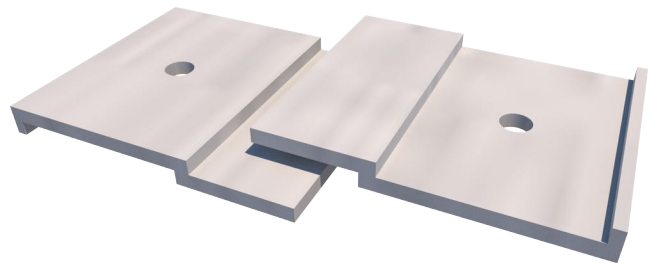


WALL CLADDING AND PROTECTION USING WALL PROFILES

Polygood panels (12,19 mm) are fastened using aluminum suspension brackets to a vertical aluminum supporting frame.

The advantages of this method include small construction depth and simple disassembly.

We recommend the profile system made by Helmut Lohr. Other similar aluminium wall fastening and ventilated facade systems are available.



Detailed instructions can be obtained from a Lohr representative. See www.lohrshop.com.

REGULAR MAINTENANCE AND REPAIR

REGULAR MAINTENANCE

Polygood panels are easy to clean. The panels may be washed with warm water or solvent-free and alcohol-free detergents.

Furniture polishes and plastic polishes can be used for the surface.

Repair

STEP 1 – surface cleaning

Pre-clean the surface with warm water and a solvent- and alcohol-free liquid detergent.

STEP 2 – dry sanding

Mirka abrasives can be used to remove deep scratches and damage when the panel surface can not be restored with polishing paste (see step 3). We recommend using fine-grit abrasives.

Examples: Abranet 540 (P600), Abranet 540 (P800) or Abranet 540 (P1000), depending on the depth of damage.

The damage can be eliminated by gradually using abrasive materials of different grits.

Example: P600 > P800 > P1000 + polishing (if necessary)

STEP 3 – polishing

If the damage is not serious, it can be removed by polishing.

Use a special polishing compound to remove surface scratches. We recommend Polarshine 45 Polishing Compound.

For a glossy effect, use Polarshine 12 Polishing Compound.

To restore matte surfaces use Polarshine Finishing Compound F05.

We are confident in the ease of use and effectiveness of these materials.

Note: Information is taken from the Mirka website www.mirka.com.

We recommend Mirka products for polishing Polygood panels. When choosing other brands, use similar parameters of abrasive materials.

EXCLUSION OF LIABILITY

The information provided is based on technical data that The Good Plastic Company International Limited and its affiliates believe to be reliable and is intended for use by individuals with technical expertise and at their own risk. The Good Plastic Company cannot guarantee that this information is completely up-to-date or accurate, but makes every effort to ensure its accuracy.



by the good plastic company

www.thegoodplasticcompany.com

hello@thegoodplasticcompany.com

+44 (0)1727 627040

+31 (0) 20 399 1260