

SPECIFICATION SHEET NO:	PSA 17	DESCRIPTION:	POLYSAFE ASTRAL PUR 2.00mm	DATE:	AUG 2023
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ARCHITECTURAL SPECIFICATIONS / BOQ

SPECIFICATION:

Supply and install Polysafe Astral PUR flexible PVC sheet flooring in 2.0mm thickness, containing a selection of the following safety aggregates to impart enhanced slip resistance: silicon carbide, coloured quartz, natural recycled aggregates and aluminium oxide granules, featuring a high quality, cross-linked polyurethane reinforcement to provide superior cleaning benefits, life cycle maintenance savings and optimum appearance retention, manufactured by spreading liquid PVC onto a random glass fibre carrier sheet in one operation, the glass fibre carrier sheet shall be fully encapsulated in PVC, fully conforming with the European Norm for safety flooring - EN 13845, in respect of flame spread, the flooring shall be certified as Class Bfl-S1 according to EN 13501-1, shall have been fully tested to ASTM E648 by an independent test house and have a Class 1 rating, making it suitable for use in institutional, commercial and public buildings, must have been fully tested by an independent test house to the RRL Pendulum Test (4S Rubber/Slider 96) and have typical results of ≥ 36 in the wet, with a surface roughness of $R_z \geq 20\mu m$, making it suitable for areas where enhanced slip resistance is required, must have been fully tested for abrasion resistance to EN 13845, passing the 50,000 cycles test and also meeting EN 660-2 Abrasion Group T, shall possess a valid Agrément certificate when laid in accordance with the instructions of Polyflor, with coved skirtings and welded joints, does not accumulate static charges above 2kV and is classified as 'antistatic' when tested to EN 1815, available in 2.0 metre width, to minimise the number of joints,• The flooring must be suitable for Use Area Classification 23/34/43, as defined in EN ISO 10874 (EN 685), in respect of light fastness, the flooring shall have been fully tested to ISO 105-B02 Method 3 and obtain ≥ 6 .

Colour:

Code:

INSTALLATION: (PLEASE NOTE: ALWAYS USE COMPATIBLE PRODUCTS FROM ONE SUPPLIER)

All installation instructions (including images) are available in our Technical Manual.

RECEIPT & STORAGE

On receipt of rolls:

- > Check that colours correspond to those ordered, that quantities are correct and that there is no damage.
- > In particular, check that rolls are from one batch, if that was requested on the order.
- > On arrival at site, the rolls should be safely secured in an upright position; (2m widths only) and stored, together with the adhesive, at a minimum temperature of 18°C for at least 24 hours before laying.
- > Inflammable adhesives require special storage conditions. Contact the adhesive manufacturer or see current literature for details.
- > To achieve best results, site conditions should be as described in BS 8203 or prevailing local/national standards. A working temperature of between 18°C and 27°C is required for at least 48 hours prior to, and during, the installation period; and for 24 hours afterwards. Conditioning should be carried out in the same room or areas as the installation, to prevent thermally induced dimensional changes.

PRIOR TO INSTALLATION (UNDERFLOOR HEATING)

On installations where underfloor heating is used:

- > The system should be fully tested and commissioned prior to the flooring installation commencing.
- > Underfloor Heating systems should be switched off and be fully cooled for a minimum of 48 hours prior to the installation commencing. The system should remain off and fully cooled during the installation and for a minimum of 48 hours afterwards. It should then be slowly brought back up to the working temperature incrementally over several days.
- > A maximum subfloor temperature; (at the adhesive line) of 27°C should never be exceeded. Specialist high temperature adhesives should be used in areas with underfloor heating, direct sunlight, and areas of high solar gain. Please refer to the Polyflor Approved Adhesive List or contact your adhesive manufacturer for more information.

SPECIALIST FLOORING & WALL PROTECTION PARTNER

Tel: 011 609 3500 | Email: marketing@polyflor.co.za | www.polyflor.co.za
Poly Sales House, 8B Buwbes Road North, Sebenza, 1609, South Africa. PO Box 3967, Edenvale, 1610, South Africa

PREPARATION OF WORK AREA

The work area should now be prepared to receive the sheet flooring.

- > Ensure that all other trades have completed their work and removed all their equipment and materials.
- > Remove all debris and vacuum the whole subfloor area.
- > Check the condition of the subfloor and make good as necessary.
- > Stone or power grind any cementitious subfloor to remove any 'nibs' or ridges.
- > Remove any surface contaminants, which may affect adhesion. Sweep or vacuum again prior to laying.
- > If required by the contract, or if in doubt, check the moisture content of the subfloor and record the results and method used. Good lighting is essential.
- > *It is important to note that commencement of work is deemed by many as acceptance of the site conditions as suitable for laying floor coverings.*

LAYOUT OF SHEET

- > The architect may have provided a drawing showing the direction in which the material should be laid. In this case, lay the sheet as directed.
- > Where the architect has left the direction to the discretion of the flooring contractor; at the tender stage show in which direction the material will be laid and state that your estimate is based on this.
- > Always pay particular attention to where seams will fall, avoiding such occurrences as seams in the centre of doorways.
- > If large windows are installed, minimise the effect of the joints by laying towards the window.

SLABBING THE SHEET

- > Polyflor recommends that all Polyflor sheet flooring be rolled out face upward, taking care not to damage the surface, and cut approximately to size.
- > Allowance of at least 75mm should be made at the ends for trimming in, the slabs should then be left overnight for 24 hours to condition at a minimum temperature of 18°C.

FITTING THE FIRST LENGTH

- > Place the first sheet in position next to the wall with the outer edge approximately 15mm from the nearest point.
- > Adjust the lie of the sheet so that the inner edge is parallel with the axis of the room.
- > Depending upon the depth of the recesses, use either a bar scribe or a pair of scribes to trace the profile of the wall. The scribes should be set to allow for the deepest recess or rake of the wall. Holding the scribes vertically and square to the edge, trace the wall profile onto the face of the sheet. With this method, all irregularities of the wall will be accurately reproduced onto the surface of the sheet. If the scribed line is difficult to see due to the colour or decoration, rub suitably contrasting chalk dust into the line to highlight it.
- > Ease the sheet away from the wall and, using a hook blade trimming knife, cut off the excess material to the scribed line. Slide the sheet back against the wall and check the fit, making any minor adjustments as necessary.
- > When satisfied that the fit on the first edge is correct, use a pencil to trace the opposite edge onto the subfloor.
- > In the centre of the room, draw a line on both the sheet and subfloor square to the main axis of the sheet.
- > Keeping the inner edge of the sheet on line A-B, slide the sheet back to clear the wall at one end of the room.
- > Set the scribes to the distance now between lines C and D. Trace the end wall profile and cut to fit as described earlier.
- > Repeat for the other end of the sheet. Once completed, the whole sheet – when slid back into position – should fit the wall profiles exactly.

FITTING SUBSEQUENT LENGTHS

- > Place the second length parallel to the first length, with a minimum of 10mm overlap along the adjoining edges or overlap of selvage.
- > On the opposite side, trace the edge along the whole length onto the subfloor. In the middle, draw a line C-D at right angles to the main axis, as previously described.
- > Using the longitudinal line as a guide, slide back the sheet from the end wall and fit as described previously.
- > Repeat for the opposite end.
- > Repeat the sequence for all remaining lengths.
- > On the final length, which abuts the opposite wall, fit as described for the first length.

ALIGNMENT OF DECORATION (HETEROGENEOUS RANGES ONLY)

This type of floor covering features a print layer with a regular, repeat decoration (e.g., wood plank). With wood effect designs:

- > To maximise the final appearance of the installation and to ensure the decorative effect is not lost, it is important that care is taken to align the decoration of each adjacent sheet.
- > The edge of the printed plank can be used in the lengthwise direction as a guide. The label and printed information on the backing of the sheet must be checked and the product reverse laid when instructed.

CUTTING IN THE SEAMS

Polyflor recommends that all Polyflor sheet floor coverings are welded.

Trimming off the factory edges and seam cutting is a prerequisite to enable successful grooving and welding.

ADHERING THE SHEET

Use of the correct adhesives is of paramount importance for the installation to be successful. Polyflor provide a comprehensive approved adhesive list available at marketing@polyflor.co.za or by contacting Polyflor on (011) 609 3500.

In areas subjected to direct sunlight or extremes/fluctuations in temperatures, Polyflor always recommends the use of an approved polyurethane, epoxy, or suitable high temperature adhesive. Polyflor provides this information only as guidance. The legal responsibility for the supply and performance is that of the adhesive manufacturer.

Prior to adhering the sheet, it is important to read and understand the adhesive manufacturer's instructions, recommendations, and safety advice. You need to know the hazards and limitations of the adhesive, especially the open time.

- > Spread the adhesive using a suitable trowel to the manufacturer's recommendations ensuring that the correct notch size is maintained throughout the installation. If the notch shows signs of wear the trowel should be renewed immediately.
- > If pressure sensitive adhesive is used the resultant serrated adhesive edges should be flattened with a lambswool roller pre-wetted with adhesive.
- > Never spread more adhesive than can be laid within the open time. Polyflor does not recommend any method of adhesive application, such as spraying, which cannot guarantee the spread rate.
- > After each section has been laid, except for the perimeter, thoroughly roll the sheet in both directions with a 68kg articulated floor roller. Repeat for each section until the main field of sheet has been laid.
- > When spreading dispersion-based adhesives on impervious or non-porous bases; (including bases where a surface applied damp proof membrane or moisture vapour suppressant has been applied) it is important to apply a suitable smoothing compound of not less than 3mm thickness. Failure to apply the correct depth of smoothing compound can result in moisture becoming trapped between the sheet and the impervious or non-porous base. This can ultimately lead to failures in the adhesive bond and in some cases discolouration of the vinyl sheet products.
- > The smoothing underlayment or adhesive supplier will provide details on which product(s) within their range should be used to suit the end use application and subfloor construction, and where applicable details of which primer should be used.
- > Adhesive selection should be based on both the floor covering, substrate type and site conditions. Always select an adhesive from the Polyflor Approved Adhesive list. If in doubt about adhesive choice, please contact Polyflor.

Premature trafficking of newly laid floors

Early trafficking may disturb the adhesive bond and weaken it, resulting in the associated problems of tracking, indentation, debonding etc. After the sheet has been installed; only light foot traffic should be allowed for at least 24 hours. Furniture etc. should only be returned after this time. The material should be protected with hardboard or plywood for at least 48 hours if subject to heavy trafficking.

PATTERN TEMPLATE METHOD

Areas which call for a considerable amount of fitting around obstacles, or which are too confined to lay down a sheet for fitting by normal methods can be dealt with by templating the floor in felt paper.

- > Dry fit the area with felt paper, leaving a gap of 15mm to 20mm around obstructions and walls.
- > Draw around the fittings using a suitable measuring and marking device. Mark the template 'This Side Up'.
- > Place the sheet in a larger area with the face uppermost. Place the template on top ensuring the direction of decoration is correct. Secure the template firmly in position and mark the position of all obstacles using the template as a guide.
- > Using a sharp trimming knife, cut the sheet to the marked lines, and fit into position.

Do not use the felt paper template as an underlay.

PREPARATION FOR SKIRTING PROFILE

- > Ensure that all surfaces are firm, dry, and free of dust, grease, and oil.
- > Fair faced brickwork or block work should have a skim coat applied, as this provides a smooth, firm surface of known porosity which will minimise adhesive usage and improve adhesion. Alternatively, 5.5mm thick plywood can be cut into appropriate width strips and then securely fixed to the block work to provide a smooth surface onto which the skirting can be fitted.
- > Surfaces may require priming prior to application.
- > All painted surfaces must be stripped back, and wire brushed to remove all traces of paint as this can impair adhesion.

SITE FORMED COVERED SKIRTINGS

Polyflor fully flexible flooring, in conjunction with the Polyflor Ejecta cove former range can be used to create site formed covered skirting to form a hygienic watertight finish.

- > Adhere the sections of cove former using an approved contact adhesive. Use a mitre-block to accurately cut internal and external corners and only adjust for length on straight cuts.
- > To prevent a difficult fit, and potential weak spot near doorways, cut away the back edge of the cove former on a taper for 150mm so that there is minimal cove former near the doorway (Figure 3.7). Heating the cove former will enable the shape to be formed but do not use a naked flame.

Fitting Ejecta capping strip (type CS-N)

- > Mark the walls around the room to the height the coving will reach. Minimum 100mm or as directed.
- > Place the sheet to the walls and mark to the same height as previous. Using a straight edge and sharp knife, trim off the excess.
- > Pull back the sheet from the walls. Fit the capping strip to the wall with a Polyflor approved contact adhesive so that the top of the sheet will sit inside the cap.
- > Using the Polyflor approved contact adhesive, apply to the face of the cove former and up to the capping strip. Coat the back of the sheet with contact adhesive and leave both to dry.
- > When dry, push the sheet into place and tuck the top edge into the capping strip. Roll with a hand roller to ensure even contact.

Fitting with sit-on capping strip (Type CS)

- > Mark the walls around the room to the height the coving will reach. Minimum 100mm or as directed.
- > Apply a Polyflor approved contact adhesive to the face of the cove former and up to the marked line on the wall. Coat the back of the sheet with the contact adhesive and leave both to dry.
- > When dry, push the sheet into place and roll with a hand roller to ensure even contact.
- > Using a straight edge and sharp knife, trim off the excess back to the required height as described earlier.
- > Using a piece of capping strip, mark where the strip overlaps the wall and sheet. Apply a Polyflor approved contact adhesive between the lines and to the back of the capping strip. When dry, push into place.

FITTING TO CERAMIC WALL TILES (CT strip)

For the junction between site formed covered skirting and ceramic wall tiles, Polyflor Ejecta CT strip should be used. The flexible section is designed to accept ceramic tiles on one side and various gauges of material on the other.

- > The Polyflor CT strip should be adhered using a Polyflor approved contact adhesive.
- > The edge between the CT strip and the ceramic tiles should be grouted.
- > The Polyflor sheet should be fitted into the bottom edge of the CT strip and adhered to the wall using a contact adhesive as recommended by Polyflor. A thin bead of mastic sealant should be run along the underside edge of the CT strip and the Polyflor sheet.

FITTING OF AN EXTERNAL CORNER (Wrap around/butterfly method)

Welded external corners can be prone to damage from wheeled traffic. To prevent this, use the 'wrap around' method.

MAINTENANCE: NOTE: NEVER USE A BLACK PAD TO SCRUB A PUR COATED FLOOR

•The following maintenance instructions are designed to minimise the cost factor, while ensuring that your floorcovering retains the optimum appearance and performance. The incorporation of PUR within the product reduces the intensity of cleaning and the use of chemicals, which helps minimise the effect on the environment, without compromising such key elements as hygiene and underfoot safety.

•Polysafe PUR ranges are designed to resist soiling, which ensures that even after transportation, installation and the period prior to handover, the intensity of construction clean can be significantly reduced. This will have a beneficial impact on the initial costs.

INITIAL CONSTRUCTION CLEAN

- Remove all loose debris
- Remove surface dust and grit by sweeping or vacuuming.
- Apply a solution of neutral cleanser (or alkaline cleanser, dependent upon the level of soiling), diluted to the manufacturer's instructions, with a spray over the section to be cleaned. Leave for sufficient time to react with the soiling.
- Pick up the solution with a clean microfibre mop, using a continuous side-to-side motion. When the mop head becomes loaded, it will start streaking the floor. At this point the dirty mop head should be removed and placed into a laundry bag and a clean mop head fitted. The cycle should then be repeated until the whole floor is completed.
- The dirty mop heads should then be laundered, in preparation for reuse.

ROUTINE MAINTENANCE

- Remove surface dust and grit by sweeping or vacuum.
- Apply a solution of neutral cleanser (or alkaline cleanser, dependent upon the level of grease or oily contaminants), diluted to the manufacturer's instructions, with a spray over the section to be cleaned. Leave for sufficient time to react with the soiling.
- Pick up the solution with a clean microfibre mop, using a continuous side-to-side motion. When the mop head becomes loaded, it will start streaking the floor. At this point the dirty mop head should be removed and placed into a laundry bag and a clean mop head fitted. The cycle should then be repeated until the whole floor is completed.
- The dirty mop heads should then be laundered, in preparation for reuse.
- Where detergent residue remains on the floor surface, the area should be rinsed completely with clean, warm water, picked up with a wet vacuum and left to dry thoroughly.
- This maintenance procedure has been designed to optimise the benefits of the Polysafe PUR system – the latest in cleaning technology. The maximum benefits are derived from this system by carrying out this quick and simple procedure daily and by using clean equipment each time, to maximise dirt pick-up and eliminate streaking.
- More traditional mechanical cleaning methods such as a 165rpm rotary scrubbing machine, deck scrubber or mop and bucket system can be used with the appropriate neutral or alkaline cleanser - full details are available from Polyflor.
- In areas subject to heavy soiling, machine scrubbing should be undertaken on a periodic basis, after neutral or alkaline cleanser has been applied to the floor, diluted to the manufacturer's instructions.

APPLICATION OF A FLOOR DRESSING

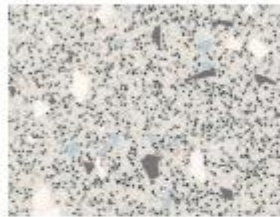
- Maintainers, polishes, or floor dressings containing polish should never be applied to Polysafe PUR ranges, as this may impair the slip resistance but, if in doubt, consult Polyflor.

This program will keep maintenance costs to a minimum and requires no sealers.

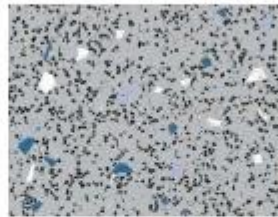
Enough entrance or barrier matting is highly recommended and will greatly ease the maintenance programme.

Polysafe Astral PUR

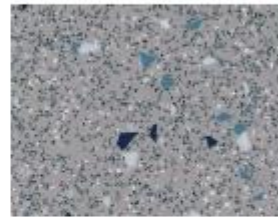
SAFETY FLOORING



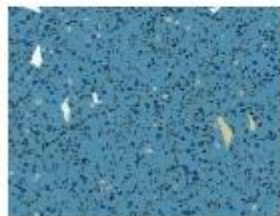
North Star **4370** wlr 4020 NCS S 3030 Y 30Y LRV 25.8



Feldspar **4620*** wlr 2090 NCS S 3030 B LRV 25.4



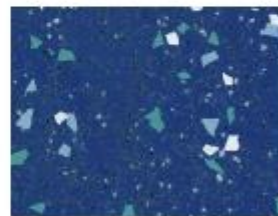
Starburst **4300** wlr 4940 NCS S 4000 B LRV 25.7



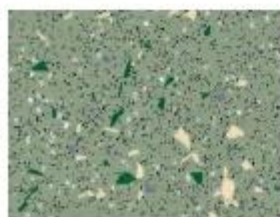
Calcite Blue **4460*** wlr 4130 NCS S 4020 B LRV 23.4



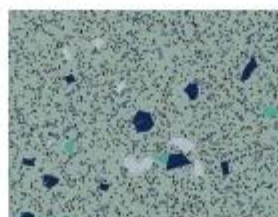
Deep Sapphire **4050*** wlr 4910 NCS S 5020 B LRV 22.7



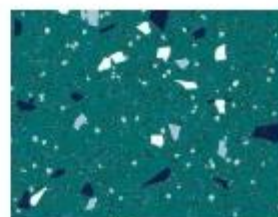
Nebula Blue **4200** wlr 4850 NCS S 5030 B LRV 23.5



Greenstone **4440*** wlr 480 NCS S 4020 B LRV 25.9



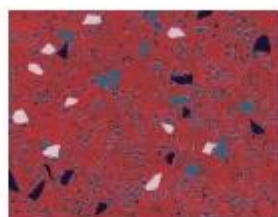
Isis **4380** wlr 4960 NCS S 4020 B LRV 26.4



Aquarius **4220** wlr 4890 NCS S 4020 B LRV 26.5



Arkose **4190*** wlr 4940 NCS S 3030 Y 30Y LRV 23.9



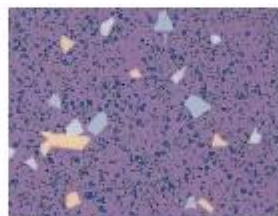
Red Sky **4310** wlr 4830 NCS S 4020 B LRV 18.9



Lunar Grey **4240** wlr 4900 NCS S 7020 B LRV 12.7



Black Opal **4080*** wlr 4490 NCS S 7020 B LRV 6.8



Space Mauve **4230** wlr 4840 NCS S 4020 B LRV 12.3

* Previously available as Polysafe Strata colours

wlr = wear test NCS = Natural Colour System LRV = Light Reflectance Value



100% RECYCLABLE
CONTAINS RECYCLED MATERIAL



Sustainable Slip Resistance
throughout product's guaranteed life
RRL Pendulum Wet Test - HSE Compliant

* Refer to BRE Global ratings on www.greenbook.co.uk

Polysafe Astral PUR

Polysafe Astral PUR is a heavy-duty safety flooring with a multi-flake decoration. Ideal in hygiene critical locations subjected to contaminant spillages, Astral provides sustainable slip resistance and continued underfoot protection. Featuring a Polysafe PUR maintenance enhancement for improved cleanability, the range is used in water spillage areas such as food preparation areas, bar serveries, clinics, laundry and sluice rooms, washrooms, WCs, laboratories, classrooms and many institutional applications. For continually wet areas such as showers, please refer to our Polysafe Hydro, Hydro Evolve or Ultima ranges.

RRL Pendulum Test
36+
Sustainable Slip Resistance



	Gauge	EN 428/ISO 24346	2.0mm
	Roll Size	EN 426/ISO 24341	2m x 20m = 40m ²
	Total Weight	EN 430/ISO 23997	2450g/m ²
	General Performance	EN 13845 ASTM F1303	Conforms Conforms
	Use Area	EN 685/ISO 10874	
	Resistance to Chemicals	EN 423	Good chemical resistance
	Reaction to Fire	EN 135011 ASTM E648	Class Bfl-S1 Class I
	Abrasion Resistance	EN 13845 EN 649	50,000 cycles Group 1
	Enhanced Slip Resistance	EN 13845 AS 4586 DIN 51330 RRL Pendulum Test Surface Roughness	ES1 R10 R10 ≥36 (wet test - 45 Rubber/Slider 96) Rz ≥20µm
	Electrical Behaviour (body voltage)	EN 1810	≤2kV Classified as "antistatic"
	VOC Emissions	AgBB VOC test GBCA/NZGBC Green Star IEO-VOC FluorScore	Pass Compliant Certified
	Responsible Sourcing	BES 6001	Very Good

Agreement Assurance - Polysafe Astral PUR has been independently assessed by the British Board of Agreement and product performance is assured for at least 10 years in recommended use areas. With proper maintenance, the appearance, colour and slip resistance will be retained during this period.

Environmentally Preferable Flooring - Polysafe Astral PUR achieves BRE Global A+ rating (ENP 472) in the Green Guide to Specification in use areas such as education and healthcare and is GreenTag LCA Rate certified with GreenRate level A - Gold Plus. Generic EN 15804 Environmental Product Declaration (EPD) available on request. It is 100% recyclable and contains recycled material. Recyclable via the Recofloor scheme. Visit www.polyflor.com/sustainability.

Polysafe PUR - Polysafe Astral PUR features a high quality, cross-linked polyurethane reinforcement, UV cured to provide superior cleaning benefits, life cycle maintenance savings and optimum appearance retention. As with all Polysafe products, Polysafe Astral PUR should not have a polish applied.

Hygiene - All Polyflor commercial sheet vinyl ranges provide a continuous, impervious and hygienic flooring solution which can be confidently cleaned in accordance with recommended maintenance procedures and approved maintenance products. The implementation of an effective cleaning regime is the most important defence against infection.

Polysafe safety flooring ranges have good resistance to dilute acids and alkalis, are compatible for use with the most commonly used alcohol based hand gels and are suitable for steam cleaning on a periodic basis. Chemical resistance charts available on request. For information regarding handling and installation, adhesives, maintenance, applications, chemical resistance and product warranty, consult Polyflor Customer Technical Services on +44 (0)181 767 1912, or email tech@polyflor.com.

As with all Polysafe products, Polysafe Astral PUR should not have a polish applied. The data presented is correct at the time of printing. For latest information, please visit our website polyflor.com. Decoration and shade may vary slightly from the samples shown.



CE
EN 14041

POLYFLOR
SAFETY FOR THE WORLD

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FLOORING

July 2017