

SPECIFICATION SHEET NO:	PSA 60	DESCRIPTION:	POLYSAFE HYDRO EVOLVE 2.00MM	DATE:	AUG 2023
-------------------------	--------	--------------	------------------------------	-------	----------

ARCHITECTURAL SPECIFICATIONS / BOQ

SPECIFICATION:

Supply and install flexible Hydro Evolve PVC sheet flooring in 2.0mm thickness and will contain a selection of the following safety aggregates to impart enhanced slip resistance: coloured quartz, natural recycled aggregates and aluminium oxide granules, the flooring material shall fully conform with the European Norm for safety flooring - EN 13845, in respect of flame spread, the flooring shall be categorised as Class Bfl-S1 according to EN 13501-1. The flooring 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, the flooring must have been fully tested by an independent test house to the RRL Pendulum Test (Slider 55/96 Rubber) and have results of ≥ 36 in the wet, with a surface roughness of $R_z \geq 20\mu m$, making it suitable for use in areas where enhanced slip resistance is required in barefoot or shod conditions, a result of Class B to AS 4586 Part C & DIN 51097 should be achieved. The product should be certified as R10 to DIN 51130, the flooring shall meet the water tightness requirements in EN 13553, meaning suitability for installation in special wet areas, the product 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 P, this product should not accumulate static charges above 2kV and is classified as 'antistatic' when tested to EN 1815. For specialist applications where there is a requirement to dissipate the electrostatic charge, see the Polyflor ESD product ranges, the flooring shall possess a valid Agrément certificate when laid in accordance with the instructions of Polyflor, with coved skirtings and welded joints, the flooring must be 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

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

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.

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 scriber 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 selvedge.
- > 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

SPECIALIST FLOORING & WALL PROTECTION PARTNER

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.

SPECIALIST FLOORING & WALL PROTECTION PARTNER

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 COVED SKIRTINGS

Polyflor fully flexible flooring, in conjunction with the Polyflor Ejecta cove former range can be used to create site formed coved 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.

SPECIALIST FLOORING & WALL PROTECTION PARTNER

> 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 coved 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

INITIAL CONSTRUCTION CLEAN

Sweep, mop sweep or dry vacuum the floor to remove dust, grit, and debris.

Apply a solution of alkaline cleanser, diluted to the manufacturer's instructions, to the floor and leave for sufficient time to react with the soiling. Using a 16rpm rotary machine fitted with a rotary scrubbing brush or, if necessary, a scrubbing pad, machine scrub the floor and then pick up the slurry with a wet vacuum. Rinse the floor thoroughly with clean, warm water, pick up with a wet vacuum and leave to dry thoroughly

Note 1: For small areas, where there is no suitable scrubbing machine available, a deck scrubber should be used in conjunction with a wet vacuum or mop and bucket system

Note 2: For very heavy soiling, dilution rates above the manufacturer's minimum recommendations may be necessary.

Note 3: For Polysafe Hydro and Hydro Evolve, the scrubbing pad should be replaced with a rotary scrubbing brush or a cylindrical type scrubbing machine.

ROUTINE MAINTENANCE

The frequency of each of the operations is dependent upon the type and intensity of traffic.

STANDARD SURFACE FINISH

Sweep, mop sweep or dry vacuum the floor to remove dust and loose dirt.

Spot mop regularly. Stubborn black marks can be removed by using the centre disc of a scrubbing pad and a small amount of undiluted alkaline cleanser. Place the disc under the sole of a shoe and rub - this gives greater pressure. Rinse the area well with clean warm water and leave to dry.

Apply a solution of neutral or alkaline cleanser, diluted to the manufacturer's instructions, to the floor and leave for sufficient

time to react with the soiling. Using a 165rpm rotary machine fitted with a rotary scrubbing brush or, if necessary, a scrubbing pad, machine scrub the floor and then pick up the slurry with a wet vacuum. Rinse thoroughly with clean, warm water, pick up with a wet vacuum and leave to dry thoroughly.

POLYSAFE HYDRO AND HYDRO EVOLVE

Sweep, mop sweep or dry vacuum the floor to remove dust and loose dirt.

The scrubbing pad should be replaced with a rotary scrubbing brush or a cylindrical type scrubbing machine.

Spot scrub regularly with a deck scrubber.

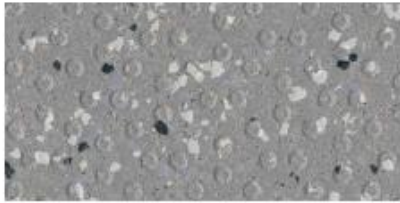
Apply a solution of neutral or alkaline cleanser, diluted to the manufacturer's instructions, to the floor and leave for sufficient time to react with the soiling. Using a 165rpm rotary machine fitted with a bristle brush, cylindrical machine, or deck scrubber, scrub the floor, and then pick up the slurry with a wet vacuum. Rinse thoroughly with clean, warm water, pick up with a wet vacuum and leave to dry thoroughly.

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

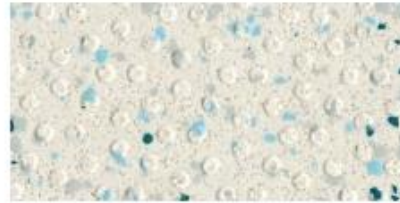
Sufficient entrance or barrier matting is highly recommended and will greatly ease the maintenance programme.

SAFETY FLOORING



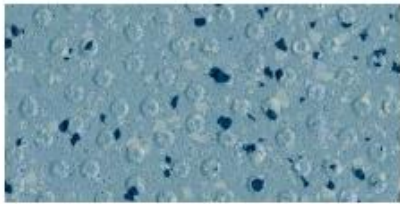
Tigris 4257
NCS S 4500-N

wf 4257
LRV 277



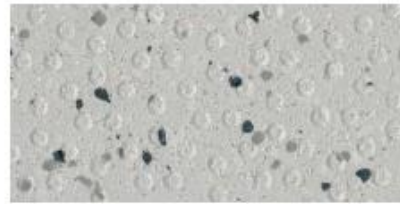
Indus 4251
NCS S 1002-Y

wf 4251
LRV 58.3



Adriatic 4258
NCS S 3030-B

wf 4258
LRV 27.2



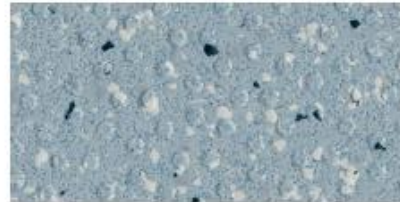
Colorado 4253
NCS S 3000-N

wf 4253
LRV 44.2



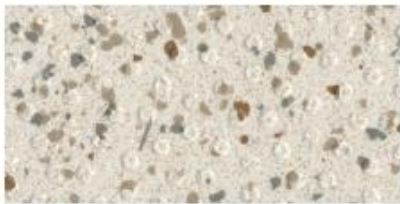
Black Volta 4255
NCS S 8000-N

wf 4255
LRV 6.4



Blue Nile 4256
NCS S 3010-YR08

wf 4256
LRV 33.7



Amazon 4252
NCS S 1002-Y50R

wf 4252
LRV 56.3



Danube 4254
NCS S 2010-YR08

wf 4254
LRV 42.2

Heavy-duty safety flooring for continually wet areas, barefoot & shod.

wf = wet foot NCS = Natural Colour System LRV = Light Reflectance Value



100% RECYCLABLE
CONTAINS RECYCLED MATERIAL

* Refer to BRE Global ratings on www.greenbuilding.com



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

Polysafe hydro|evolve

Polysafe Hydro Evolve is a heavy-duty, decorative safety flooring specially designed with a pimple emboss, giving greater confidence in specifying for areas that are subjected to constant running water and where enhanced slip resistance is a prime consideration. Featuring carbonundum-free particles for added design clarity, Hydro Evolve is suitable for areas where barefoot or footwear is worn such as walk-in showers, wet rooms, hydrotherapy areas, changing rooms and indoor swimming pool surrounds.

R11, Pendulum Test
36+
Sustainable Slip Resistance



	Gauge	EN 428/ISO 24346	2.0mm
	Roll Size	EN 426/ISO 24346	2m x 20m = 40m ²
	Total Weight	EN 430/ISO 23997	2960g/m ²
	General Performance	EN 13845 ASTM F1303	Conforms Conforms
	Use Area	EN 685/ISO 10874	
	Resistance to Chemicals	EN 423	Good chemical resistance
	Water Tightness	EN 13553	Annex A
	Reaction to Fire	EN 135011 ASTM E648	Class Bfl-S1 Class I
	Abrasion Resistance	EN 13845 EN 649	50,000 cycles Group P
	Enhanced Slip Resistance	EN 13845 AS 4586 Part C DIN 51097 R11, Pendulum Test Surface Roughness	ES6 & ES1 Class B R10 Class B +36 (wet test - Slider 55/95) Rz >20µm The wet slip resistance across all Polysafe products is sustainable throughout the guaranteed life of the product, with strict adherence to HSE Guidelines. For further clarification regarding slip resistance, consult Polyflor.
	Electrical behaviour (body voltage)	EN 1815	<2kV Classified as 'antistatic'
	VOC Emissions	AgBB VOC test FloorScore	Pass Certified
<p>Agreement Assurance - Polysafe Hydro Evolve 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.</p> <p>Environmentally Preferable Flooring - Polysafe Hydro Evolve achieves BRE Global A+ rating (ENP 472) in the Green Guide to Specification in use areas such as education and healthcare. 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.</p> <p>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.</p> <p>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)161 767 1912, or email tech@polyflor.com.</p> <p>As with all Polysafe products, Polysafe Hydro Evolve should not have a polish applied.</p> <p>The data presented is correct at the time of printing. For latest information, please visit our website polyflor.com.</p> <p>Decoration and shade may vary slightly from the samples shown.</p>			

